THE ROLE OF SUSTAINABLE ARCHITECTURE OF CULTURAL BUILDINGS IN THE URBAN SOCIALIZATION AND HUMANS' PARTICIPATION
O papel da arquitectura sustentável dos edifícios culturais na socialização urbana e a participação do homem

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ABSTRACT

The swelling of the population is an inescapable trend in many countries. There is no point in denying that managing this fundamental social change is an unprecedented challenge. A significant change has occurred as a result of the rapid expansion of urbanization. Sometimes urban space and architecture are sloppy and messy. Urbanization over the past century has led to the loss of the nature and function of buildings and urban spaces as a result of uncontrolled urbanization without consideration for factors such as form, function, and meaning. This problem has the major consequence of reducing social interaction and vitality in neighborhoods. A building, which is one of the main components of urban design, can contribute to urban sustainability and increase social participation. Therefore, this study has focused on the relationship between the characteristics of architecture and urban environment in social interactions by explaining these spaces and their influence in the cultural center's design. The case study is Khavaran cultural centre which is selected in Tehran city. The results indicate that the architecture can affect the quantity and quality of socialization of the cultural buildings.
Key-words: Socialization, Social Interaction, Urban Spaces, Cultural Spaces, Architecture.

O PAPEL DA ARQUITECTURA SUSTENTÁVEL DOS EDIFÍCIOS CULTURAIS NA SOCIALIZAÇÃO URBANA E A PARTICIPAÇÃO DO HOMEM

The role of sustainable architecture of cultural buildings in the urban socialization and humans' participation

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RESUMO

O inchaço da população é uma tendência inescapável em muitos países. Não vale a pena negar que a gestão desta mudança social fundamental é um desafio sem precedentes. Uma mudança significativa ocorreu como resultado da rápida expansão da urbanização. Por vezes, o espaço urbano e a arquitectura são desleixados e confusos. A urbanização ao longo do século passado levou à perda da natureza e da função dos edifícios e espaços urbanos como resultado de uma urbanização descontrolada sem consideração de factores como a forma, a função e o significado. Este problema tem a principal consequência de reduzir a interacção social e a vitalidade nos bairros. Um edifício, que é uma das principais componentes da concepção urbana, pode contribuir para a sustentabilidade urbana e aumentar a participação social. Portanto, este estudo centrou-se na relação entre as características da arquitectura e do ambiente urbano nas interacções sociais, explicando estes espaços e a sua influência no design do centro cultural. O estudo de caso é o centro cultural de Khavaran, que é seleccionado na cidade de Teerão. Os resultados indicam que a arquitectura pode afectar a quantidade e a qualidade da socialização dos edifícios culturais.
Palavras-chave: Socialização, Interacção Social, Espaços Urbanos, Espaços Culturais, Arquitectura.

INTRODUCTION

The deep social transformations occurred in the last decades have deeply affected the patterns of urban living (Goudarzi & Gharai, 2022). In this sense, experimentation on housing plays the dual role of investigation and validation of our hypothesis that residential space should reflect new life-styles. At the beginning of the 21st century, social housing represents the main field for experimentation. In the current architectural scenario, many interesting experimentations on contemporary housing can be observed (Shryock et al., 2011). The urban population is expected to double in the next 40 years, forcing cities to undertake a holistic and sustainable transformation of their model. According to Martha Thorne, Dean of the IE School of Architecture and Design and Executive Director of the Pritzker Architecture Prize, the great challenge of architecture has to do with its capacity to create denser metropolises that have high urban quality and offer residents a better quality of life (Chapple, 2014). In European metropolises, the situation may not be as dramatic as it is in emerging countries, but this could change as a result of various factors, such as the aging of the population, the influx of refugees of war or natural disasters, and unemployment. Therefore, a key aim in Europe is to ensure that large cities are engines of sustainable economic growth where particular population segments—such as young people—can find work, whereas the goals in developing countries such as Iran, Brazil, Colombia, and India are to provide housing and basic services for all social classes. This aspect is very important not only from the standpoint of housing but also for governance and city strategy (Sztompka,2004) . A sustainable city is defined as a city designed with environmental consideration, with minimum consumption of energy, renewable energy sources like wind and solar (Dindar et al.,2022), water resources management (Ourang, 2017), and food and minimum output of waste and air, soil, and water and waste water pollutions (Dehkordi et al., 2022). Urban sustainability can also be defined as the improvement of the quality of life of human beings within the capacity of Earth's limited resources. Since the architectural design is related to that region's culture and climate therefore, it is of high significant to modify designs in case of sustainability and climate (Ashrafi et al.,2019).

Today's urban design inevitably involves a multitude of rules, stipulations, and design principles. There are both aesthetic/idealism principles and performance-based principles. The qualitative traits (symmetry, gestalt cognitive laws, proportions and so on) and various measurable performances (functions of buildings, accesses to natural resources, circulation efficiency, etc.) (Friedrich et al., 2018). Architects have been enthusiastic in developing computational models for urban design, especially after the 2000s. For instance, the Architectural Association School of Architecture (AA School) in London pioneered parametric urbanism; the Berlage Institute at Rotterdam investigated the associative design and synthetic vernacular (Trummer, 2008); and Computer-Aided Architectural Design (CAAD) at ETH Zürich advanced self-organization methods in urban design (Hovestadt, 2009). However, to date, few works have been made for applying the role of architectural in urban design.

Buildings are made up of multiple building blocks (rooms, halls, and so on) in the same way that cities are made up of various components, such as squares, roads, gardens, or paths. Buildings, as objects, are usually designed and built in a very short period. They transform only minimally to adapt to changing needs. Cities, on the other hand, are subjects of continuous transformation as new components appear, disappear, and reconfigure space over time. The type and characteristics of cities are further subject to changes in the social and economic organization of a society (Goudarzi & Gharai, 2016). Architects and urban designers are often associated with the development of "visions" for built spaces, it is impossible to consider their activity a purely artistic exercise. Buildings are shelters that can act as a filter between the private and the public; they can be symbolic, and they can carry economic and environmental implications (Motamed & Bitaraf, 2016).

Satisfying human needs for shelter, security, and functions depends on the availability of means, such as building materials or local building skills. It has been argued, therefore, that the challenge of limited resources and unlimited wants lies at the core of architecture and urban design (Goudarzi & Gharai, 2022).

Today, architects and urban designers—their respective spaces of activity and influence frequently overlapping and converging—address this challenge in identifying the parameters for specific design briefs and designing for the client's intention and goals. They seek to balance costs and benefits across diverse proposals and

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their plans for implementation (Loo & Mahdavinejad, 2018). Their job description includes preparing appraisals for the financial viability of projects; making plans to maximize the potential of investments; understanding current patterns of consumption, and ensuring regulatory and planning compliance (Alvani et al., 2018).

Cultural buildings should be able to accommodate a wide range of people with different social characteristics, in particular groups of age, gender, social status, etc. And these public places are less considered by public when compared to other public spaces, such as commercial and recreational spaces, which leads many of them to fail in order to fulfill social needs as it is done in other public spaces to create social interaction; and the individuals just respond only a small fraction of their social needs, that is, being with people (Fatemi & Mansouri, 2019). As a result, the attention to the social dimension of a place in the design of cultural buildings and to find the link between spatial qualities and concepts such as Socialization is important in the success of these spaces. Socialization is one of the concepts used in the field of environmental psychology, which is referred to spaces that are multifunctional and provide major routine activities of users, as they provide social coordination for users (Loo & Mahdavinejad, 2018). Making cities efficient, sustainable, and livable has become a critical social issue. Governments have been encouraging and funding research projects to design better urban environments with state-of-art technologies. Cultural centers as one of the most significant public buildings are responsible for promoting culture which is usually done by dynamic performance and prosperity within these spaces, and of course architectural fit and harmony has a great role in their success. Cultural foundation is a public place which should have the power to attract and influence on the psyche of the audience more than anything else. Hence, its architecture is partly symbolic and sculptural, and since of that it could become a symbol of the city and its cultural identity. Many cultural monuments, known as a symbol of the community's cultural life and their appearance, evokes the contents of them. Urban design arranges building groups, street networks and public spaces. Urban designers focus on the layout of urban sites, as a composition of buildings, terraces, routes, green spaces, etc. Urban design is at the interface between architectural design and urban planning but is distinct from both disciplines. Thus, architecture and urbanism should seek to attract people and correlation between human beings. But what we face today in the form of public spaces are unsociable places which reduces relationships and social interactions between people in these places. The purpose of this research is to investigate the role of architecture in the social capability of urban spaces (Goudarzi & Gharai, 2022). Therefore, the amount of socialization in these spaces can be increased by using appropriate architecture design. And also, the quantity and quality of socialization in these cultural buildings could be impressed with the architecture of these spaces. It seems that, this aim is to be achieved shortly by designing smart architecture.

1 LITERATURE REVIEW

In recent studies, the environment is classified into two groups of socializable and unsocializable environments. Socializable environments encourage collective interactions, and unsocializable environments reduce collective interactions (Fatemi & Mansouri, 2019). Regarding the problem of socialization in the architectural space, the creation of favorable social relations and the existence of public spaces with socialization characteristics are both important complements to the socialization of individuals, also, the sociable nature of public spaces promotes the spirit of solidarity, individual growth, creation and improvement of behaviour al patterns (Loo & Mahdavinejad, 2018). Therefore, public spaces of architecture as an adjunct to the improvement of communication and the growth of social interactions of individuals should be considered in terms of socialization (Soflaei & Shokouhian, 2017). Increasing the opportunities for social interaction is outlined in both individual and transcendental (group) communications (Khalili & Fallah, 2018). Socialization is based on the presence of people in urban spaces and social interactions between them, and is resulted by the human need for the sense of "social belonging" and "being with others" (Iossifova, 2015). "Jan Gehl" emphasizes on inviting aspect of space more than other features, in the definition of urban communal spaces, and defines the city attraction with the attention of the masses of people who come together in its public places to spend their time (Gehl, 2011). Jon Lang describes socializable spaces as "welcoming places", and believes that such spaces are environments that can improve human experience, and are a platform for various behaviour s and activities with a human scale, and are able to accept the desired behaviour of

citizens (Gehl, 2011). Socializable spaces, that are the source of everyday life, are multifunctional spaces that provide many of activities and are utilized by users, and represent social coordination for users (Trummer, 2008).

Socialization capability of spaces encourage the social and collective behaviors and represent the qualities of a space that bring people together. In the organization of sociable space, there is a chance to make a face-to-face contact, and the distance between interactive spaces in motion areas or pauses in cases of the advisory social distances are reduced. The socialization process is critical in sense of social interactions between the users and the ability to effectively interact with others, both in private life and in the general and professional life of humans (Pternea et al., 2015). Also interior furniture can play a significant role, research from Abouali et al 2019 and 2020 proves that different furniture have impact in mental behavior and socialization of habitants (Abouali et al 2019 & 2020). Physical components of space effective on socialization of public space are presented in Table 1.

Table 1 - Physical components of space Effective on Socialization of public space (Pternea et al., 2015)

Physical Components	Security and comfort, Accessibility and communication, Readability and visibility, Indicability, Reception and Involvement, Socializable Furniture, Beautiful Landscape, Attractiveness and Visual Beauty, Spatial Transparency, Form and Geometry, Colors and Materials, Physical opportunities for perching, Semi-open spaces, high altitudes in parts of space, unexpected parts of the circulation, unexpected passages, ramps, communication bridges, garden pits.
Activity Components	Diversity of activity, active involvement (walking, talking, etc.), passive involvement (observing and watching), providing privacy, creating social events, creating sitting spaces, pausing, gathering, creating collaborative spaces, increasing social interactions, creating community spaces, creating cultural spaces, increasing contact points, creating focal spaces.
Perceptual and Semantic Components	Sense of belonging to space, meaningful space, symbolic perceptions (references and metaphors), identity and having a collective memory, creating vitality, reducing the gap between people.

Source: Adapted from Pternea et al. (2015, p. 287).

Human activities in the environment constitute a complex system that has different aspects and different theoretical approaches have regarded that. These approaches share a common concept i.e. quality of life in the human-made environment, which reveals the need to address the capabilities of the human-made environment. On the one hand, the possibility of establishing a favorable collective interaction at different levels of family and community in the human environment, and the possibility of perception of nature and natural elements, on the other hand, point out the two aspects of the quality of the human environment, which have been explored in this research (Soflaei & Shokouhian, 2017). The problem of creating favorable social relationships in the architectural spaces and increasing the opportunities for social interaction in public buildings by designers led to the inquiring about the type and extent of the impact of human-physical factors and its process on this issue. Table 2 presents components and dimensions affecting the socialization of space.
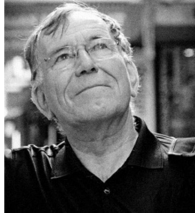
Table 2 - Components and Dimensions Affecting the Socialization of Space (Pternea et al., 2015)

	Component	Dimension
Socialization	Physical	Positioning and access
		Form, Geometry, Discipline, Coordination, Harmony, Diversity of Dimensions, other Aesthetic Aspects
		Formation and arrangement of spaces
	Activity	Problems and barriers of user motions
		Functional assessment of spaces
		The way space is used by users
		Conditions and social features of performing activities

Source: Adapted from Iossifova (2015, p. 549).

The social housing complex Carabanchel 17 in Madrid (2009), designed by ACM Arquitectos responds in part to the listed needs (Fig. 1). Blocks of different colors constitute the apartments, each provided with an external private area, and form a single concrete building organized around an internal courtyard. This project materializes SITE research on the Highrise of Homes, based on Le Corbusier's thoughts on modern urban life, from the Immeuble Villas project to the Plan Obus plan for Algier. However, the investigation conducted among the inhabitants revealed high levels of dissatisfaction towards both the dwellings and the complex. The ostensible failure of the experimentation, which indeed faced an interesting architectural challenge, led to some important reflections for future applications of a similar approach in different conditions. In social housing projects, a number of factors combine and cooperate to offer an adequate response to the future users. A correct evaluation of the different issues involved is fundamental to guarantee the success of the intervention. The individuation of the future beneficiaries (mixed or classified as elderlies, students, families, young couples, etc.), the housing programs (long or short term, rental or sales, rental with option to buy, etc.), the architectural project, the social and urban context and the existing services are some of the main issues that need to be combined (Hammad et al., 2017). Socialization in public spaces is based on the need of people to sense social belongings and interact with each other, and this will be possible in a supportive social space, along with providing physiological comfort, claiming the realm and sense of ownership, and getting justice in space. The issues influencing the social interactions have different perspectives that incorporate a wide range of perceptual, conceptual, physical and objective components; but in a comprehensive view, factors such as dynamism and vitality, visual beauty, comfort and relaxation, the possibility of stopping in space, walking, resting, proper access, gathering, having social activities and different events, proportion and readability are among the most important factors affecting socialization and social interactions (Carr et al., 1992). Types of human activities in the public space are divided into three main categories: the essential activities that regardless of space one does frequently, selective recreational activities that attract people related to the quality of space, and finally, the social activities that take place due to presence and participation of the people (Sztompka,2004). The views of impressive architects regarding the Socialization factors are presented in table 3.

Table 3 - Summary of views on the factors affecting the Socialization of public spaces

	Jan Gehl,2011	Stephen Carr,1992	William Whyte,2012	Jon Lang, 1974
Feeling Comfortable	☑	☑	☑	
Presence of People	☑		☑	☑
Activity	☑			☑
Access		☑		☑
Comfort		☑		
Facilities and Services	☑		☑	
Physical Framework	☑			
Protection	☑	☑	☑	☑
External Actuator			☑	
Physical & Visual Permeability			☑	

Source: Prepared by the authors (2022)

2 RESEARCH METHODOLOGY

Creating a popular public area that can accommodate different individuals and groups, is proportional to the human presence. In fact, architecture and urban planning should follow a way to attract people and motivate the solidarity between human beings, instead of making division and separation. But what we are facing today in the

urban public templates is the un-sociable spaces that reduces the social relations and interactions of individuals in these spaces. Studies in field of collective life and the role and place of social interactions in public spaces have been conducted to evaluate this issue, and by theoretical or field work examples such as metro station spaces and open spaces have analyzed the existing social relationships in mentioned spaces from the sociability point of view (Sakieh et al.,2014a). The analytical and descriptive method is carried out through library studies and the Internet. In this study, data collecting is conducted by reviewing valid scientific sources. Therefore, the study path was determined based on the content analysis of the scientific literature of the subject; as in a step-by-step process, a systematic search was carried out in credible information banks and the identified documents to review the scientific literature of the subject. Then selected authoritative sources were contently analyzed for the purpose of determining key issues to study of the role of architecture in the social capability of urban spaces. In the next step, the output of the previous step has been investigated in descriptive-analytic method, and recommendations have been presented by interpreting the results.

For this purpose, in Section 3 and 4 we discussed about socialization designs and the characteristics of urban design and architectural design towards has been discussed in section 5 and 6. First, we described the meaning of public space in urban design and presented requirements and components for public space in an urban context. In particular, the study suggested that urban social sustainability could be influenced by economic, environmental, and socio-cultural factors. Therefore, we proposed the whole methodology by explaining the potential of each scope and how to interpret it. In response to this, in Section 7 we comparably analyzed various kinds of Architectural tools in Urban design. Because there was a vast amount of cases of public architecture, we went through the process of establishing the hypothesis based on a sample survey, and then doing an in-depth analysis on recent cases which were frequently referred toward architectural parameters in urban.

3 ARCHITECTURE IN URBAN SPACES

Architecture is the art and science of the design and construction of buildings. Architecture as the most socially human art is related to the space around humans. The presence of place, building and the city, from the past to today and in the future, is not absent a moment of everyday life of humans, and will not be. Cities are full of buildings designed by use of arts and math skills. These skills are named as elements of aesthetics, in combination with each other. The principles of aesthetics such as the use of line, shape, space, light and color are derived from art, science and mathematics, and are used to create a pattern, balance, rhythm, contrast, and unity in architectural design; these elements being together allow architects to create beautiful and useful buildings. In short, aesthetic principles along with structural aspects, help to build a successful building. The subject of architecture is about space and area. According to Groat and Wang (2013), the contribution of design is the proposal of an artifact, whilst that of research is knowledge and generalizable application. The dominant processes in design are generative, whilst those in research are analytical and systematic. The temporal focus of design is the future, whilst that of research is the past and/or present. Thus, design operates along the lines of a systematic process, whilst research follows a "scientific" method. However, both follow the logics of abductive, inductive, or deductive reasoning. The scope of design can be macro, micro, and mid-level, whilst research develops big, medium, and small theory. Finally, design considers the social context in situated practice, whilst research does so as situated research (Groat et al.,2013).

Amos Rapoport is one of the most prominent theorists of behavioural science who has paid attention to urban issues. He discusses the issue of interaction between human and the environment by denying the passive position of human in urban space and considering moving in the environment as the most important factor in understanding the environment and the mental plan (Rapoport, 2016).

Clare Cooper Markus (2015) introduces the urban spaces in seven levels. Her main emphasis is on the urban spaces and the people in which they are located. In the book "People Places", she and her colleagues evaluate the residential environment and classify the urban spaces in seven categories particularly from social connection point of view, as: parks, the plazas in Urban neighbourhood (residential units), compact parks, Open-air areas for schools, open-air residential areas for elder persons, outdoor areas for keeping the children and their play, open-air

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Therapeutic Spaces. This approach is related to the strengthening of social interactions in the second period from 1960 to 1990 (Marcus, 2015).

In studies on more than a thousand urban public spaces in different countries of the world, it has been indicated that four essential factors in assessing the quality desirability of urban public spaces are more important. These factors include: access and consistency, comfort and perspective, applications and activities, socialization (Iossifova, 2015). Satisfying the human need for affection and being together, requires a physical body, and urban public spaces have the highest capacity in this regard. The calm atmosphere, the presence of natural factors, space privacy and vehicle control are effective because they provide the human need for rest (Fatemi & Mansouri, 2019). Figure 1 presents an accurate example of combination of architectural design regarding urban design.

Figure 1 - Combination of Architectural design regarding urban design

Source: Adapted from Iossifova (2015, p. 549).

3.1 Urban design

Urban design is the process of shaping the physical setting for life to deal with the three-dimensional space in cities, towns and villages, and its objective relies in accordance with the vision of the future that they represent. Urban design involves coordinated and self-conscious actions in designing new cities and other human settlements or redesigning existing ones and/or their precincts in response to the needs of their inhabitants (Pternea et al., 2015). It is founded upon the social, environmental, political, aesthetic and economic importance of design in the public realm, serving the public interest and to provide opportunities and cultural dimensions. It focuses on the intersections between architecture, landscape design and planning. Urban design is related to urban planning, but it focuses more on the physical design of places and deals the more fine-tuned scale and more detail design approaches.

3.2 Defining the Urban?

The "urban" in architecture cannot be easily distinguished as a scale, a type, or a typical set of functions. If once it was the playground of planning and official architecture, it now gives way to the unplanned, informal, and unplannable. If once it was synonymous with dense centers and congestion, it now exists as endless urban sprawl. If once it was characterized by coexistence and diversity, it now flourishes in uniform gated enclaves. The urban is no

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longer associated with synthetic, abandoned, or replicated nature, but rather, it seeks to absorb it and make it its own. The urban promise of democratization through technology slowly gives way to control through "smart" design. The set of traditionally urban functions (traffic, work, residence, and recreation) expands or contracts to accommodate additions and alternatives. The definitions of the past no longer hold. Verticality in the form of the skyscraper, at least in the imagination of the architect, appears to have remained the last element explicitly associated with the urban. Cities are falling apart in fragments. They no longer have a single morphology or typology in common. As Koolhaas (1995b, 28) asserts, a "perverse automatic pilot constantly outwits all attempts at capturing the city, exhausts all ambitions of its definition, ridicules the most passionate assertions of its present failure and future impossibility, steers it implacably further on its flight forward. Each disaster foretold is somehow absorbed under the infinite blanketing of the urban." The city no longer exists; "each insistence on its primordial condition—in terms of images, rules, fabrication—irrevocably leads via nostalgia to irrelevance" (Koolhaas, 1995).

3.3 Relationship between Urban Space and Social Interactions

It is necessary to study the public spaces of cities and evaluate their social performance, due to clarify the points of harm in urban public spaces and their social life. Because by correcting these points of damage, quality can be returned to the spaces of cities and the lives of citizens (Hammad et al., 2017). As well as influencing the development of social justice, urban public space can be a factor in deepening social inequalities; if they are not carefully planned and designed (Trummer, 2008).

According to John Lang idea in urban public spaces, social interaction patterns are significant. If people are attached to these spaces and environments, social interactions will take place in the strongest state (Sztompka, 2004). Carmona believes that urban public spaces are places and social environments that serve as a field for behaviour and display, a common and neutral ground for social interaction, matching and communication, and a stage for social knowledge, personal development and exchange the information (Nasution et al., 2012).

Public spaces in cities own a huge capacity to meet the social needs of human and her/his social life. Public spaces, due to comprehensiveness and accessibility to all, can establish social justice, and activating these spaces to attract different classes of society creates interconnectedness, social cohesion and also creates a place for the production and propagation of culture. But what matters most is the adaptation of such spaces to the needs and aspirations of citizens, which enables the presence of a citizen's background in the city. Therefore, attention to the physical and functional quality of such spaces in order to increase collective interactions, as well as the definition and creation of various cultural and social events by designers in public spaces, can induce a sense of belonging and create common collective memories, and help to restore collective identity of the citizen in the city, and make cities and communities to be sustainable (Hammad et al., 2017). Urban space plays a significant role as a platform for social functions in facilitating these functions and related dynamics that arise in the forms of institutions, organizations and etc., and facilitates the social relations and refinement of social form.

4 ARCHITECTURAL TOOLS IN URBAN DESIGN

4.1 Facade and Interface

It is important that all sections of a building contribute to the continuity of the public realm and create a consistent street wall. Elements such as corners, main entrances, unit entrance, balconies, porches, patios, appropriate signage, awnings and lighting are important in the design of a building. All of these elements reinforce the public realm (pedestrian environment), are aesthetically pleasing and adds to the pedestrian experience (Sztompka, 2004).

4.2 Building Setbacks

For mixed use, retail or commercial buildings, the built form should normally be located at or near the property line to reinforce the streetscape and create a quality pedestrian experience. With residential built form, the setback is dependent on the building's type. For apartment and townhouse forms, the building should be located at or near the property line to ensure the proper proportions are created for the public realm (as discussed in the previous section). Opportunities should be sought to create forecourts or front gardens to soften the hardscape condition along the street. For single family dwellings, the built form should be located between 2-4m from the property line. This setback ensures there is a proper growing space for trees, reinforces the streetscape and creates a quality pedestrian environment (Motamed & Bitaraf, 2016).

4.3 Building Type

Along with massing and scale, building type has an important role in creating a quality public realm. Building type includes a variety of characteristics, such as the size of the building's floorplate, its storey heights, means and location of access and the building's relationship to external spaces at grade. All of these elements are influential in creating a quality public realm that is enjoyable for all user types. On larger building typologies (ie apartments and office buildings), smaller floorplates are desirable as they permit sunlight into the street and breaks down the visual bulk of the large mass that is usually created by this built form type. The building's relationship to the external spaces at ground level is also important (such as, where are the entrances? What is the mean of access to the site?). To ensure a quality public realm, entrances to the ground floor units, whether commercial or residential, should front the street; otherwise the building will be backing onto or flanking the street. Vehicular access to the site should be integrated with the overall built form; this access should not be pronounced or dominate the streetscape (Nazarnia et al., 2015).

4.4 Density And Mix

The density and mix of a building influence a variety of characteristics within a neighbourhood, such as, people's transportation choices (i.e. walking or driving), one's ability to age in place and the community's ability to support retail and commercial uses within walking distance; density and mix are also influential on building type, site layout and neighbourhood character. The intensity of activity should be relative to the place's accessibility and proximity to a range of uses (Mirmozafari & Abdollah Zadeh Taraf, 2018).

4.5 Materials

The materials chosen for a project are the skin of the building; it is what ties all of the urban design elements together. Materials can "make or break" the success of a project. When choosing materials, it is important to understand scale. The size and repetition of a material can add a dimension to the built form and assist in creating a positive streetscape. Materials such as stucco and concrete, which can be applied as a sold material with no relief is not a desirable design response (Iossifova, 2015).

5 CULTURAL SPACES

The realm of public space refers to all areas that can be accessed and used by people. Considering the division by Carmona and others from the physical, social, and cultural realms of public spaces, it includes:
(1) Outdoor public spaces
(2) Indoor public spaces
(3) Internal and external semi-public spaces.

Where cultural areas are placed in the category of indoor public spaces. In mentioned definition of general public spaces, it says: " Indoor public spaces include libraries, museums, city theatres, cultural centres, etc., and contain also the public transport facilities such as bus, train, airports, etc." (Khajepour & Raouf, 2018). Considering the above definition and placing cultural complexes in the classification of public spaces, one can find the social dimensions of these spaces by generalizing and revising the theoretical foundations in the field of public spaces. Public spaces are also defined as open intellectual areas. Because these spaces are designed and planned for a variety of unpredictable uses and activities, to pave the way for citizens to satisfy their desires and make for them possible to get benefit from (Li & Smith, 2018). Also, Carmona considers today's public spaces as general realms, which are referred to as "places and environment of social life". These territories act as a field for behaviour and display, a common and neutral context for social interaction, mixing and communication as a stage for "personal development" and "information exchange" (Khajepour & Raouf, 2018).

Figure 2 - Architectural design in urban spaces

Source: Adapted from Iossifova (2015, p. 549).

Public buildings and public spaces as an infrastructure for improving communication and the development of social interactions should be studied in terms of socialization. Studies show that public spaces can be well responsive to people's needs, if the needed social analyses are done due to complete their design process which figure 2 is an architectural design in urban space to attract people around it (Iossifova, 2015).

In urban general areas, social interaction patterns and architectural capabilities of space are of particular importance. The main reason for this is that there is a close relationship between social interaction and the attachment of people to social environments. In the sociable general spaces, the meetings occur successfully, since these spaces are used by different groups and are directly accessible to the users around them, and hence they are the headquarters that belong to collective life and identity (Li & Smith, 2018). Collective life is an opportunity to get rid of the tensions of everyday life, spending leisure time, social interactions and gathering of people in the community, as well as a place for their presence and free expression of themselves in space. The features of creating and sustaining collective life in desired general spaces consists of social interplay (Asgarian et al., 2014), attracting people in different groups (Lang et al., 1974), social security and encouraging greater tolerance against different groups in space, greater socialization (Sakieh et al.,2014a), and active and vibrant space. Social inclusion in public spaces is based on the people's need for social belonging and interacting with each other, and this supports the successful social space (Sakieh et al.,2014b).

6 CULTURAL CENTERS

The cultural centre is a real urban space in which one or more cultural institutions have activities, and a wide variety of heterogeneous uses as commercial, cultural, educational, dramatic, and etc. are combined in it. It is the space to spend time and is the place of social encounters and affairs. A place to engage people in the production of culture and, finally, a place in which the city and the citizen are interrelated dynamically; therefore, it is superior to

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other one-dimensional and more passive uses, such as museums and traditional galleries. Some cultural centres have their own library and publications, and some of them carry out transregional activities, apart from covering their area. Many cultural centres are professionally special (specialized cultural centres) (Crane et al.,2016).

Based on the type of activity, cultural centres address one of the three axes; personality, content, and specific group or entity. The groups related to the personality-oriented cultural centres are consisted of children, teenagers, youth, students, women, elderly cultural clubs. The categories covered by the content-oriented cultural centres are thoughts, the holy Quran, art, nations, sports, health, nature, information technology, etc., and groups associated with institution-based cultural centres are such as family, school, city, etc.

The most common leisure spots in the city are parks, recreational and culture centres. Cultural centres and public parks are multi-use spaces that are open to all citizens without any economic and social restrictions to exploit them. Nowadays, experts believe that sophisticated social connections that are formed simultaneously through the productivity of urban utilities and leading the flow of urban life are far more important than just responding directly and explicitly the specific needs. Separate culturally important applications, including cinema, theatre, museum and opera will be involved in the crisis and cannot afford their costs. The root cause of this crisis is the overabundance and specialization of these spaces; the creation of advanced scientific and technological facilities is not enough to meet the needs of society (Crane et al.,2016).

Common approaches to designing these types of spaces should be changed, and the integration of specialized applications should take place with attractive and non-professional applications. This attitude is even considered in design of the new museums, and they are not only embracing specific people, but also are spaces for leisure, which at the same time, allow people to get acquainted with serious and specialized topics. In fact, the intertwining of cultural and scientific activities with entertainment, recreation and social encounters has been welcomed recently.

Scientific museums, painting galleries, exhibitions and labs have been devoted mainly to educational-recreational programs, gaming simulations, moquette displays and many other varied and entertaining imitation samples; rather than providing principal examples of scientific experiments. The most famous of these cultural centres is the Georges Pompidou Centre and the Parc de la Villette Cultural Complex.

7 KHAVARAN CULTURAL CENTRE

Khavaran cultural center was built in order to fill the free time of children and young people in the southeast of Tehran (district 15), which is considered one of the deprived areas(Figure 3). Currently, Khavaran Building is considered one of the largest cultural centers in Iran. This cultural center has an area of over 83,000 square meters and a substructure of 24,000 square meters, with four sections of 1-the administrative building, 2-the culture and art market (open in the middle of the area), 3-the central building and 4-science, technology and the amusement park. It has made it possible especially for young people.

Figure 3 - Location of the study area in district 15 of Tehran city in Iran.Source: Manisipulity of Theran
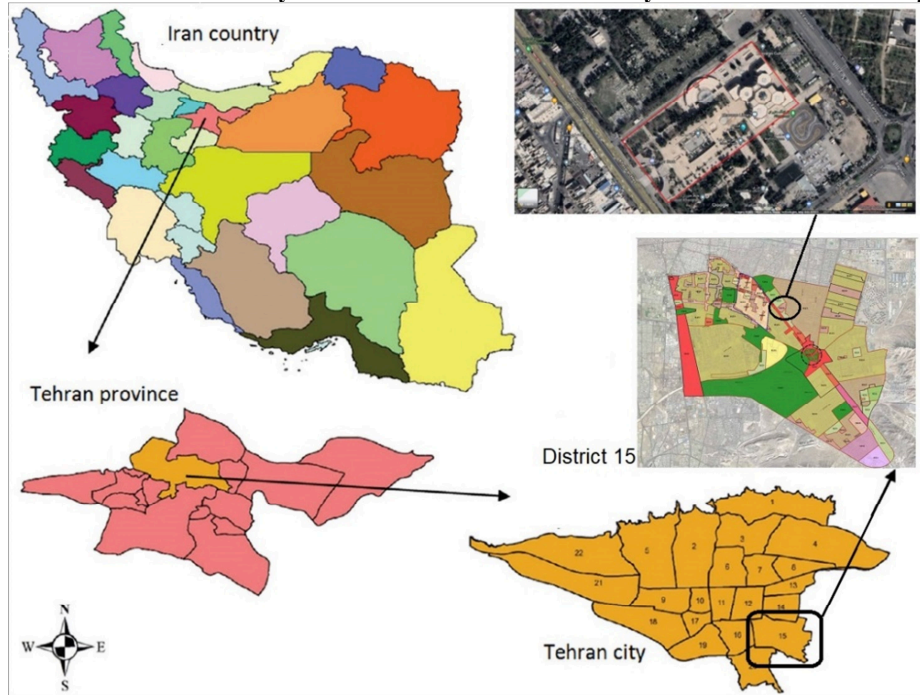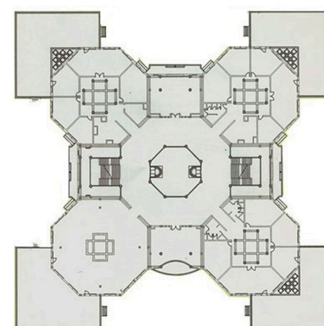

Source: Prepared by the authors (2022)

The activities of Khavaran cultural center are also divided into four artistic, educational, social and cultural groups. In the art sector, there are various facilities, such as halls and galleries, available to the youth of the region (Figure 4). It has a fusion of Islamic-Iranian architecture. Its entrance building, with its brick facade and rectangular windows, gives a special effect to the atmosphere of the cultural center, and the variety of green space built in this place evokes walking in old gardens (Goudarzi & Moghaddam, 2018). In a part of this centre, a small market can be seen, which has shops of the same shape on both sides, and its presence makes it easy for citizens to shop, and they can buy their necessities in addition to using the cultural programs of this collection. But the distinct advantage of the Khavaran cultural complex is the presence of its theater, which is built using geometric shapes, and this doubles its charm. In addition to the halls, the presence of skylights on the roof of the complex has given a special charm to its gallery and library. Apart from the beautiful architecture and good facilities that can be seen in this cultural center, it is the implementation of rich and varied programs of this complex that brings a large number of citizens from far and near neighborhoods to this cultural place every day.

Figure 4 - Various spaces in Khavaran cultural center
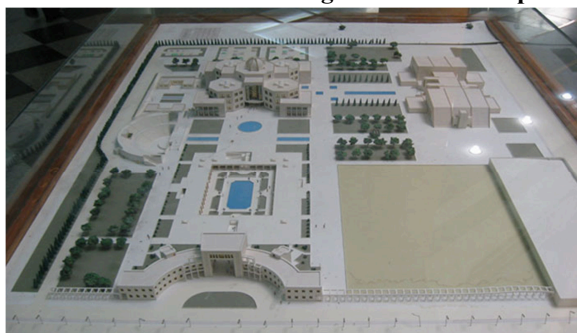
architectural maquette

Plan

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Outdoor space

Covid-19 Vaccination Centre

Library

Religious gathering place

Source: Prepared by the authors (2022)

According to the discussed issues and the activity field of cultural centres, all spaces capable of performing cultural and scientific activities with recreation, entertainment and social encounters, while increasing the level of science and culture and filling leisure time, are considered as spaces of Culture clubs.

1. The entrance lobby and entrance hall, which has the role of inviting and directing to other sectors, after entering the collection.
2. Vaccination centre for corona and pandemic situations is of high significance, previous studies indicate that post-corona strategies are very essential (Norouzi et al., 2021)
3. The educational section including classes, practical classes and workshops (atelier) for teaching of traditional arts of Iran and activity fields of painting, pottery, carpet design, illuminated manuscript, calligraphy, coffee house (traditional) painting, and courses of story writing, editing, design and painting, photography, sculpture, architecture, design, and etc., as the centre for promotion and growth of customers and special classes for the presentation of works.
4. Audio-visual classes and language labs and so on.
5. Temporary and permanent galleries, scientific museums, painting galleries, exhibitions and labs.
6. The library and its related departments, such as various study halls, and so on.
7. Meeting halls, cinema.
8. Discussion rooms for different groups (social interactions spaces).
9. Computer site.
10. Commercial section including various commercial stands for the supply of cultural, food and other products. This section can also be designed as a marketplace.
11. The administrative section including a conference room, presidential chamber, offices, archive room, tea-house and so on.
12. The service area including bathrooms, dressing room, restaurant, children's playground.
13. Restricted gambling.

14. Sports hall.

15. Venues for religious ceremonies, literary circles and festivals in indoor and outdoor spaces (if possible).

Creating different filters, called "foregrounds" or "waiting lobes" is required to link each section to the original set. These departments are based on the designer's idea and are organized and made by elements of the form with specific visual characteristics and specific methodology in solving the connection between different parts and in correlation with the way of circulation and the quality of complex spaces, based on the urban location, climatic conditions and the relationship between form and space (Mostavafi et al.,2018).

8 DISCUSSION

Urban public spaces interfering with the facilitation and refinement of social form are generally involved with social strategies and sometimes strengthen, consolidate or weaken them. Therefore, due to the general nature of its effects, it has a social role. The social perspective of the public spaces aims at concepts such as social capital, social action and community integrity, and conceives its weakness in cities as a factor of social instability in cities (Walzer, 1986). Therefore, designing urban public spaces in order to increase social interactions is a major topic. Once a design can be desirable, if attract the users, and the sense of the location to be in a shape such that create a psychological relaxation in them, and enhance the sense of involvement in the people, making citizens to engage in social interactions.

People's everyday social life consists mainly of mutual actions and their interactions with each other. The fact that such encounters occur in certain spaces is important. In this context, the recognition of the concept of socialization and analysis of its dimensions shows that the human-made environment is influencing on users; social interactions, in the form of two components of physical and activity. Architectural socialization aims to provide architectural spaces due to communicating and collective interacting of users; thereby helping to increase the opportunity for social interaction among the users of the building. Figure 5 presents patterns and modelling of the cultural centre. Urban public places, as a part of the public presence and general utilization of urban communities, must have the characteristics of architectural socialization so that they can act as an institutional role in the process of citizens' socialization. It is expected that by designing suitable architectures for such spaces, the level of socialization of mentioned areas can be increased. And also, the findings of the present research indicate that the architecture of these spaces can affect the quantity and quality of socialization in these cultural buildings.

The summary of the research results states:

1. The highest level of socialization occurs in unofficial or informal spaces.

2. Users of different activity areas often interact with people and the environment in the most relevant space possible.

3. The physical and activity components of socialization do not have the same effect on collective spaces of a certain cultural building, and each of the uses of building requires one of the components of socialization. In uses with a daily and periodic audience, the physical components are more bolded, while in sectional applications or free audience, the components of activity have a greater impact on space socialization.

4. Increasing the spatial capacity for mutual function affects the quality of space socialization by means of active and passive way through the creation of satisfaction sense resulted by staying in space.

Figure 5 - Patterns and modelling of the cultural centre
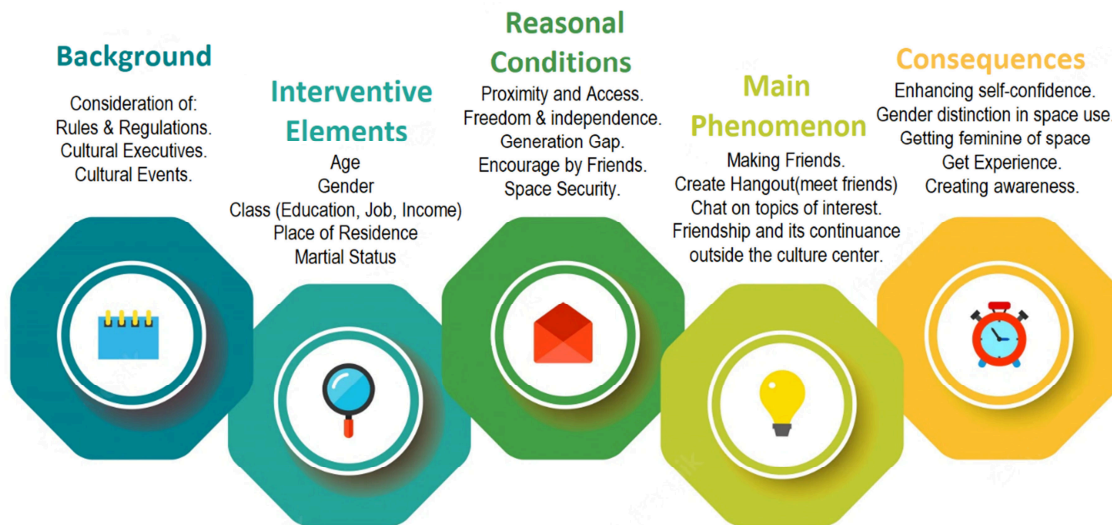
Source: Prepared by the authors (2022)

CONCLUSION

In architecture and urban design, the urban is often used as a descriptive type, neither explanatory nor predictive. A widely recognized, evidence-based taxonomy of the urban does not exist. This is perhaps due to the continued use of outdated visions and ideas of progress which fail to acknowledge insights from emerging transdisciplinary research and practice.

The theory that shapes architectural practice is often rooted in radical political ideologies, rather than in the empirical analysis of the real. Despite fundamental changes in the technological, social, political, and institutional context of urbanization over the past decades, many important architectural research and teaching programs build almost exclusively on design philosophy to identify those processes which are currently transforming the "planetary" socio-ecological landscape Technocratic or artistic models of architectural or urban design practice ignore the rules of evolutionary intelligence and seek to respond to complex problems as if they were merely visual design challenges.

As a result, it should be noted that the main issue in facing social spaces and cultural buildings is the awareness of social life patterns of individuals and the need of environments to be changed proportionately over the time. Cultural buildings also represent an important part of life in the community that should possess the ability to make such changes over time, since by owning the ability to be socialized and attract the users they positively impact the increase in social interactions and community culture.

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