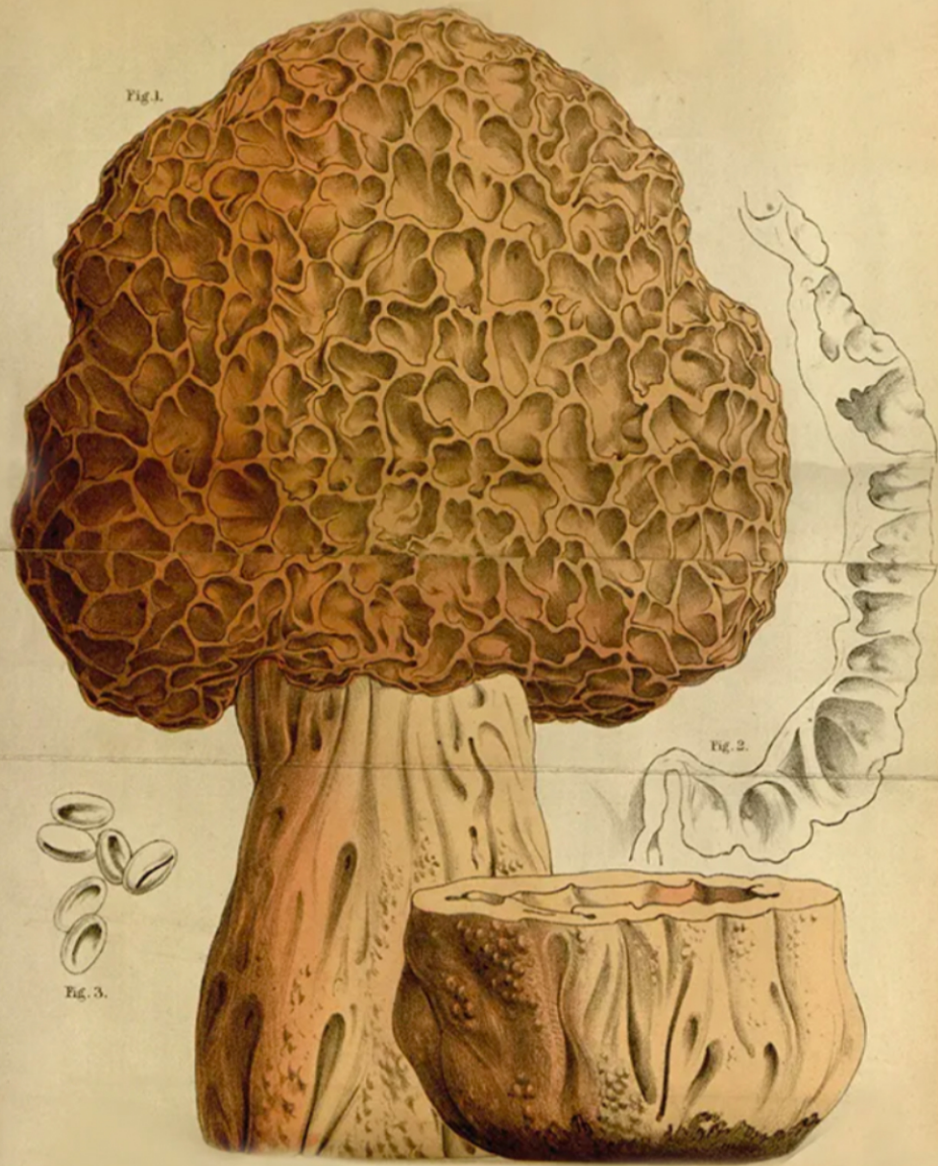


# CONTEMPORARY ISSUES IN ARCHITECTURE AND URBAN PLANNING

## ARCHITECTURE AND EXPLORATION



EDITED BY  
YILDIZ AKSOY  
EFE DUYAN

**DAKAM**

# **CONTEMPORARY ISSUES IN ARCHITECTURE AND URBAN PLANNING**

**ARCHITECTURE AND EXPLORATION  
FALL 2022**

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**DAKAM BOOKS**

CONTEMPORARY ISSUES IN ARCHITECTURE AND URBAN PLANNING: ARCHITECTURE AND  
EXPLORATION

ISBN: 978-625-7034-29-6

Editors: Yıldız Aksoy, Efe Duyan

DAKAM BOOKS - Özgür Öztürk DAKAM YAYINLARI

DECEMBER 2022, İstanbul.

[www.dakam.org](http://www.dakam.org)

Firuzğa Mah. Boğazkesen Cad., No:76/8, 34425, Beyoğlu, İstanbul.

Cover Design: D/GD (DAKAM Graphic Design)

Print: Metin Copy Plus, Mollafenari Mah., Türkocağı Cad. 3/1, Mahmutpaşa/Istanbul, Turkey.

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# THE VALUES OF REPUBLIC PERIOD BUILDINGS - ISTANBUL BAKIRKOY ISBANK HOUSES

YILDIZ AKSOY<sup>1</sup>

## ABSTRACT

Isbank houses are an architectural heritage that should be preserved with its unique design approach, as it contains the characteristics of the period in which it was designed, is an important example in the emergence and development of the housing culture in Turkey with its cooperative structuring. It also provides information about the housing policy of the period in which it was built. Isbank Houses carry the characteristics of a document, as they bear a way traces of the period in which they were built. Thus, it shows that it has exemplary protection features in terms of both its structures, environmental values and natural plant character, urban space and open space values, as it will be a document about 20th century housing structures for future generations. Isbank Houses, was designed by architects Ayhan Böke and Lemi Varnalı, are a very important example in terms of reading the recent history of Architecture and should be preserved. The strong identity and imaginability created by the settlement enable users to adopt and own the settlement.

**Keywords:** Architectural heritage, identity, urban memory, landscape character

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## **INTRODUCTION**

Today, housing has lost its feature of being designed as a housing product focused on human needs and has turned into a real estate tool that can be bought and sold within the economic system. As a result of urban and housing policies throughout Turkey, housing has lost its former value.

Isbank Houses, which are the subject of the research, are located in Bakırköy. As the majority of the residential buildings built in the Republican period in Bakırköy District were developed in a feasibility-based understanding, ignoring the urban memory and values as a result of the application examples that emerged with the zoning decisions, the Republican period buildings were demolished and mixed new structures were created by including them in commercial uses.

Bakırköy Isbank Houses is an important place in the green area system of Bakırköy, within its cultural asset potential which is located between İncirli Street and Yüce Tarla Street and its surroundings, between Bakırköy Mental Hospital.

It is an important example in the history of Turkish Architecture that should be protected with its architectural features and plant species that need to be preserved in its garden, and settlement planning where open spaces have a value of close to 70% within the mass-space balance.

When we look at the situation of twentieth century buildings in the world, it is seen that most of the large-scale public structures specific to the period such as education, health and administration are used and preserved with their original functions. However, the situation is different for residential buildings that give character to the period. Twentieth century housing structures are structures with high historical value because they contain many historical information such as the ways of meeting the housing need that developed as a result of the social mobility of the period, changes in the family structure, newly developed housing areas and neighborhood life (Özkaban, 2014).

Due to the fact that the examples built after 1950 have not been studied both in architectural historiography and in the discipline of conservation, this research focuses on Bakırköy Isbank Houses, which were built between 1964 and 1967.

## **EVALUATION OF İSBANK HOUSES AS ARCHITECTURAL HERITAGE**

It is necessary to focus on residential buildings in order to understand the modernization in zoning and construction activities after 1950. As in all modern societies, in this period, housing, as a dominant construction activity, becomes the main element that guides the modernization process (Bilgin, 1998).

The rapid urbanization process was experienced in the country between 1950 and 1980, and housing production revealed different forms of presentation and formation such as cooperative houses that would meet the needs of different social classes.

Although the first years of the republic were more stagnant than the 1950s in terms of urbanization, they are important in terms of establishing the first housing policies and establishing the first housing cooperative. First of all, Emlak ve Eytam Bank was established in 1926 in order to find a solution to the housing problem of the newly established capital Ankara, and it was aimed to provide housing loans to civil officers. However, in the face of the shortage of housing and the rise in rents despite all the measures taken by the state, Bahçelievler Building Cooperative was established in Ankara in 1935 and constituted the first example of housing cooperatives (Sey, 1998).

The efforts to provide housing for state officers came to the fore in the 1940s-1950s. Especially in the face of the increase in the demand for housing in the cities and the limited housing production with individual production, cooperatives have been tried to be established with the help of the public, and housing cooperatives have started to take place in the legal regulations. The change in the economic stagnation experienced during the war with the end of the war caused the development initiatives supported by the statist policy to be replaced by liberal economy discourses and the housing production to be left to free market mechanisms.

In this sense, Türkiye Emlak Bank was established, housing construction for state employees was supported and housing loans were started to be given through SSK, which was established in 1945. However, at the beginning of the housing cooperatives, it included state officers who were in the upper income group and had regular income. Over time, the state emphasized the establishment of housing cooperatives in Anatolia among low-income groups such as workers (Doğru, 2020).

Bakırköy Isbank Houses, which constitute the subject of the research, were also built with the formation of Isbank Officers Building Cooperative.

Modern period residences include many new approaches and experiences in terms of architecture, art and technique, with their architectural language diversity, holistic design understanding, spatial pursuits, innovations in the construction system and material usage. "Identity value", which is one of the important values, is a value that emerges depending on the physical and cultural environment in which the heritage product is located. It is possible to explain this value with the role of the heritage in the political, social and cultural history of the settlement in which it is located. In the definitions made for the identity value, expressions are used that are "important for the society due to some of its features" and "give an identity to the city because it is a product specific to the city" (TMMOB Chamber of Architects Committee for the Protection and Development of Cultural Heritage, 2010).

When we evaluate that the Bakırköy Isbank Houses in terms of urban or individual memories and city memories, it is an important residential area that gives Bakırköy an identity. Isbank Houses can also be considered as spaces that create the urban identity as the representative of the modern architectural movement due to the continuity of urban memory. Isbank Houses are buildings with a high continuity value since Isbank Houses are still in use as twentieth century buildings.

When the modern architectural heritage is evaluated especially in residential buildings; especially in our country, due to the disappearance of many modern housing areas under the pressure of intense urbanization, it is not possible to come across housing examples with group and texture values, except for a small number of mass housing / lodging applications (Omay Polat, 2008)

Isbank Houses come to the fore with the value of being the first in terms of building types and building technology built after modernization.

The definition of cultural assets is made in the 3rd matter of the law numbered 2863 on the protection of cultural and natural assets, amended by the law numbered 5226. Based on this definition, when we approach the subject in terms of time dimension, there is a definition determined as "prehistoric and historical periods" in the relevant law. There are no restrictions on the historical process here (Madran, 2006).

Isbank houses were built between 1964 and 1967 as a product of modern architecture, and there are no restrictions on gaining protection status in terms of temporal dimension.

***When we evaluate in terms of quality, it is matter 3 of the relevant law that shows the definitions section.*** The qualitative criteria that will be required for the status of the building to be protected are divided into 3 groups in matter 3. It is said that the dwelling should be related to science, culture, religion and fine arts (Madran, 2006). Isbank houses, like other 20th century buildings, are associated with science and art.

According to the 2nd criterion discussed in matter 3, it is the criterion of being a subject of social life in prehistoric or historical periods. According to this second criterion, the functionality of the building is emphasized (Madran, 2006).

There must be a functional reason for the creation of every work, and Isbank houses are very important living proof that modernist housing structures can be produced even on a small scale, even in the period they are in.

In the 3rd criterion put forward by the 3rd matter, it is the issue that the work must have a scientific and cultural original value (Madran, 2006).

Isbank Houses are not just a building design, they are settlement planning and design. The size of the open and green areas is an important place in terms of mass void balance, occupying more than 60 percent of the entire floor area. The open green areas it owns both create social activity areas in the settlement and have an important role in meeting the physical, physiological and psycho-social needs of all users.

The COVID -19 we have experienced in recent years has shown us how much we need open green spaces. Since all the gardens in the blocks in Isbank houses are designed in such a way that every user can benefit equally, the users of Isbank houses have easily passed the COVID -19 process. For this reason, it is seriously necessary to reconsider open green spaces while preparing urban transformation projects.

The years when the Modern movement was active all over the world correspond to the early periods of the Republic of Turkey. In Turkey at that time, modern architecture was built using more traditional, smaller spans and often pitched, tiled roofs, due to the poverty and constraints of the construction industry (Bulut, 2005).



However, since Isbank Houses were one of the examples of modern architecture of that period, terrace roofs were built in their architectural design and these terrace roofs became one of the main characteristic elements of the buildings.

The landscape design of Isbank houses has a unique feature. There are many coniferous and broad-leaved trees, shrubs in the garden, which is arranged quite simply. Even if there is a single monumental tree in the open green areas of Isbank Houses, it will be one of the rarest examples of the natural heritage to be preserved (Photo 1)



**Photo 1.** *Cedrus atlantica*

The plant species present in the large gardens at the front, middle, back and sides of İşbank Houses both complement the green texture of Bakırköy District and create eye-catching silhouettes of the natural landscape. At the same time, it gives İşbank Houses a unique identity and privilege with the memories they have from the past to the present.

## **CONCLUSION AND EVALUATION**

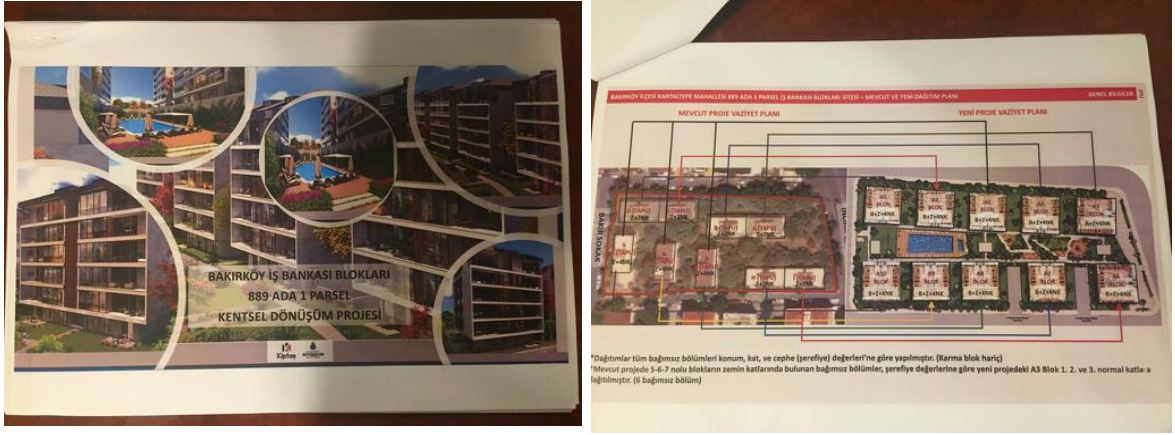
Republican period buildings constitute our cultural heritage and should be taken under protection. The users of the Republican period buildings are often not even aware of the architectural features of their properties.

İsbank Houses, which we consider as the structures of the 20<sup>th</sup> century, are an important area that should maintain its current status as a document and as a part of the urban identity, without being destroyed, as it is an example of the period. Today, since the buildings considered within the scope of urban transformation are evaluated on an economic basis, they often turn into projects that end with the benefit analysis of demolishing instead of protecting them. The same way of thinking has been included in the restructuring agenda of İşbank Houses and creates a great risk. The environmental values and natural plant character of İşbank Houses, urban spaces and open spaces have the potential to be sample protection features.

For this reason, the risk that arises in the construction process is carried out with a feasibility-based understanding, ignoring the urban memory, environmental values and natural plant character, urban space and open space values.

In the case of İşbank Houses, “protection of cultural heritage” should be at the forefront so that an assessment made in financial terms loses its validity. Because, like the heritages of all periods, the protection of modern architectural heritage is very important because it carries values far beyond economic value.

When we look at the proposed urban transformation projects for Isbank Houses (figure 1), they are projects that will radically eliminate both the architectural value of Isbank Houses, their natural plant character and the value of urban spaces and open spaces.



**Figure 1.** Urban Transformation Project proposed by KIPTAŞ

As a result, urban transformation projects should not be carried out by destroying the memory of the city, eliminating plant species, and eliminating the value of open green space.

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# AN EVALUATION OF THE PHENOMENOLOGY LITERATURE AND ITS APPLICATION IN ARCHITECTURE

SABA MATIN AYGÖREN<sup>1</sup>

## ABSTRACT

One of the most influential research foundations in contemporary architectural theoretical debates is phenomenology, which tries to review the concept of place and physical perception by considering the place of human biological experience and reviving hidden meanings in artificial spaces. Phenomenology in architecture concerns the quality and form of human experience, the relationship between the physical subject and the surrounding space, and the ability to receive environmental data. Understanding the experience of being somewhere as a presence can objectively or subjectively change the architect's view. It can also improve the architect's relationship with the users of the built environment. In contemporary architecture, spaces have undergone radical changes, and the qualities that traditionally characterized human settlements have either been destroyed, degraded, or irreparably removed. The modern environment has rarely given rise to the sense of wonder and exploration that is the charm of the old city experience. This situation highlights the spatial experience's character and sometimes the place's spirit. The strength of phenomenology is that creating a place makes the environment meaningful because, in architecture, meaning is based on the ability to symbolize human existence or presence and the spatial experience of the work. Science abstracts from facts to arrive at unbiased and objective knowledge; therefore, if spaces are indeed a fundamental aspect of human existence in the world and if they are a source of trust, comfort, and identity for individuals and groups of people, then it is essential not to overlook how we experience, do, and maintain space.

Considering the inability of human beings to understand the biological space experience, paying attention to the objectification of existential space through the construction of spaces is considered one of the essential factors affecting phenomenology in architecture. This case is the characteristic of the spatial experience and sometimes the spirit of the place. The strength of phenomenology is that creating a place makes the environment meaningful because, in architecture, meaning is based on the ability to symbolize human existence or presence and the spatial experience of the work. Modern architecture and then contemporary architectural designs have led to the loss of architecture's sensory and physical essence. Science abstracts facts to reach objective and objective knowledge; therefore, if spaces are a fundamental aspect of human existence in the world, and if they are a source of trust, comfort, and identity for individuals and groups of people, then it is essential not to overlook how we experience, do, and maintain. This study aims to investigate the concept of phenomenology and its origin in architecture with a descriptive method and by referring to library resources. Based on phenomenological concepts, it is possible to qualitatively examine contemporary architectural spaces and the role of sensory perceptions in understanding place and feeling this identity with space from the perspective of phenomenologists and experts in architecture.

**Keywords:** Phenomenology, phenomenon, Space, Meaning of Space, Architecture.

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## 1. INTRODUCTION

In recent years, phenomenology as a philosophical interpretation has been influential among architects. Architecture is so connected with the philosophy that many philosophers have thought about architecture and architectural issues such as housing and space, and many architects have studied their works from a philosophical point of view. The phenomenon of space as a residential area has been chosen and realized as a part of human existence. It is the primary source of the identity of the residents of the place. On the other hand, the lack of space crisis refers to the inability of living spaces to provide the necessary content for human settlement. Today, architecture follows its logic and rationalism, away from the attention of human needs, which are meaningless and cause the spread of forms for speculative purposes. The architecture of the buildings, which does not allow people to settle in and transforms them into consumers, does not reflect the basic meanings of human existence, and therefore people are deprived of the creative use of spaces and eventually lose their sense of belonging to the place by becoming passive witnesses and spectators. Due to the importance of this subject, the phenomenon of place is examined in terms of phenomenology in this article.

Modern people abide by the rules of modernity and are smartly concerned with the number of events rather than their quality. As a result, we witness the definition of living spaces as the shapers of human life and the indifference to the existence of meaningless places in modern living spaces. Compared to other philosophical currents and methods, one of the outstanding features of phenomenology is that it escaped the exclusivity of philosophy and found a practical and applied directly to conduct qualitative research in other fields of science and art.

Phenomenology has suggested that we set aside questions about objective reality and look to our inner human experience for answers. In addition, text comprehension looks at the awareness and reality of a phenomenon, putting another expression from objective experience to transcendental experience. The method of phenomenology aims to learn and research phenomena that arise indirectly from our direct experiences, not based on the mentality of pure rationality and the emotions of empirical science. It is not based on the mindset of pure rationality and experimental science. This is against the view of René Descartes, who bases philosophy on thought and wisdom and believes that the external world is independently existing<sup>2</sup>.

Architectural models based on phenomenological concepts can contribute to the qualitative evaluation of contemporary architectural spaces by presenting sensory perceptions in the process of understanding and feeling the space from the views and thoughts of phenomenologists in architecture. Edmund Husserl can be regarded as a pioneer in presenting the philosophy of phenomenology, like his successors Martin Heidegger, Gaston Bachelard, and Maurice Merleau-Ponty. In the field of architecture, architects such as Christine Norberg Schulz, Alberto Perez Gomez, Yohani Plasma, Steven Hall, and Peter Zumthor have taken strides around the approach of mindset and objectivity and attention to the human senses and a return to objects and experience. The spread of these concepts has had a remarkable reflection in the international arena, as it has led to the re-acquaintance of architects with the local identity and attracted new interest (Seamon,2000).

Space is a phenomenon related to daily life, and therefore it precedes all academic concepts and perceptions. A phenomenology is an approach that acknowledges the complexity of this experience and seeks to clarify its dimensions without reducing it to a few specific models. From a phenomenological point of view, while being placed in a particular context and environment, on the other hand, it presents an aspect of the openness of the world. Spaces should be neutral and "objective" to "single" information.

## 2. PHENOMENOLOGY

Due to the scattered views of 20th-century philosophers on phenomenology, many observers believe that a single definition of phenomenology cannot be made. For philosophers and their leader, Edmund

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<sup>2</sup> René Descartes believes that the external world independently exists, that our mind can discover it, that we can only understand things correctly with the power of the mind, and that any sensory perception will lead to error.

Husserl, phenomenology seeks to explain the immediate situation of subjects and the environment, a way to hope for an understanding without assumptions and prejudices. In this context, he escaped the trap of scientific, religious, metaphysical, and psychological prejudices. Dermot Moran sees the primary purpose of phenomenology as the effort to reach a state of revelation, the place where the studied phenomena are understood. Subjects are defined in precise and comprehensive ways, and no bias or preconceived view will interfere with the process of understanding them (Moran, 2005).

The main aim of phenomenology is to return to the essence of things, which means confronting the nature and meaning of phenomena as they are in our awareness. It is possible to get in touch with the reality of facts most honestly and purely by moving away from abstract concepts in the cognitive sense, leaving aside ideological, social, and personal prejudices and presuppositions. (Husserl, 2012). Phenomenologists guide this explanatory phenomenon to construct explanations about real human experience or the same biological experience (Van Manen, 2016). Life experience manifests the direct rediscovery of all dimensions, everyday life, and human existence. Here, life refers to a wide variety of human experiences, concepts, situations, and events, whether boring or stimulating, fascinating, suspenseful or magnificent, material or spiritual. For example, are there moments in our daily lives when we consciously experience the buildings around us more profoundly and memorably? From the perspective of Sean D. Kelly, phenomenology starts from the fundamental problem of wholly and accurately describing the inherent features of life experience. The lived experience appears to be an active and relevant experience we acquire from the world throughout our daily lives. For example, to hear the sound of the game bell, to see the smile of a friendly face. The most critical assumption of phenomenology is that acquiring daily life experience is entirely and largely a matter of adjustment that one has thought about from the very beginning. (Kelly, 2014).

Experience is one of the most important topics discussed in phenomenology. To phenomenologists, the world is a matter of experience. In a world where we relate to nature and society, everything has a meaning or a human implication. Every sense experience, every sensory perception, or every judgment has a pure aspect to explore. Phenomenology explains the meaning of a concept or phenomenon from some people's perspectives and life experiences and tries to understand the shared experiences of some people (Schwartz-Shea, 2006). Phenomenology helps to understand the nature and meanings of everyday experiences (DeMarrais, & Tisdale, 2002). Phenomenology relates everything to the person and sees the mind as the primary point that leads to forming mental bonds between himself and others. After taking what happened to him at a specific moment, he shows a particular behavior concerning the environment. It means studying the interpretation of human experiences to know situations, events, meanings, and human experiences that occur in everyday life (Von Eckartsberg, 1989). *Phenomenology* is a descriptive field that describes the content of human consciousness and studies and explains revelations (Mitrovic, 2012).

Phenomenology aims to pass the stage of knowing objects and appearances and aims to reach an understanding of the essence of the facts. Phenomenology tries to prove that knowledge consists of meaning and cannot be easily doubted. (Berrios, 1989). Based on the views of Van Manen and Moran, phenomenology can also be described as a way of understanding emphasizing the identification and interpretation of dimensions of human experience, awareness, and meaning mainly unconscious understanding. Phenomenology aims to explore and understand the voluntary awareness that shapes the human experience. Analysis of this experience reveals the precise structure of the world expressed in shared or multiple meanings, the meanings of things available when confronted with the world. (Tuohy, Cooney, Dowling, Murphy, Sixsmith, 2013). According to Smith, the basic phenomenology of various types of experience extends to social activities, including perception, reflection, memory, imagination, emotion, desire, physical awareness, physical action, and activities (Smith, 2013).

The structure of these forms of experience includes what Husserl calls intentionality. It means that he has experience or is aware of something. The central structure of any experience is its intention. This means that experience has objectivity in the world through its content or meaning. Phenomenology allows us to recognize and ontologically understand our lost world, imprisoned in philosophical

confusion. Accordingly, we learn that words, symbols, perceptual objects, images, moods of others, and social conventions exist as ordinary things that occur in a familiar way (Sokolowski, 2008). Therefore, the purpose of the phenomenological description is nothing but the description of what appears in our awareness. The phenomenological description is not based solely on the rationalist mentality or the feelings of empirical science but is a description that will be obtained by giving meaning to the facts in which social and human phenomena are full of meanings.

Phenomenology means breaking the foundation in examining the space's attitude, method, and process. The beginning of this process is a radical change in the way of seeing, a deep, sincere and honest relationship with space, and acceptance of place as the meaning of existence. The critical point in the phenomenological approach is based on the assumption that people and their environments are intertwined so that each creates and reflects the other. Phenomenology refers to a world that includes people and their environment together so that each defines the other. Therefore, if places are indeed a necessary aspect and foundation of human existence on earth, a source of trust, comfort, and identity for individuals and groups of people, it is essential not to lose sight of how we experience, construct and maintain space, and defining place is the foundation of human ability to settle. According to this approach, every living thing has its own "soul," with which it acquires its unique character. Therefore, every object and place has its own "spirit" and peculiarities. Human needs it to understand the spirit of the place by constructing buildings and constructing the "spirit of the place," one reveals the place that exists and allows the place to reveal its soul (Schulz, 1980).

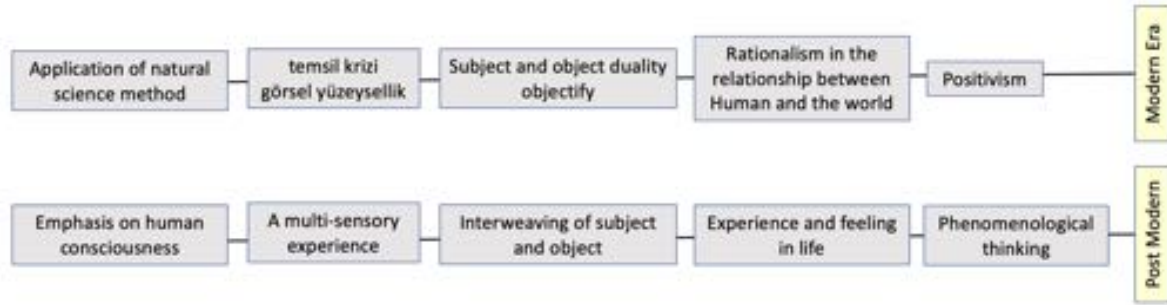
The phenomenology of space aims to describe fixed and permanent structures, describe the life of the world, reveal the different characters and tangible and abstract features of space, remain faithful to the nature of particular places, generalize its meaning to the broader patterns of main structures and the interrelationship between people and places.

### **3. THE PHENOMENOLOGICAL PARADIGM FACING THE CRISIS OF MODERNITY**

The philosophy of positivism was the success of Descartes' thought after the 17th century, which caused the study of phenomena to be done with an analytical and partial approach, paying attention only to quantities. The change in the definition of subject and object in the Cartesian vision and the primacy of the human have led to ignoring the richness and complexity of symbolic ideas, the essence of the reasons, reasoning, and meanings of all phenomena. The emergence and spread of phenomenological thought can be seen as a crisis pointed out by Edmund Husserl, one of the pioneers of phenomenological philosophy. This crisis stems from two factors. One is the use of the methods of enlightenment and natural sciences in the humanities, and the other is due to the duality between the subject and the Cartesian tool, dividing Man and the world in front of him into two independent categories. In Cartesian's method, the external world is a world that exists independently of the object and can be obtained by the power of reasoning and leaving sense perception to itself; That is, this view assumes that there is a world outside and independent of human consciousness. Starting from the Enlightenment period with Descartes and Kant, positivists see wisdom as the only tool of human knowledge and believe that science can illuminate all aspects of existence, such as material and physical nature. The scientific interpretation of the world led to removing all metaphorical images and mythological beliefs from classical cosmologies and transforming the world into a mathematical and geometric complex. The world of modernity is an empty world without ancient legends. Modernity is the story of wisdom's battle with the religious, overriding traditional ideologies and removing cryptographic methods from the world. The world of modernity is a simple, one-piece world that can be recognized with the help of science and technology.

The French philosopher Maurice Merleau-Ponty also emphasizes that extreme phenomenology is a crisis on this subject and that this crisis is still dominant. In this context, Merleau-Ponty believes that his phenomenology makes a kind effort to solve a problem unrelated to a group (Merleau-Ponty, 2013). This problem has been on the agenda worldwide since 1900 and continues to be effective. Therefore, Husserl's philosophical effort is a requirement of his mind, which wants to simultaneously solve the crisis

of philosophy, the crisis of the humanities, and the crisis of all the sciences that we have not yet been rid of (Dartigues, 1972). Alberto Perez-Gomez believes that architecture has lost its metaphysical dimension and that there is no other form of integration and concepts between humans and the world around. Only phenomenology can overcome the tragedy of the burden that modern philosophy inherited from Descartes by rediscovering the superiority of perception (Gomez, 2016).



*Figure 1. The difference between modern and post-modern viewpoints.*

### 3. EDMUND HUSSERL'S PHENOMENOLOGY AND RE-READING PHENOMENOLOGY IN ARCHITECTURE

What can be said about Husserl is his activity concerning the central role of meaning in experience. It describes a detailed account of our conscious experience with the objects of the world around us and considers phenomenology as knowledge of the essence of consciousness. Husserl determined his phenomenology as consciousness and ecology, accepted as a type of epistemology. In this context, the fundamental question of Husserl's phenomenology is how the meaning of the world and objects is formed in human consciousness. Husserl's pure awareness comes from the perception that something in the world is not just a mental image but is seen in the mental experience regardless of the presence or absence of the world. Husserl's method mainly aims to realize the relationship between humans and the world. That is, we can understand this link's nature and meaning before translating it into subject and object so we can look at them as two independent categories. Therefore, the meaning of non-instrumental perception is only sensory observations and sensory data. Therefore, what Husserl took for granted was intuition or direct perception. Intuition is based on accurate observations or experience, and the next step in the study is its explanation and investigation.

Husserl's phenomenology is both an explanation and an interpreter of the mind and its subject. Whether that subject has an actual existence and is in harmony with the outside world or whether it has an external existence and is not in harmony with the outside world. In Husserl's time, there was a consensus that phenomenology should be descriptive and describe phenomena through direct awareness. The descriptive words of direct phenomenology are examples of how phenomenology has been used in its general sense and as a purely descriptive science for concrete phenomena (Schmitt, 1967). For example, in the design of a building, before considering the features of the space, physical plan, et al., the architect thinks about the general consciousness and belief regarding the nature of the building through the immeasurable memory of the environment (Hale, 2013). Therefore, the concept of awareness and consciousness is considered one of the most fundamental concepts in Husserl's philosophical system. The aim is to determine the structure and framework of human consciousness to understand the characteristics of the external world. "Consciousness is not consciousness insofar as it is directed towards an object, and the object, on the other hand, is not defined unless it is related to a consciousness" (Dartigues, 1972). Here awareness is like a bridge that softens the connection between mind and eye, the inner and outer world. We want to return to the essence of every phenomenon, and every

consciousness produces a time when it turns to something other than itself. "Consciousness is not consciousness insofar as it is directed towards an object; on the contrary, the object is not defined unless it is related to consciousness"(Dartigues, 1972).

The object should not be thought of as the contents of a box, but the object of awareness should be mentioned. This definition reveals the systematic difference between Descartes and Husserl. Descartes' thoughts take the form of a philosophy oriented towards an internally assimilated subject. With the opening of this subject to the world of things, Husserl's discussion, unlike Descartes, is on the movement that directs awareness to something other than itself and the outside. That is, awareness arises when it is opened to the outside. Otherwise, there is no awareness. Edmund Husserl wanted to know how consciousness shapes reality and how the world reveals itself to consciousness. Instead of Cartesian doubt about everything, Husserl casts aside all his beliefs about an object or, as he says, brackets it to throw it at that object. Rather than cast doubt on everything in the Descartes way, Husserl set aside all his beliefs about an object or, according to his own words, set them aside or bracketed them so that he could look at them from time to time. Husserl saw a kind of unity in things. For example, when he looked at one side of the box, he argued that the other sides of the box should also be predictable. On the one hand, Husserl's effort to make phenomenology a method and to equate philosophy and phenomenology on the other has caused Husserl to be remembered as the founder of the method until today when the word "phenomenology" is used.

The fundamental question of Husserl's phenomenology is what the world and objects around mean and how these meanings are formed in awareness. What can be said about Husserl is his activity, which relates to the central role of meaning in experience. This state describes a detailed account of our conscious experience with the objects of the world around us. The clear awareness that Husserl seeks comes from the perception that something in the world is not just a mental image but is seen in a mental experience, regardless of the presence or absence of the world. On the other hand, Phenomenology is accepted as the knowledge related to the knowledge of the truth that constitutes the content of awareness. Based on the cognitive approach, the analysis and descriptive analysis of the phenomenon begin with mental processes. According to Husserl, sensory perception is the same as perception, accurate perception is awareness, and all perceptions are related (Husserl, 2012). Therefore, what Husserl took for granted was intuition or direct perception. Intuition is based on accurate observations or experience, and the next step in the study is its explanation and investigation.

Phenomenologists guide this explanatory phenomenon to construct explanations about real human experience or the same biological experience (Van Manen, 2016). Life experience manifests the direct rediscovery of all dimensions, everyday life, and human existence. Here, life refers to various human experiences, concepts, situations, and events, whether boring or stimulating and impressive, suspenseful or magnificent, material or spiritual. For example, are there moments in our daily lives where we consciously experience the buildings around us more profoundly and memorably? From the perspective of Sean D. Kelly, phenomenology starts from the fundamental problem of wholly and accurately describing the inherent features of life experience. The lived experience appears to be an active and relevant experience we acquire from the world throughout our daily lives. For example, to hear the sound of the game bell, to see the smile of a friendly face. The essential assumption of phenomenology is that the acquisition of daily life experience is a problem of adaptation, which one thought from the beginning (Kelly, 2014). Husserl's effort to make phenomenology a method on the one hand and to equate philosophy and phenomenology on the other caused Husserl to be mentioned as the founder when the word phenomenology was used.

We live and work in a world where places are entirely different, but at the same time, we seem to know very little about how places are created and how we experience them. The place is the fundamental aspect of existence, and although existence goes beyond it what we call life on earth, it will always be expressed through the place. Husserl sought to free himself from what he called the natural position. The naturalistic viewpoint was the viewpoint and approach adopted by scientific positivism in the 19th and early 20th centuries. With this approach, objects are in a material-free world, and it is possible to



obtain them through positive experience. The meaning of this interpretation is to avoid making judgments about the existence of objects and the world outside of human consciousness and to refer to the objects themselves with direct intuition without having any preconceptions about them.

#### 4. CONCLUSION

Because the intimacy of an architectural experience depends on the architect's ability to pay attention to the mind and the body simultaneously, the characteristics of a space based on sensory needs will lead to a more satisfying experience. Focusing on the phenomenological approach is how architecture can inform the mind of meaningful experiences. Phenomenology provides the opportunity to improve the views and attitudes of architects and opens a new horizon for them. While most architects focus on sight, paying attention to the senses can make the space more meaningful to the user. In the phenomenology of the built environment, it is essential to understand the environment and its emotions, as the acquisition of sensory data and its transformation in mental processing, reproduction, and association of meanings play the most crucial role. The body is connected to the world through sensory perception. Accordingly, it can be concluded that the Building is about life and contains a sense of continuity, community, and comfort. This world is where people live and understand it specially, and through it, we communicate with others. Today we define a *house* as a roof over our heads and a few square meters of land under our feet. In other words, we present only a tiny and material view. Today's residential buildings may be well-designed, easy to maintain and inexpensive, and have adequate ventilation and lighting, but this does not necessarily lead to people settling and living in these buildings. Heidegger believes that human settlement has been reduced to construction in the modern age. Activating being includes the ways we do, see, understand and think.

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# TRENDS OF RESEARCH ON INTERIORS: A BIBLIOMETRIC ANALYSIS OF THE *INTERIORS: DESIGN, ARCHITECTURE, CULTURE* JOURNAL

DİLEK YAŞAR<sup>1</sup>

## ABSTRACT

The present study aimed to investigate the current state and trends of research on the interiors. A bibliometric analysis method was used in the study and accordingly the Interiors: Design, Architecture, Culture, a respected journal in its field, was selected as the field of study. A total of 659 articles, including 228 articles published in the said journal between 2010-2022 and 431 articles cited those articles were analyzed within the scope of the study. Accordingly, the articles were investigated using a bibliometric analysis method, based on title, abstract, and keywords, and then classified by main themes, sub-themes, and research objects of the relevant themes. The results were indicative of the fact that the main themes of design, history, and sustainability were the most frequent research objects.

**Keywords:** Trends of Research on Interiors; A Bibliometric analysis of the interiors; Interior design; Interior architecture; Interior.

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## **1. INTRODUCTION**

“Throughout human history interior space and its experience has served as both the beginning, the initial inspiration, for the design of architecture, and the end, the final purpose of architecture as it is engaged in inhabitation” (McCarter 2016). Today, people spend most of their lives indoors. As a dynamic background of human activity (Cys & Lawrence, 2013), interiors is directly related to human life.

Studies on interiors has become popular and accelerated in the recent decades. Nevertheless, to the best knowledge of the author, there is no quantitative study in the relevant literature, which investigated the current status and trends of research in this area. In that respect, it is important to carry out a literature analysis for interiors.

Bibliometrics, is one of the most frequently used methods for the purposes of quantitative analysis in the relevant literature (Chai & Xiao, 2012). Bibliometric allows a classification of scientific publications by certain criteria, including, subject, author, citation, title, etc. with an aim to monitor the development in the literature.

In the present study, a total of 659 articles, including 228 articles published in the *Interiors: Design, Architecture, Culture* journal between 2010-2022 and 431 articles cited those articles were investigated using the bibliometric analysis method. The analysis results indicative of the direction of the prominent research trends on interiors in the last decade were presented in the study. In this context, the distribution of citations from the “*Interiors: Design, Architecture, Culture*” journal by year, the most cited articles, the distribution of the journal articles by country, the distribution of citations by country, the most used keywords, and the frequency of their use were investigated. Finally, and most importantly, the main themes, sub-themes and research objects of those themes were identified based on the research trends on interiors, which was the point of departure of the present study.

## **2. METHODOLOGY**

As an indispensable tool in scientific disciplines, articles are important studies in which scientific progress can be captured. The articles help with discovering the past status of the related discipline (Lee, Wu). & Tsai, 2009) as well as providing information on current research trends. Those resources play an key role in exploring and identifying the direction, where the relevant discipline is heading to, and they are of special significance especially today, when access to information and producing information based on information is important.

Although the articles may structurally vary by the respective publication procedures of the journals, they are composed of three basic elements, namely title, abstract, and keywords. The title provides important clues as regards the content of the article (Haskins, 1960; Hartley, 2007; Sagi & Yechiam, 2008). In other words, it is the most important brief of a scientific article and accordingly it assumes a difficult task of attracting the attention of the reader (Paiva, Lima, & Paiva, 2012). Another element, abstracts, provide important information about the article and emphasize the critical points. Although the abstracts, by nature, do not feature the details of article, they do present the research subject and purpose of the article and summarize important results and research method, which makes them an invaluable source of analysis. Keywords serve as index terms with the most important information. They play a crucial role in extracting correct information tailored to the user requirements (Kaur & Gupta, 2010). Key concepts are important for both the scholars and readers, the consumers of literature. The scholars carefully choose their keywords with an aim to increase the visibility of the abstract among the relevant research topics and provide the researchers with guidance.

In brief, the title, abstract and keywords as integrated elements of articles, provide a key introduction to relevant article and therefore provide the scholars with important information about the content. Accordingly, the above parameters were taken as a basis in the analyses to investigate the research trends on interiors in the scope of the present study. As a reputable journal in the relevant field, the “*Interiors: Design, Architecture, Culture*” journal was selected as the field of study. The first reason for the said choice was that it was heavily focused on research on interiors. Besides, the journal embraced

rich perspectives from various disciplines and was the journal of choice of prominent and specialized authors.

The publications, which cited the journal's publications, were identified via Google Scholar tool. Nevertheless, the Google Scholar tool retrieved some duplicate or wrong citations. A total of 659 publications were included in the study, upon elimination of duplicates and erroneous citations. Table 1 shows the number of publications included in the study.

Research Area	Range of Years	Number of Publications
Interiors: Design, Architecture, Culture Journal	2010-2022	228
Other Publications Cited the Articles in the Journal (Google Scholar)		431
Total		659

**Table 1.** Number of Publications Analyzed in the Scope of the Study

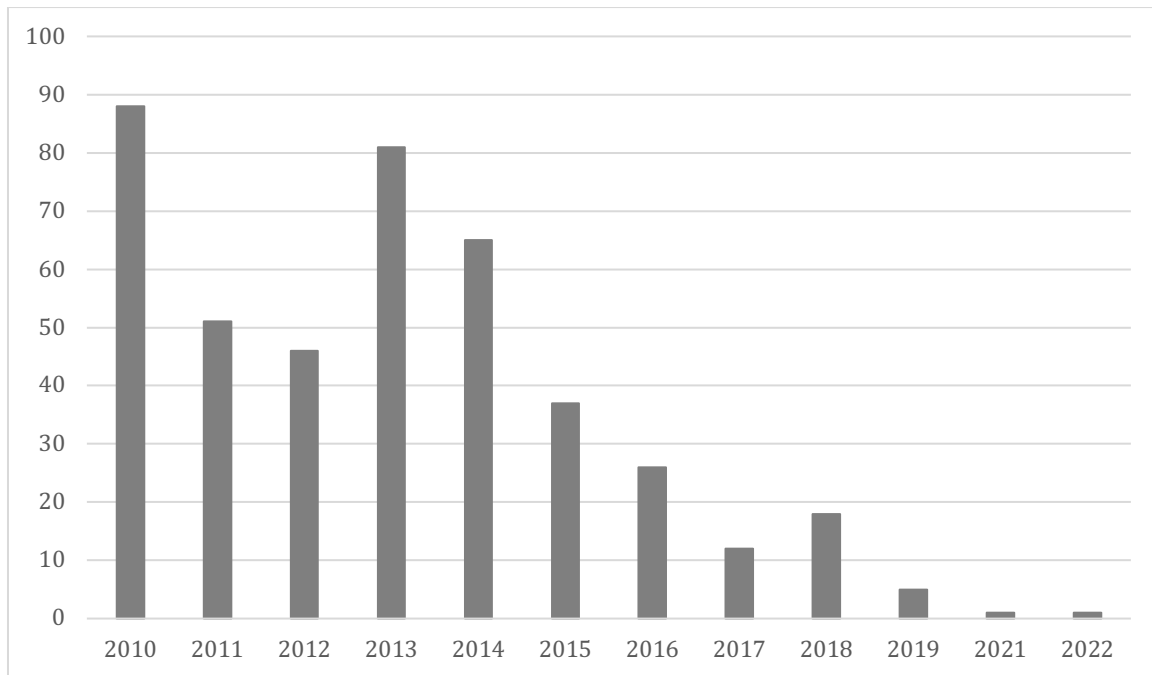
The next stage of the study included collection of raw data from the research area. In the context thereof, information regarding authors, publication years, countries, titles of publications, abstracts, and keywords of the articles were collected as raw data from the articles and tabulated using the Microsoft Excel software.

The final stage of the study included the classification of data. In this context, the distribution of citations from the "Interiors: Design, Architecture, Culture" journal by year, the most cited articles, the distribution of the journal articles by country, the distribution of citations by country, the most used keywords, and the frequency of their use were investigated. Finally, the research trends on interiors were assessed on the basis of titles, abstracts, and keywords.

### 3. RESULTS

#### Distribution of Citations from Publications Articles Published in Interiors: Design, Architecture, Culture by Years

The 228 articles in question were viewed a total of 56,078 times by the time of study and the total number of citations was 431. The highest number of citations was from 2010., and although the number of citations decreased partially until 2013, it increased again by the same year. Furthermore, the number of citations has decreased gradually since 2013, except for a partial increase in 2018. A distribution of the number of citations by year is summarized in Chart 1.



**Chart 1.** A Distribution of Citations by Years

### 3.1 MOST CITED PUBLICATIONS

The most cited publication was “The Flex-Nest: The Accessory Dwelling Unit as Adaptable Housing for the Life Span” by Jane Louise Nichols and Erin Adams, dated 2013. This article was cited in 21 publications. Six keywords were used in this publication: Housing; Accessory dwelling unit (ADU); Baby boomer; Generation Y; Elderly; Nest. This was followed by “On the Unhomely Home: Porous and Permeable Interiors from Kierkegaard to Adorno” by Henriette Steiner, dated 2010, which was cited in 18 publications. The article had eight keywords: The uncanny; Freud; The haunted house; Søren Kierkegaard; Theodor Adorno; The domestic sphere; Culture of the interior; Nineteenth-century fiction. In the third place, there was “Possessions in the Homeless Shelter Experience: “The Built Environment’s Potential Role in Self-restoration” by Jill Pable. Pable used six keywords in this article: Interior design; Homelessness; Homeless shelters; Possessions; Opportunity restriction process; Consumer culture theory. The journal articles, which were cited in 10 or more publications, are given in detail in Table 2.

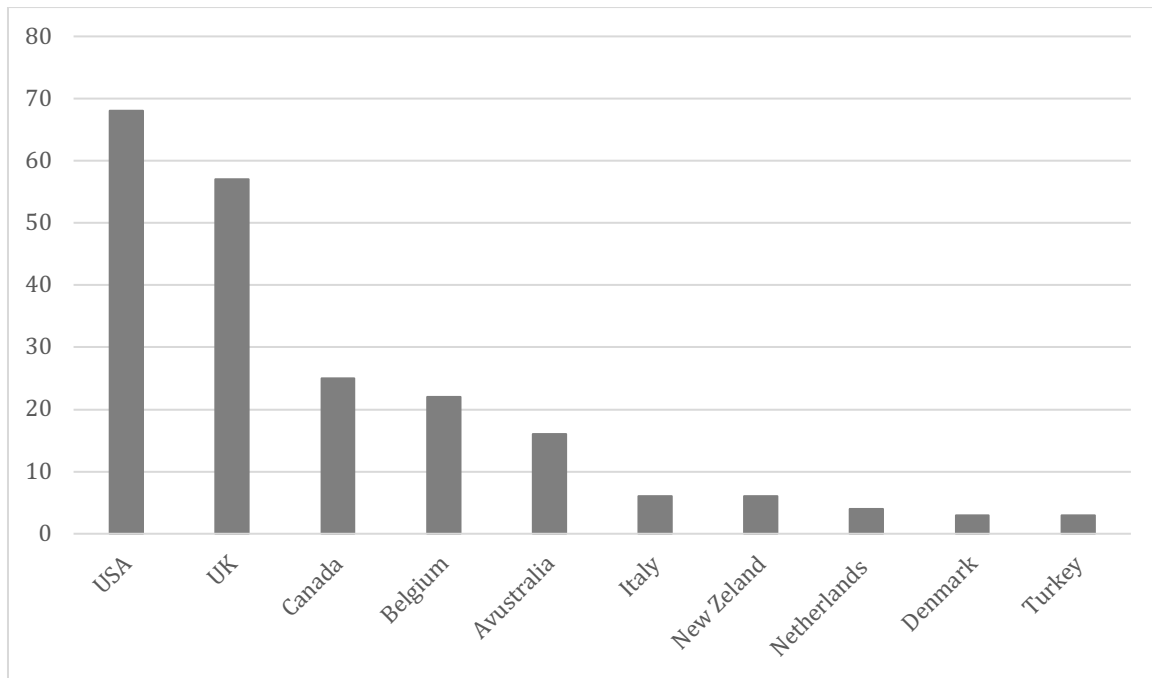
Author	Year	Publisher	Keywords	Citations
Jane Louise Nichols and Erin Adams	2013	The Flex-Nest: The Accessory Dwelling Unit as Adaptable Housing for the Life Span	Housing; Accessory dwelling unit (ADU); Baby boomer; Generation Y; Elderly; Nest	21
Henriette Steiner	2010	On the Unhomely Home: Porous and Permeable Interiors from Kierkegaard to Adorno	The uncanny; Freud; The haunted house; Søren Kierkegaard; Theodor Adorno; The domestic sphere; Culture of the interior; Nineteenth-century fiction	18

Jill Pable	2013	Possessions in the Homeless Shelter Experience: The Built Environment's Potential Role in Self-restoration	Interior design; Homelessness; Homeless shelters; Possessions; Opportunity restriction process; Consumer culture theory	16
Penny Sparke	2010	The Modern Interior: A Space, a Place or a Matter of Taste?	Modern; Interior; Space; Place; Taste	15
Mona Sloane	2014	Tuning the Space: Investigating the Making of Atmospheres through Interior Design Practices	Interior design; Material culture; Atmosphere; Eaesthetics; Cultural capital	15
Edward Hollis	2010	The House of Life and the Memory Palace: Some Thoughts on the Historiography of Interiors	Decoration; Design; Architecture; Historiography; Memory	14
Bie Plevoets & Koenraad Van Cleempoel	2014	Aemulatio and the Interior Approach of Adaptive Reuse	Adaptive reuse; Interior architecture; Historic interiors; Heritage conservation; Restoration	14
Menno Hubregtse	2016	Passenger movement and air terminal design: artworks, wayfinding, commerce, and kinaesthesia	Air terminal; Art; Architecture; Affect; Interior exhibition	14
Julia Keyte	2013	Objects in Purgatory: How We Live with Uncherished Gifts	Domestic space; Practices of keeping; Attachment; Possessions; Value	10

**Table 2.** Top Ten Countries of Articles Published in the Interiors: Journal Articles, which were Cited in 10 or more Publications

### 3.2. A DISTRIBUTION OF INTERIORS: FEATURED IN DESIGN, ARCHITECTURE, CULTURE JOURNAL ARTICLES BY COUNTRY

Top Ten Countries of Articles Published in the Interiors: The 228 articles from the Design, Architecture, Culture journal came from 23 different countries. The United States and the United Kingdom were the countries with the highest number of publications. The majority were the European countries, yet there were also countries from the Asian continent, including Jordan and India. The ten countries with the highest number of publications are given in Chart 2, and all the countries are given in Table 3.



**Chart 2.** Top Ten Countries of Articles Published in the Interiors: Design, Architecture, Culture Journal

Articles Published in the Interiors: Design, Architecture, Culture Magazine by Country

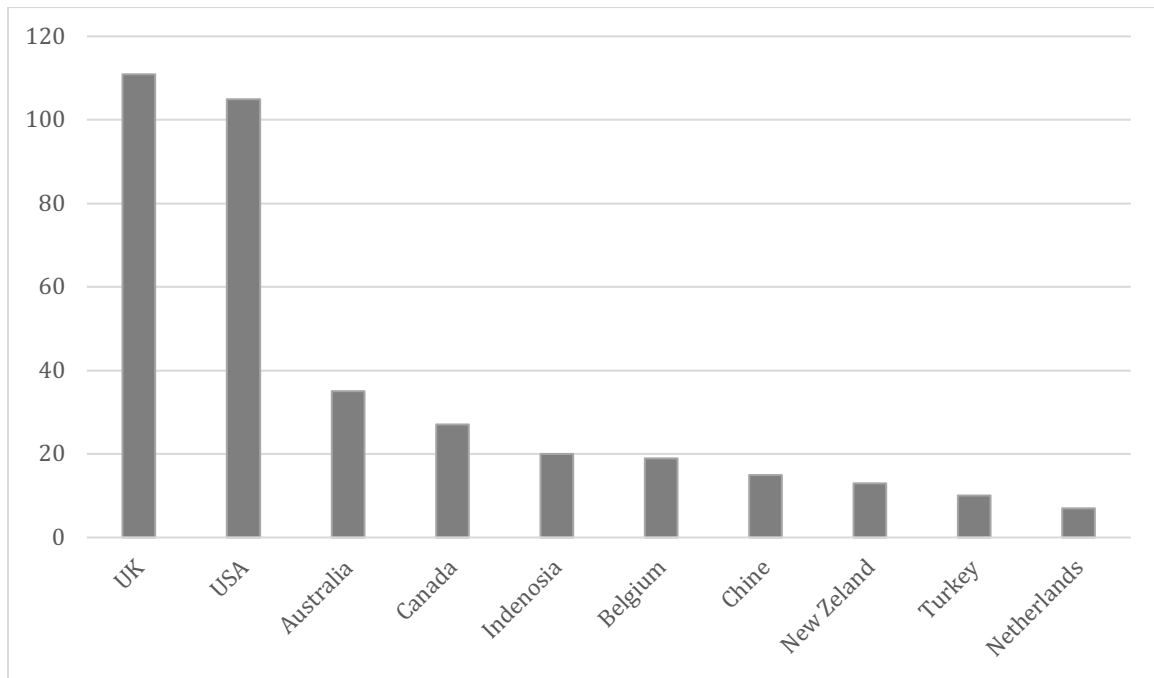
USA	Denmark	Austria
UK	Turkey	Finland
Canada	Switzerland	Germany
Belgium	Sweden	Greece
Australia	Norway	Spain
Italy	China	Jordan
New Zealand	Estonia	India
The Netherlands	Japan	

**Table 3.** Articles Published in the Interiors: Design, Architecture, Culture Magazine by Country

## 6. DISTRIBUTION OF CITATIONS BY COUNTRY

The countries of citations were even more diverse and included 38 countries. UK and USA were, again, at the top of the list of countries of citations. The countries from the Asian continent were more diversified, including citations from Kuwait, Egypt, Lebanon, and Israel. The 10 countries of citations are given in Chart 3, and all the countries are given in Table 4.





**Chart 3.** Top 10 Countries of Citations

Countries of Citations		
UK	Portugal	Equator
USA	Sweden	<b>Kuwait</b>
Australia	Iran	Egypt
Canada	South Korea	South Korea
Indonesia	Norway	UAE
Belgium	Russia	Lebanon
Chinese	Austria	Greece
New Zealand	India	Jordan
Turkey	Brazil	Iraq
The Netherlands	Finland	Israel
Italy	France	
Spain	Japan	
Denmark	Switzerland	
Germany	Cyprus	

**Table 4.** All the Countries of Citations

The analyses also included the parameters of field of expertise and gender of the authors. The fields of expertise included a rich diversity from sociology, literature, and visual arts to textile design, along with especially the interior architecture, interior design, design history and architecture. Also, the female authors made up the majority, where two-thirds of all the authors were women.

### 3.3. MOST USED KEYWORDS AND FREQUENCY OF USE

There were keywords in 387 of 659 articles in question. A total of 2320 keywords were used with an average of five keywords per article. Nevertheless, there were also articles with up to 13 keywords. The most recurring keywords and their frequency of use are given in Table 5.

Most Used Keyword	Number of Articles
Interior design	37
Interior	33
Architecture	24
Design	18
Interior architecture	16
House	16
Modern	14
Technology	14
Home	13
Gender	12
Identity	12
Domestic interior	11
Space	10
Domestic	10

*Table 5. The Most Recurring Keywords and Their Frequency Of Use*

Keyword distribution was highly diverse. In particular, the "design" term was frequently used in combination with other terms to produce compound keywords, including "domestic design", "modern interior design", "design history", "spatial design", and "design research". The extent of the above frequency was indicative of the fact that design was considered a priority. The keywords "house", "home" and "domestic" were also frequently used in the articles, which suggested that the articles mostly focused on living spaces compared to other spaces. Another remarkable keyword was "gender" with a particular emphasis on female identity. The frequency of use of keywords is visualized using a word cloud and given in Figure 1.



**Figure 1.** Keywords on Word Cloud

#### 4. TRENDS OF RESEARCH ON INTERIORS

The present study aimed to investigate the direction of research trends, and accordingly, a total of 659 articles were analyzed by title, abstract, and keyword. Although there was a rather a wide variety of research topics, the most frequent topics were associated with design, history, and sustainability.

The design theme was mainly referred to in the context of interior design, domestic design, interior architecture, decoration, and identity sub-themes, where house, home, dwelling and objects were the most frequently included research objects. Primarily the modernism, Nineteenth Century, and Postwar sub-themes were investigated under the history theme. The most frequently included research objects in the articles in question were adaptive reuse, domestic space, and cultural interior, i.e., the spatial reflections of diverse country cultures. The sustainability theme was generally discussed in the economic and social context. The research objects associated with the sustainability theme was the adaptable housing and accessory dwelling unit (ADU) in the context of economic sustainability, and meaning and humans in the context of social sustainability. Table 6 provides prominent main themes, sub-themes, and research objects pertaining to the trends of research on interiors.

MAIN THEME	SUB-THEME	RESEARCH OBJECT
DESIGN	Interior Design	House; parts of house; home; dwelling; furniture; objects, modern interior spaces; cultural interior spaces; spatial arrangement; museum and exhibition spaces, ADU, materials; retail spaces
	Domestic Interior	Home; house; parts of house; dwelling; furniture; objects; modern interior spaces; materials; meaning
	Interior Architecture	House; dwelling; heritage buildings; historical buildings; modern interior architecture; user behavior
	Decorating	Home; furniture; objects; materials; historical buildings; cultural interior spaces

	Identity	Home; furniture; objects; materials; cultural interior spaces
HISTORY	Modernizm	Modern interior design; domestic space; cultural interior design; house; interior architecture; gender; furniture; identity
	Nineteenth century	Interior design; interior architecture; interior decoration; adaptive reuse; domestic spaces; objects; house; identity; decorating; heritage building; historical buildings
	Postwar	Interior design; domestic spaces; home; furniture; objects
SUSTAINABILITY	Economical sustainability	Adaptable housing; ADU; house; dwelling; prefabricated interior
	Social sustainability	Meaning; older people; women; home; house; inclusive design

**Table 6.** *Prominent Topics in Trends of Research on Interiors*

## 5. CONCLUSION AND DISCUSSION

The present study aimed to investigate the current status and trends of research on interiors. Accordingly, the articles published in the *Interiors: Design, Architecture, Culture* journal and the studies cited those articles were investigated by means of bibliometric analysis.

One of the first results was that researches on interiors were internationally distributed over a wide geography. The countries of original articles were not limited to European countries, including Spain, the Netherlands, Germany, and Italy. In addition, there were citations from Asian countries, including Egypt, Israel, Iraq, Lebanon, Jordan, and Kuwait, which was indicative of the fact that the journal reached to a wide audience.

The second result was that the keywords offered a rich repertoire of terms, which suggested that researches on interiors were carried out in consideration of a wide range of relevant aspects. Therefore, it was pleasing to see that the studies in question on interior architecture and/or interior design, a discipline directly related to quality of life, duly included multi-perspectives.

The second stage of the study included a bibliometric analysis on 659 articles by title, abstract, and keywords. Thereupon, the articles were classified by main themes, sub-themes, and research objects thereof. The results indicated that research topics covered a wide variety of contexts. Nevertheless, it was possible to identify prominent themes. Majority of the articles focused on the main themes of design, history, and sustainability.

Finally, it should be noted that; as with many other studies, this study had its limits. The primary limitation of the present study was the fact that it was based on the articles published in the journal *Design, Architecture, Culture*, and other articles that cited those articles. Nevertheless, given that those articles were published between 2010 and 2022, they were important to investigate the current trends.

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# NEW MEDIA'S RESPONSE TO THE ARCHITECTURAL SOCIETY OF 21<sup>ST</sup> CENTURY: ARCHDAILY CASE

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## ABSTRACT

This article focuses on how the new media of architecture corresponds to the architectural society in the 21st century and how the new media of architecture can have an instrumental power in creating a response/attitude to the period. Since the ArchDaily platform is the most prominent representation platform in the field of architecture, it was chosen as the object of the study. All publications of Archdaily in a specific time period have been examined in the titles; (i) the subject(s) (writers and readers, their interactions, and participations); and (ii) time (21. century architectural society). These studies were conducted with the Qualitative research software ATLAS.ti. The hypothesis of the research was founded on; *Archdaily should be equipped with maximum sensitivity to respond quickly/instantly to the architectural culture in the 21st century.* The research findings have determined that Archdaily has difficulty responding to the architectural society of the 21st century theoretically, and being 'instant' may lead to a loss of quality. Therefore, it is concluded that evaluating the new media of architecture is necessary/obligatory to establish more fluent and realistic new media-public-architectural society relations. In addition, the study proposed a new model to evaluate the new media of architecture.

**Keywords:** Architectural Society, Architectural Media, New Media Archdaily, Qualitative Analysis

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## 1. INTRODUCTION

This study was conducted to evaluate the new architectural media environment.

The Media defines as; 'Mass Media' and 'Medium' in the media and communication dictionary (Chandler & Munday, 2011). (i.) Mass Media: Various technological tools for distributing cultural forms (especially news, newspapers, and magazines) to the masses (Chandler & Munday, 2011). (ii.) Medium is the unit in which communication occurs, usually synonymous with the channel (Chandler & Munday, 2011). This study evaluates the 'New Media'. According to Manovich, '...New Media today can be understood as the mix between older cultural conventions for data representation, access, and manipulation and newer conventions of data representation, access, and manipulation. The "old" data are representations of visual reality and human experience, i.e., images, text-based and audio-visual narratives – what we normally understand by "culture." The "new" data is numerical.' (Manovich, 2003).

Manovich states that the new media field began taking shape at the end of the 1980s. He underlines that in the 1990s, Europe and Japan were the best places to see new media works. And he adds, 'Festivals have been required places of pilgrimage for interactive installation artists, computer musicians, choreographers working with computers, media curators, critics, and net artists.' (Manovich, 2003). New media started in the 1980s and gained recognition in the 90s. Why is new media so crucial in the 21<sup>st</sup> century?

According to statistics, as of April 2022, there were more than five billion internet users worldwide, which is 63.1 percent of the global population (Statista, 2022). One can claim that, over the past century, there has been a dramatic increase in new media usage in many disciplines. All this started to change with the globalizing world and accelerating technologies. Various fields in the world have begun to give importance to new media. For instance, universities have initiated a degree program in new media discipline. New professions began to be born. These professions concentrated at the intersection of media and graphic design. Therefore, the image and its digital representation have gained importance. Following that, museums have started to exhibit online exhibitions. This way, a new cultural environment began forming in the new media. New media can be considered more mature in the 21<sup>st</sup> century than in the 80's.

The discipline of architecture has also been added to this new cultural environment because it is based on representation. There are channels to deliver architects' works to the audience/reader. Therefore, the motivation behind this article is to investigate 'How the new media is responding/answering to the 21<sup>st</sup>-century architecture culture?' The importance and originality of this study are that it explores the current stage of architectural representations and their contributions to the discipline. The reader should know that the study is based on the Archdaily's material in a specific period. ArchDaily has the potential to be the initial step that can reflect the new media since it is a free and accessible platform for the whole world, with 14 million visitors every month (Archdaily 2020). Moreover, according to Alexa statistics, it is the most visited architectural website in the world (Alexa, 2020).

## 2. LITERATURE REVIEW

Having discussed the definitions of 'The Media' and 'The New Media' in the introduction chapter, 'What New Media actually is?' will briefly sketch this chapter. The short history of the media can be read in 'Rise and Functions of New Media in Architecture: An Investigation via Archdaily' (Esen & Dinç Kalayci, 2021). New Media has an important cultural context and should be placed somewhere in the literature. In order to make this placement, new media will be tried to be defined from different perspectives.

### 2.1. New Media as a Cultural Platform

According to Manovich, '...new media is concerned with cultural objects and paradigms enabled by all forms of computing...' (Manovich, 2003). What can be these new cultural objects? New Media is used in

developing visual art forms, graphic design, cinematography, filmmaking, art, and architecture. One can not imagine that a single area of culture exists explicitly in the new media.

It could be argued that no cultural field has so far been more recognized than the new media. Because in today's modern age, many concepts have been moved to online environments. For instance, a book, a newspaper and a library, an architectural studio, a museum, a cinema, a market, an office, and so on... moved into new media. A new culture has been born, and this culture became global and started to be used by the whole world. Perhaps a common culture that unites the entire world appeared for the first time in history. While the new media has such a unifying power, it was thought to be very important for the 21st century.

## **2.2. New Media as a Faster / Instant Response**

It is stated that some cultural forms have been transferred to the new media, and this change has brought speed with it (Manovich, 2003). For example, considering a newspaper; writing, editing, and sending the news to the printing house so that the news can be included in the newspaper; after publishing newspaper must be forwarded to newsstands. The process takes hours to reach its reader. However, thanks to the new media, the news comes to the reader within seconds in the age of speed. Is faster / instant always better?

Speed can cause to loss of some critical values. For instance, in the newspaper example, since newspaper printing goes through several stages, a control mechanism inevitably occurs at each stage. Therefore, publishing a discourse that is not newsworthy in the newspaper is meaningless and costly. However, if it is thought that there is no cost in new media<sup>3</sup>, non-newsworthy discourses can be included. This may lead to a decrease in theoretical knowledge. For instance; The 'architectural theory is dead' argument erupted following the release of *Assemblage* magazine's latest issue; 'The MIT Press published *A Critical Journal of Architecture and Design Culture* three times a year (*Assemblage*, 2000)'. Many architecture theorists interpret the magazine's end as the 'theoretical aspect' of architecture has been killed, (Graham, 2014). Do theoretical discourses dominate today's media?

## **2.3. New Media as a Distribution/Representation Platform in Architecture**

Colomina emphasizes the importance of altering media consumption for architectural theory (Colomina, 2014). Several studies<sup>4</sup> have shown that the Internet has made New Media one of the most widely utilized channels for news, communication, and socializing. Following this development, New Media began to serve the essential needs of architects, such as project announcements and advertising. Architects now use new media to generate publicity; some have even become star architects. For instance, Colomina emphasizes that the most successful technique of integrating Le Corbusier's architecture into the twenty-first century was the mass media, which Corbusier had efficiently utilized (Colomina, Loos, & Corbusier, 1996). Colomina claims that modern architecture is modern not by the use of glass, steel, or reinforced concrete but rather because of the introduction of mass media (photography, film, advertising, publishers, etc.).

Pérez-Gómez states; 'Expecting architectural representations to embody a symbolic order (...) will seem controversial unless we revise the common assumptions about art and its relationship to human life that have been with us since the eighteenth century (Pérez-Gómez, 2005)'. It would not be incorrect to assert that based on Pérez Gómez's discourse, architectural representation is a tool for establishing social and cultural engagement across cultures rather than being just a symbol for communication between

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<sup>3</sup> New media has a certain cost, but it is complicated to explain whose income is this. For example, when one read a news on the new media, whom do we pay? Is it the computer company or the one who made the news or do we pay our internet company? This complexity can be explained by the theory of capitalist economies.

<sup>4</sup> The following studies can be reviewed; (Standage, 2013), (Whiting & Williams, 2013), (Kweon, Hwang, & Jo, 2011), (Martin, 2003).



architects and non-architects. However, these assumptions were based on data from over 17 years ago, and it is unclear if these are still valid.

The majority of studies on the representation of architecture evaluate the relationship of architecture with the physical environment. In these studies, user requests/profiles, the relationship between the physical environment and the structure, the relationship between age and the structure, and building materials were evaluated<sup>5</sup>. The subject of this study is not a physical structure; therefore, it cannot be evaluated by the above methodologies.

#### **2.4. The Archdaily as the New Media**

Today, New Media brings architectural works into our lives. It is possible to claim that the contemporary theory of architecture is being written in more than one medium and multiple ways. In the 21st century, there are many architectural offices in the world, and almost all of these offices have online pages (portfolios) in the new media environment. In addition, architecture magazines also have accounts with online access. It would not be wrong to address these platforms, whose ancestors were magazines, as new media. Archdaily is one of these platforms.

ArchDaily was founded as a Spanish site *Plataformaarquitectura.cl* by David Basulto and David Assael in late 2008 (Archdaily, 2020). Basulto and Assael understood the power of new media and its impact on the profession and set their goal as creating a big architectural platform and designing a place that offers new opportunities for the discipline of architecture (Cilento, 2012).

Is Archdaily a New Media? Since the 'Digital Media–Architecture Relationships: ArchDaily As A Representation Tool' thesis answered this question, Archdaily is accepted as new media in this study<sup>6</sup>.

To sum up, new media has a complex structure. It is cultural. It is fast. It is instant. It is global. It is reachable. It is everywhere... The numerous information flows in new media have made the researchers question; Is the content of such platforms qualified? Therefore it is possible to develop hypotheses for the study as;

*H: Archdaily should be equipped with maximum sensitivity to respond quickly/instantly to the architectural culture in the 21st century.*

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<sup>5</sup> Examples of these studies are; (Dinç Kalayci, 2015), (Gür, 2009), (Demirhan, 2019), (Keskin, 2000).

<sup>6</sup> In the methodology part of 'Digital Media–Architecture Relationships: ArchDaily As A Representation Tool' thesis, the 1st stage analysis has proven that Archdaily is a new media platform. For this reason, Archdaily will be considered as new media in this study.

### 3. METHODOLOGY

This study aims to measure Archdaily's performance in a specific period and determine its response/reflex to the architectural culture. ArchDaily's publications will be examined between Jan 1 and to Sept 3. In this period of time, an extraordinary situation, such as a pandemic<sup>7</sup>, has taken the whole world under its influence, and Archdaily's attitude towards a new event has been wondered. Archdaily's response to an abnormal order was considered remarkable and notable. Another reason for choosing this period is that Archdaily changed its web interface while conducting the research. Therefore, the study could not be continued in the same way after Sept 3, 2020 because some publications on Archdaily have changed, altered, or lost. New media's immediate response to a crisis will be monitored, and this inquiry can provide existing new media(s) with more accurate/strategic developmental proposals.

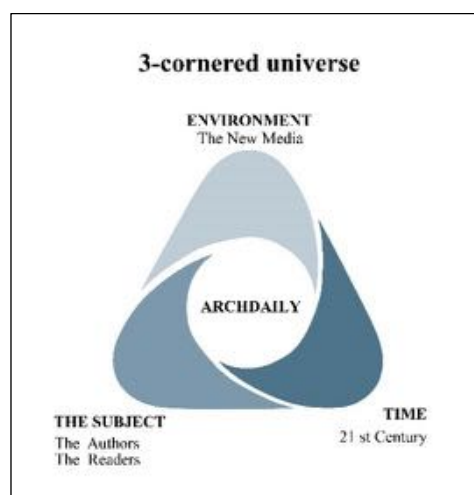
As mentioned before, the method used in previous studies that examine architectural objects will not be used in this study because the 'Object' of this inquiry is not a physical object. Therefore, a new model proposal is required for this study.

#### Proposed Methodology Model:

The proposed model has three variables, one independent and two dependent variables. The independent variable is Archdaily. The dependent variables are the subject (writers and readers, their interactions and participation), and time (21. century architectural culture) (Figure 1). This analysis was conducted with a qualitative research program called ATLAS.ti.

ATLAS.ti. is a computer-assisted qualitative data analysis software (CAQDAS). The software was developed at the Technical University of Berlin in Germany between 1989 and 1992 (Friese, 2019). It is used for analyzing data in visual, written, and even audio form and allows the researcher to interpret the data.

Wolcott states that the main aim of computer-assisted qualitative data analysis software is to close the gap between the original text and interpretative text (Wolcott, 1994). Parallel to this idea, Friese states, the ATLAS.ti program minimizes the researcher's subjectivity by creating simultaneous findings and presenting them as quantitative documents (Friese, 2019). ATLAS.ti was preferred to achieve as much accuracy as possible because the software enables the researcher to analyze the context using forward-reading, backward-reading, and cross-reading. Qualitative data analysis software is mainly used in social science, but there are also examples in architecture and planning<sup>8</sup>.



**Figure 1.** The proposed model for the new media of architecture.

<sup>7</sup> WHO (World Health Organization) announced Coronavirus as a pandemic on 11 March 2020 (WHO, 2020). A global crisis has emerged.

<sup>8</sup> These studies can be seen; (Özer, 2017), (Ashkan, 2016).

Previous studies in the literature have approved the environment variable of the proposed model<sup>9</sup>. As is seen in the figure, the model is not a perfect triangle since the New Media is a dynamic and interconnected structure, and the structure's corners are not sharp, so new media seem to globalize. Variables tend to interact with each other. The variables of the study will be explained in the following;

#### The Independent Variable: Archdaily

The independent variable of the study is Archdaily. Archdaily has been recognized as a new media platform. In order to examine the effects/reactions of Archdaily on the architectural culture, it is necessary to interpret Archdaily's publications. Since Archdaily is an open-access new media platform, no restrictions were encountered in accessing this data.

Data collection: All of Archdaily's publications between Jan 1 and Sept 3 have been accessed online<sup>10</sup>. Later, these publications were saved on a computer as word documents. Then all word files were transferred to ATLAS.ti software.

Coding and Managing Data; Firstly, all the content read and citations considered essential for research were determined by keeping the study's hypothesis and purpose in mind<sup>11</sup>. The researcher marked five hundred eighty-six (586) citations from 105 articles<sup>12</sup>.

Analyses: Each marked citation examined to express the underlying meaning by questioning; 'Says What?', 'To Whom?' and 'With What Effect?'<sup>13</sup>. According to the answers given, ATLAS.ti categorized these citations and revealed the research findings numerically.

#### The Dependent Variable 1: Subject

The subject variable is available to evaluate/observe Archdaily's communication with the author-reader. The evaluation of the author-reader relationships aims to diagnose Archdaily's response to meeting society's (primarily architectural) expectations.

Archdaily publications and all comments under these publications in the specified time interval are uploaded to ATLAS.ti for this measurement. Publications with comments are classified under the 'subject' variable for review by the researcher. After this classification, the content of the statements and their comments is evaluated. Do both comments and publications meet the expectations of the public? What does Archdaily tell/say/imply about the architectural culture? Those evaluations were carried out as in the example below.

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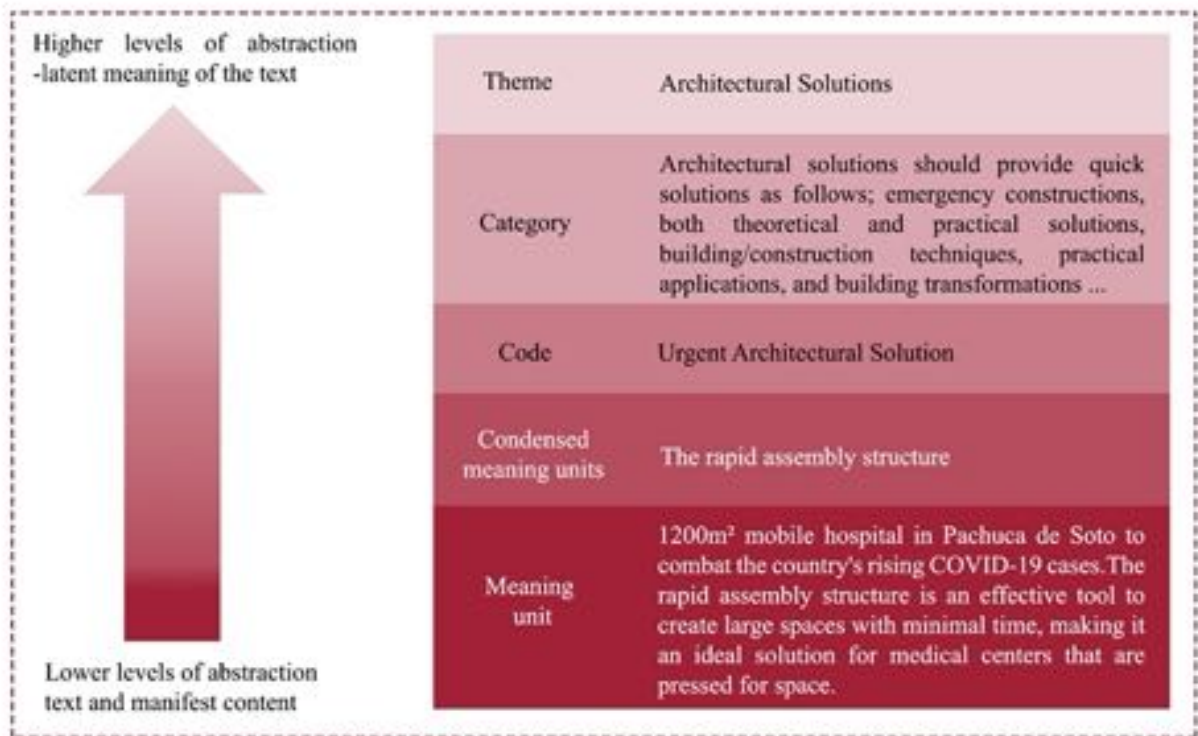
<sup>9</sup> For detailed information, one can read; (Esen & Dinç Kalayci, 2021), (Esen, 2021).

<sup>10</sup> [www.archdaily.com](http://www.archdaily.com)

<sup>11</sup> The sentences that could answer the hypothesis were examined. The issues discussed in the literature are emphasized.

<sup>12</sup> Figure 3 can be seen.

<sup>13</sup> These questions come from a query method called the lasswell formula, and this query is made for media mediums (both traditional and new media). Since Archdaily is accepted as a new media, the study was conducted with these questions in order to understand the content of the message more clearly. For more detailed information, the following articles can be examined; (McQuail & Windahl, 2015), (Esen, 2021).



**Figure 2.** Repetitive and abstract reading processes on ATLAS.ti

Figure 2 displays what is meant to be said based on the essential meaning. In this example, the aim is to reach the text's original purpose most accurately. The researcher coded five stages on ATLAS.ti software; each step approaches more and more abstract/exact meaning.

ATLAS.ti software tries to bring out the most accurate result by bringing every stage to the researcher many times. For example, while reading other articles, ATLAS.ti software shows the previous ones in the side window. In this way, researchers can see their remarks simultaneously, leading to crossover and more accurate readings.

### The Dependent Variable 2: Time

Time is chosen as the dependent variable because Archdaily's reactions may vary for different periods. Which values regarding time are desired to be examined? The answer to this question can be found in the literature section. New media has been evaluated from different perspectives in the literature section. These are features such as being fast/ instant/ rapid, being a cultural environment, and being a distribution/representation platform. Therefore, whether Archdaily can respond to these concepts will be examined.

In the information age, the definition of 'time' has modernized and developed on common sense, according to Giddens's discourse (Giddens, 2013). It was mentioned in the literature that new media is a culture. Parallel to this idea, Archdaily is supposed to be appropriate to this culture and meet the time's characteristics.

There are two reasons for the chosen specific time frame; firstly, the appearance of the pandemic is a situation that resonates around the world, and it was thought that Archdaily's response to architectural culture could be observed more clearly in such an environment. Secondly, when the evaluation started on Archdaily, the Archdaily platform changed its web interface. This change has led to the fact that the inquiry cannot be managed in the same order anymore. Therefore, the research was kept within a specific date range.

The study method is based on detailed cross-reading. Unlike the subject variable, all posts with or without comments are evaluated in this variable. While reading/evaluating the publications, it was checked whether Archdaily was fast/ instant/ rapid and whether it created a cultural environment. This assessment was made by examining how Archdaily responded to events in the world. Quotations were reviewed by looking for the above-mentioned features of Archdaily<sup>14</sup>.

### **Case Study**

The researcher analyzed 105 publications submitted to architectural culture via Archdaily between Jan 1 and Sept 3, 2020. By reading the 105 publications in detail, 586 quotations were obtained by dividing publications into 'Meaning Units.' It should be noted that not every word/sentence was considered meaningful for the investigation in 105 articles. Text fragments (quotations) that can contribute to the study's hypothesis are included in the analysis <sup>15</sup>.

For this study, a licensed student version of ATLAS. ti has been purchased monthly. The researchers have trained through tutorials and have reached the required qualification to run this software. Also, a short training was received by participating in the 'Introduction to Qualitative Coding with Delve' webinar on Wed, Oct 21, 2020.

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<sup>14</sup> The study was carried out by the method in figure 2.

<sup>15</sup> Figure 3, the parts participating in the study are shown with 'highlight'.

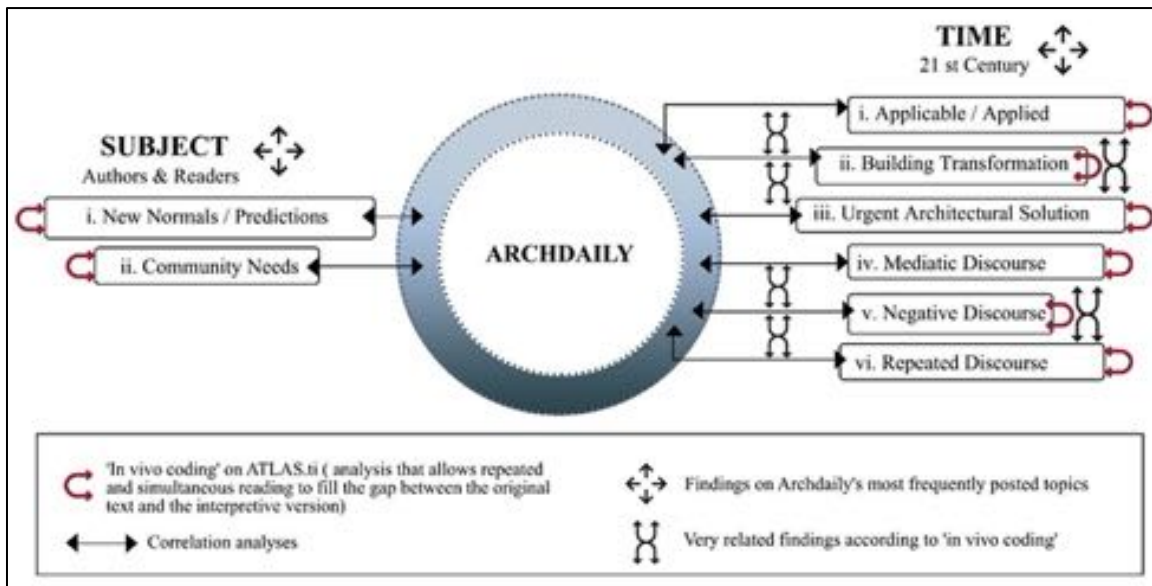


**Figure 3.** Data coding and reading processes on ATLAS.ti

As seen in Figure 3, the left side of the page is for ArchDaily contents; the right side is used for coding on ATLAS.ti. Although some sentences addressed more than one code, some sentences were not related to any code. While making these analyses, researchers kept the research hypothesis and research variables in their mind. The examination was not taken sequentially hence retrospective readings were made.

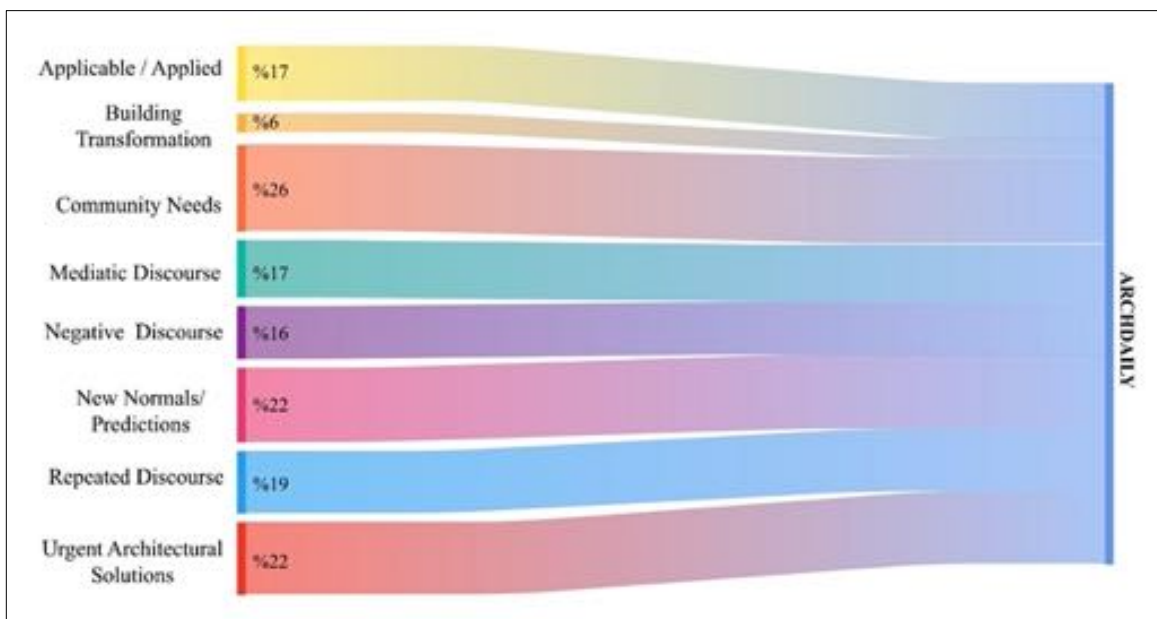
#### 4. FINDINGS

The research was completed through ATLAS.ti. software. Figure 4 summarizes the research findings' relationships with the variables. The most frequently mentioned topics were determined, and ATLAS.ti analyzed those topics by the 'in vivo coding' feature.



**Figure 4.** *The Relationships between Variables*

Figure 4 is created to explain that cross-readings and correlation relations were established, and repeated retrospective readings were done with ATLAS.ti. First, the most mentioned subjects have been determined with the help of ATLAS.ti. and indicated by arrows in 4 directions (figure 4). As is seen in Figure 4, there is a correlation between Archdaily (the independent variable) and the dependent variables. 'In vivo coding', one of the most important features provided by ATLAS.ti, is expressed with a red arrow. Thanks to this feature, it is aimed to get findings closest to reality<sup>16</sup>. Finally, ATLAS.ti revealed the most related findings. All these findings were mathematically analyzed by ATLAS.ti and presented to the researchers in percentages (figure 5).



**Figure 5.** *Percentage Values of the Depended Variables*

<sup>16</sup> For more information, one can read (Friese, 2019).

#### 4.1. Findings related with Subject

The Author's & Reader's Relationships have been measured via ATLAS.ti software. Two main concepts were encountered in the context of the data examined: *New Normals / Predictions* and *Community Needs*.

*New Normals / Predictions:*

When Archdaily publications are examined, discourses about pandemic conditions / predictive statements about the future are encountered. For instance;

*'How can architecture, particularly in dense areas, reduce risk for inevitable future pandemics? Will the anxiety over hygiene instigated by coronavirus have lasting effects on the way architects and urban planners design going forward?'* (Archdaily, 2020).

Asking questions discourses seem to establish a relationship with the reader. Also;

*'One good news, however: emissions in cities are on the decline, and nature is running its regenerative course. But how long will this last?'* (Archdaily, 2020).

There is a comment about the changes that come with the pandemic and a question to the reader about how long it will continue. Such posts have been evaluated under *New Normals / Predictions* title. According to ATLAS.ti findings, 586 quotations were labeled on the articles. *New Normals/Predictions* were mentioned 131 times, and that makes %22 percent of the whole data.

*Community Needs:*

Almost every discipline has to consider community needs; hence one can claim that the discipline of architecture has to consider Community the most. Because architecture is for everyone, it is expected that new architecture media should publish community-need topics. When Archdaily was examined, discourses that consider the people's health, economic, housing, and mental needs were encountered. For instance;

*'Moreover, if the COVID-19 pandemic has proved anything, it is that outdoor, public spaces are very much a necessity'* (Archdaily, 2020).

Here, a determination has been made about the needs of the people. Therefore, Archdaily served as a bridge between the public and their architectural needs. In other words, it can also be interpreted as establishing a relationship between the reader and the author. It should be remembered that only the publications with comments are examined in the 'Subject' variable. Another example from Archdaily;

*'Perhaps, "smart" architecture and public spaces will reduce the chances of infection. We need to come up with solutions for better public space in the cities.'* (Archdaily, 2020).

A comment has been made that considers public health and calls architects *to come up with better solutions* for society. Therefore, a call to the reader has been observed whether s/he is an architect or not. In such publications, it is seen that there are 586 quotes, and Community Needs were mentioned 152 times, which makes %26 percent of the whole data.

#### 4.2. Findings related with Time

Six findings (Urgent Architectural Solutions, Repeated Discourse, Mediatic Discourse, Applicable / Applied, Negative Discourse, and Building Transformations) were encountered considering Time variables.

*Applicable / Applied:*

When Archdaily publications are examined, discourses about built structures or going-to-be-built structures, and designs that offer easy/practical production/solution topics are encountered. For instance;

*'With 3,500 containers per vessel, patients would only stay on the ship in the circumstances where there is no place to deploy the containers. The containers are adapted by having one of the steel doors removed and*



*a perspex panel riveted in place. The perspex also has a hit and miss panel for natural ventilation and a built-in air-conditioning unit'* (Archdaily, 2020).

In this example, an architectural problem seems to have been resolved. Considering that this problem emerged with the pandemic, it can be seen that Archdaily offered a solution to the 21st-century architectural culture.

*'The building was completed in under 10 days by a team of 7,000 construction workers, a far cry from the reality many countries are facing as they scramble to quell the outbreak and wrestle with the shortcomings of their own healthcare systems. With over 14,000 dead and more than 300,000 infected worldwide, not to mention a shortage of medical supplies and facilities, health systems across the globe are feeling the strain of preparing for a crisis.'* (Archdaily, 2020).

In this example, it is mentioned that an architectural solution was produced in a short time (in 10 days). Although it is appropriate to evaluate this quotation in the context of Applicable / Applied, different meanings can be derived from the rest of the sentence. Therefore, this sentence has been assessed as a quote under different headings. As can be seen, several different interpretations can be made from a sentence. This way, findings that correlate with each other have also been determined<sup>17</sup>. Out of 586 quotations, 97 of them related to Applicable / Applied, which makes %17 percent of the whole data.

#### *Building Transformation:*

When Archdaily publications are examined, discourses about 'structures previously used for different scenarios and now used for other purposes' topics are encountered. For instance;

*'...adaptation of pre-existing structures such as market centers, sports fields, and schools in order to convert them into medical centers.'* (Archdaily, 2020).

The example clearly mentions that buildings that serve a particular purpose should be converted into health centers. Therefore, it has been tried to propose a solution to a concept that creates a crisis in the 21st century. In this respect, it is thought that that quotation responds to the time.

*'Wuhan began constructing three temporary hospitals in Wuhan Hongshan Stadium, Wuhan Salon, and Wuhan International Convention and Exhibition Center.'* (Archdaily, 2020).

Publications related to the pandemic can be thought to respond to the needs of the time. The fact that it responds to the requirements of the time and announces it to its readers also shows that Archdaily creates a cultural environment and is a distribution/representation platform. Out of 586 quotations, Building Transformations were mentioned 33 times, which makes %6 percent of the whole data.

#### *Mediatic Discourse:*

It was mentioned that faster / instant responses may not always be a good idea<sup>18</sup>. Mediatic discourses usually aim to get readers' attention, and there is no story behind these publications/news. Therefore, these discourses move away from theory. For instance;

*'Without a doubt, the critical scenario we are experiencing today ...'* (Archdaily, 2020).

This sentence uses a sharp expression such as 'Without a doubt'. The goal here may be to grab the reader's attention because no theoretical information about the current situation has been given to the reader.

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<sup>17</sup> Figure 4 can be seen for correlations.

<sup>18</sup> One can check 'New Media as a Faster / Instant Response' in literature review.

*'For more information, check [www.erco.com](http://www.erco.com), [www.arclighting.de](http://www.arclighting.de) or follow him @arcspaces'* (Archdaily, 2020).

Here, the reader is directed to another new media environment. Therefore, it can be interpreted that the necessary theoretical background is not in the Archdaily article. One can state, Archdaily can not fulfill theoretical needs and redirect the reader to other new media platforms. Therefore, these and similar publications are also interpreted in the 'Mediatic Discourse' category. Out of 586 quotations, Mediatic Discourse was mentioned 97 times, which makes %17 percent of the whole data.

#### *Negative Discourse:*

Another concept mentioned in Archdaily is 'negative discourse'. Contrary to the solution scenarios related to the pandemic, these discourses frequently mention the crisis and arouse a sense of panic in the public/reader. Therefore, one comes across a text that has moved away from constructive/positive discourses. For instance;

*'Each new day seems to add to the uncertainty about the immediate and long-term impact of the Coronavirus pandemic.'* (Archdaily, 2020).

For example, this sentence evokes hopelessness about the future. Especially the word 'uncertainty' tends to cause alarm in the reader. It can also be thought that this word is used to attract the attention of the reader. Therefore, this quotation is one of the texts evaluated under both headings, 'negative discourse and mediatic discourse.' because there is no theoretical information in this sentence.

*'The situation is so bad that doctors have been reported to wear diapers so as not to waste time with toilet breaks.'* (Archdaily, 2020).

Here, the severity of the pandemic is intended to be mentioned. But the word 'so bad' draws attention. Therefore, it can be stated that it is a discourse that will panic society. Archdaily's quotes that have 'disaster scenarios' and emphasize the 'badness' of the situation were considered negative. Out of 586 quotations, Negative Discourse was mentioned 93 times, which makes %16 percent of the whole data.

#### *Repeated Discourse:*

Repetitive discourses are cases of mentioning the same thing over and over again. Therefore, cases, where Archdaily did repetition have been identified. Repeated discourses do not produce anything new; they just create a crowd of information. The tendency of the architectural media to fall into repetition does not add any new information to the literature, and it only distracts the architectural society. Some examples of repetitive discourses are given following;

*'Over the course of a few days, the lives of millions of people have drastically changed.'* (Archdaily, 2020).

*'Home office is a practice that has become quite common during the last years.'* (Archdaily, 2020).

The sentences are used in more than one text. Out of 586 quotations, Repeated Discourse was mentioned 101 times, which makes %19 percent of the whole data.

#### *Urgent Architectural Solution:*

It can be accepted as a reflection of the speed expectation. Discourses that offer quickly decided architectural needs with fast construction and instant suggestions have been observed on Archdaily.

*'Yale School of Architecture came up with proposal designs on churches, synagogues and mosques that can be quickly built as "Pop-Up Places of Worship" in refugee camps.'* (Archdaily, 2020).

As can be understood from the sentence above, it is mentioned that the structures can be built quickly-rapidly-easily. In the age of speed, rapid architectural solutions have been mentioned on Archdaily.

'...The three buildings of this medical center were designed and constructed within 20 days' (Archdaily, 2020).

The idea of rapid production and construction was Urgent Architectural Solutions were mentioned 127 times which makes %22 percent of the whole data.

To sum up, Archdaily should create humanistic, beyond-mediatic relationships with its readers. Keeping attention to community needs (primarily architectural) and offering architectural solutions would seem to depend on the authors' choice in the new architectural media. The analyses revealed the importance of the author's point of view.

Archdaily was expected to bring instant solutions to the challenges of the 21 st century. Although a significant percentage of *Urgent Architectural Solutions, Building Transformation, Applicable / Applied, and Community Needs* were expected to be present in Archdaily, there was also a considerable percentage of *Repeated Discourse, Negative Discourse, and Mediatic Discourse* obtained. According to findings, the hypothesis, '*Archdaily should be equipped with maximum sensitivity to respond quickly/instantly to the architectural culture in the 21st century.*' has been supported.

## 5. DISCUSSION

Analyses have shown that Archdaily was not entirely capable of responding to the architectural society between Jan 1 and Sept 3, 2020. For example, Archdaily was only able to meet the 'community needs' variable at a rate of 26% (figure 5). Therefore, it is observed that Archdaily, which is considered to be the new media, did not show a strong connection with the public<sup>19</sup>. Why would such a result be achieved? This incapability can be interpreted as a result of the faster / instant response concepts mentioned in the literature (Manovich, 2003). This speed can sometimes lead to quality deficiencies. Publishing instantly, especially in the first year of Covid-19 Pandemy might have caused Archdaily to weaken the bond with the reader.

Parallel to this, repetitive content is another weakness that has entered our lives with new media (Manovich, 2003). Let's remember the newspaper example given in the literature; it was stated that there is a control mechanism at every stage while publishing. The convenience brought by the New Media is a distribution/representation platform as well as faster / instant response. Therefore, this repeated information, which reaches too many people instantly, can cause a chaotic statement to the architectural society. One may have difficulty distinguishing between new information and old information. Therefore, the 'instant' New Media becomes not so instant, even 'time killing' for those looking for the correct information. Repetitions on Archdaily may be due to Archdaily's desire to respond quickly to a crisis such as a pandemic. Archdaily may have fallen into repetition with the concern of being 'instant'.

Another remarkable issue is; 'building transformations' has a deficient percentage. According to Gropius, '... architects should operate as a society coordinator, and they should curate architectural solutions for social problems to steer society in another direction through new forms (Gropius 1965)'. Although Archdaily publishes architectural solutions<sup>20</sup>, it is noteworthy that Archdaily could not fulfill them in a satisfactory amount. Perhaps this is because Archdaily, like many other media, does not know how to react to an emerging crisis<sup>21</sup>. It can be claimed that if Archdaily had a solid theoretical background, maybe it would not suffer from such a problem. It is also necessary to mention the lack of theoretical discourses. It was explained in the previous sections that mediatic discourses and repeated discourses do not contain any theoretical information. Therefore, it can be claimed that; if mediatic and repeated discourses are

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<sup>19</sup> The public mentioned here can be interpreted as the architectural society or readers who are /are not an architect.

<sup>20</sup> Such as; 'urgent architectural solutions', 'Building Transformations' and 'Applicable/ Applied' (Figure 5).

<sup>21</sup> Crisis mentioned here is the pandemic.

reduced, more theoretical information will be available on Archdaily. And in this way, Archdaily may fulfill and meet the needs of the age.

## **6. CONCLUSION**

It is crucial to evaluate New Media for the architecture discipline with a comprehensive and appropriate model. Evaluating approaches based on different perspectives ( subject-time ) and examining these perspectives in terms of their relationships may develop a contemporary architectural culture environment. This study should be considered an initial attempt to establish a new model for new architectural media. The results indicated; Repeated Discourse, Mediatic Discourse, lack of Architectural Solutions, and Community Needs to be the key factors that could affect ArchDaily's success in meeting society's (primarily architectural) expectations.

As a result, several undesirable characteristics (such as non-theoretical discourses) were discovered. Therefore, it was thought that the Archdaily platform should develop its theoretical infrastructure to strengthen its relations with the architectural culture environment. To address these weaknesses, it is suggested that an 'Archdaily Academic' platform can be developed as a sub-platform. The Archdaily Academic platform can theoretically analyse the period, write the history of architecture in the new media environment, and enhance the architectural culture environment. As a result, the chaotic atmosphere can be balanced, and the performance of architectural media can improve in terms of reader-author-time relationships. Therefore, new architectural media tools can be fluid, contemporary, and realistic and further media-culture-public-architecture relations can be established.

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# NEW WILDERNESS. THE REGENERATIVE ARCHITECTURE OF URBAN-INDUSTRIAL NATURE

LUCA ZECCHIN<sup>1</sup>

## ABSTRACT

The territorial dimension of the settlements and the new urbanities that incorporate and are incorporated by Nature, require the transformation of the point of view, establishing regenerative “minglings” between apparently irreconcilable elements. The Nature for city is at the top of the list of materials on which to base the composition of the contemporary “landscape-city” and the re-generation of parts-places of it. An issue that now is intertwined with those of wildness. In our cities, Nature takes back its spaces, the *selva* re-emerges as a primary figure and imposes a project, especially in the “urban-industrial Nature” where natural processes often create completely new habitats based on existing resources. Its relevance derives from being a refuge for biodiversity and, at the same time, a useful design material. Observed by the disciplines of architectural and urban design for the spatial composition and regeneration, in the “new wilderness” the figure of the *selva* refers to the significant voids and to edges, thresholds, transitions, fringes that undermine the clear definitions between inside-out, open-closed, permeable-impermeable. The design operations are those of preserving the boundary void and the stratification of margins. The intrusive character of “new wilderness” refers to the processes of colonization of space with figures that undermine physical and perceptual boundaries. The design operations are those of confusing and re-connoting them. This thematic and figurative imagery is applied to the project of regeneration and enhancement of a significant fragment of a recent urban landscape in northern Italy, an ordinary suburb built by commercial and productive sheds along a busy road, large asphalt forecourts, abandoned or underused intercluded spaces, surviving tracks of *amena* Nature, weak and fragmented relationships. Within this framework, the process of wilderness regeneration is understood first as a methodological approach, which is a question of verifying the potential that emerging themes for the contemporary project must creatively tamper with the urban architectural form.

**Keywords:** Architecture, Urbanity, Regeneration, New Wilderness, Urban-industrial Nature

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## 1. THE NATURE FOR CITY

Climate change, environmental decay, widespread pollution, rapid consumption of resources, radical modification of ecosystems, are among the emerging issues for the contemporary project. The modern design principles, based on the concepts of separation and development, now appear to be ineffective. The territorial dimension of the settlements and the new urbanities that incorporate and are incorporated by Nature, require the transformation of the point of view, articulating multiple levels of interpretation and new paradigms, establishing regenerative “minglings” (Zecchin, 2018) between apparently irreconcilable elements.

In order that the figures of artifice can weave new regenerative relationships with Nature, able to produce ecologies rather than destroying them, the project is called to find resources within the figures themselves, re-conceptualizing the accumulated artificial residues and existing stagnant structures as an instrument of ecological evolution, a resource to be exploited and enhanced. Taking care of what is placed “between things and not just what simply is” (Clément, 2015), this approach forces us to renounce to a project as a pre-determined construction, in exchange for an eco-effective system of goods able to respond to living and changing conditions. The new project requires a “creative cannibalization” (Clifford et al., 2017) of the already built “urban materials” in more resilient and performing spatial and ecological cohabitations. It is a necessity that crosses scales and geographies of the project, in which to specify the role that Nature and landscape can play in the urban regeneration process.

If on the one hand the mitigation strategies outline long-term scenarios, on the other the effects of the changed environmental conditions and its crises place cities in the face of increasingly demanding and cogent challenges to design and recompose adaptive spaces. Green blue infrastructures are at the centre of these strategies. The first agreements as complex systems of green equipment and “greening devices”, the second as networks of natural water bodies and “sustainable urban drainage systems”.

The concept of green blue infrastructure describes “a category of artifacts, technologies and practices that use natural - or artificial systems that simulate natural processes - with the aim of improving the overall environmental quality and supplying public utility services. In general, green blue infrastructures use soil and vegetation for infiltration, evapotranspiration and/or recycling of rainwater. Green blue infrastructures, such as green roofs, permeable floors, rain gardens, and green trenches can supply a variety of environmental benefits when used as components of rainwater management systems. In addition to allowing sedimentation and infiltration of rainwater, these technologies can simultaneously help to reduce atmospheric pollutants, reduce energy demand, mitigate the effect of urban heat island, and keep carbon monoxide, while also offering to communities’ aesthetic benefits and green spaces” (US Environmental Protection Agency).

Green blue infrastructures are “multi-functional resources able to offer benefits about landscape quality, ecological functioning, and quality of life. Their design and management should help protect and improve the character and identity of places, considering the types of present landscapes and habitats” (Town and Country Planning Association, London). In the city understood as an ecosystem, they can be designed as real bio-infrastructures, devices that simulate the functioning of natural systems, “prostheses” of artificial naturalness designed to replace environmental parts, fragmented by urban development, or to restore functioning of those compromised. The introduction of green blue infrastructures can be an opportunity for the urban design culture and the sense and role that Nature can play in the urban composition and/or re-composition.

The Nature for city - here understood as quality green and blue spaces and infrastructures - is at the top of the list of materials on which to base the composition of the contemporary “landscape-city” (Bocchi, 2006, Zecchin, 2019) and the re-generation of parts-places of it.

The landscape is central to the morphological constitution of the new city. Marginal spaces, urban and extra-urban voids, borders between spaces and different uses of the territory planned by zones, abandoned or underutilized areas, large production platforms and scattered small scraps, appear as the artificial spaces most available for transformation. They are fundamental occasions of the new urban



form and can become the structuring places of “a city basically shaped by the landscape and its characteristic elements, in which the project of the empty space can become prevalent on the project of the full space, in which indeed the empty space is potentially the full, the very matter of urban construction” (Bocchi, 2006). A city that returns to making to the geography the founding character of its own form, in which the architecture is the necessary measuring instrument within a project-process of adaptation, strengthening and repair over time. Considering the natural element as a design “outil”, working on what already exists, these widespread spaces and fragments of space can be composed with Nature in new relational “armor”: radical landscape-architectures working, together, for human and environment (Zecchin, 2019).

## 2. THE NEW WILDERNESS

The issues of Nature for city outlined so far are intertwined with those of wildness. Wilderness refers to an original condition dominated by a lack of order. The *selva* (Lat. *silva*) is the spontaneous plant association, forest, plants outside the enclosure, area where Nature grows and spreads freely, where climatic factors, soil and human action create conditions such that the dominant plant species are trees. It is a space of relations that are not regulated in cultural terms, without human law. The figure of the *selva* indicates a multitude of things, sometimes intricate and confusing, collected, miscellaneous, varied or composed in a non-organic and not definitive form.

In our cities, Nature takes back its spaces (Clément, 2005), suddenly the wild appears, the *selva* re-emerges as a primary figure and imposes a project. As much as we have been accustomed to living in an artificial environment, we should remember that man comes from natural evolution, depends on it and without it cannot live. Wilderness that returns to our cities, tests that the barrier effect created by our structures is fragile and must become more resilient. Preserving, regenerating, and making available wilderness in our cities and in their ordinary urban declinations are not only measures for the protection of biodiversity, but embrace wide positive effects in social, recreational, and quality of urban life terms, as amply highlighted by Aldo Leopold (1949), a pioneer of wildness.

Wilderness is a resource with known characteristics to explore. Urban ecologist Ingo Kowarik (2005) described four “types of Nature” that can be found in a city. “Nature of the first type” are the remnants of the original natural landscape such as former natural habitats, forests and wetlands, floodplains, and embankments, which often found on the edge of cities. “Nature of the second type” are the relics of the cultivated landscape connected to agricultural areas, arable land, meadows, and pastures, often subject to strong pressures and where wilderness pushed to the edges between the parts. “Nature of the third type” are the green landscape areas, the predominant part of the urban green infrastructure designed by man, from parks to private gardens, in which wildness creeps into areas of transition and non-use. “Nature of the fourth type” is “urban-industrial Nature”, limited to urban areas and linked to its development, spontaneous emergence on already built areas or urban-industrial areas waiting, abandoned or in disuse. Here, Nature claims spaces that have been profoundly transformed by man. This “urban-industrial Nature” is the “new wilderness” (Kowarik, 2013) because it is natural processes that often create completely new habitats based on existing resources. Its relevance derives from being a refuge for biodiversity and, at the same time, material for sustainable urban regeneration.

The liberation of abandoned built spaces, the infiltration of Nature into those still in use, their re-naturalization ensures the resilience of systems and the best coexistence between Nature and city, cities understood as greener, healthier, wilder living systems, to improve the lives of people, wildlife forms and Nature, for a transformation based on Nature, for sustainable and inclusive cities-landscape. “The return to Nature and wildlife in our cities is desirable, beneficial and even possible” (SWW, 2015). The idea of a city that dares wilderness refers to the opportunity to give development to natural successions that take place in different urban and suburban spaces, to increase the diversity of species and habitats and the quality of life.

Cities and their ordinary urbanities can be regenerated as frontier places where “disruptive interventions based on natural models” can be applied, because “extreme pragmatism is the path to true creativity” that “the inherently artificial reality of our planetary condition” requires us (Bratton, 2019). It is precisely during the condition of suspension of the as usual model in which we are immersed that it is worth to pose and overcome the challenge on “revealed pathologies” (Bratton, 2019), on how to ensure a future based on coexistence with vital, healthy, and resilient natural systems, starting from these frontier places that cities are, creatively interpreting its emerging figures.

### **3. THE DESIGN FIGURES AND MODES**

Observed by the disciplines of architectural and urban design for the spatial composition and regeneration, in the “new wilderness” the figure of the selva refers to the significant voids and to edges, thresholds, transitions, fringes that undermine the clear definitions between inside-out, open-closed, permeable-impermeable. The design operations are those of preserving the boundary void and the stratification of margins (Zecchin, 2012).

In architecture, preserving an empty space means push to the edges to free up space. Freeing spaces means not feeling the need to fill them, it means working at the edges of what is already there. The empty space appears the primary design resource, a prerogative of value rather than defect. The empty space available, rich in potential and prolific, becomes the true matter of composition. Building thresholds is used to open or close a space and to preserve objects along the edges necessary for its operation without occupying it. The margin gets thickness, complexity and meaning and not to the mere separation of two realities, it becomes space where it is possible to live on a different scale. In many cases the margin is the only workable way of intervention, a clean-up action. The need to open and close a space and to preserve objects necessary for its operation without occupying it, and the conformity as a place from which to see and in which to be privileged, makes these architectural devices deeply necessary, not at all accessories, intense and precious. It is the poetics of the mismatch between conterminal spaces, in which matter focused on thicknesses able to gradually enlarge to increase its ability to contain and the hollow structure as a generator of architectural configurations that result in a multidimensional phenomenological experience.

The construction by accumulation of successive layers over time and, in contrast, the decay of the construction that allows the layers to appear for the first time, corresponds to a project-palimpsest. In some cases, this means using a preventive project that governs architectures and landscapes in transformation, the result of the coexistence of various times - geological, plant, human - in which time is project material. These operations recall the destructive force that creates beauty. Beauty can be produced by tragedies, by the radical transformations of a place or a single point, destruction understood as a transformation that produces beauty. Spaces of rationality are contaminated by deliberate destruction or the passage of time revealing the disorder and disintegration of order. The stratification of time produces a new form, distinct at every moment from the previous and next conformation: a changing architecture shows together with the other forms, those of Nature, a new characteristic unit.

The proliferation of wilderness in the order spaces requires a reflection on the conceptual and operational tools useful to reconstruct the relationship lost with the natural. The combinatorial space between Nature and artifice can be identified as a privileged place of research. The artifice flexes and opens a renewed dialogue of closer contamination with the materials of Nature to express an invention always inspired by the reality that teaches us to see. Research that urges us to think more creatively about the relationship between the two terms. Moving away from the truth of Nature, another truth, a combinatorial path that no longer belongs exclusively to one or the other, is generated by their experienced and renewed relationship. On the one hand, the urgency of responding to issues related to the environmental, climate and ecological crisis requires us to put our work to this reality in dimensionally and conceptually radical terms. On the other hand, the reality with which architecture works today, at least for much of the territories we inhabit, is a compromised amalgam where Nature

can play a design and procedural role that starts from reality to return it to a construction that is only analogous to Nature itself. And it suggests a contaminated spatiality, an intense dialogue between architecture and Nature. The project becomes the process of assembling and concatenating sequences that change over time, working with empty space, margins, and fragments. The pre-existing elements, first selected, can be contaminated with each other and with the new elements within new narrative structures, through the tools of fragmentation and combinatorial composition that folds space on itself and in many directions, marking the coexistence, promiscuity, the border, and the absence of the border. This means tying the parts together through a general goal, considered in the context of space-time changes, through movement and perception, to assimilate intrusions and feed on them.

The intrusive character of “new wilderness” refers to the processes of colonization of space with figures that undermine physical and perceptual boundaries. The design operations are those of confusing and re-connoting them (Zecchin, 2012).

Camouflage, hide, mimicry, imitate, are actions of the intruder who changes appearance to adapt, working on the dissolution between being and not being. Intrusive strategies are useful to the project that must contend with the possibility of its existence with everything already there. The intrusion proves dialectical relationships between foreign bodies and pre-existing structures. The intrusive Nature of architecture refers to its ability to colonize by veiling itself and adapting revealing reality. The intrusion does not express a renunciation attitude of the project, belongs to the enhancement of the detail in a background structure impossible to erase. Both aims need to support the distinction between the object and its context, and certainly not its deletion. Parasites or lichens, viruses or bacteria adopt the devices of contaminating by dissolving, defence actions and ambushes necessary to survive. To escape attacks from predators, fragile bodies reproduce shapes and colours of the surrounding environment. In architecture, camouflage can show a close link with the place, become an instrument of interpretation and reverberation of the context. As Neil Leach argues, “the desire to assimilate potentially contains within it a specifically architectural concern, in that assimilation involves a process of relating to the environment” (Leach, 2006). The art of camouflage perpetuates the purpose of invisibility, architecture loses definition to blend in with the environment, the intruder duplicates the host’s identity to escape recognition and gain a strategic advantage. An architecture-intruder hides through dialogic forms in relation to the physicality of the place and uses the properties of camouflage with, and the mirror of, context. Camouflage is as much the outer casing of a building that is enveloped by vegetation as an architecture that belongs deeply to a geography and appropriates its elements: an architecture-landscape that is structured through co-existing relationships and without fractures, which to dissolve duplicates the place in an indistinct whole. The stated attempt to blend in makes this architecture more powerful than its presence. Uncertainty that dissolves identities, in the name of the environment and its potential, is the peculiar characteristic of such contaminations.

The intruder is a stranger, crossing a threshold it undergoes the experience of transformation. The transmutation of the morphological characters of architecture, to adapt to the found conditions, is manifested when a building tends to imitate or explicitly refer to a reality belonging to a world outside it, distorting with this its own morphogenetic code. The indefinite is obtained by cutting any reference to an organically articulated compositional grammar, an architecture without defined margins or limits where the perception of the size and the real entity of space is confused to connote as an environment with no apparent end. The informal is the arrangement of things in space, an architecture that adapts to the place dispersing between its folds. It generates a perceptual instability that does not allow the natural to be distinguished from the artificial in a dialectic of overlaps and dispatched pieces. A found architecture that adapts to the minor signs of a place, an architecture of traces of which can not be said exactly where it begins and where it ends: contaminating the place, the architecture takes possession until it becomes the place itself. And such contamination can deeply affect the soil, the textures of the pre-existing signs, the topography. The topography of the site lends itself to architectural manipulation operations such as cuts, lifts, stratifications, at the end of which it is no longer easy to draw the boundaries in a masking-unveiling chase of the architectural space that becomes the measuring body

and device of knowledge. Contaminate, infect, are actions to re-connote space. It is the inclusion in the pre-existing of empty spaces, relationships, architectural bodies, which allow a rediscovered habitability. We need these places because they make it possible to multiply space bending it; a beauty that is corrupted by reality and that in turn contaminates it, an architecture that allows re-inhabiting the Earth in the Heideggerian sense.

Reading the host context ensures that its specific conditions can be used as a potential generator of the project until it produces an interpretation. Let us think to Leon Battista Alberti in Rimini contaminating a Gothic church with a powerful neo-Roman vestment, to Giovanni Battista Piranesi who intervenes on the slabs of the prisons twenty years after their execution by infecting the images with new contents, to Gordon Matta Clark who pierces, and cuts pre-existing buildings contaminated by the *vacuum*. All these contaminations are the result of a plurality of design operations reunited by time. Similarly, it is the life in time of the building that requires its continuous redefinition, it is the changes of taste that impose a series of transformations, it is the same time that wears down the buildings, inevitably reducing them to ruins. In all cases, contamination is a process that activates the potential or repressed meaning of a place, expressing the need for sudden mutations. Ignasi De Sola Morales describes this type of process as an “analogue procedure”. “The analogue procedure is not based on the visible synchronicity of interdependent forms, but on the association made by the observer over time” (De Sola-Morales, 1995). New or hidden meanings are unveiled, architecture gets a greater significance that reactivates the narrative and perception of space-time. It is about putting the new in tension with the pre-existing. Belonging in context is the architecture that is introduced into a space as if it had always belonged to it; in other cases, the architecture sets up a stated contrast relationship with the host context, allowing the character of each to exist in a strongly independent way. From this meeting will be born a new synthesis, marked by a typical complexity, impossible to replicate starting from the *tabula rasa*.

The dialectic between intruder and context, together with the reduction of means and forms, concerns the necessary character of architecture. Architectures such as tools define places with minimal gestures, such as bony skeletons carried by the current, able of returning depth to space. Alternative settlement logics include “*vagabond architecture*” (Vidler, 1999), with legs, by conception and statute. Their strength lies in the exploration of types with legs, pointy and diffuse, bacterial cultures related to pre-existing structures of the most varied species and origin, in a continuous going between being and not being. In contrast to a rigidly defined architecture, these models’ welcome space and movement together. Radical architectures for settlement logic, devices to inhabit, equip and make perceive the places that have become hostile, accessories necessary to repopulate the interstitial spaces of the wilderness regenerated city.

#### **4. THE ARCHITECTURE-NATURE OF A WILDERNESS REGENERATION**

The issues addressed so far constitute the thematic and figurative imagery of some recent personal design experiments. Among these it is useful to recall, at the end of this paper, which relating to the project of regeneration and enhancement of a significant fragment of the territory south of the city of Pavia. The problem is that of a recent urban landscape, an ordinary suburb (Bonomi, 2013; Koolhaas, 2006) built by commercial and productive sheds along a busy road, large asphalt forecourts, abandoned or underused intercluded spaces, surviving tracks of *amena* Nature, weak and fragmented relationships (Figure 1).



**Figure 1.**

What has been structured over time, along the axis of the SP35 is a succession of commercial activities, typically with the formula of the average sales structure, which have contributed to the creation of a well-defined identity of the municipality with respect to the surroundings. From the morphological point of view, these commercial settlements appear accessible by car, great availability of appurtenant parking areas and direct access to the main sliding axes, but the same cannot be said for the pedestrian and cycle-pedestrian part. This is due to the promiscuity between spaces dedicated to the car and pedestrian spaces, if not to the total absence of the latter along the road axis, finding a multitude of situations of insecurity. Added to this is an extremely low overall comfort of the spaces, almost repulsive for the user without a motorized private vehicle. The picture worsens if we consider that half of these commercial spaces, to the east, dialogue with the part of the city dedicated to residence and living spaces, but which manages to structure few virtuous situations. What happens differently on the west side of the sliding axis: here the relationship relates to the rural space, but at the same time the points of connections between the two functions are lacking in quality. The redevelopment of the axis is therefore not only a necessary act aimed at improving a degenerate situation, but the attempt to regenerate one of the strongest centralities of the newly formed urban context.

Within this framework, the process of wilderness regeneration is understood first of all as a methodological approach, that is a question of verifying the potential that emerging themes for the contemporary project - the abandonment and wilderness of many spaces, distance and emptiness as essential elements, climate change, environmental decay, widespread pollution, rapid consumption of resources, radical modification of ecosystems, etc. - have to creatively tamper with the urban architectural form.

The project of redevelopment and urban enhancement of Provincial Road 35 *dei Givi* (commercial road west of the municipality of San Martino Siccomario that connects Pavia with the over Po), composes with urban and "urban-industrial Nature" a significant piece of city-landscape. And it does so through the contamination of parts and elements: presence of vegetations, green blue infrastructures, urban reforestation, preventive planting or "preverdissement", sustainable urban drainage systems, slow and safe relationships.

The project of the regenerated open air commercial park is based on three principles.

The first: it is not a mere road infrastructure, a road, but a piece of landscape. It is a park, an urban garden, between Nature and artifice, by the presence of green open spaces, designed with variety and balance.

This is the ecological proposal, a commercial road-park (Figure 2), a garden for shopping, leisure, culture, sport. A park that produces landscape, well-being, quality of life. In addition to the forms responsible for shaping commercial spaces, productive buildings and dwellings, the garden system expands and enhances the pre-existing public open spaces and proposes new ones, to rebalance the relationship between full and empty spaces and between permeable and waterproof soils. A new piece of eco-city that recovers, heals, and compensates a park territory of which traces and plots survive.



*Figure 2.*

The second: it is not a line, the road, but a wider thickness. Only a cross-sectional look (Figure 3) can return figure and meaning to the current longitudinal system. At the base of the project, the need to redesign the space between the historic center, public places, pre-existing gardens, recently urbanized areas, rediscovering the matrix of signs of the historical agrarian landscape. It is the re-weaving of relationships, cycle paths of connection safely between the various parts of the urban fabric and these with the agricultural and peri fluvial park that lap it. The new cycle and pedestrian connections ensure the complete accessibility of the commercial park, mitigated by the acoustic and visual impact of vehicle traffic, with protected crossings and new bus stops.



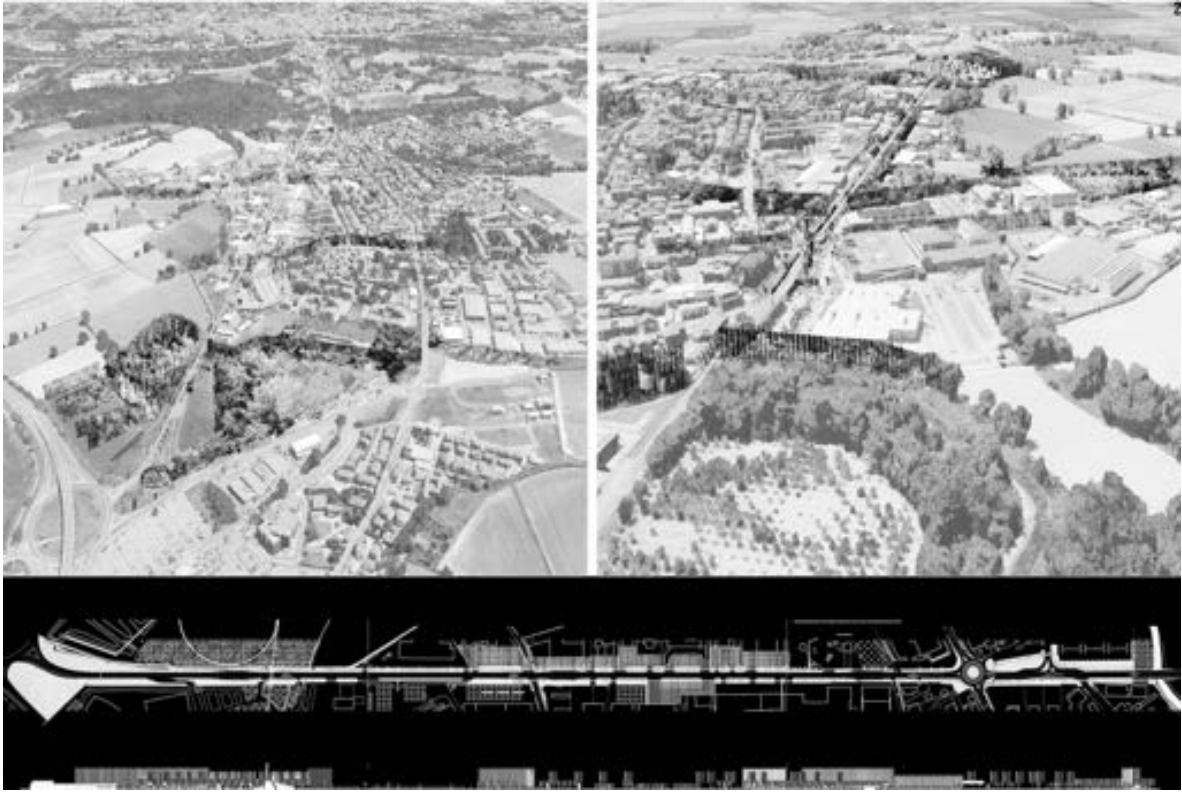
**Figure 3.**

The third: the new commercial park, the place of intersections, threshold space from where all the filaments start and arrive, is an ecological and hydraulic *machine* (Figure 4). It is a soil as much as possible recovered porous, permeable, natural. The urban system consists of the arrangement of the soil through a permeable surface, a multipurpose carpet that can offer friendly spaces for outdoor encounters. Green canals, gardens of graminacea and tree-lined rows serve as a counterpoint to the new urban soil: a topography made with systems of green equipment, greening devices, and sustainable urban drainage systems. In addition to allowing the sedimentation and infiltration of rainwater, they help to reduce air pollutants, reduce energy demand, mitigate the effect of urban heat island, and keep carbon monoxide, while providing communities with aesthetic and social benefits. The landscape architecture also includes parterres of trees, with monothematic essences chosen by the owners, which characterize the forecourts recycled over time (Figure 5).



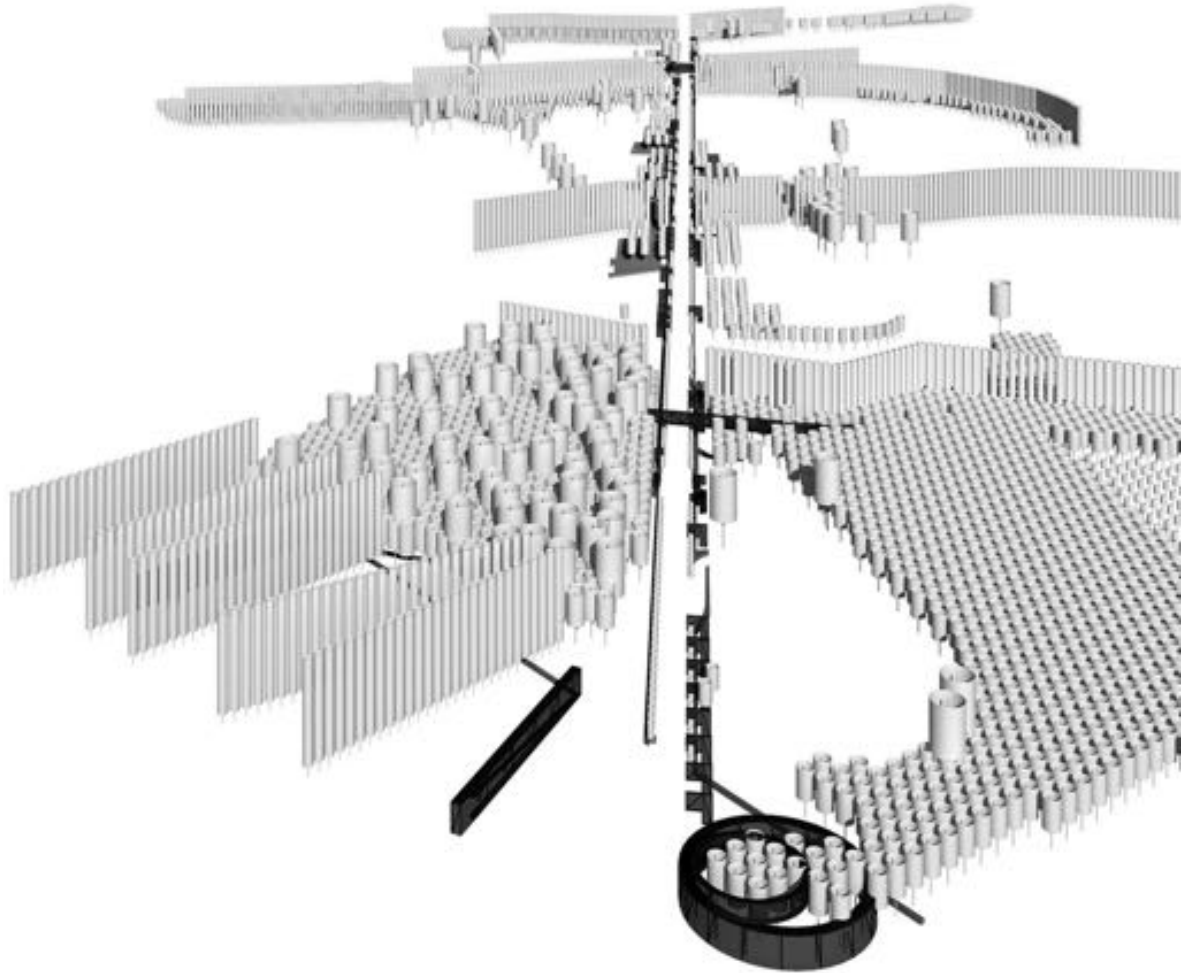
*Figure 4.*



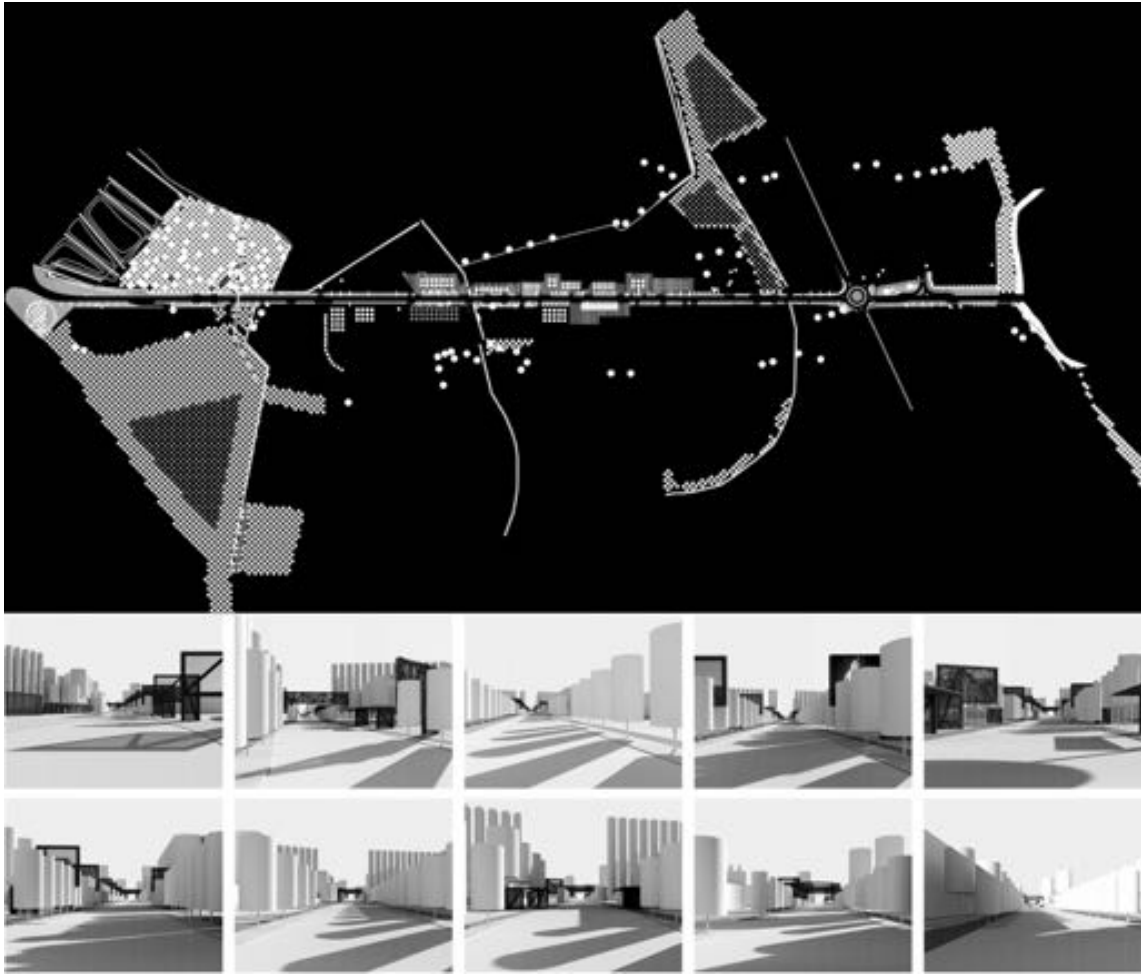


**Figure 5.**

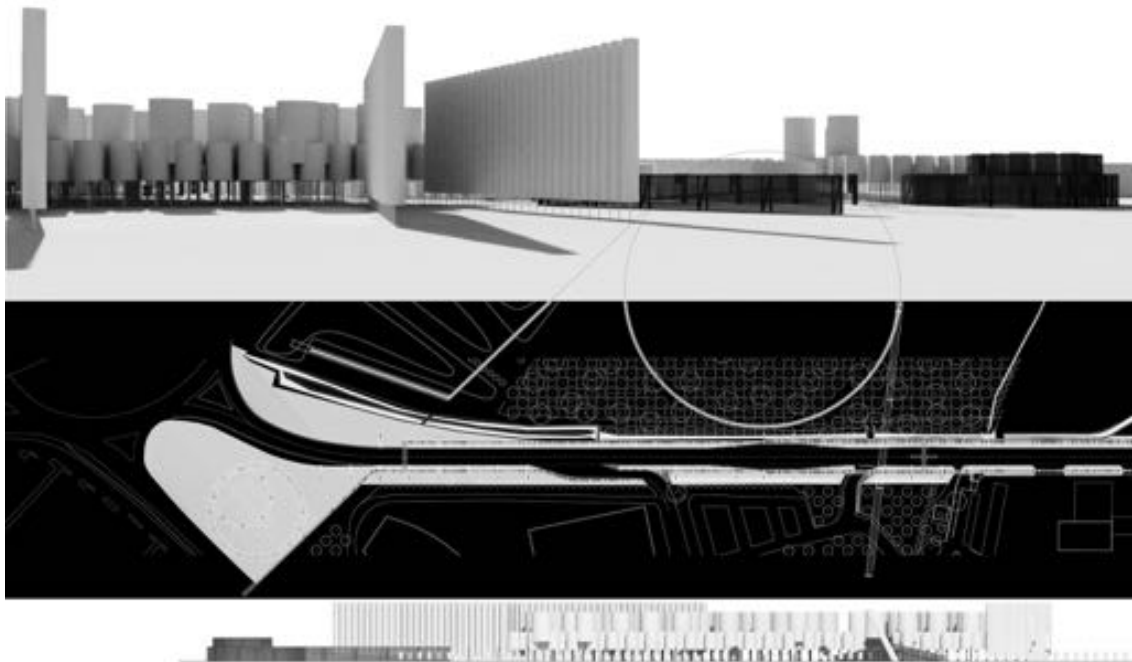
Elements with essential design, repeatable, suspended from the ground to relate, articulate, and define the new spaces, are architectures with legs, in steel and climbing. Their structure is lightweight, made with tubular square-section pillars and steel mesh. In memory of the *bressanella* (Figure 6), these compositional devices favor visual and functional connections. An aerial multisystem that is support for vertical green, info-surfaces, energy systems, light sources, and that accommodates in an orderly manner all commercial signs. The alternation and variety of the screens give the whole a pleasant and interesting landscape image, the perspectives widen and narrow to give rise to different spaces, adaptable, flexible, modular (Figure 7). The new open air commercial park of San Martino Siccomario is a garden architecture built with Nature and with an essential schedule of repeatable elements that give quality to the urban environment and its relations with the landscape. The attention paid to the green points system and the green space factor, superimposed on the presence of three-dimensional figurative expressions (Figure 8), of ever-changing rhythms in perspectives, are essential qualitative factors of a landscape in transformation over time: a multi-dimensional architecture that finds in wilderness regeneration its theme and its figures.



*Figure 6.*



*Figure 7.*



*Figure 8.*

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# THE NEW CONCEPT OF HOME OFFICE STRUCTURES, AS A PART OF CONTEMPORARY MULTI-FAMILY HOUSING DESIGN AT THE TIME OF PANDEMIC. CASE STUDY OF CITY OF POZNAN, POLAND

JAKUB KACZMAREK<sup>1</sup>, ADAM NADOLNY<sup>2</sup>

## ABSTRACT

On March 11, 2020, the World Health Organization announced the SARS-CoV-2 coronavirus pandemic. SARS-CoV-2 is a new type of virus that has spread around the world in a noticeably short time. As the virus spread increasingly fast, the gradual closure of commercial and service facilities began, and enterprises, offices and schools switched to remote work. Home office, which was introduced, turned out to be in some or even most cases difficult to implement in many countries, including Poland. In many cases, living spaces in multi-family buildings turned out to be insufficient for running a businesses or learning.

As part of the research, the authors would like to focus on the search and redefinition of the concept of common parts in the existing and planned residential development investments. The creation of new workplaces, a kind of cooperation between a collective of residents and architects would undoubtedly be a valuable change. As research material, this article will present one existing investment. The authors will show the possibilities of transforming individual parts of a building into places where it will be possible to safely work remotely. In the article there will also be shown a system in the building controlled by mobile applications (opening, closing the door, operating the elevator etc.)

All transformations proposed on the basis of detailed studies will have a positive impact not only on the attractiveness of given development investments, but above all, on increasing health safety and efficiency of people who work remotely.

Bearing in mind the economic issues of investments, an attempt was also made to diagnose the costs of the proposed transformations. These activities will also be aimed at drawing attention to the fact that, with the assumed activities, the costs of their implementation will not be as high as one might suppose.

**Keywords:** social distance, home office, multi-family housing, semi-public spaces.

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## **1. INTRODUCTION**

The COVID-19 pandemic that began in late 2019 in Wuhan, China, is having a significant impact not only on people's health, but also on the economy. The first cases of SARS-CoV-2 appeared on December 31, 2019 in the Chinese province of Wuhan, where 59 cases of pneumonia were reported, possibly related to a new type of coronavirus that later turned out to be known worldwide as COVID-19.

The coronavirus is transmitted directly from one person to another. It is possible to become infected through close contact with a sick person. SARS-CoV-2 is transmitted by airborne aerosols generated by e.g. coughing or sneezing [1][2]. They can enter the body through the mouth or nose e.g. when breathing, straight into the lungs [5]. Aerosols are infectious particles that can remain in the air for up to 3 hours and typically cannot travel more than 2 meters from their point of origin[6]. Nevertheless, simulations examining the effects of aerodynamics on the spread of these droplets suggest that physical activities such as running or cycling increase the range they can travel [7]. In 80% of cases of COVID-19 infection, symptoms such as fever, dry cough and shallow breathing occur. Severe cases of infection showed symptoms such as dyspnoea in 44% of patients, hypoxia (depletion of oxygen in body tissues) in approximately 50% of patients and high fever in approximately 14% of patients [8]. However, in some cases, people who were confirmed as being infected with COVID-19 go through it asymptotically, nevertheless, they can still spread the disease [9]. For this reason, and the long incubation period of the virus of up to two weeks, COVID-19 requires extreme safety measures to minimize transmission and morbidity [10]. After the first cases of coronavirus were recorded in Wuhan Province, the situation worsened month by month and COVID-19 began to spread beyond Chinese borders. On March 11, 2020, the World Health Organization (WHO) declared a pandemic. European countries began to introduce restrictions on the movement of people. Initially, state authorities closed airports and borders to reduce the likelihood of "importing" the virus from abroad. Then, as the pandemic progressed, restrictions were imposed on the economies of the concerned countries. And so, initially, restrictions on the number of people in shops were introduced while cinemas, theaters, gyms and hotels were closed. In Poland, the first lockdown (shutdown of the economy in a strict sense) was to last two weeks, it is mid-2021 and still not all sectors of the economy are fully open.

With regards to remote work, and due to COVID-19, it is necessary to create a safe place to work or study in terms of health. The main point of this article is to provide a systematic review of previous studies and then show how developers, housing associations or inhabitants of housing buildings could redesign common places into work places.

## **2. RESEARCH METHODOLOGY**

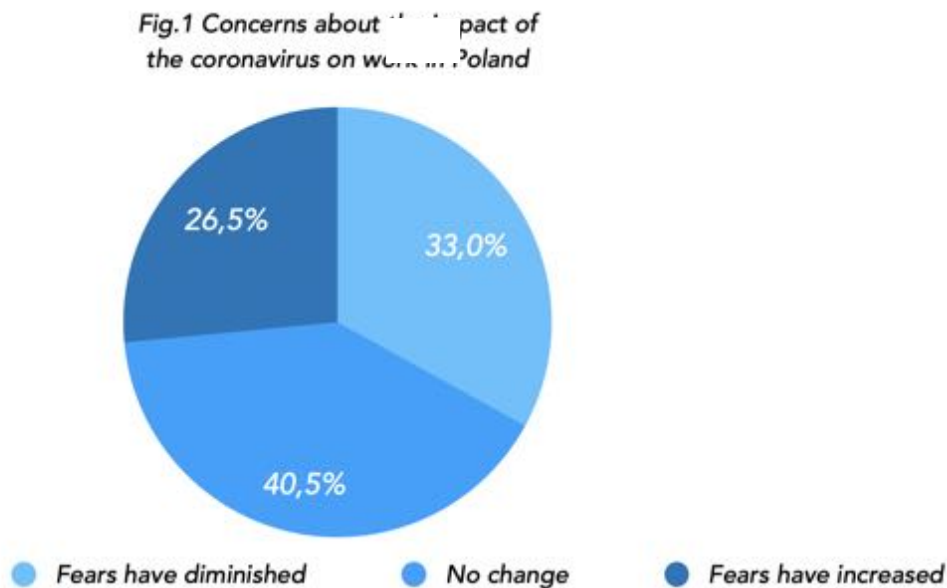
The adopted research methodology was a systematic literature review, thanks to which it was possible to organise knowledge about the Sars-Cov-2 coronavirus, labour market and remote work. This was necessary to integrate the conclusions from all studied domains. The authors focused on qualitative methods in previous studies. The method resulted from the complexity of the topic related to the COVID-19 pandemic, which affects a wide range of life aspects, and the need to focus on research related to the impact of the pandemic on the housing market. The deductive thematic analysis allowed the authors to create the hypothesis that it is possible to redesign common places into safe and healthy work places.

Then, implementation scientific research was carried out, which may concern every aspect of implementation, including factors influencing the implementation, the implementation itself and the results of the implementation [4]. The research is related to the implementation of design assumptions that will allow one to create safe spaces for office workers.

### 3. THE LABOUR MARKET IN THE TIME OF PANDEMIC

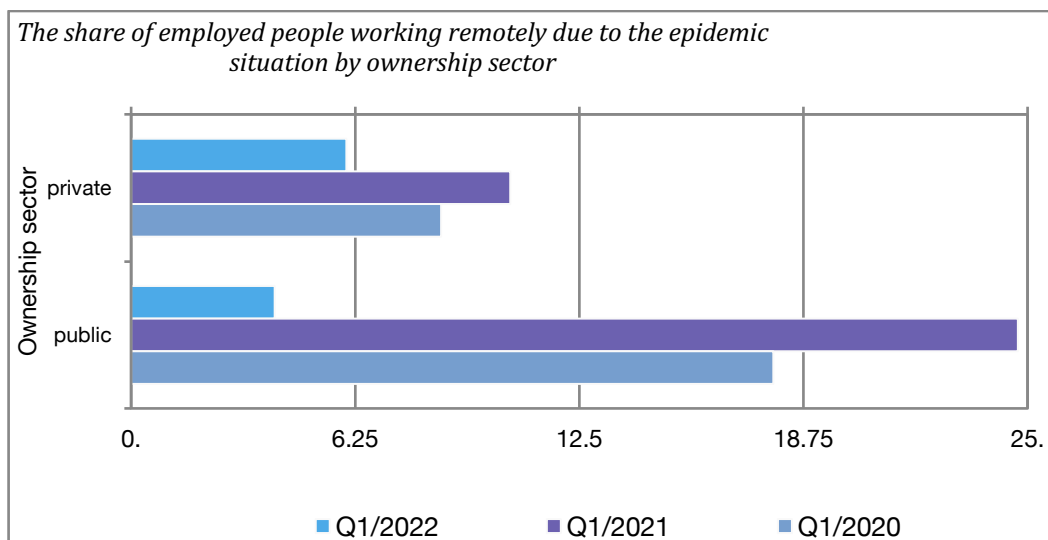
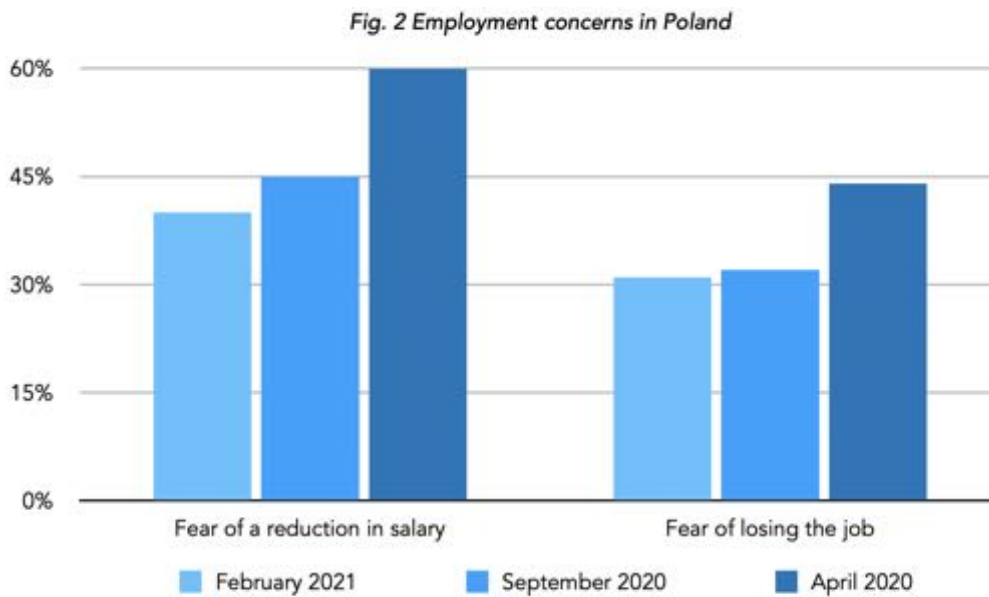
In order to broaden the possibility of remote work, initially it is necessary to analyze the tendencies on the labour market with regards to both the employees and the employers. What has changed as a result of the pandemic and what is the general state of labour market in Poland.

Initially, COVID-19 had a significant impact on the economic consequences. They most often concerned employees by decreasing their salaries, greater stress related to the possibility of losing one's job and less prospects of changing the job. Currently, according to a study by pracuj.pl [11] portal, conducted on a group of 810 people, 33% of the respondents believe that concerns about the impact of the coronavirus on work have decreased, for 40.5% they have remained unchanged since the beginning of the pandemic and 26.5% of people admit that their fears have increased [Figure. 1].



**Figure 1.** Source: Own study based on data from pracuj.pl website February 2021, n = 810 portal users who are employed

It should be mentioned that the employed respondents are more often afraid of deterioration of the current working conditions (lowering the salary or changing the employment rules). In reference to previous research carried out by pracuj.pl [11] in September 2020 and April 2020, there is a tendency to reduce employees' concerns about losing their job or a salary reduction. [Figure 2.]



**Figure 2.** Source: Own study based on data from *pracuj.pl* February 2021, n = 810 portal users who are employed

**Figure 3.** Source: Own study based on data from GUS, *Impact of the Covid-19 pandemic on selected areas of the labour market in Poland 2020-2022*

Since the outbreak of the pandemic, employers have been struggling with the problem of morbidity and COVID outbreak in their company. Therefore, from the beginning of the COVID-19 pandemic, i.e. from March 2020, more and more companies are opting for the remote or hybrid work model.

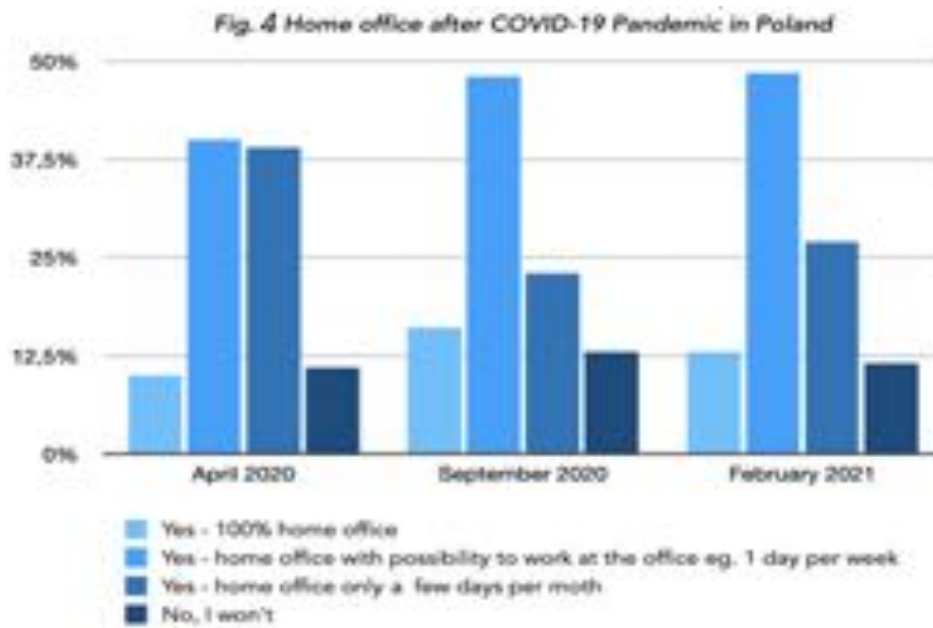
In 2017, about 4% of employees in Poland worked remotely, where the average for the European Union was 5.5% [12]. In the first quarter of 2020, when the COVID-19 pandemic was announced, the number of employees in the public sector who started working remotely increased to 18% and in the private sector to 8.5% - giving an average result of 13.25% [13]. The first quarter of 2022 brought a significant decrease in remote work. In the public sector it is 4% and in the private sector 6% - an average of 5% [14]. Comparing 2017 with 2022, almost 90,000 more people switched to the remote work system. [15]



Why did entrepreneurs decide to change the model of work? Of course, this is largely related to the COVID-19 pandemic, the fear of creating an infectious outbreak that may cause staff shortages, but at the same time reduces the employer's costs related to preparing a workplace for an employee [16]. An entrepreneur who decides to hire or send an employee to work remotely reduces the costs associated with providing the employee with Internet access, electricity for his workplace, fees for cleaning the office, etc. An additional advantage for the employer is also the probability of reducing the number of sick leaves. It is governed by the fact that an employee who is sick but has appropriate conditions and is able to work from home will still work. Thanks to this, the employer reduces the costs related to sick leave, and the employee receives 100% of the salary.

The danger for both employers and employees is the reduction in the number of face to face meetings. This may generate problems such as: limited access to information, poor understanding of the tasks entrusted to the employees, limited supervision over employees. [17]

Some people who have achieved success with stationary work may not be able to cope with working remotely. Lack of suitable conditions at home, lack of organization of work outside the workplace, these are challenges faced by employees and their employers. For this reason, the hybrid model is gaining more and more popularity. According to a study conducted by pracuj.pl in February 2021, 88.5% of respondents would like to continue working remotely after the pandemic is under control. However, it should be noted that only 13% would like to work remotely full-time. The vast majority, i.e. over 70% of respondents, want to be able to come to the office once a week or on single days of the month [11].



**Figure 4.** Source: Own study based on data from the pracuj.pl portal April 2020 n = 683, September 2020 n = 333, February 2021, n = 810 users of the portal working remotely.

Despite good reception by employers and remote work employees, and a positive attitude towards online meetings - 62% of respondents perceive this model of meetings positively, the effectiveness of teleconferences is lower than that of face to face meetings – as 53% of respondents said (pracuj.pl).

It is related to such problems as: problems with the Internet connection 53%, delays in image or sound transmission 42%, noise from the participant's microphone 41%, interference by third parties 36%, speaking with the microphone off 29%, problems with the operation of the internet camera 20% [Figure. 5].



**Figure 5. Source:** Own study based on data from the *pracuj.pl* portal April 2020  $n = 683$ , September 2020  $n = 333$ , February 2021,  $n = 810$  users of the portal working remotely.

#### 4. CO-WORKING

The problems previously described regarding third party interference etc. can be resolved through coworking spaces. What are Co-working places? According to Oxford Dictionaries: "Coworking - the use of an office or other working environment by people who are self-employed or working for different employers, typically so as to share equipment, ideas and knowledge" [18]. As office-renting facilities where workers hire a desk and WI-FI connection, these are more importantly, places where independent professionals live their daily routines side-by-side with professional peers, largely working in the same sector"[19]. To sum up, these are rooms, places where everyone can come - whether for a fee or for a specified time, it depends on a given coworking office, and work from this place instead of, for example, the company's headquarters. They are mainly used by people who run their own business, because renting such a place is free or cheaper than renting a "regular" office for work [20].

For the purposes of this study, efforts were made to "re-interpret" and transform the meaning of coworking. As is well known, and as the research conducted above shows, most office workers switched to home office during the COVID-19 pandemic. However, it should also be remembered that it is not only office workers who have started working from home, these are also children who have switched to remote model at school, and children who have closed nurseries and kindergartens. In Poland, in the first quarter of 2021, according to the Central Statistical Office, the average area of a flat completed in multi-family buildings was 52.8 m<sup>2</sup> [21]. This is an important indicator because it shows that two adults can live in such a size of a flat, but also two adults with two schoolchildren can do so. Approximately 52m<sup>2</sup> flats usually consist of 3 rooms with a kitchenette. So with 4 people working or learning remotely there is no space where they can work so as not to disturb each other. Therefore, referring to coworking spaces, it is necessary to create a place for residents of housing estates where they will be able to work or at least hold a videoconference.

#### 5. DESIGNING COMMON SPACES - COWORKING PLACES

The above assumption applies to residential investments, which of course have not been completed yet, but are at the design stage. Unfortunately, the pandemic affects us all here and now, therefore, first of all, one should look for solutions that can be applied to existing investments. In some existing housing estates, developers decide to build or create a place for residents, commonly known as the Resident's Club [24]. In such rooms there are usually tables, sofas, a billiard or table tennis table. Residents can book this room through a notice board in the stairwells or through a group on social networking sites. Such places can be converted easily and at low cost into coworking spaces - the purchase of 3-4 desks together with 3-4 chairs costs about PLN 3,500, plus temporary partition walls [24]. In the Resident's Club there is usually access to a public WIFI network, there are power sockets, good lighting and the possibility of ventilation. A. Bonemberg and M. Lucchini developed guidelines for work or study places in apartments:

These should be rooms that provide insulation and privacy

They should be places that are well lit, especially with natural light

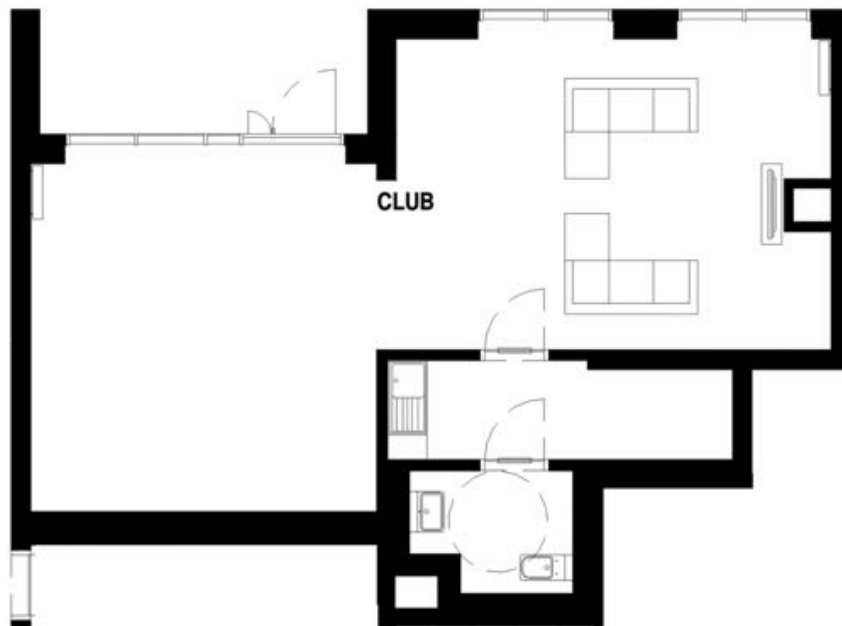
Furniture and workstations should be ergonomic and easy to clean and disinfect

There should be appropriate background during the videoconference [16]

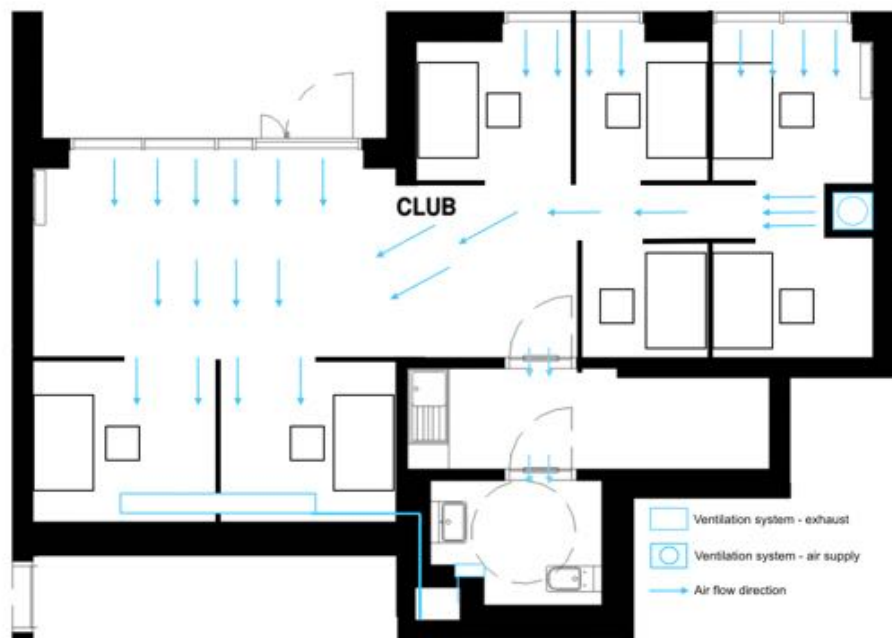


**Figure 6.** Source: Jakon Inwest data - already existing common place at „Kórnicka” investment in Poznań city

What are the benefits of that for the residents? The biggest benefit, as has already been mentioned, is the possibility of using such a place while working from home. Another advantage of transforming the common space into a coworking space is its proximity, thanks to which an employee of a given company saves time on access or commuting to the workplace, because the room is in the same building as their apartment.



**Figure 7** Source: Jakon Inwest data. – already existing common place projection at „Kórnicka” investment in Poznań city



**Figure 8.** Source: Jakon Inwest data, proposed office layout with ventilation system

A proposal to increase sanitary safety is, in the common spaces, the possibility of installing an air supply and exhaust ventilation system within the technological shafts [Figure 8]. In combination with gravity ventilation installed in the windows - in the absence of such an installation, it is enough to open the window for a certain period of time and the air flow in the room is significantly increased. The amount

of forced air and exhaust air depends on the size of the ventilation unit. The cost of adapting, buying and adapting the room itself to the installation is about PLN 5,000-6,000 [22]. The proposed solution is an up-to-date idea that was created in the Jakon office building. In the case of a common part in a residential building, the ventilation is only designed to force in and extract air to ensure its constant flow, while in an office building, it also has the functions of air filtering, heat recovery, heating and cooling.

In addition, to increase sanitary safety in the common room, but also in all common parts of a given building, an HVAC room automation system should be introduced – by using this system one can not only reduce the costs related to heating, air conditioning and ventilation, but also automate all these aspects via sensors installed in the rooms [23].



**Figure 9.** Source: Siemens data [23]

It is also possible to attach a door control system to the common areas through a mobile application - the system can work in two ways, either unlock and open the door after entering the application on the phone, or work in the same way as, for example, some barriers on motorways in Poland, i.e. it automatically raises the barrier, there is no need to turn on the application manually [23]. Thanks to these improvements, one gets a space that will be safer than „ordinary” coworking offices in terms of sanitation and will be located in the same building where the user of this room lives. It is worth mentioning that the assumptions given above do not only apply to the so-called Resident’s Club. The concept assumes that you can also transform rooms such as a bicycle or pram storage - these are places that are less illuminated and less adapted to a longer stay of people there, but they can still provide the sometimes necessary place to work. If it is not possible to transform a given room into a multi-family building, it is possible to rent or purchase portable offices. The costs of preparing such an office for residents are more expensive than the above-mentioned transformations, because it involves rental of above-ground parking spaces - current development projects intensify the development at the expense of the space on the estate. Therefore, it should be assumed that parking spaces are the only place to organise a portable office. In Poznań, the cost of renting one parking space is about PLN 200 per month, plus the purchase of a portable office - about PLN 80,000 [24].

The advantage of these offices is that they can be sanitary secured more easily. It is much easier to keep such a room clean – things inside are limited to a minimum like a desk, a chair and a lamp. In addition, if the residents find that they do not need such an office anymore, it is very easy to move it and take it away

so that it does not occupy parking spaces. Other things related to epidemiological safety remain unchanged. HVAC systems monitor the rooms in terms of temperature, ventilation, air conditioning and heating, and the entrance door is fully automated so that there is no need for direct contact.

## **6. CONCLUSIONS**

Overall, the COVID-19 pandemic has significantly changed the way we work. It forced most companies to switch from stationary work to a remote or hybrid one. This led to many consequences, for enterprises it limited the costs associated with office maintenance, saved time the employees spend on commuting to work. Despite the large number of benefits, there were also problems such as worse communication between the employer and employee and tele technical problems related to poor Internet connection, lack of experience in remote work, and simply the whole family's presence at home, i.e. the lack of appropriate working conditions.

We can treat the emergence of the pandemic as a threat on the one hand, and as a design challenge on the other. The presented statistical data shows a very interesting picture of a contemporary user, a space in a sense an "office" in residential buildings. The need for space to work on one hand has decreased, while on the other hand, the expectations and demand for space for relaxation and professional activities in the vicinity of the house have increased.

This work was aimed at indicating certain design assumptions, thanks to which the inhabitants of development estates will be provided with appropriate conditions for remote work in their place of residence. The introduction of small amenities and the use of common spaces in residential buildings can become, as mentioned, an interesting alternative.

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# ASSESSING WOMEN'S SATISFACTION, SAFETY, AND USE IN URBAN PARKS: A CASE STUDY OF GENÇLIK PARK

DİDEM DİZDAROĞLU<sup>1</sup>

## ABSTRACT

To enable women to take an active part in open spaces, their needs and expectations should be considered. Moreover, the barriers or threatening factors limiting their existence should be identified and eliminated. In Turkey, gender equality has become a forgotten feature in the spatial design of open spaces. This study aims to contribute to the necessity of considering the needs of women users with an example of an urban park in the design of open spaces in Turkey. To this end, Gençlik park is selected as the case study. Gençlik Park is the first established urban park of historical importance within the borders of the old city center. With the expansion of the city over the years and the degeneration of the old city center, the park lost its popularity and became neglected. This study seeks to provide an overview of the current state of Gençlik Park. For this purpose, an on-site questionnaire survey is conducted to identify the demographics of women visitors, their preferences for using the park, satisfaction levels, concerns about their safety, and their ideas for the improvement of the park. Based on the survey findings, several recommendations are proposed to create a comfortable environment designed around their needs. In the light of this study, the park has a great potential to serve the whole city, but it has been detected that many problems should be considered for women users. This research provides the following contributions to knowledge: (1) providing an understanding of gender-related challenges in the design of urban parks; (2) offering a set of gender-sensitive recommendations to overcome these challenges identified by the survey study; (3) presenting important insights for landscape architects and urban planners to enable women to utilize open spaces in a safer and better way; (4) increasing awareness of administrative authorities about gender-inclusive urban planning and design, and; (5) encouraging local governments to improve the functionalities of open spaces in Turkey by promoting recreational infrastructure and facilities for women and other disadvantaged groups.

**Keywords:** Ankara, Gençlik Park, Gender, User satisfaction, Urban park

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## 1. INTRODUCTION

Public spaces are essential for turning cities into liveable, sociable, and enjoyable places by nourishing and sustaining community life (Mitrašinović and Mehta, 2021). Public space is defined as “*a special space in common use which is a product of civilization irrespective of the form of ownership, and its public character follows from the way it is used*” (Mierzejewska, 2011, p. 41). Public spaces have many different types that include but are not limited to squares, plazas, streets, marketplaces, parks, and alternative forms of urban green spaces. These spaces provide several benefits (Francis et al., 2012; Gehl and Svarre, 2013; Garvin, 2016; Madanipour, 2017; Carmona et al., 2019). In terms of economics, a public space of good quality may turn into an essential tool for business and marketing to attract companies, customers, and services alike. In addition to offering numerous employment opportunities, it enhances the local economy. It affects real estate prices and tax revenues positively. In terms of social aspects, it assumes a significant role in influencing human relations by the way it happens, and who communicates with whom, and is strongly related to the content of the interaction. This urban relationship brings people together and closer and contributes to improving ties between the members of the society. Additionally, a public space that is used on a regular basis, decreases the rate of crime and other safety issues concerning public safety. In terms of environment, public spaces offer a healthy environment for people and other living beings. Finally, these public spaces encourage movement through walking, cycling, or public transport in and between spaces.

Gender is one of the crucial aspects of influencing public spaces and how they are experienced (Soraganvi, 2017). According to the literature, limited time and money, restricted mobility, social isolation, insufficient recreational opportunities, lack of public services, negative emotions, domestic responsibilities, and oppressive socio-cultural norms are considered to be the main barriers to women's experiences in the use of public spaces (Fenster, 2005; Rosenbloom, 2006; Jarvis et al., 2009; Lacey et al., 2012; Henderson and Gibson, 2013; Currie et al., 2016; Jiang et al., 2018; Zibell et al., 2019; Yerkes et al., 2020; Ceccato and Nalla, 2020). Women are more often engaged in housework and childcare activities, which restricts their flexibility for the use of public spaces as well as traveling long distances to visit public spaces (Jorgensen et al., 2013). Similarly, Williams et al. (2020) indicated that women prefer visiting local neighbourhood open spaces to centrally placed public spaces. Their dependency on public transport influences the range and timing of their movement. Many women do not have economic independence; hence, they spend little money on recreational activities (Lofland, 2017). Insufficient public services such as childcare and health facilities, transportation, and education affect women's usage of public spaces (Gardner et al., 2017). Women prefer minimal interaction in outdoor environments where they do not feel safe (Polko and Kimic, 2022). The time of day also significantly affects women's use of public spaces. Kondo et al. (2021) reported that women respondents do not prefer walking in their neighbourhood and never take public transport alone after dark. Some scholars highlighted that women feel unsafe in public spaces such as closed car parks, dimly lit alleyways, vacant urban parks, and isolated transit stops (Cohen et al., 2021; Sillman et al., 2022). Access to well-maintained public toilets and other women-friendly facilities is another design consideration. These facilities allow women to spend more time walking or moving around the city (Beebeejaun, 2017). Women are less likely to use public spaces with poor physical accessibility (e.g., stairs without ramps or elevators), especially when traveling with strollers or baby carriages. Furthermore, accessibility is vital for people with disabilities to provide opportunities for recreation or relaxation in public spaces (Derose et al., 2018). Based on the findings of these studies, there is a need for designing gender-inclusive built environments and physical infrastructures to achieve gender equality in cities.

Urban parks are significant public spaces where people living in the city come together for recreational, cultural, or social purposes in their leisure time. Many factors contribute to a well-designed urban park. The quality of a park is based on the design and the embodiment of orientation, cleanliness, street furniture, amenity areas, pavements, aesthetics, planting, and lighting. The variety of uses and activities in and around must satisfy the visitors' needs since the shared experience is a significant aspect attracting people to visit an urban park. Properly and successfully designed parks serve as tremendous assets for local communities. These assets, however, have the potential of turning into significant issues

once parks become unsafe places, thereby losing value, as well as the advantages they provide to the local community. Many studies report that there are several factors associated with people's feelings of safety in urban parks (Özgüner, 2011; Mehta, 2014; Maruthaveeran and Van den Bosch, 2014; Rigolon, 2016; Costamagna et al., 2019; Talal and Santelmann, 2021; Basu and Nagendra, 2021; Mak and Jim, 2022). As mentioned in these studies, well-maintained green areas, a diversified number of recreational activities, environmental convenience, proper lighting, along with security precautions such as security guards, police presence, and surveillance cameras, enhance the perceived safety and attractiveness of the park. On the other hand, physical and visual barriers created by the vegetation of the park, visitors' feeling of anxiety when trying to find their way in the park, elements of urban furniture that are both neglected and unfitting to the atmosphere, graffiti, and litter decrease the safety and comfort of the park.

Specifically, the relationship between the use of an urban park and safety regarding gender has been emphasized by several researchers (James and Embrey, 2001; Wesely and Gaarder, 2004; Krenichyn, 2006; Wattis et al., 2011; Sreetheran and Konijnendijk van den Bosch, 2015; Sanchez de Madariaga and Neuman, 2016). In her study, Krenichyn (2003) suggested that if women are in a social relationship with family members, friends, acquaintances, and strangers, they feel more secure during their visit to the park. The presence of other people and the possibilities of random meetings provide further social support and allow visitors to develop positive feelings for any possible activities and uses in the park. Results of the study conducted by England and Simon (2010) indicate that fear serves as a constraint against the accessibility of parks. It represents the social inequalities in society that often influence the usage behaviours of public spaces, leading to a tendency not to use specific areas in the park during specific times of the day. In another study, Wilbur et al. (2002) pointed out that wardens or rangers in certain park areas during the day make women feel more secure in such areas. These studies demonstrate that being afraid of potential violence and harassment makes women feel uncomfortable and less secure in urban parks. Women's access to urban parks is restricted, especially when they are on their own; hence they cannot make use of various recreational activities as much as men do.

In the light of the literature review presented above, this study aims to investigate the women's satisfaction, safety, and use of Gençlik Park, which once played a significant role in women's participation in public life during the early-Republican era of Turkey. According to several studies, Gençlik Park used to be a secure and comfortable environment for everyone until the 1970s (Durakbaşa and İlyasoğlu, 2001; Demir, 2006; Özaloğlu, 2006; Şengül, 2007; Memlük, 2012; Ekinci and Sağlam, 2016; Akkar Ercan, 2017). However, rising crime levels and political protests of social movements during the 1970s reduced physical accessibility to the park. This decline was exacerbated by the increasing predominance of low-income groups (rural migrants and squatter dwellers particularly), such as the unemployed and the homeless in the park. The park became a prominent spot among off-duty soldiers wandering around or watching a football game on TV in tea gardens and cafes on weekends. In these years, the park was apprehended by male dominance, forcing the elderly, families, and women to become intimidated, thus diminishing the social accessibility of the park. In later years, the project for renovating the park between 2005 and 2009 managed to enhance both the park's physical and social accessibility. New design, management, and control policies were introduced to provide order and discipline to the park and bring comfort and convenience to park visitors. However, some challenges for women visitors still need to be addressed. This paper aims to provide an overview of the current state of Gençlik Park. For this purpose, an on-site questionnaire survey is conducted to identify the demographics of women visitors, their preferences for using the park, satisfaction levels, concerns about their safety, and their ideas for the improvement of the park to enhance their park experience. Based on the survey findings, several recommendations are proposed to increase the number of women visitors by creating a comfortable environment designed around their needs. This paper is structured into four main sections. Following this introduction, the second section provides background information on Gençlik Park along with the research method. A summary of the study's findings is introduced in the following section. As a result of identified problems and needs, recommendations for future park development are presented in the final section.

## 2. MATERIALS AND METHODS

In the first stage, to evaluate the state of the study area from past to present, literature research has been performed, and historical documents, reports, and previous studies related to the Gençlik Park have been reviewed. Secondly, the literature on women's experiences in public spaces was reviewed extensively during the development of the questionnaire. The last stage includes writing a discussion and conclusions based on the analysis and synthesizing the findings in the light of literature.

### 2.1. Study Area

The 27,5-hectare Gençlik park is located in southwest Ulus and remains within the borders of the Altındağ District Municipality. The park is built around the central station, and being at the heart of the public transport, it welcomes visitors arriving by train as the city's first image. The park is surrounded by historical architecture and notable sights, which include the Ankara Citadel, ancient Roman bath ruins, the Column of Julian, the mausoleum of Mustafa Kemal Atatürk, Ankara Opera House and Symphony Hall, numerous museums and theatres, culture centers, a large sports complex, hospitals, schools, commercial, public and government buildings (Figure 1). The park's history dates back to the 1920s. The Declaration of the Republic of Turkey in 1923 initiated a drastic change in society's structure and its relation to its environment. The capital city, Ankara, was shaped by the master plan of the German architect and planner Hermann Jansen to establish a new nation-state and culture. As part of the plan, a healthy built environment was designed to enhance urban life where public spaces have been developed through parks and recreation areas in the new city centre. Gençlik Park, being the first established urban park by Theo Leveau, a French planner and landscape architect, was designed in 1943 within the borders of the old city (namely, Ulus functioning as the commercial centre). Gençlik Park was designed as a new and modern public space to support cultural identity by creating a sense of community and urban citizenship. It served as a meeting spot for resting, relaxing, interacting and socializing, and made significant contributions to both the cultural and social life of the citizens. It functioned as a symbol of democracy, unity, and solidarity, reflecting the spatial configuration of the Republic of Turkey's modern capital city (Demir, 2005; Özer, 2005; Akansel, 2009; Tekcan, 2009; Akkar Ercan and Memlük, 2015).



**Figure 1.** Land-use Map of Gençlik Park (Map Data: Google Earth, ©2020)

The cycle of republican transformation has taken enhancing women's participation in public life and their appearance in social life as one of the main objectives after the creation of the Turkish Republic in

1923, and several legislative changes were undertaken in citizenship, and civil law to make this happen. With their growing involvement in education and business life, the number of women grew significantly in urban public life. Women became prominent in urban life during this era which affected the physical structure and the design of public spaces (Tuncer, 2014). Gençlik Park provided a peaceful and pleasant atmosphere with various activities reflecting the modern lifestyle and needs during the early years after it was opened. The park's secure and decent image served as an impetus for both families and women to use it freely (Demir, 2006). A wide range of sports, cultural and recreational activities (a large concrete pond for activities such as swimming, rowing, sailing; ice-skating, exhibition hall, open-air theatre, playgrounds, casinos, cafes, and restaurants) were utilized to attract more citizens from diverse social backgrounds, genders, ages and ethnic groups to the park, thereby spreading modernization efforts to a larger portion of the community (Memlük, 2012).

The urban fabric in Ulus started to change because of the rapid population growth during the 1950s. The city's economy boomed with the rapid growth of industry and service sectors. The rapid urbanization and industrialization attracted a large influx of rural migrants to Ankara, causing the development of illegal squatter neighbourhoods around the city's centre. The city's peripheries in the north, south, and east directions became dominated by large squatter district clusters in the 1960s. The city centre shifted from Ulus to Kızılay, which progressively turned into the city's new Central Business District (CBD). Functions of the CBD extended towards the south of Kızılay following the 1970s, hosting high-income residential areas, international embassies, and the Presidential Palace. This section of the city maintained its prestigious image during the following years by establishing art galleries, international company headquarters, hotels, business and shopping centers, cafes, restaurants, pubs, and shops (Akkar Ercan and Memlük, 2015).

Over the years, Gençlik Park was left unattended and unmaintained since it has lost its allure, popularity, and value as the city's old centre has degenerated. Other factors that accelerated the park's deterioration even further during this timeframe were the 'arabesque' culture, rising crime levels, and dangerous and unpleasant environments caused by the unemployed, male, and homeless population (Demir, 2005). The park has undergone a renovation project between 2005 and 2009 to restore its former allure of the park by providing high accessibility for public transport passengers and drivers as well as improving safety and comfort due to rising measures of control on the public space, such as security guards and Closed-Circuit Television (CCTV) systems. The project involved redesigning and expanding the existing commercial facilities and adding even more kiosks, cafes, and tea gardens (Figure 2). Nowadays, the park mainly serves entertainment and commercial purposes. The southern part of the park is currently occupied by a large parking area and funfair. To that end, the park's vegetation was destroyed to a great extent. Unfortunately, the park's former impressions and functions were neglected, and the park's historic appearance and architectural qualities were lost.



*Figure 2. Views from the park (Source: Aynur Çiftçi, Didem Dizdaroğlu)*

## 2.2. On-Site Questionnaire Survey

The survey was conducted between 1 May 2021 and 1 August 2021. The number of participants (n) for the study was determined as 384 by using the formula of simple random sampling given below:

$$n = \frac{t^2 pq}{d^2}$$

Where n is the sample size, p is the probability of success, q=1-p (probability of failure), d is accepted sampling error (5%), t-value = 1,96, and α is the significance level (5%).

However, a survey of 400 questionnaires was conducted to prevent data loss and inconsistencies in the responses given by survey participants. The participants were randomly selected among the visitors of the park coming from the city's various districts and among the people residing in the Altındağ District. People, who participated in the questionnaire, were surveyed at different hours of the day, both on weekdays and weekends. Different socio-demographic characteristics were considered during the survey as a representative sample of the total population. A mix of multiple-choice and open-ended questions was used to encourage respondents to think about the issue from various perspectives and construct their responses. The data obtained from the questionnaires were evaluated using the IBM SPSS Statistics 23. While evaluating the data, frequency distribution (number, percentage) is given for categorical variables. The Chi-square technique was used for statistical comparisons, and p<0.05 was accepted for statistical significance. Statistically significant relationships are presented in tables in the results section.

The survey consists of six sections;

*Socio-demographic characteristics:* Parameters examined under socio-demographic characteristics included age groups, marital status, level of education, and employment status of women visitors.

*Transportation:* To identify the transportation status and accessibility to the park, women visitors were asked questions regarding where they reside, where they come from to the park, and what type of transportation means they utilize to reach the park.

*Park usage:* Usage of the park was investigated according to women visitors' intended use of the park, frequency of their visit, preferred hours, utilization during leisure times, and their reasons for preference.

*Urban furniture elements:* This section involved investigating the use and sufficiency of the park's urban furniture elements and equipment.

*Level of satisfaction:* The factors that cause a disturbance and opinions on park maintenance and potential improvements that would enhance their experiences in the park were inspected to determine the level of satisfaction.

*Perceptions of safety and security:* The security concerns of women visitors and their recommendations for improving the park's security were investigated.

### 3. RESULTS

#### 3.1. Socio-Demographic Characteristics

The majority of visitors to the park are between the ages of 18-44 (69%), followed by visitors between the ages of 45-64 (24%). The visitors aged 65 and over (7%) use the park rarely. The proportion of single women (54%) who do not have children (55%) is the highest among the park's visitors. The majority of the park's visitors consist of university and high school graduates (43%; 37%). A percentile breakdown of the park's visitors indicated that 29% are students, 29% are housemakers, 24% are employees, 9% are retired residents, and 9% are unemployed.

#### 3.2. Transportation

It is observed that 60% of the park's visitors use public transport to get to the park while 24% prefer coming by car and 16% prefer walking. Visitors' distribution based on the districts they reside revealed that visitors who reach the park by public transport and by mainly walking reside in the immediate vicinity of the park (40% Altındağ district), whereas visitors who reach the park by their private vehicles come from distant districts (18% Etimesgut; 15% Çankaya; 15% Yenimahalle; 12% Keçiören). When the visitors were asked where they come from the park, 45% of visitors stated that they came from a trip, and 37% came from home, while the rest of the participants expressed that they come from shopping and school with equal rates of 9%. According to the chi-square test, visitors between the ages of 18-24 get to the park by walking from the Çankaya district, visitors between the ages of 25-44 choose to use their private cars and mostly come from the Etimesgut district, and visitors aged 45 and over prefer public transport to visit the park from Keçiören and Altındağ districts. Visitors between the ages of 18-24 visit the park after school, visitors between the ages of 25-44 spend time in the park after shopping, and visitors aged 45 and over come to the park from home (Table 1).

**Table 1.** Chi-square test results between age and transportation variables

Age	Mode of transport						p
	Car		Public transport		Walking		
	N	%	N	%	N	%	
18-24	20	20.8	80	33.3	44	68.8	0.000*
25-44	52	54.2	72	30.0	8	12.5	
45-64	20	20.8	64	26.7	12	18.7	

>65		4		4.2		24		10.0		0		0.0			
Location of residence															
Altındağ		Etimesgut		Çankaya		Yenimahalle		Keçiören		p					
N	%	N	%	N	%	N	%	N	%						
60	37.5	20	27.8	32	53.3	12	20.0	20	41.7						
52	32.5	36	50.0	16	26.7	24	40.0	4	8.3						
28	17.5	16	22.2	12	20.0	20	33.3	20	41.7					0.000*	
20	12.5	0	0.0	0	0.0	4	6.7	4	8.3						
Where do they come from to the park?															
Home		School		Shopping		From a walk		p							
N	%	N	%	N	%	N	%								
24	18.8	28	77.8	4	11.1	88	48.9								
20	15.7	8	22.2	24	66.7	60	33.3								
64	50.0	0	0.0	0	0.0	32	17.8							0.000*	
40	31.3	0	0.0	8	22.2	0	0.0								

\* $p < 0.0$

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### 3.3. Park Usage

62% of the park's visitors stated that they rarely (a few times a year) come to the park, 28% of the park's visitors said that they come to the park a few times a month, while the 10% stated that they visit the park regularly (every day or a few times a week). The visitors use the park mostly on afternoons during weekends (46%). Whereas 30% of the visitors prefer to use the park in the evening during weekends. It is observed that visiting the park in the evening after 20.00 during both weekdays and weekends is not preferred due to security concerns. 43% of the users spend 3-4 hours in the park, while 41% spend 1-2 hours there. It is noted that the majority of the park's visitors prefer to visit the park with their families and relatives (51%) or with their friends (44%). On the other hand, visiting the park alone (5%) is less preferred. According to the chi-square test, visitors between the ages of 18-24 come with friends frequently, visitors between the ages of 25-64 come with their families or relatives rarely, and visitors aged 65 and over visit the park alone daily or weekly (Table 2). When the visitors of the park were given the right to make more than one choice and asked about their purpose for using the park, 34% of them stated that they come to relax and spend time in nature, 25% said they come to meet their relatives and friends, 17% of visitors said that they come to eat and drink, while 13% of visitors stated that they come to visit the funfair.



**Table 2.** Chi-square test results between age and park usage variables

Age	With whom do they come to the park?						p
	Alone		Family or relatives		Friends		
	N	%	N	%	N	%	
18-24	8	40.0	44	21.6	92	52.3	0.000*
	4	20.0	88	43.1	40	22.7	
	0	0.0	52	25.5	44	25.0	
	8	40.0	20	9.8	0	0.0	
25-44	Frequency of park use						p
45-64	Daily and Weekly		Monthly		Rarely		
	N	%	N	%	N	%	
>65	20	55.6	48	42.9	60	23.8	0.000*
	8	22.2	20	17.9	104	41.3	
	6	16.7	32	28.6	76	30.2	
	2	5.5	12	10.7	12	4.8	

\* $p < 0.0$

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### 3.4. Urban Furniture Elements

When the visitors were granted the right to state more than one preference and asked about which of the urban furniture elements they use the most, 29% of the visitors said that they use the equipment for sitting, 17% of visitors stated that they use green areas, 16% of them said play equipment, 12% eating and drinking establishments while 10% of visitors stated that they use the walking paths in the park (Figure 3).



*Figure 3. Urban furniture examples from the park (Source: Aynur Çiftçi, Didem Dizdaroğlu)*

### 3.5. Level of Satisfaction

The majority of the visitors stated that they are satisfied with the park's overall condition (75%) and the maintenance works (72%). According to the chi-square test, visitors between the ages of 18-24 and visitors aged 65 and over are satisfied, while visitors between the ages of 25-64 are not satisfied (Table 3). When the unsatisfied visitors were asked about the factors that disturb them, 28% of the visitors stated that the park is overcrowded, 24% of the visitors complained about the level of noise in the park, 21% of visitors stated that they are disturbed by the smell of garbage, 14% complained about the amount of dust caused by the heavy traffic, and 13% of visitors stated that they feel discomfort because of the insufficiency of green spaces. Based on the open-ended responses, the suggestions set forth by the visitors to improve the use of the park may be summarized as follows;

Reopening the pond for water sports and creating living habitats for birds, swans, and ducks in the pond,

Providing cleaner playgrounds for children, diversifying the playground equipment, and increasing the number of sitting areas around the playground,

Increasing, maintaining the green spaces, and decorating green spaces with planting,

Redesigning parking areas and equipment to be suitable for the use of the disabled,

Organizing various cultural events such as music and dancing shows, theatre performances and exhibitions, and;

Ensuring that establishments for eating and drinking and the public toilets are well-maintained and clean.

**Table 3.** Chi-square test results between age and satisfaction variables

Age	Satisfaction with the overall condition of the park				p
	Yes		No		
	N	%	N	%	
18-24	116	39.7	26	24.1	0.006*
25-44	88	30.1	42	38.8	
45-64	64	21.9	34	31.5	
>65	24	8.3	6	5.6	

\* $p < 0.05$

### 3.6. Perceptions of Safety and Security

77% of the visitors stated that they feel safe when strolling around the park alone in the morning, while 88% said that they do not feel safe when strolling around the park alone after dark. According to the chi-square test, visitors between the ages of 18-44 and those aged 65 and over feel unsafe in the morning and after dark. On the other hand, visitors between 45-64 feel safe all day long (Table 4). 90% of the users reported a lack of implementation of crime prevention and control systems in the park. Almost all the visitors (97%) stated that the number of security guards in the park should be increased. When an open-ended question was asked to the visitors to determine their recommendations for increasing the park's security, the visitors suggested that more lighting elements, surveillance cameras, and emergency call boxes should be installed. Moreover, surveillance cameras should be installed in the playgrounds, and the number of security guards should be increased in these areas. One of the visitors suggested that a library should be established in the park so that the visitors may become conscious and protect the park themselves thus, there will be no need for security in the park.

**Table 4.** Chi-square test results between age and safety variables

Age	Feeling safe in the morning				p
	Yes		No		
	N	%	N	%	
18-24	44	47.8	100	32.5	0.000*
	28	30.4	88	28.6	
	8	8.7	16	5.2	
	12	13.0	104	33.8	
25-44	Feeling safe after dark				p
	Yes		No		
	N	%	N	%	
45-64	57	44.2	40	14.8	0.003*
	36	27.9	109	40.2	
	32	24.8	93	34.3	
	4	3.1	29	10.7	

\* $p < 0.05$

#### 4. DISCUSSIONS AND CONCLUSIONS

According to the survey results, most of the park's visitors consist of single women between the ages of 18-24. The statistical analysis results show that concerns about safety and security lead to less use of park services by women aged 25 and over. Visitors aged 25 and over visit the park only a few times a year, and the amount of time they spend in the park does not exceed a few hours. It is also observed that the visitors do not feel safe when they stroll in the park alone. The park is not used in the evening after 20.00. In order to increase the security in the park, visitors have demanded that more lighting elements, surveillance cameras, and emergency call boxes should be installed. As reported in several studies in the literature, other factors that cause Gençlik park to be rarely used could include limited access to women-friendly facilities, and poor physical accessibility (e.g., stairs without ramps or elevators), especially when traveling with strollers or baby carriages, and inadequate recreational facilities the park offers.

The high number of visitors who get to the park using public transport indicates that the number and the frequency of trips by bus, subway trains, and taxis are sufficient. On the other hand, the survey results indicate that the infrastructure to let visitors arrive at the park by riding their bicycles or on foot is inadequate. The statistical analysis results demonstrate that visitors mostly come to the park from their homes (i.e., 45 and over age group) or from a walk (i.e., 18-44 age group). The park is visited predominantly by students studying in surrounding schools and housemakers who live close to the park. Visitors aged 25 and over visit the park from Keçiören and Altındağ districts. The survey findings support the literature stating that women cannot travel long distances due to their limited time with housework or childcare activities. Therefore, they prefer using parks in their neighbourhood.

Based on survey results, the visitors utilize the park to rest, meet their relatives and friends, and spend some time in nature. As mentioned in the literature, well-maintained green areas along with a diversified number of recreational activities increase the attractiveness and use of the park. However, the park does not have any areas or paths that may be used for physical activities such as riding a bicycle or exercising. A significant portion of the park is occupied by car parks, funfair, and establishments for eating and drinking. Available green spaces neither possess the quality nor the quantity to satisfy the needs of visitors who wish to spend some time in nature. Since the most frequently used urban furniture elements in the park are the seating units and play equipment, it is understood that the visitors bring their children to the playgrounds inside the park and come to chat with one another. These findings confirm the previous studies conducted on the presence of other people and the possibilities of random meetings to provide further social support and allow women visitors to develop positive feelings for any possible activities and uses in the park. Lastly, the crowd, noise, and the smell of garbage are stated to be the most disturbing elements for visitors to the park.

On-site questionnaire surveys are an essential data source for the design, planning, and management of urban parks and for satisfying the needs of the visitors and ensuring that urban parks can function properly. Questionnaires allow for identifying shortcomings and insufficiencies of urban parks and developing new strategies to render them more useful for citizens. A survey is a flexible research approach, and participation is voluntary. As a limitation of this study, people, who participated in the questionnaire, may not reflect the views of all types of park users. Another limitation is that survey questions were developed by the researcher through literature review and according to the scope of the study. For this reason, if some aspects of the topic are not included in the survey, they will not appear in the results. In the light of the survey findings, the park's current condition should be re-evaluated, and the necessary arrangements in line with the issues and needs identified by the visitors should be carried out. Considering the characteristics of the women visitor profile and their recreational demands, the following recommendations should be taken into consideration:

Park amenities and facilities, including playgrounds, sitting areas, spaces for community events, pathways, public toilets, tea gardens, and restaurants, need to be improved. Necessary improvements should be made considering the needs and accessibility of individuals with disabilities.

The concrete pond that is currently unused needs to be turned into an artificial wetland to provide a habitat for fish and wildlife, control potential floods, and preserving water quality. The artificial wetland to be created may also be used for recreational activities such as rowing or sailing.

The diversity of green spaces must be maintained and increased to attract more visitors. It should be noted that being in contact with a rich and diversified natural environment will improve the health and well-being of the visitors and social activities.

A safe and convenient pedestrian and cycling accessibility to/from Gençlik Park should be created to encourage citizens to use the park actively.

The park's quality and use throughout the year rely on its performance in meeting recreational requirements. Various cultural and social activities that will enable women to come together must be coordinated to allow women to meet, socialize, and make their presence known within the park.

Crime control and prevention systems (i.e., surveillance cameras, security guards, panic buttons, and emergency phones) should be provided across the park to increase public safety and surveillance in high-profile areas such as playgrounds. Moreover, the number of security guards should be increased across the park.

It should be noted that lighting is one of the most crucial factors in improving the quality of a pedestrian's environment during night-time. Strategic interior positions in the park should be provided with pedestrian-scale lighting.

Night-time events should be organized to attract visitors to the park after dark for enhanced convenience and security.

Signs and maps need to be conveniently and strategically positioned across the park to offer consistent directions to critical points of interest, such as the locations of public toilets, exits and entrances, park events, and public transport.

The park needs to be maintained regularly to prevent vandalism and ensure that women visitors feel safer and at ease.

To sum up, gender has a fundamental role in using open spaces. To enable women to take an active part in open spaces, their needs and expectations should be considered. Moreover, the barriers or threatening factors limiting their existence should be identified and eliminated. In Turkey, gender equality has become a forgotten feature in the spatial design of open spaces. This study aims to contribute to the necessity of considering the needs of women users with an example of an urban park in the design of open spaces in Turkey. To this end, Gençlik park is selected as the case study. Gençlik Park is the first established urban park of historical importance within the borders of the old city centre. With the expansion of the city over the years and the degeneration of the old city centre, the park lost its popularity and became neglected. In the light of this study, the park has a great potential to serve the whole city, but it has been detected that many problems should be considered for women users. This research provides the following contributions to knowledge: (1) providing an understanding of gender-related challenges in the design of urban parks; (2) offering a set of gender-sensitive recommendations to overcome these challenges identified by the survey study; (3) presenting important insights and lessons for landscape architects and urban planners to enable women to utilize open spaces in a safer and better way; (4) increasing awareness of administrative authorities about gender-inclusive urban planning and design, and; (5) encouraging local governments to improve the functionalities of open spaces in Turkey by promoting recreational infrastructure and facilities for women and other disadvantaged groups.

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# THE FAILURE ANALYSIS IN DESIGN OF THE HOUSING PROJECT IN ISTANBUL ACCORDING TO THE ARCHITECTURAL DESIGN AND TURKISH CODES

SERKAN YATAĞAN<sup>1</sup>

## ABSTRACT

The failure analysis has an important role during the design process. Since the failures should be determined during the design, the failures which occur during the construction may be obstructed or decreased. These codes and regulations help to determine the failures and supply the suitability of the design to the codes and regulations. Besides, the owners' requests are also taken into account during the design process. Sometimes, the owner's requests are different and not suitable to the codes. Therefore, it is important to specify the right alternatives. The failure analysis forms the alternative solutions and makes the architects and engineers decide which solution is best suited for the construction. In this paper, the design process of the competition project in Balıkesir is evaluated and analyzed for the failures according to the Turkish codes and regulations. Generally, the structural system and services are analyzed for the failures that occur during the construction. By the help of this analysis, the questions like which structural system should be used in earthquake zone or is it suitable to use different structural systems together or how and where the service systems are settled or constructed are tried to be answered.

**Keywords:** Failure, regulations, design process, Turkish codes

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## 1. INTRODUCTION

The first Turkish seismic design code was written in 1940 which was followed by the codes written in 1944, 1949, 1953, 1962, 1968, 1975, 1997 and 2007. Twenty two years after TEC 1975 (Turkish Earthquake Code), first TEC 1997 and then Tec 2007 which include significant changes, were put into effect. The first basic seismic analyses begin with 1949 Earthquake Code. Until TEC 1997 with seismic precautions and changes were put into effect, most of the buildings in Turkey were constructed in accordance with TEC 1975.

Due to the damage occurred during 7.6 Kocaeli Earthquake, the issues related to the material quality, improper aggregates and poor concrete, short columns, strong beam-weak columns, corrosion of reinforcements, stirrup interval and hook length problems, unreactive detects, workmanship errors and inadequacies in TEC 1975. After Kocaeli Earthquake, in the following earthquakes, it's seen that the same problems have been repeated. Moreover, during the evaluation of collapsed or severely damaged buildings, it has been ascertained that the most of these buildings were not constructed in accordance with the code of that two ones had significant design adequacies.

According to the observations, after the past earthquakes, damages are mostly due to architectural design. At this point, earthquake codes play a crucial role to lead the designer.

### 1.1 Common Seismic Design Faults Due To Architectural Design

There are various facts that should be taken into consideration with the criteria of the seismic design in Turkey are determined.

#### A. Seismic Design Faults in Plan [1]

##### A.1 Torsional Irregularity

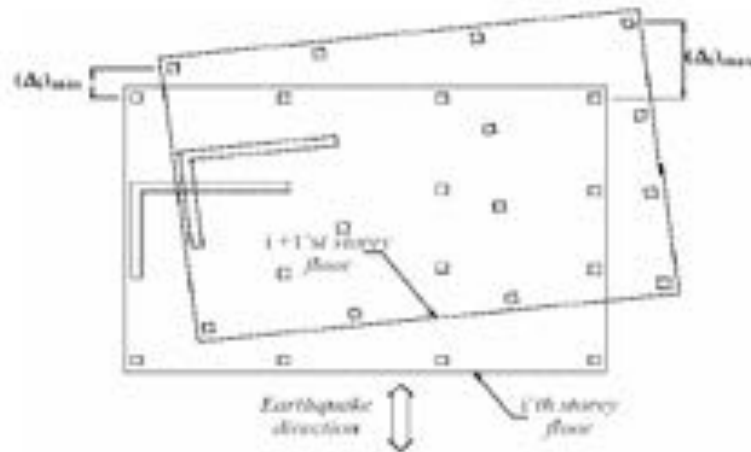
The center of building mass is generally considered as the geometric center of the building and the center of rigidity is considered as the center of vertical elements of the structural system. The center of rigidity of a building should coincide with the center of mass. When the center of a building mass does not coincide with the center of rigidity, torsion and stress concentration occur in the building when it is subjected to seismic loads (Figure 1). Eccentric between the centers makes the building rotate due to the seismic forces.

The Turkish earthquake code mentions the torsion eccentric as follows: "The case in which the Torsion Irregularity Factor which is defined as the ratio of the maximum story drift to the average story drift at any story, exceeds 1.2 in any one of 2 perpendicular earthquake directions."

In order to avoid torsional deformation, it is desirable to have symmetry bot in the building configuration and structure. The vertical structural elements of the lateral resistance system should be emerged in order to approach the centers of mass and rigidity to each other and in order to produce high resistance to torsional effects on the building [2, 3].

##### A.2 Floor Discontinuities

Diaphragm which transfer forces between vertical structural elements are needed to connect them and to make them resist to the seismic forces as one body. Architectural Institute of Japan states that they behave like columns when the lateral forces are considered as the horizontal forces.

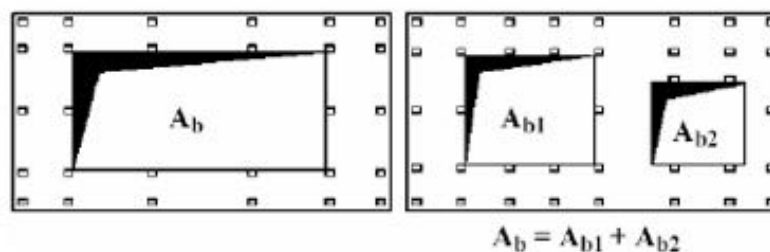


**Figure 1.** Torsional Irregularity [6]

Architectural requirements such as necessities for vertical traffic within a multistory building, visual integration of stories and other purposes result in a variety of diaphragm penetrations such as staircases, elevators, atriums, duct shafts, skylights and so on. The size, location and even shape of the penetrations are critical to the effective of the diaphragm. Diaphragm penetration and their geometrical irregularities weaken the load carrying capacity and the lateral rigidity leading to torsion and stress concentration.

The Turkish earthquake code describes floor discontinuity as follows: “The cases in Figure 2 in which;

1. The total area of the openings including those of stairs and elevators shafts exceeds 1/3 of the gross floor area of any story.
2. Local floor openings making the transfer of seismic loads to the vertical structural members difficult or even impossible.
3. Abrupt reductions made in the in-plane stiffness and strength of floors.”



**Figure 2.** Floor Discontinuities [6]

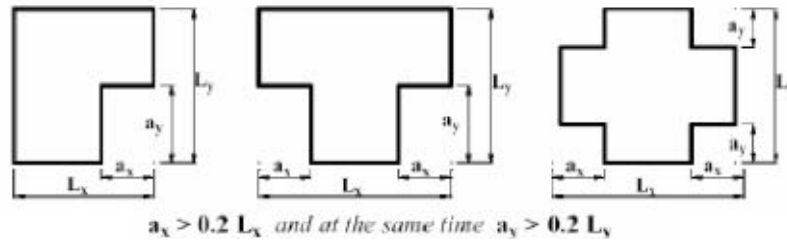
The irregularity is not strictly forbidden in code but it is obligatory to show with calculations that the transformation of lateral loads to the vertical elements is safely achieved.

If the relative size of the penetration in a diaphragm is a reasonable one, placement of reinforcement for the edges and corners of the opening and adequate diaphragm width at the opening may be sufficient for the integrity of the continuous diaphragm. However, if the penetration in a diaphragm is quite large, the diaphragm should be separated into small and regular parts for maintaining the continuity of the whole diaphragm [7].

### A.3 Projections in Plan

Architectural form determines the strength of the building because the building behavior depends on the form. If the plan of the building is not considered of simple and regular geometries, there will be big stresses especially at corners of the building during an earthquake.

The Turkish earthquake code describes the projections in plan irregularity as follows: “The cases where projections beyond the re-entrant corners in both of the two principal directions in plan exceed the total plan dimension of the building by more than 20 % in the respective dimensions (Figure 3).



**Figure 3.** Projections in Plan [6]

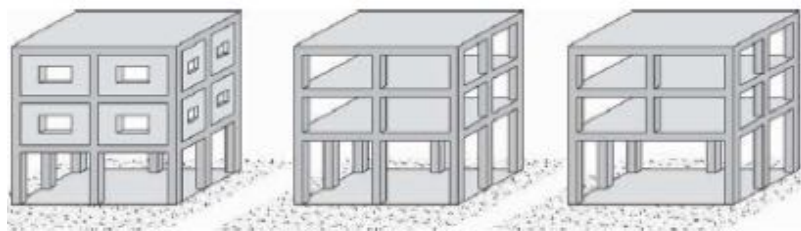
Seismic behavior is related with the mass of the building and every molecule creates loads of inertia proportional with the earthquake energy. If a structure consists of too many building blocks with different natural periods and lateral rigidities, these blocks will move individually during an earthquake.

It is not always possible or architecturally desirable to design a building having a symmetrical plan. In fact, most of the time, due to the requirements of the building program, functional and aesthetical concerns the architects decide to create more complex building forms. Even so, if the projection are absolutely necessary, the structural engineers should be consulted for additional reinforcements. If possible, the structure should be divided into several sections with structural joints [4].

## B. Seismic Design Faults in Elevation [1]

### B.1 Weak Story and Soft Story

Weak story is related with the total cross section areas of columns and shear walls. Weak story configuration describes structure where one story of a building is more flexible and/or weaker than the one above it from the perspective of seismic forces. On the other hand, soft story is a ratio about the relative displacement of the building. If there is a soft story in building, total displacement of building that should be in upper floor, occurs only in one floor where soft story is. These two irregularities are similar to each other (Figure 4).



**Figure 4.** Examples of soft and weak storey configurations:

Stiff and strong upper floors due to masonry infills, the columns in one storey longer than those above, Soft storey caused by discontinuous column [6]

If there is a soft or weak story in a building, more displacements occur in one floor where it is. This unexpected displacement in these wrong application cases in collapse of the whole building.

Ambrose and Vergun stated that if relatively open ground floor is necessary there are some possible solutions to reduce soft and weak story effects [2]:

1. Bracing some of the open bays. If designed adequately for the forces, the braced frame (truss) should have a class of stiffness closer to a rigid shear wall, which is the usual upper structure in these situations.

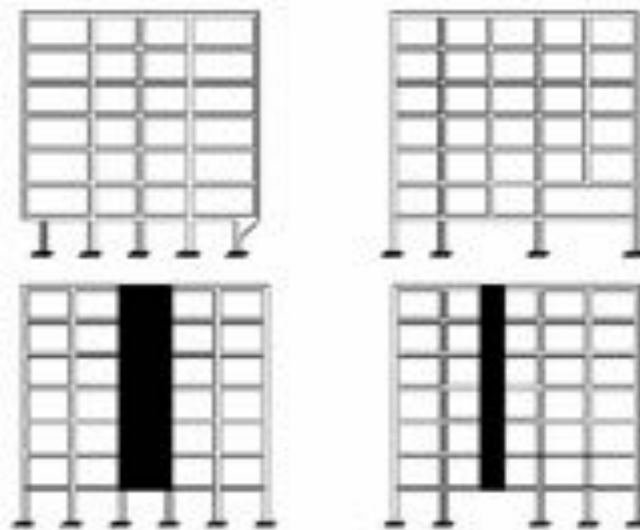
However, the soft and weak story effect can also occur in rigid frames, where the soft story is simple significantly less stiff.

2. Keeping the building plan periphery open, while providing a rigidly braced interior.
3. Increasing the number and/or stiffness of the ground floor columns for an all rigid frame structure.
4. Using tapered or arched form for the ground floor columns to increase the stiffness.
5. Developing a rigid first story as upward extension of a heavy foundation structure.

## B.2 Discontinuity of Vertical Structural Elements

Forces applied to buildings must travel from their points of origin through the whole system and into the ground, in the design for lateral loads. The force paths must be complete. Where there are interruptions in the normal flow of the forces, problems occur. In a multi-story building, columns and shear walls must be stacked on top of each other. If a column is removed in a lower story, a major problem is created, requiring the use of a heavy transfer girder or other device to deal with the discontinuity in Figure 5 [2].

The Turkish earthquake code describes Discontinuity of Vertical Structural Elements as follows: “The cases where vertical structural elements (columns and shear walls) are removed at some stories and supported by beam or gusseted columns underneath, or the structural walls of upper stories are supported by columns or beams underneath.”



**Figure 5.** *Discontinuity of Vertical Structural Elements*

Although these items of this irregularity were not forbidden in 1998 earthquake code, structural elements like columns and shear walls must be continuous through the entire building height according to 2007 earthquake code. Discontinuity of the structural elements of the buildings may make a story weak or create torsional effects.

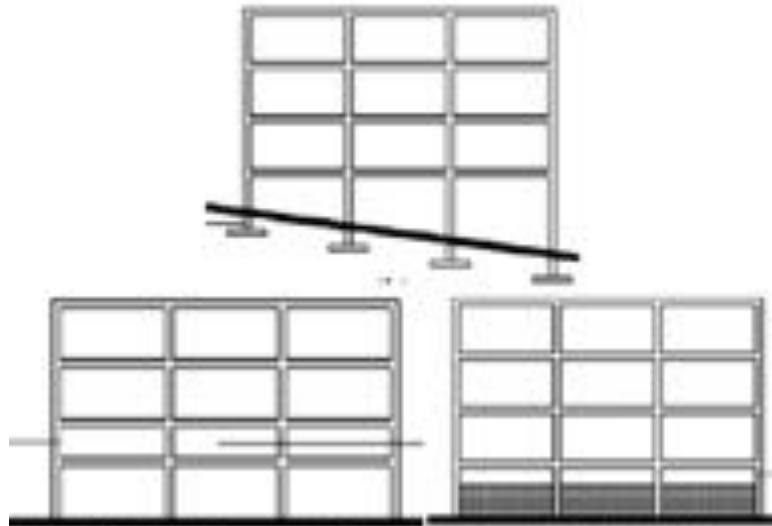
## C. Common Seismic Design Faults by Configuration of Structural Elements [1]

It is an important subject that structural elements should be well placed and sized besides their surfaces in numbers. Poor decisions may increase the stresses in structural elements and cause damages.

### C.1 Short Columns

If both long and short columns exist in the same story, instead of distributing the loads equally among all of the columns, the columns experience different shear forces due to the height differences (Figure 6).

The lateral loads are passed from the longer and more flexible columns to the shorter and the stiffer ones, and concentrated on the short columns. As short columns are not designed for overloading, failure occurs along the line of short columns before the longer and more flexible ones, which simply deflect without cracking [5].



**Figure 6.** A short column on a sloping site, Columns 'shortened' by beams, Columns 'shortened' by Masonry or concrete infill

There exist solutions in order to avoid short columns formation. These are;

1. It is necessary to keep the heights of the column and a façade approximately equal. If the unequal height of the columns are needed, horizontal bracing can be inverted to equalize the stiffness of the columns of varying heights. Another solution is to obtain the usual effect of unequal heights of the columns with the help of non-structural architectural elements where the column heights remain same, actually [6].

2. Short columns may turn into a shear wall.

3. Non-structural walls should be isolated from columns by developing architectural details. Placement of elastic or flexible material in between the infill walls and the structural members is necessary to obtain independent displacement of the frames system for infill walls [7].

4. As an engineering attribution, proper arrangement of reinforcing for short column solves the problem.

An architect should be aware of the reasons of the short column formation. Therefore, coordination between the architecture and the structural engineer is important and is needed to avoid the problem in architectural design process [7].

### C.2 Strong Beam-Weak Column Configuration

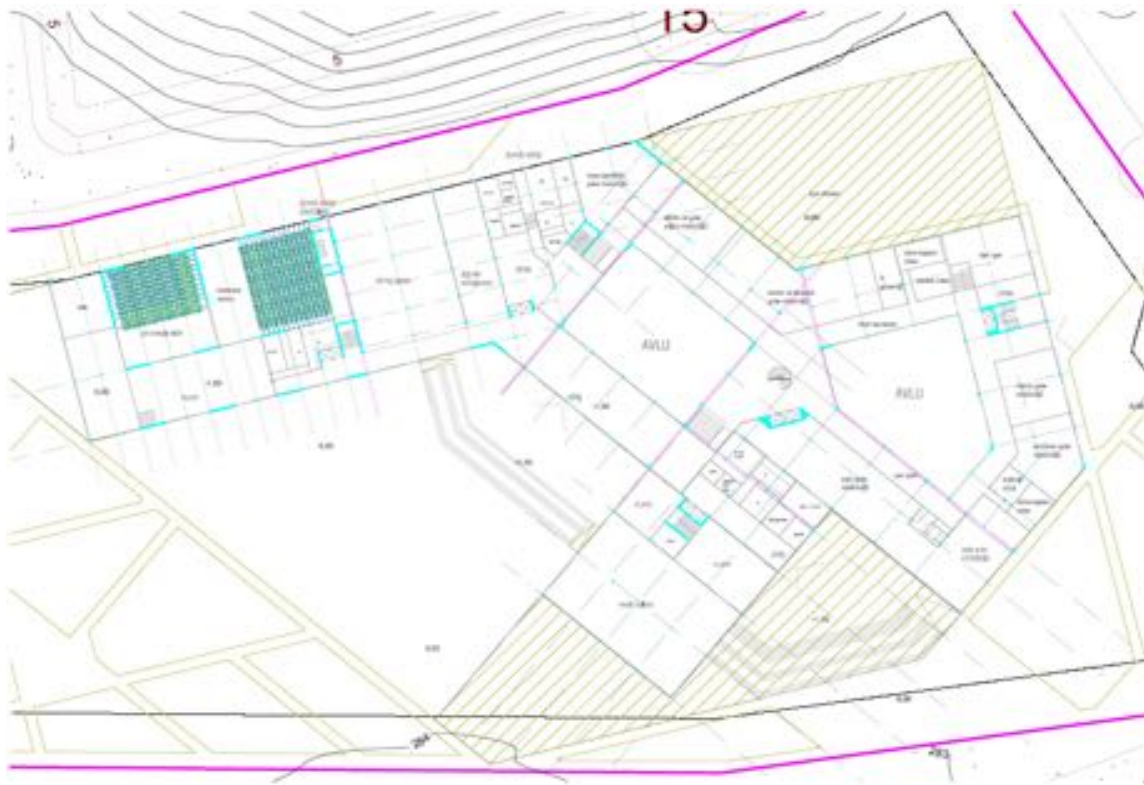
In case of an earthquake, the structure must be able to absorb the maximum energy by ductile deformations in column-beam connections, which the lateral stability of the building is preserved. If the beams of a building are more rigid than the columns, ductile deformations will occur at the top and both ends of the columns. Excessive displacements will cause additional moments and the columns will easily lose their lateral stability. Since the greatest earthquake forces occur at these coulombs, they will collapse first, probably causing the destruction of the entire building.

If the columns are more rigid than the beam, ductile deformation occurs at the end of the beams. Beams can absorb a lot of energy by ductile deformations without an important loss in the load carrying capacity. In the system, all the beam-column connections in the building have to fail before the collapse of the

ground floor columns. Architects should know that strong column-weak beam design is not only advisable but also obligatory according to Codes.

## 2. EVALUATION OF ARCHITECTURAL COMPETITION PROJECT IN BALIKESIR ACCORDING TO TURKISH EARTHQUAKE CODE

In the competition project for Balikesir Metropolitan Municipality Building, there is one basement at -1.50 m and the building should be used as social usage. The area of the building floor is 550 m<sup>2</sup> (Figure 7).



*Figure 7. The plan of the competition project*

The structural system of the building is reinforced concrete. The dimension of the column is 30 x 30 cm. The building is cut in the dilatation when the width of the building is over than 40 m. In the basement wall, stairs and elevator sections wall, the curtain wall should be used. Also, in the conference hall, due to the large width, curtains walls should be used in the reinforced concrete structure system.

Since the Balikesir region is in the first degree earthquake zone in Turkey, the efficient coefficient of the ground acceleration ( $A_0$ ) is determined as 0.40. The importance coefficient of the building ( $I$ ) is 1.50 because the building is in the class of government buildings, hospitals, fire stations, the communication buildings, transportation buildings and energy buildings. The participation coefficient of the live loads is determined as 0.30.

When the design faults are investigated according to Turkish Earthquake Code;

1. There is no torsional irregularity (A.1).
2. There is no floor discontinuity (A.2). The amounts of openings are  $\frac{1}{4}$  of the floor in the entrance building and is  $\frac{1}{5}$  of the floor in the governance building. Since the amount of the opening is lower than  $\frac{1}{3}$  according to Turkish Earthquake Code, this building provides the condition of the floor discontinuity.
3. There is no projections in plan.



4. There is no weak or soft story (B.1) in the building. The structural system has symmetrical vertical structural system (B.2).
5. There is no short column (C.1) and strong beam-weak column configuration (C.2).

## **CONCLUSIONS**

By the past earthquakes, it was understood that there was a strong relationship between architectural design and building resistance. The architecture should design the structural system correctly and understand the dynamic behavior. To do that, the seismic codes which are important keys should be used actively when designing structures [8].

The most significant part of earthquake code for architecture is irregular buildings. Architecture should know that regular and symmetrical buildings are stronger against earthquake forces and irregular buildings have weak parts that may not resist earthquakes. Thus, these weak parts may cause damages even collapse of buildings. It should be noted that because the earthquake code is not prepared with an architecture-friendly approach, especially the irregular types created by geometric arrangements such as projections in mass and gallery openings are widely misunderstood and often undeservedly objected by architects. The earthquake code does not forbid the existence of such architecture elements but simply calls for attention to the consequences of using these elements in terms of the seismic behavior of the building [8].

Earthquakes will not affect human's lives negatively as a result of buildings designed and constructed according to earthquake-resistant design principles. For preventing negative effects of earthquakes, following topics must be taken into consideration immediately:

1. Basis of earthquake codes must be taken in architecture students' undergraduate programs.
2. Existing buildings must be reinforced and repaired according to the regulations given in earthquake codes.
3. During the construction period, the new structures must be inspected attentively to be adapted to the earthquake code [8].

In conclusion, the architecture project should be designed according to the earthquake codes. However, the architecture design is aesthetic, unique and different. Sometimes, the design of these properties is not suitable for the earthquake codes. It is important to provide the earthquake code with these properties. In the architectural education, the relationship between the architectural design and safety regulations in the earthquake code should be described very well. Therefore, both architectural design and safety should be arranged together and the architectural originality with the regulations in earthquake code should be obtained.

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# MORPHOLOGICAL CHARACTERISTICS OF THE RAPID CHANGING HOUSING SETTLEMENTS, THE CASE OF QAFFIN TOWN IN PALESTINE

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## ABSTRACT

The paper addresses the morphological characteristics in the rapidly changing urban form of the Palestinian settlements choosing the town of Qaffin as a case study. Qualitative methods are used to address the analytical and historical transformation. Thus, the urban form of Qaffin tells a lot about the political, social, and economic factors of change in Palestine in the last century. The main finding of the study accentuates the rapid changing of housing forms and density while the continuity of streets and plot patterns. Hence, the Palestinian towns are still able to conserve their organic character, but the rapid change could cause over-densification in the future. Accordingly, there is an urgent need for a plan for the deceleration of the change of urban form in Palestinian towns, which in turn will play a role in preserving the Palestinian identity and cultural stability.

**Keywords:** Urban morphology; urban form; urban transformation; Qaffin town; borderline towns.

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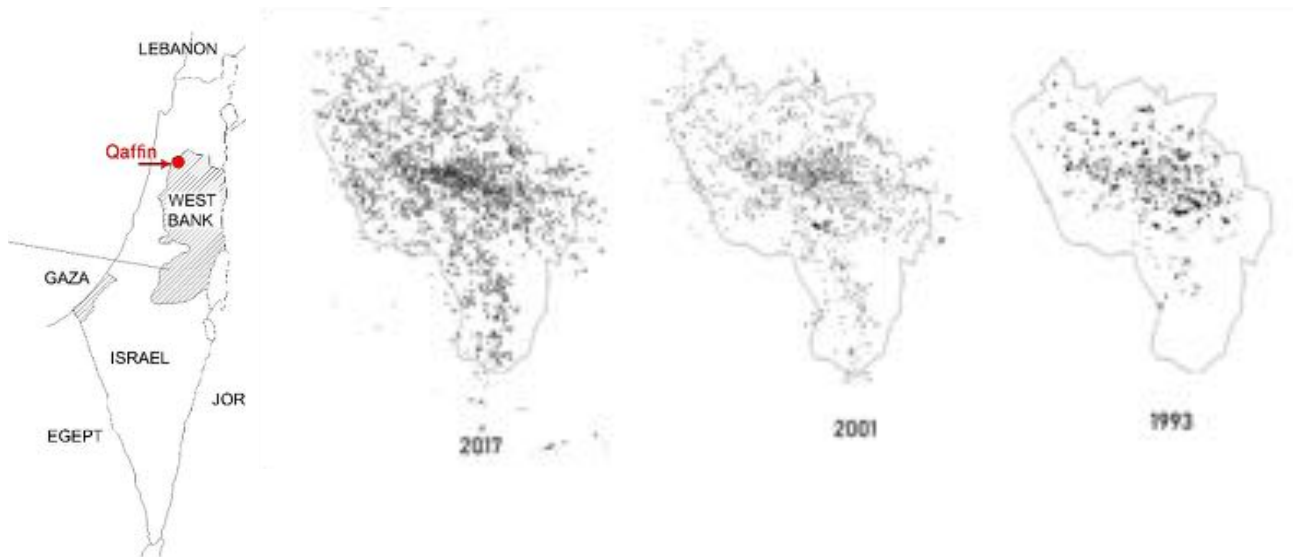
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## INTRODUCTION

The vernacular compact fabric of rural Palestine was the predominant style in the country, encompassing the Palestinian landscape with uniform and coherent forms (Miller, 1985). The existing environment was the main influence on the vernacular character of traditional architecture in Arabic countries, as well as that in Palestine (Rapoport, 1969). As Palestine's traditional architecture began to disappear and urbanity spread at the expense of rural areas, the remaining villages transformed to towns and developed new diverse and fragmented urban forms (Ragette, 2003). Those forms differ drastically from the north to the south of the West Bank, reflecting the spatial isolation of Palestinian communities caused by the country's political struggle. (Ghadban, 2000) However, villages located in the same regions share common characteristics and similarities (Senan, 1993).

Moreover, Palestinian settlements are considered as one of the most rapidly changing areas during the last decades (Itma, 2016), the change is an important direction force in transferring settlements into high dense areas (Itma, 2014). accordingly, this paper tries to understand the influence of such rapid transformation of the urban form of housing settlements in the last decades and up until now, choosing Qaffin town as a case study as shown in Figure 1. It attempts to examine how far the urban form has changed in these towns, what changed and what continued. The analysis also highlights changing the indigenous identity of such villages into a complex urban form with disintegrated and non-homogeneous architecture.



**Figure 1.** Qaffin's location in the Tulkarm Governorate  
The urban expansion of Qaffin between the years 1993-2017

Source: (Elections.ps2019, edited by Authors)

Urban morphology and urban landscape formation have been explored by academics through the last century, yet not completely nor thoroughly (Živković, J. 2020). As there is a problem between syncing the theoretical base of the field to its practical application of it (Sadeghi & Li, 2019). In many cases, the historical development of towns or cities is hard to acquire, and in other cases, morphological analysis and research is a time-consuming process and has complicated procedures (Bergamini, 2019), as the analytical work isn't only limited to the physical nature of urban areas, but also integrates it with the societal values of their communities (Conzen, 2004), (Siksna, 2006).

However, urban form is mostly influenced by sociological anthropological, technological and political factors (Sorauf, 2015). Social relations aren't just expressed and communicated through our daily lives, but they are found and embodied in buildings' spatial organization, and settlement patterns. Built space is an expressive form of culture and lifestyle and the alterations that the social structure experience through time (Calvet, 1979). There are

many factors to be considered in studying urban form, whether environmental, cultural, economic, technological, or aesthetical. And it's vital to understand each context's exact situation to identify its influences.

Scholars working on urban morphology were highly influenced by the environment and the region in which they studied, and this resulted in different methodologies and approaches to the point of changing the principles of the discipline of urban morphology (Oliveira, 2016). And according to this variance, Moudon has categorized them into three leading schools of thought on urban morphology; those being British schools, Italian schools and French schools (Moudon, 1997). Although there are different schools and approaches to analyzing the urban form of towns, it is possible to develop an appropriate framework for studying the specific urban form of a country to understand how far different events change said form. Figure 2 shows the analytical frame meant to be used in the case study, the elements and sub-elements of urban form are chosen based on data available for analysis.

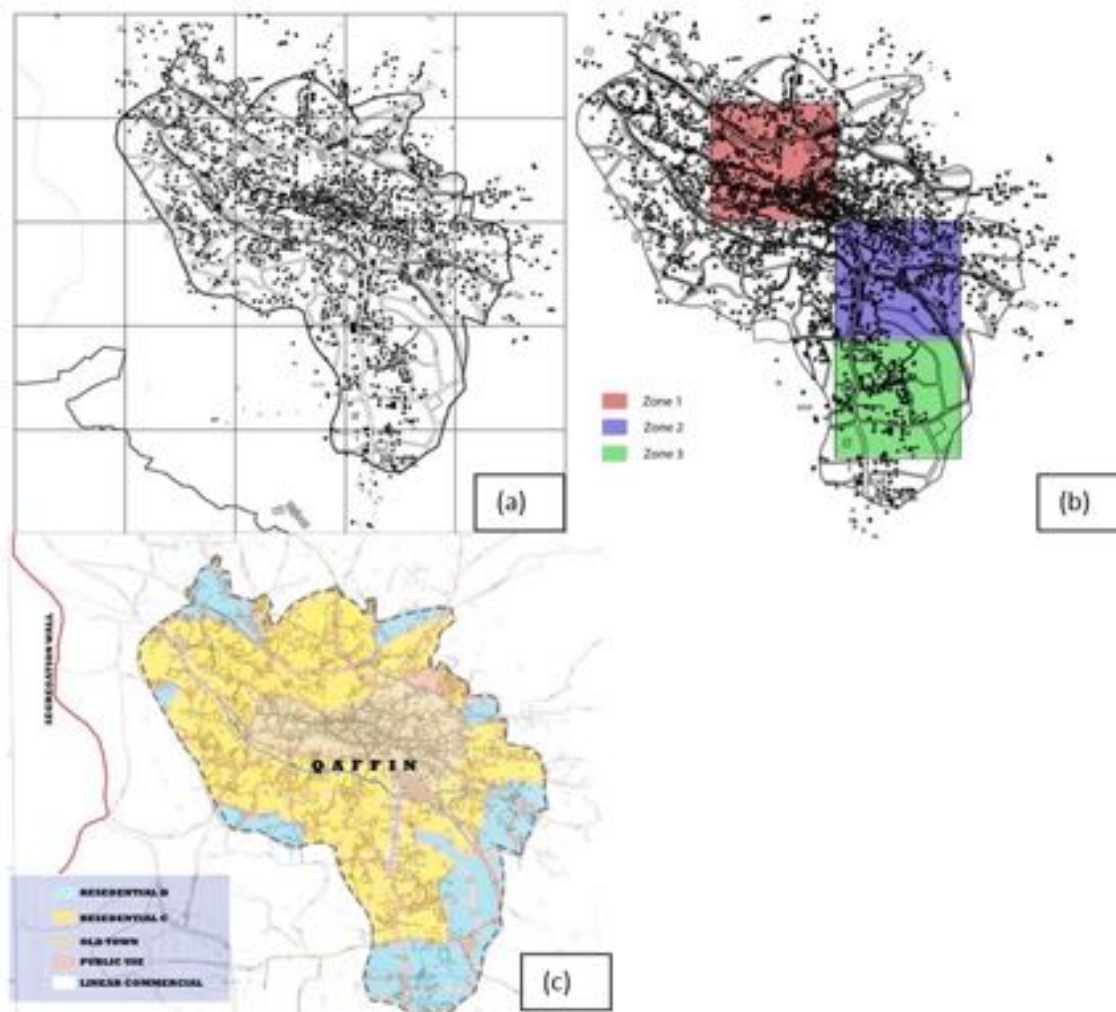


**Figure 2. Elements of Urban Form**

*Source: developed by Authors 2022*

## **METHODOLOGY**

Qualitative methods are used in this paper that includes collecting statistical information about Qaffin, such as population increase, town area decrease, statistical numbers regarding housing units, number of buildings and housing unit size, etc. Figure 3 shows the selected zones for urban form analysis. Areas are set to cover parts of the old town of Qaffin and the later construction bursts. They are also selected to include different land-use patterns, residential, commercial, and public land use. These zones include buildings built in different periods through the last century and have been utilised differently to include all possible varieties of urban form in Qaffin, which will serve to present a clear understanding of the morphological characteristics of the town's urban form. The selection of these zones has been based on the grid division of Qaffin Municipality's Master plan.



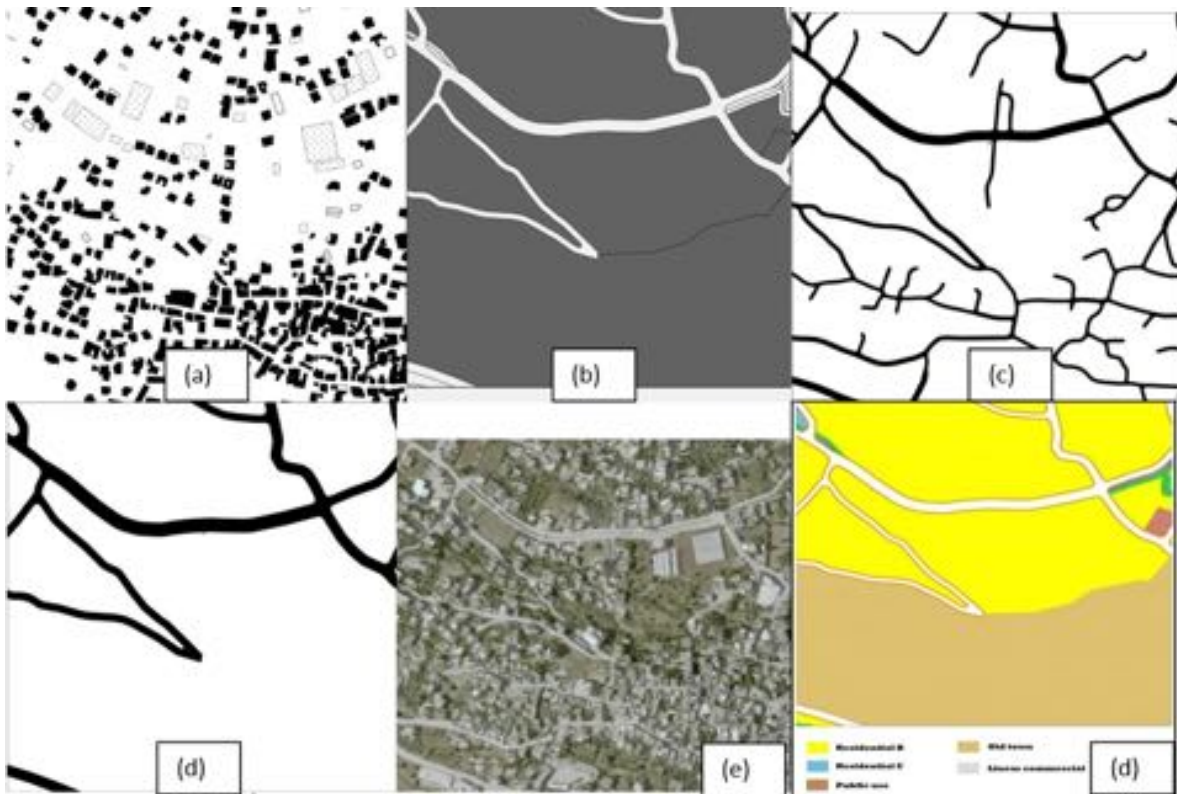
**Figure 3.** Master plan Grid (Qaffin Municipality) (a), selected zones (b), master plan (c)

*Source: developed by Authors 2022*

### **THE NORTH OF QAFFIN: THE OLD TOWN AND ITS PERIPHERY (ZONE 1)**

The first selected area, which is shown in Figure 4, is chosen on the periphery of the old town of Qaffin and is a part of the northern area. Old town Qaffin is the oldest inhabited area of the town, and some archaeological shrines within the area, like the Al-Nabi Othman shrine, are said to be more than 700 years old. Consequently, old town Qaffin has the oldest streets and buildings and has witnessed more extensive alterations. It is worth mentioning that the northern area was originally an agricultural field before urban expansion reached it through the Israeli occupation period, and traces of its agricultural identity can still be seen to this very day.

A brief look at the town plan -see Figure 4- shows the difference between the old town and its neighbouring area to the north. It can be noticed that the old town has a compact building fabric where mostly all blocks are fully occupied with buildings and houses are close to each other and at some points form cluster buildings. On the other hand, the Northern side of the zone shows a less compact pattern with the building which are spaced apart noticeably. These spaces are either completely vacant or occupied with greenhouses, see Figure 4. a. The building scale varies in each region, as public buildings like schools, the municipality building and mosques have the largest areas. Residential buildings also vary in size in this area based on the housing type-single house, villas, semi-attached or multi-story buildings.



**Figure 4.** Building Pattern (a), Block Pattern (b), Street network pattern (c, d), Land use (e)

Source: developed by Authors, Geomolg 2022

The block analysis, in Figure 4. a, and e shows almost the entirety of old town Qaffin, zoned into one continuous block, which is the largest block in the Master plan stretching horizontally with irregular boundaries. It is noticed that it is unlike the town ground plan which stretches from north to south. The change of urban growth direction is mostly caused by having confines on the horizontal direction; the separation wall on the west side, and illegal Israeli settlement expansion on the East.

The street network analysis, shown in Figure 4. c, shows more interlaced and tangled narrow routes to serve the dense building pattern, which is very similar to the paths and alleyways of Palestinian old towns, those refer to the villages and towns which have developed at the first of the 20th century and still make up the core of contemporary villages and towns. The difference is clear in Figure 4.d between the planned street network and the existing one As previously mentioned, the planned street network is only designed between blocks, and so the old town being only one plot has no planned streets that go through it. Crossing the boundaries of old town Qaffin, the street network gets less complicated and more regular.

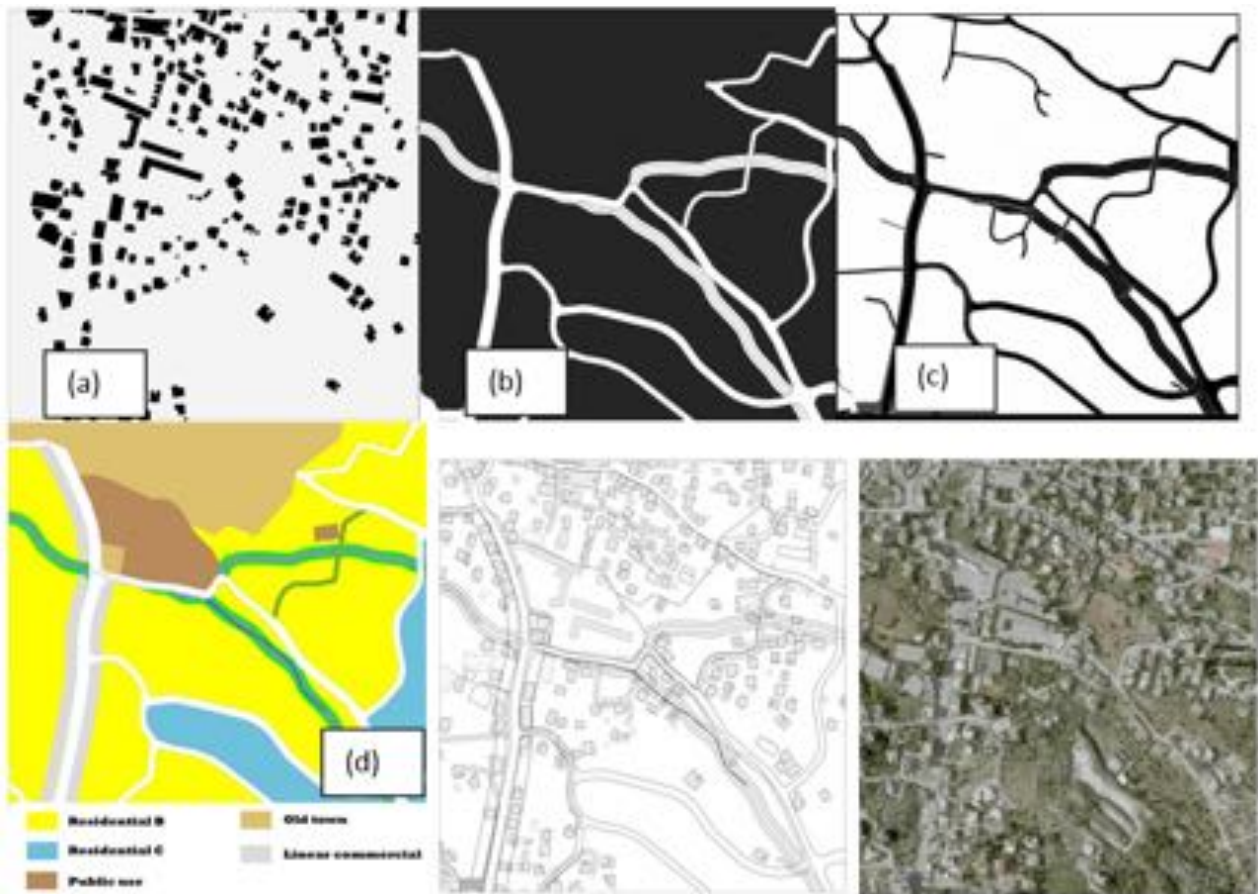
For zone 1, land use classifications of the old town which can be seen in Figure 4.d, have special regulations that allow minimal or no setbacks, and maximum built-to land area percentage. However, those regulations are not fixed and every case is reviewed by the municipality council to determine the building utilization, its ground dimensions and its allowed number of stories. The rest of the zone is classified as Residential B, except for a public use parcel that is used as a cemetery.

### **THE MIDDLE- EASTERN AREA OF QAFFIN (ZONE 2)**

Zone 2 is selected on the western side of the ground plan, see Figure 5. Urban development of this period started through the Israeli occupation period and picked up pace through the Palestinian authority period. In Figure 5, the built area takes multiple forms and has different patterns.

The building pattern is shown in Figure 5. a is a nonlinear cluster pattern and spreads unevenly according to the land use classification of the plot. The building fabric of this zone is loose, with irregular and scattered building

density that ranges between a semi-compact and an open fabric pattern. The arrangement of houses is affected and follows both street patterns and plot patterns. It is vital to note that some houses are positioned without following street direction as the biggest influence on buildings' position in such towns is land ownership.



**Figure 5.** Building Pattern (a), block pattern (b), street pattern (c), land use (d), ground plan, and aerial photo  
 Source: developed by Authors, Geomolg 2022

The block pattern in Figure 5. b shows large irregular and interconnected blocks, as well as small-sized irregular blocks. The plot pattern lacks any kind of linear or curved lines and is considered rough with a primitive rural form. Blocks are drawn to suit the topographical nature of the town and have kept the same outline since before the year 1948. Blocks are not even divided into parcels, as the Regional Palestinian Master plan committee has not surveyed Qaffin as of yet, and thus the Master plan is yet to be prepared.

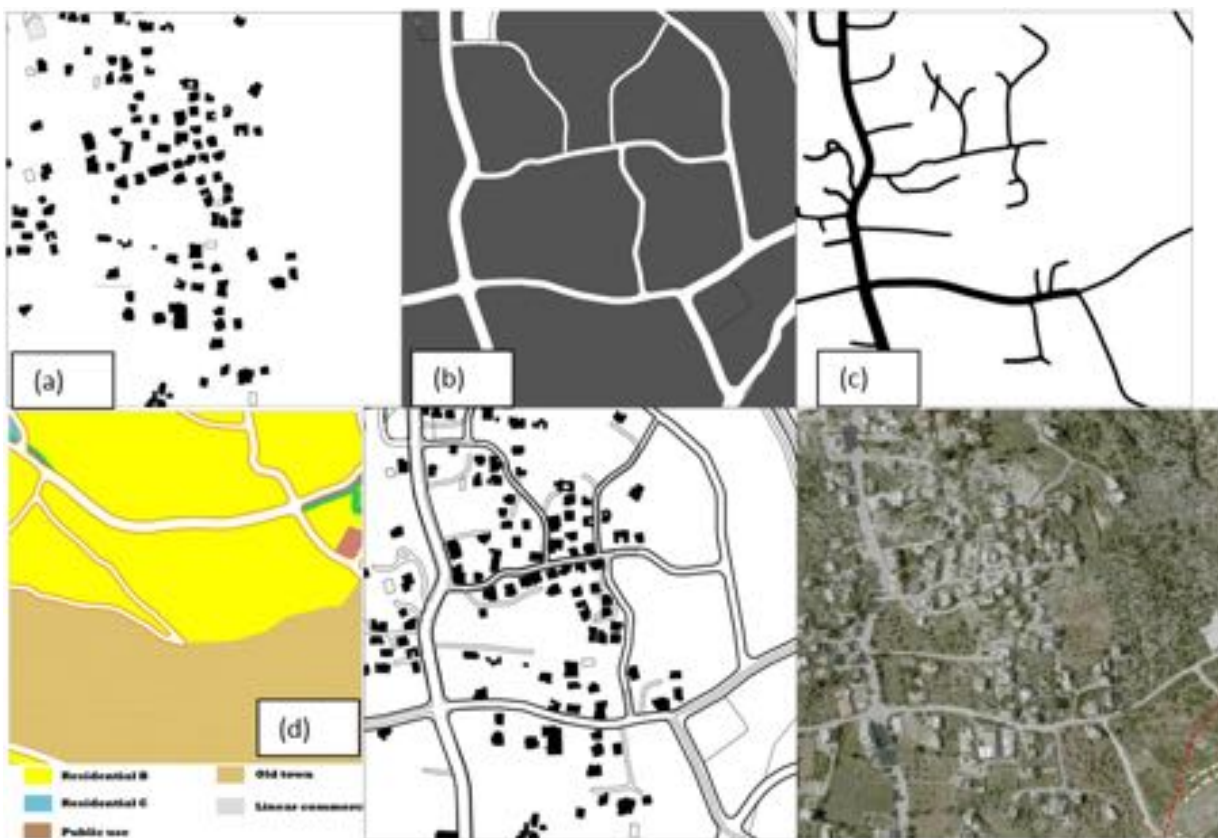
As for the street pattern, which is shown in Figure 5. c, the streets have followed the plot pattern and not vice versa. The blocks (or blocks) of Qaffin have been drawn, and with the urban expansion, the streets have followed the pattern of those blocks, which expectedly resulted in the irregular and rough pattern of the streets. Most streets in town are narrow, except for the main street, which is the widest and runs from the centre of old town Qaffin to the south. Streets are few compared to the size of the block and have few crossing points. The land use pattern in Figure 5. d, in the selected zone has interacted and unclear streets, for public building land use follows the previously built location of the town's schools which was chosen by the town people more than 40 years ago



### THE SOUTH OF QAFFIN (ZONE 3)

Zone 3 is selected on the southern side of Qaffin, and is considered one of the newest zones that have witnessed urban development in the town. Urban development in this zone had started through the Palestinian authority period and quickened pace over the last decade. In the ground plan in Figure 6, the building density increases near the main street of Qaffin and decreases moving farther from the streets, as the west side of the zone is almost vacant of buildings.

The building pattern is shown in Figure 6. a, as mentioned previously, is denser on the main street side. This is because the main street comprises the most vital commercial area of Qaffin, and like many different towns and cities in Palestine, the main street presents commercial potential and future development, for they are the vines that connect to neighbouring towns. The block pattern in Figure 6. b albeit still irregular, shows more uniform shapes compared to the previous two zones. It can be noted that the blocks almost form square shapes in some areas and are also smaller in size.



**Figure 6.** Building Pattern (a), block pattern (b), street pattern (c), land use (d), Ground plan, and aerial photo

Source: developed by Authors, Geomolg 2022

The existing street network is in Figure 6. c, mostly follows the planned street network, except for undeveloped areas, while pathways and narrower streets branch out of the main roads to connect the newly constructed buildings to the street network. In the land-use classification in Figure 6.d, the blocks nearer to the old town are classified as residential C, while those farther away are classified as residential B, meaning the farther the plot from the town centre, the lesser the building density. The land aligned along the sides of the linear street of Qaffin, which is also expected to have a more vital commercial activity, isn't all classified as linear commercial. However, the residents of Qaffin expect this classification to be changed soon.

## **DISCUSSION**

It can be noticed from the upper analysis of the three selected zones that the building pattern within the stable block patterns is more prone to reflect the changes that Qaffin has witnessed compared to street network and plot patterns. The building pattern has rapidly changed through the last century, while streets and plots were slowly changed. The following will summarize the results of applying the proposed theoretical framework of this paper to the three selected zones of Qaffin in terms of buildings-blocks, street networks, and plots patterns:

### **Random Expansion of Buildings:**

The urban form of Qaffin has shown very distinct qualities that are most apparent through the building pattern of the town. While the block pattern hasn't changed at all through the last century, the most prominent change which has happened to the town plan is the high rise in building pattern density. For as the town plan is almost packed with buildings, it appears from the analysis of the three selected areas that the building form of the village is characterized by:

Increasing the density of buildings in most areas, especially those closer to the village centre (Zone 1 is an example, see Figure 4)

The footprint of the buildings increases as we move from the old centre towards the outskirts as a result of changing building laws (zone2 is an example, see Figure 5)

Random or scattered growth from all directions due to the absence of natural obstacles that determine a specific shape of the village (zone3 is an example, see Figure 6)

### **Stability of the Street Network, and the Possibility for Future Densification:**

Street networks have shown little alteration with time, as streets stretched linearly, they still had their original spontaneous arrangement and organic pattern. The street network maintains to some extent this organic character, which is characterized by frequent bends to suit the geographical nature of the village with the presence of narrow streets that lead to the residential areas. However, the pattern of streets become less dense as we moved to the outskirts which are likely to increase the built area in the future growth of the city and allow for high densification as highlighted in zone 3.

### **Irregularity of Plots Pattern:**

From the study of the selected zones, on one hand, it is possible to trace the shapes of irregular buildings in all zones, which indicates the existence of a random division of plots. Compound buildings follow the boundaries of the land, which often take an irregular shape. Complementing this pattern is the spontaneous sense of the extension of the village with the presence of the organic network of the streets. On the other hand, land use classification has slowly changed until the period between the year 2001 and 2017, which allows for greater setbacks and much-fragmented fabric in the outskirts of the village.

The contrast of density: the densification in some parts of the village and fragmentation in other parts.

The contrast of organization: the absence of order, or systematic relations between buildings and the absence of a repetition of spatial patterns.

The contrast of building forms and footprints: the high variation of building types and forms, in terms of footprint size, height and layout.

## **CONCLUSION**

It is acknowledged that the urban form of any town cannot be simply fixed or frozen, but the sudden transformation of this town in a limited period can cause negative changes in the national identity and cultural stability. This study attempted to track the rapid transformation of urban form in bound Palestinian villages in the past few decades, in order to verify elements of continuity and element of changes in the morphology of such towns.

As a result, there is an urgent need for a plan on political, social, and economic levels, to slow down the shifting and changing of urban form in Palestinian towns in terms of building form, thus preserving Palestinian identity and cultural stability. It is recommended for the contributors to conduct further studies in the future that address the changing of urban form in other parts of the West Bank and Gaza. It is also recommended to learn from international experiences, to develop slow-changing plans in the Palestinian urban form.

## ACKNOWLEDGEMENTS

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

## CONFLICT OF INTERESTS

The authors declare no conflict of interest.

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# GENDER EQUALITY :MENTAL AGONY AND KHULA PRACTICE IN PAKISTAN

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## ABSTRACT

Khula is a basic right granted to women 1400 years ago. Pakistani constitution also grants right to Khula to Muslim women. Marriage contract (Nikah Nama) is an important document in which delegated right of divorce is given to women but Khula is rarely practiced due to cultural reasons that's why many women resorts to delegated right of divorce to end abusive marriage. This paper aims to address issues related to Khula practice in Pakistan and misogynist mindset of Pakistani society. This paper will address misogynist religious interpretation of Khula right by the *clerics* who issues anti-women fatwa against Khula right which is granted to women by the religion itself.

**Keywords:** Khula, Family law, Gender equality, Women's right, Pakistan, VAW.

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## 1. INTRODUCTION

According to Islamic Feminist Islam is an egalitarian religion and Islam has granted women right to Khula, a form of divorce in which women has to return her dower in case to end marriage. Khula is a basic right granted to Muslim Women in Islam. In Pakistan Khula right is enshrined in Muslim Family Law ordinance 1961. Although delegated right of divorce is given to women in Pakistani constitution however it is rarely practiced mostly women opt of Khula to end abusive marriage. Khula right for women in Pakistan ensures gender equality between women and men. For Khula husband's consent is not required to end marriage if women agrees to return dower. The word khula literally means to remove or putt off and signifies the removal of the matrimonial bond.

According to Rashida Patel 2003 Khula is the most common ground for the cancellation of marriage in Pakistan and for Khula the most common ground is irreconcilable differences between husband and wife. And in Case of Khula women has to forgo her Dower which she has received at the time of marriage. Before Partition of subcontinent Khula was only form of Divorce to end marriage but at that time husband consent was required to end marriage. (Rashida Hussain Patel, 2003, p. 100-101)

## 2. ISLAMIC PERSPECTIVE ABOUT KHULA

In the Islamic history we can witness various examples of Khula one famous case is Habiba/Jamila and her husband Sabit. Habiba came to holy prophet SAW and complained about her husband that he is not good in looks and that thing made her despised her about husband and she said he is short and not handsome and she finds him ugly on hearing that holy prophet SAW said to Habiba/Jamila are you willing to return the garden that he gave you she said yes and even more. The Holy Prophet Said no more but you return the garden that he gave you and then holy prophet said take the garden and divorce her. (Ibne Maja Vol 1 p. 63)

Second famous Hadith is about Barairah who was married to slave Mughis she did not live with her husband she was unhappy with her husband. The Prophet SAW advised her to go back to her husband she said is this an order? The Prophet SAW said that it was merely a recommendation she then refused to go back to him and said I have no need of him. This shows that women can't be compelled if she has a fixed aversion to her husband. [Sahih Al Bukhari - Book 63 [of divorce] #206<sup>2</sup>

In Surah al Baqarah 2:229 Khula concept is mentioned:

A divorce may be [revoked] twice, whereupon the marriage must either be resumed in fairness or dissolved in a goodly manner. And it is not lawful for you to take back anything of what you have ever given to your wives unless both [partners] *have cause to fear that they may not be able to keep within the bounds set by God: hence, if you have cause to fear that the two may not be able to keep within the bounds set by God, there shall be no sin upon either of them for what the wife may give up [to her husband] in order to free herself.* These are the bounds set by God; do not, then, transgress them: for they who transgress the bounds set by God-it is they, they who are evildoers (Muhammad Asad's Translation)<sup>3</sup>

Khula Concept in Quran Implies that if a women fears she cannot live with her husband within the prescribed limits from GOD she can apply for the Khula. Surah Al Baqarah verse 2.229 is a milestone for women's right to seek Khula if she feels she can't no longer live with her husband and wants to end her marriage. This verse is quoted by various jurists in Muslim countries who are in favor of Women's unilateral right to end marriage. Jurist are of view that "Women have rights against men, similar to those that men have against them, according to the well-known rules of equity."

Quran expressly says that husband should either retain a wife according to well recognized custom ( Imsak un bil maroof) or release her with grace (Tasreehun bi ihsan). The Word of GOD enjoined the husband to not cling the women in order to cause her injury. Another Hadith declares Lazarar wa lazarar fil Islam. Let no harm be done nor harm be suffered in islam. If husband proves recalcitrant and doesn't agree to release the woman from the marital bond the Qazi (judge) may well intervene to give redress and enforce Quranic injunction. (Rashida Hussain Patel, 2003, p. 103)

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<sup>2</sup> [https://www.searchtruth.com/book\\_display.php?book=63&translator=1&start=0&number=206](https://www.searchtruth.com/book_display.php?book=63&translator=1&start=0&number=206)

<sup>3</sup> <https://www.islamawakened.com/quran/2/229/>

In pure Sharia doctrine, Khula normally dependent upon the consent of the husband. Maliki authority (and one Shafi'i view) might have been claimed for the power of the arbitrators appointed in case of discord between spouses to enforce a Khul' divorce, but, as it stands, the text of the report implies that the role of the husband is always limited to demanding material compensation. 'About Khula, that is divorce sought by the wife, there is a consensus of opinion that Islam has granted this right to the woman if she forgoes the mehr or a part of it, if it is so demanded by the husband. (N.J Coulson, 1957, p. 140)

### **3. LEGAL BATTLE FOR KHULA CASES IN PAKISTAN**

If we talk about Khula practice in Pakistan for Khula usually women have to file for their case in the court then court decides fate of women after decision from court the case is forwarded in the arbitration/Union council if there is no reconciliation arbitration council issue the divorce certificate. For Khula case it is sufficient for women to claim that she can no longer live her husband within prescribed limits of GOD that's sufficient for her to win her case in the court however this was not situation in the early years of history of Pakistani court's judgement.

In both Umar Bibi and Sayeeda Khanam case the Lahore Court remarked on the danger of liberalizing a woman's right to divorce If a woman were allowed a divorce simply on the ground that she didn't like her husband, or even that she hated him, said the Court in Umar Bibi "It will then become possible for any woman to get rid of the marriage tie-fickle minded and impressionable, as she temperamentally is-on account of a passing fancy [I]t will reduce the marriages into more or less a farce "The sentiment was echoed by the Full Bench in Sayeeda Khanam If wives were allowed to dissolve their marriages, without the consent of their husbands, by merely giving up their dowers, paid or promised to be paid, the institution of marriage would be meaningless as there would be no stability attached to it. (Lucy Carrol, 1996, p.101)

Muslim wife has the right to demand a dissolution of her marriage on grounds no more substantial than that she disliked her husband's appearance if she were prepared to forego her mahr (dower) The judges in Pakistan relied particularly on Maulana Abdul Ala Maudoodi's Haqooq-uz-Zaujain, and the Maulana's interpretation of the hadith concerning Jamila/Habiba and her husband Sabit ( Lucy Carrol,1996 p.103)

Most often judges grant khula, a divorce in which the wife foregoes her dowry, even in cases where women are clearly entitled to a judicial divorce under the terms of the law. Women who initiate a divorce can be essentially penalized and forced to buy their freedom (Ali, 2000).The Supreme Court of Pakistan confirmed the principle laid down in the above judgment in 1967 in Khurshid Bibi v Baboo Muhammad Amin.In this case, the courts recognized that the Qur'an, which is the basis of all the fundamental laws of Islam, places both the husband and the wife on an equal footing with regard to their mutual rights and obligations. The court held that a wife does not require the consent of her husband for khul'. Further, it held that the Qur'an and Sunnah prescribe that persons in authority (ulū al-amr), including a qāḍī, can order dissolution of marriage on the basis of khul', even if the husband disagree (Abbasi, 2017 p.396)

### **4. GENDER EQUALITY & KHULA**

Federal Shariat court is the constitutional court which was established in 1980's to see that laws of country are in accordance with Islamic laws. The Federal Shariat court (FSC) observed that the injunctions of Islam regarding gender are based on "equality without any discrimination whatsoever". The FSC held: Obviously Islam does not intend to force a wife [to] live a miserable life, in a hateful unhappy union, forever. If she is unhappy and reconciliation fails, she should be entitled to get relief whatsoever (Abbasi, 2017, p.399)

On the issue of gender equality, the judges did not find support in the views of Muslim jurists. If, as the judges suggest, Islamic law recognizes gender equality, then why is a wife's right to the dissolution of marriage judicially controlled? In other words, how can the notion of gender equality be reconciled with the husband's absolute right to divorce while a wife can exercise her right to khul' only through a court? (Abbasi, 2017 p.402).Wife has to walk into a court of law and state that she wants to dissolve her marriage. The court is bound to "accede to her request". She does not need to establish any fault on the part of her husband (Abbasi, 2017, p.408)

According to report Abbasi, 2019 from 1947-2017 overall 376 cases were reported for Khula. The increase in the reported judgments of khula can be attributed to various factors. One key factor is the liberal interpretation of the law relating to khula, which has made it far easier for women to obtain a decree of dissolution of marriage on the basis of khula (Abbasi, 2019, p.7)

One of the remarkable achievements of Pakistani courts has been the development of women's unilateral right to no-fault based judicial divorce (khula) Husbands have contested the wife's right of khula in various cases, claiming that their consent is a pre-requisite for the dissolution of marriage on the basis of khula. However, courts have dismissed such claims and have held that khula is not contingent upon the consent of the husband, rather on the court's reaching the conclusion that spouses could no longer live within the limits prescribed by Allah. A wife's right to no-fault unilateral judicial divorce (khula) was fully recognized following the amendment in section 10(4) of the Family Courts Act 1964, which requires a judge to immediately pass a decree for dissolution of marriage if the reconciliation fails. (Abbasi, 2019, p.13)

## 5. REPERCUSSION OF KHULA THROUGH COURT

It is fact that unilateral Khula is not taken well by the male clerics they reject the concept of unilateral Khula The famous hadith which they quote is that "Women asking for Khula will be deprived of fragrance of paradise" Trimizi.

The Council of Islamic Ideology (CII) in 2016 has declared it Un-Islamic to grant Khula without the consent of husband.<sup>4</sup> Council of Islamic ideology is a constitutional body that advises legislature whether certain law is in conformity with Islam or not. In 2016 its head was Mualana Muhammad Khan Sherani who was also member of National assembly. He and other clerics were of view that Divorce issued by the courts without the consent of husband is not valid and according to Shariah. They pointed out that Courts are dissolving marriages in the name of Khula but that's not correct because courts neglect consent of husband to end marriage and its violation of Shariah laws.

This statement is problematic and creates hurdle for women who want to end abusive relationship through Khula from the courts. Clerics in Pakistan are concerned with rising cases of Khula in the country because they feel its threatening to family system in Pakistan. This is against injunctions of Islam because clerics don't practice of ijtehad whereas legal system in Pakistan is based on Ijtehad.

## 6. CASE STUDY OF AMIR LIAQAT HUSSAIN

Amir Liaquat Hussain is a famous religious scholar in Pakistan who used to conduct religious program on GeoTV channel. He is also is famous for his marriages .He is currently a member of National assembly in Pakistan from 2018. His second wife took Khula from him through the court. After few days of Khula he got married third time with a girl who is almost half of his age. After third marriage he appeared for an interview with FHM magazine and he claimed that his second wife took Judicial Khula and it is not valid because he didn't divorce her and if she married someone else it would be Zina (Adultery). This case is widely reported in Pakistani Social media and this shows level of acceptance of Judicial Khula in Pakistani Society.<sup>5</sup>After his statement his Ex-wife Syeda Tooba Anwar posted her stance on Instagram that she took Khula form divorce according to Pakistani constitution and has returned her dower she said

*"I urge the Islamic scholars to speak up for women who choose to exercise their rights in accordance with Shariah and Pakistan's constitution, and she said that Islam permits to seek divorce if the marriage is no longer working. Taking a graceful exit from a toxic and abusive marriage is a right not a sin"*<sup>6</sup>

It is evident from the case mentioned above that there are still misconceptions about Khula in Pakistan that Khula issued by the court is not valid and it is often used to emotionally blackmail Ex-wife to resort to her Ex-husband.

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<sup>4</sup> <https://tribune.com.pk/story/1049717/khula-without-husbands-consent-is-un-islamic-rules-cii>

<sup>5</sup> This news can be accessed from <https://www.lollywoodcity.com/aamir-liaquat-conflict-khula-without-the-consent-of-husband-is-an-un-islamic-act/>

<sup>6</sup> Her statement can be accessed from the account <https://www.instagram.com/syedatuba/?hl=en>

## 7. SHOAB QASIM CASE

Shoaib Qasim is Pakistani Youtuber who makes vlogs he has almost 24 k subscribers on Youtube , he is father of three amazing sons and his wife took Khula from him.He now lives life as a Single Dad who is devoted to his children and takes good care of his children, he also expressed similar kind of sentiments about Khula in his vlog that he consulted a religious cleric who said that his divorce is not valid because Khula was taken without the consent of husband.

It is evident from both Amir Liaqat and Shoaib Qasim Case that Clerics don't approve the idea of women taking Khula without the consent of husband and this regressive thinking jeopardize women's rights movement and promotes violence against women whereas Khula's right is granted by Islam itself and similar to unilateral divorce which is as valid as other kind of divorce.<sup>7</sup>

## 7. CONCLUSION

It is concluded that Khula is basic right to women granted by the constitution of Pakistan. Legal system of Pakistan ensures gender equality and states that women are entitled to khula right in the same way men are entitled to divorce right. However if women seeks Khula through court without the consent of husband she is still subject to mental torture that her Khula is not valid. This mentality is hurdle for the implementation of women's right in Pakistan. However empowered women are exercising their right in accordance with National & Islamic law.

## ACKNOWLEDGEMENTS:

I am Thankful to my mentor & best friend Dr. Mamonah Ambreen for motivating me to work on publications.

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<sup>7</sup> Shoaib Qasim Channel could be accessed from website <https://www.youtube.com/c/ShoaibQasimVlogs/videos>