



A Framework to Promote Publicness in Urban Open Spaces

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Abstract

Urban public spaces are places where people, socialize, daily life activities take place, and are accessible to everyone. Urban space harbors public life. Today, the meaning of publicity is changing in the new centers of developing cities, and it is important to sustain public life in these areas. This study aims at determining the necessary framework for the formation of public open spaces and the provision of public use in urban open spaces. The examining and strengthening of public open spaces are possible by reviewing daily life activities. The focus of this study is to use the studies on urban space as a tool for the improvement of public space, to examine the design approaches that develop appropriate design criteria, and to reveal formation of public space and the spaces that have potential for public life. Thus, publicness, public life and public use have led to the literature for this study. Approaches that deal with the environment, people and space relations have been adopted while the concept of publicness concept was discussed. In this context, parameters that provide formation of public open spaces in order to ensure public life and improve communication among urban residents have been proposed. These parameters, which reveal the characteristics and potentials of public space, can guide us through the design of new urban spaces or the renewal of existing urban spaces.

1. INTRODUCTION

Urban space, where daily life is displayed, consists of areas where public and private spaces coexist, hosting different uses and serving different needs. The vitality and life style of the city is related to the use of urban spaces and formation of our daily experiences in the city. Urban public spaces are areas where social interaction, interaction with the environment, meeting, sharing and common use take place. Today, studies examining the relationship between people and urban space, are carried out at urban planning and architectural design scale for the continuation of public life. In these studies carried out to analyze the relationship between the physical environment and people's activities, the necessity of a common language for urban planning and architectural design should be considered.

The study's aim is to provide a framework for a design approach that promotes the production of public space and the continuity of public life. It also aims to evaluate the planning and design practices for public uses, as well as newly planned areas and to reveal the criterias to be used in the transformation of created urban environments and undefined areas into effective public spaces. The characteristics and potentials of the formation of public spaces in cities have been explored in order to ensure the city's public life and to increase citizen's contact. Current studies and design approaches that support public use in urban open spaces are examined. A framework is proposed for parameters constituting public use to assist planning and design. During the research process, the framework of the study was formed through a literature review.

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To determine the direction of the literature review, a conceptual framework was established, and the study progressed based on observations and analyses in the selected research area to test this framework. Fieldwork¹ was conducted to test the proposed model. The Dumlupınar Road axis of Ankara-Eskişehir Highway was chosen as the sample area to interrogate with the proposed model. Publicness, public life and public space concepts, which form the basis of this research are discussed and the qualities for the evaluation of urban space related with these concepts are revealed. Within the scope of the study, concept of publicness has been investigated with an environment-people-space focus.

2. PUBLICNESS, PUBLIC LIFE & PUBLIC SPACE

The relationships in urban public spaces affect the socio-cultural life, environmental connection and historical consciousness of the individual. Urban public spaces are the whole of spatial pattern that provide the interactions and actions of the individual within daily life. The publicness of the urban space varies depending on the access of individuals from all segments of the society and the characteristics it possesses. The phenomenon of publicness, public life and public space have emerged as a result of historical developments in the 18th century and have undergone many changes until today. Today's cities exhibit a changing and transforming relationship between the meaning of public space and its outward appearance. Differentiations in the economic powers of cities, new modes of production, and societal changes conceptually alter the contexts of public spaces. In this context, the concept of publicness and its associated public life and public use are discussed and evaluated through the definitions and explanations by theoreticians and researchers.

Arendt and Habermas contend that face-to-face contact is the foundation of public life. Both theorists argue that the existence and behaviors of humans are the most important factors in the production of public space [3] [13]. Jacobs highlights that public space is a social context in people's daily life that may be kept alive by the users' actions and can be active with the people on the streets [15] [16]. Whyte adds that public space hosts activity contributes to the city's vibrant street life. He emphasizes that the most crucial requirement for public space is its usage. Successful urban open space, according to Whyte, is public area that can meet the needs of users, is equally usable, and has a meaning for a wide portion of the society [31] [32] [33].

Tchumi states that public space varies based on user interactions, habits, and preferences [28]. Lynch emphasizes that people and their activities are more effective than physical environment [20] [21]. Carmona, like Lynch, considers activities as the most important aspect in the physical environment and claims that people's interactions and dialogues in public spaces constitute the start of their connections and activities. Also, highlights that urban public spaces are public places where people perform group and individual activities, which depend on noting that they are tied to access and use [5]. According to Hood, public realm is linked to people's social and cultural accumulations [14]. Mitchell emphasizes that in order to have exposure in urban environment, demands of the users must be addressed [23]. Newman draws attention to the need of using semi-public /semi-private spaces which are in between public and private

¹ In the fieldwork, the model proposal of the doctoral thesis titled "An Exemplar Analysis and Method Proposal Intended for Development of Open Spaces along Auto-Transport Corridors in Expanding Cities as Urban Public Space" completed by the author at Atılım University in 2020 was tested, and it was found that this model provides a framework that can be used for further research [40]. Additionally, the proposed model generates data for analyzing and providing recommendations for cities exhibiting similar development patterns.

spaces, suggesting that physical space should be well-designed for public use and should be a shared space [25].

The concept of publicness and public use in urban open spaces is a subject that is particularly emphasized in current publications throughout Europe and USA. In our country, new residential and commercial areas are being designed rapidly and both the vital meaning and physical characteristics of the public space are transforming and changing. With the effect of the differentiation in the economic power of the cities, socialization areas are created where publicness becomes a necessity within private spaces that are disconnected from the city center. At the point where cities are today, these areas, which offer life alternatives to different segments of the society, offer areas for individual uses rather than public uses with their buildings far from socialization opportunities. Public spaces continue to be places where lots of people can congregate for face-to-face encounters and where public life flourishes, despite beliefs asserting a decline in physical space as a communicative environment. In this context, it gains even more importance to define concept of publicness and public space phenomenon and to determine its qualifications.

Public space phenomenon, interpreted differently by theoreticians, is defined as the area, where discourse and action are conceptually at the forefront, differentiating from its sociological historic meanings that determine the physical boundaries of living together. This subject, which investigates how the concept of public space can be associated with today's urban space, has been analyzed and different definitions of public space related to urban space have been proposed by many theoreticians and architects after the industrial revolution. Publicness is undergoing rapid change and transformation along with technological advancements and the associated socialization. The interaction between environment, human, and space plays a significant role in the transformation of public space. It is understood that, based on these developments and definitions, public space exhibits variability depending on:

- Activities,
- Users,
- Using behaviors

Public space concept, when associated with today's urban space, turns out to be a physical commoning area that is related with and open to everyone, accessible, shared in common, where social rules are valid, individuals coexist and in which different vantage points exist.

3. A FRAMEWORK FOR DEVELOPING SPACES FOR PUBLIC USE

This study, while questioning public use of urban open spaces, examines the criterias that support the formation of public spaces. Considering the effect of the environment on people, the relationship between people's behavior and activities in daily life and urban space is evaluated. One common method of research in the studies of researchers performing people-oriented design approach is observation of people's activities and behaviors [26] [30] [34] [35]. The methods used for the emergence of the proposed framework based on people-oriented approach of the research, the archive and literature review, and the approaches of researchers who have worked on this subject are listed as the resources for determining existent data. These are methods that are still used by researchers in people-oriented research and human-environment studies.

Cullen claims that urban design principles are linked to people's emotional reactions and visual experiences [8]. Tchumi, in his works on urban space argues that creation of public space varies based on user interactions, habits, and preferences [28]. Madanipour, underlines that urban public space is defined as areas that are physically accessible to everyone, and use and physical form of urban spaces have changed with the alteration of people's lifestyle [22]. As user / inhabitant define the desire of urban space, Alexander

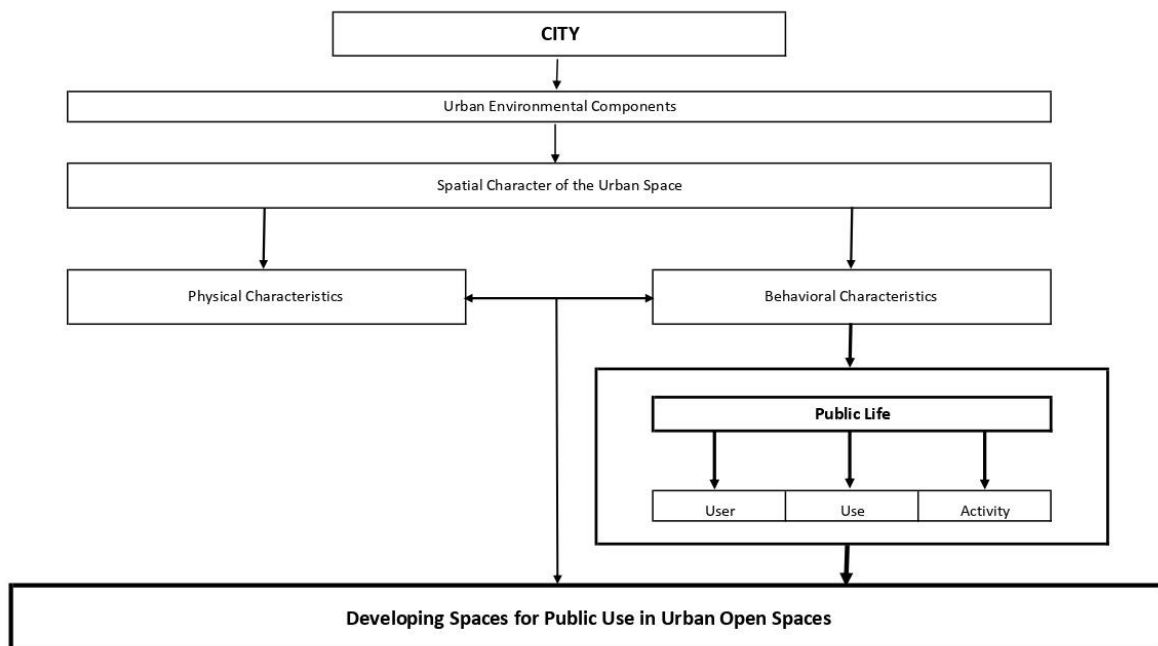
refers to cities as "life forms" that can react to changing socio-economic situations and the cultural composition of cities [1].

Carr, Francis, Rivlin, and Stone (1992) define urban spaces as places that provide fresh air, sunlight, and opportunities for social interaction while also inviting people to relax. Urban public spaces act as social binders/gatherers, connecting individuals together to form a sense of community. Urban spaces are environments that meet the needs, comfort, relaxation, active/passive participation, exploration, and necessities [6]. Lang utilized Maslow's (1987) 'hierarchy of needs' as the organizational basis for human needs in urban areas, which included physiology, safety and security, belonging, dignity and self-actualization phases [18] [19]. According to Lynch, urban public space is the physical environment that supports the lives of individuals, has a high spatial quality, can adapt to people's behavioral demands, has a high accessibility value, and is under citizen control [20] [21]. Newman, distinguishes urban spaces into public and private areas, claiming that both have occupancy and emptiness. He underlines that public spaces are for society's general use, while private spaces are for individual use [25].

According to researchers like Gehl and Carmona, the role of urban space in public life is a social characteristic that increases the opportunity for individuals to interact in urban space. The necessity of activity becomes apparent in outdoor living. The importance of designing public spaces, that satisfy human needs from various perspectives and create new opportunities for people to interact with one another, emerges [4] [10] [11] [12]. Public life constitutes the components of the social/behavioral characteristics of the urban space [5]. PPS states that successful urban spaces must fulfill four main functions. Socialization, use and activities, access and connections, comfort and image are four major aspects that form the main spatial character parameters [26]. As per Jacobs, a people-oriented approach that determines the reason why it is preferred by citizens is more important than the physical location, the binding feature or its functional characteristics [15] [16].

In studies on the components of the city and the definitions of urban space, the characteristics that make up the spatial character of the urban space are handled with different variables. Characteristics of urban space are detailed as physical and behavioral, based on the literature formed by these studies. The main axis of the proposed list indicates the spatial character of the urban space (Table 1).

Table 1. Table for Examining Urban Open Space within the Context of Publicness

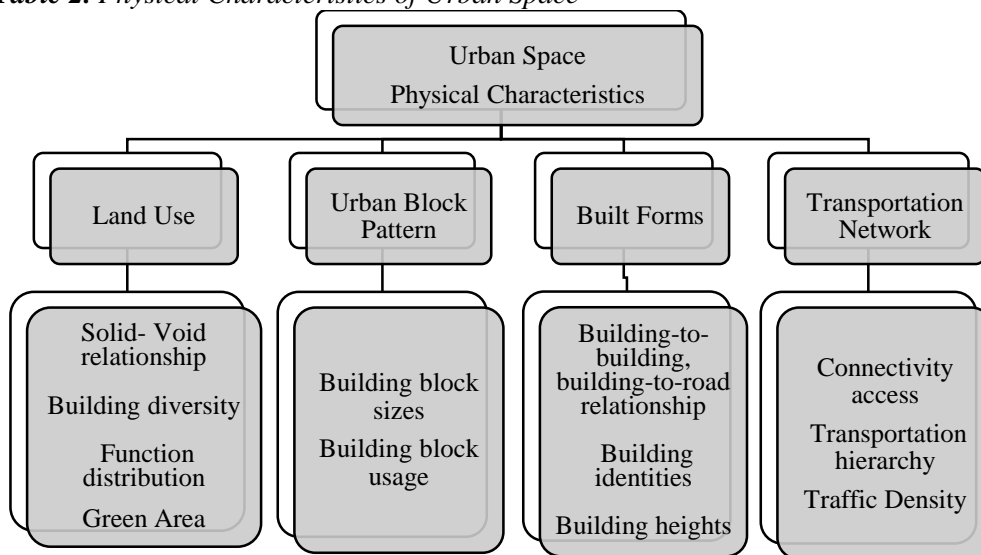


Urban space is a communicative space, where people have face-to-face relationships, which provides for certain behaviors and psychological conditions of people in realizing their needs and goals, and has potential for publicness. When determining the character of urban space, the urban environment has been approached in the context of its physical and social attributes, considering its multidisciplinary nature. It has been examined in terms of both its physical components and behavioral components.

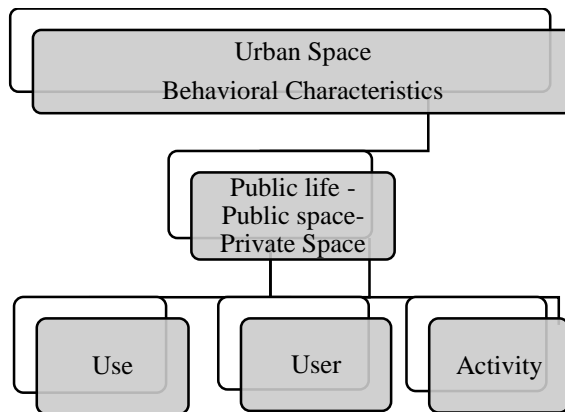
- Physical Characteristics of Urban Space: These characteristics are affected by the providers of the urban environment.
- Behavioral Characteristics of Urban Space: These characteristics are brought about by the relationships that the users establish with the urban space.

The whole city and its components also have an impact on the shaping of urban space. The model's sub-components were enlarged while taking into consideration the characteristics of urban space. When evaluating the physical characteristics of urban space, the definitions and components provided by researchers related to urban space have been examined. The criteria and sub-components derived from these definitions are presented in Table 2. The important point here is that each characteristic is interconnected with another characteristic and collectively forms the urban space as a whole.

Table 2. Physical Characteristics of Urban Space



Behavioral characteristics of urban space are related to individuals' socio-economic, cultural and political needs, social interaction and development, socio-cultural experiences and activities in urban space. Public/private space relations, usage, user, activity relations are among behavioral characteristics (Table 3). People based life and public use are detailed under this title. Individuals' freedom of expression, sharing in common, interaction with others and with the environment take place in public spaces. The model put forward in this study, with its conceptual framework, emphasizes that spatial variables of urban space are effective in public uses.

Table 3. Behavioral Characteristics of Urban Space

The physical characteristics of public open space also affect the interaction patterns and intensities of relationship between individuals. With the concept of public open space, not only the spaces between the buildings, but also taking into account the use functions and activities of the people inside the buildings and their environs determining the boundaries of the spaces are related. Gehl emphasizes that the public open space is a pedestrian-centered, activity-related physical environment. Determining the qualities of public space is important in terms of diversification of use and activities and increasing the intensity of activity [11].

Lynch describes the characteristics of public space using five criterias. These are; the relationship of the environment with people's senses and how they perceive space (impulse), people's relationships and interactions with other people (social contact), access to activities, resources, and other people (access), controllability of access and use of spaces and activities, needs, and the balanced distribution of environmental conditions for human use are among these criteria (control) [20].

Carr, Francis, Rivlin, and Stone present a systematic and detailed definition for defining the activities in the public space and defining its criteria, claiming that it should be sensitive, democratic, and meaningful. It promotes the growth and evolution of democracy by allowing people to freely express themselves and interact. He defines public space as a centralized place where people do their functional and daily activities, and its physical characteristics and the role it plays in cities as a communication channel and open space system. The requirements of public space are defined as physical comfort, food, drink, shelter, and a rest area that can be provided as needed, and also people watching, being active in the activities, and having a variety of opportunities [7]. Gehl describes public space as a pedestrian-centered and activity-dependent physical environment, arguing that optional activities are dependent on a suitable physical environment and successful public spaces. A qualified public space, according to Gehl's work, is an accessible, open, meaningful, safe location with physical components to create a sense of environmental comfort and sensory enjoyment [11] [12].

Lang relates human needs to the functions of the structured form, expanding on Maslow's (1987) hierarchy of human needs. He claims that both needs and systems that supply them should be seen as part of a social order in this interaction. Physiology, safety, security, connection, integrity, and self-actualization constitute Lang's hierarchy of requirements for human needs in urban spaces [19]. Carmona defines the attributes of space required when designing public spaces as being open to the public, making the uses attractive for the users, analyzing the potentials to create a social environment, and enabling it to interact with life and the user for active use [5]. Environmental factors affect the actual and perceived safety of public spaces. Jacobs cites stores, bars, and restaurants as a vital component of monitoring and safety in his examination of public spaces [15]. Safety in the public space, according to Appleyard's research, is a person's ability to feel safe

from social and physical factors (crime and traffic). Another essential factor in the utilization of public space is traffic safety. The inverse relationship between high traffic volume and neighbor behavior is highlighted in Appleyard's research of street activity [2].

Accessibility, hosting various activities, having a comfortable and good identity, and encouraging social activities are all qualities of a successful public place. Whyte clarifies the importance of food and beverage facilities in promoting socialization in small urban areas [33]. The PPS (Project for Public Space) group is dedicated to enhancing public space quality. They contribute to the transformation of public areas into people-oriented, lively, and living spaces through their work. It explains the qualities of public space within the scope of the following criteria as a result of these researches [26].

- Integrating pedestrian and vehicular traffic, maintaining pedestrian road continuity, creating areas for cyclists, offering directions and transitions from bus stops to the area, etc.
- ensuring the area's security, increasing the density of usage by combining urban equipment,
- providing centers that will support people's activities and maintain their unity,
- providing places that will support various activities and provide social communication

The qualities of public space, according to Kohn, are whether they encourage ownership, accessibility, communication, and involvement [17]. This term is refined by Carmona to integrate function and perception [5]. Madanipour, the same as Kohn, utilizes three dimensions to explain the qualities of public space. He defines these as "access to the area and the activities that take place there," "the center of control and decision-making," and "the benefits of the action or actions that affect the space" [22]. Varna and Tiesdell, define public space in five dimensions, within each range of approaches. Ownership, control over people and their safety, culture, civilization, connectivity towards the environment and physical accessibility from the outside, and an arrangement that satisfies the needs of users are among these attributes [29].

Sarkar, defines evaluation methods for pedestrian movement and usage in public spaces in urban systems based on comfort levels. Convenient walking path, pavement continuity, comfort for disabled and elderly users, obstacle-free walking path, comfortable walking surface, resting areas for pedestrians, physical comfort, including weather protection, physiological comfort (noise, pollution), maintaining desired walking speed, and various factors are all essential. It consists of psychological comfort that enables pedestrian activities to be performed [27]. Curran studies urban space by focusing on building form and spatial relationships, building surfaces, defining ground surfaces, and reinforcement elements, as well as analyzing the physical properties of public space. With the void left out of the architectural form, Curran highlights that the form itself plays a vital role in defining public space. He also claims that the usage of building facades and the voids left on them is part of a framework that supports, regulates, and directs public space. This impact also ensures that the inside and exterior have a physical and functional relationship [9].

Alexander, too, underlines that boundary components that define the urban outdoor area include activities and play an important role in the life of the space. The essential point to mention is that functions built forms support outdoor life and provide indoor-outdoor space relationships. Considering these functions as well as the activities that will support outdoor life together ensure public life's continuity and its unity with the place [1]. Montgomery emphasizes that a place is identified by its physical characteristics. He highlights the importance of the individual's feelings and impressions of a place in terms of perception of its identity. He explains that visual representations of the city and urban space are insufficient, instead perceptual, sensory, cognitive, and organic definitions can be used [24].

When qualities of urban public space are investigated in researches done, there are found to exist different approaches to the qualitative components and criteria of such spaces. In studies on public space qualities, the functional characteristics of space, the physical characteristics of space or the relations of its users with the environment are taken into consideration separately. The success of the attributes of public space does not only depend on physical data, but also on the individual user profile: for what purpose and how often they use it; and how they feel themselves in that space. Based on the works of researchers, the qualities of the public space are evaluated under three sub-titles: physical, functional and users' relations with the environment. These headings are widened with sub-variables (Table 4).

Table 4. Dimensions of Quality for Public Spaces

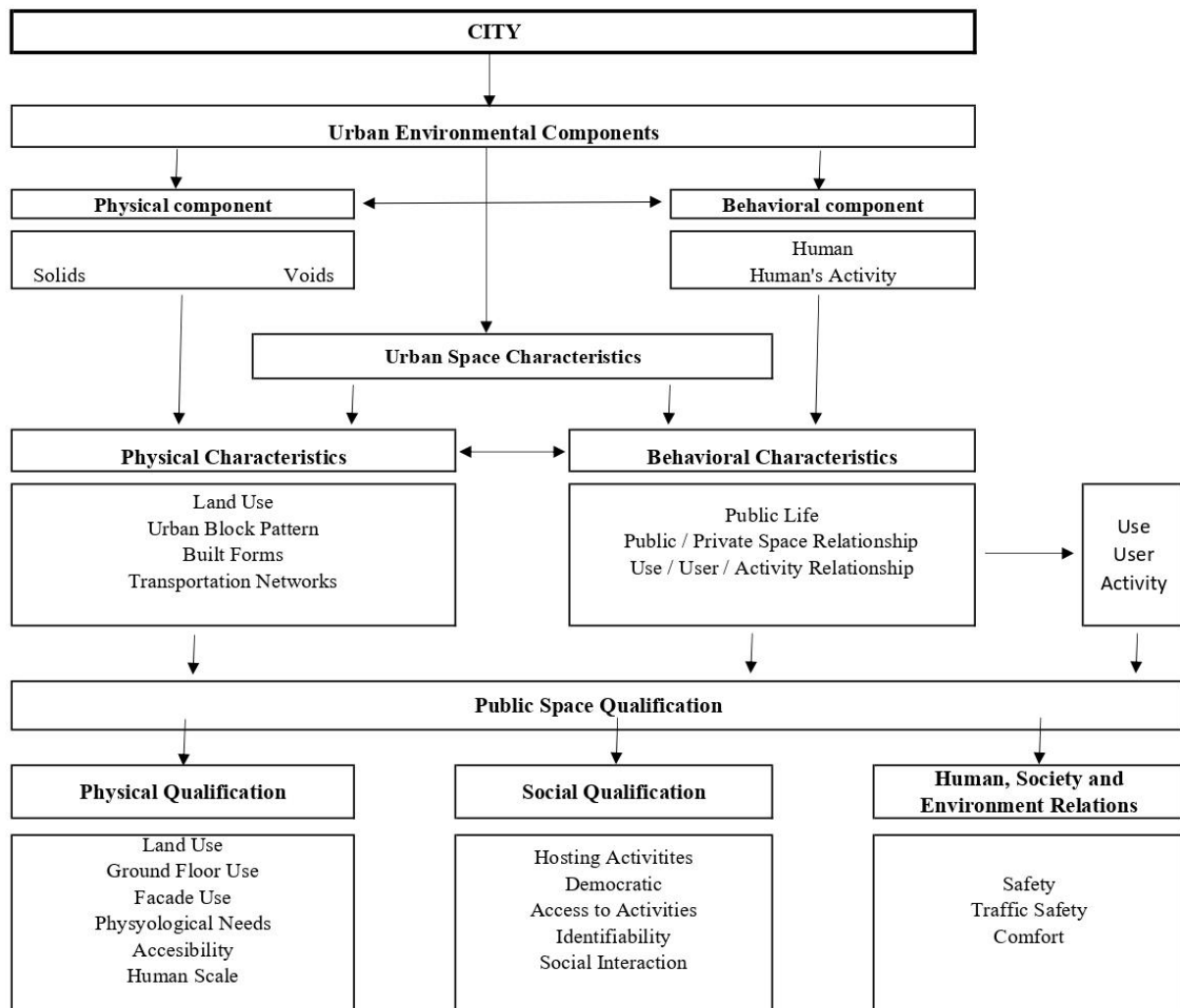
Physical Qualification	Land Use: The relationship between the void left by the form of structures and the open space surrounding it.
	Ground Floor Use: The non-building areas should support public life.
	Facade Use: Supporting the indoor-outdoor relationship.
	Physiological Needs: Creating physical features that cater to fulfilling human needs.
	Accessibility: Being shareable by many people in terms of use, and being accessible to the space.
	Human Scale: Creating the ratio of voids and solids in urban space based on human scale, using architectural elements such as eaves, arcades, and urban amenities.
Social Qualification	Hosting Activities: Hosting activities that involve different uses and supporting interaction.
	Democratic: The freedom to express and share ideas freely.
	Access to Activities: The inclusiveness of the space, accommodating people from all groups, and providing access to activities.
	Identifiability: Having memorable qualities, being shareable and inclusive, involving interaction.
	Social Interaction: Promoting interaction and communication among people from all social and cultural groups in their activities.
Human, Society and Environment Relations	Safety & Traffic Safety: The physical characteristics of the built environment and open spaces should be designed at a pedestrian scale to create safe environments that prevent crime. Organizing vehicular traffic in a manner that ensures pedestrian safety and protecting pedestrian areas from vehicle traffic.
	Comfort: Dependent on physical, psychological, and physiological factors. Physical conditions include adequate walking paths, seating areas, spaces for activities, elements for protection against weather conditions such as eaves, landscaping, and gathering spaces. Psychological comfort is dependent on achieving physical comfort. Physiological comfort is influenced by air pollution levels and noise levels.

Formation of public space and its physical characteristics are defined by physiological requirements, land use, ground use, facade use, accessibility and human scale. Its social qualities are affected by the activities it contains, democratic structure, accessibility to all segments of the society, identifiability and social interactions. It is made evident that qualities of people-society-environment relationship are determined by

variables such as safety and comfort of the area. By grouping the factors affecting the characteristics of the public space, it is possible to reveal the necessary variables for the formation of public space. The variables exposed in this study include the qualities that areas for public use in urban open spaces should have.

The proposed model establishes the character of the urban space and explains the necessary processes and qualities for the provision of public life in urban open spaces (Table 5). This process starts with the city, continues with the urban environment, and expands with the components and subcomponents that make up the urban environment. The relationship between the components and subcomponents and the interconnectedness of each characteristic with another are deemed significant.

Table 5. Model proposal for examining the character of urban space in the context of publicness



4. CONCLUSION

The research is based on a theoretical framework developed through literature review. In the study, criterias were determined for designs which would support public use in urban open spaces and provide formation of public space. For this purpose, research on designs that ensure the continuity of public life and enable public use have been examined. As a result of these investigations, it has been determined that the structure that encourages public use can be handled with a list. With the proposed model, the character of the urban space has been created and the processes and qualities necessary for the provision of public life in urban

open spaces have been revealed. This model provides a framework that can be used for further research on formation of urban public spaces in cities. The proposed parameters also provide data for the creation and development of spaces with public space qualities by transformations and improvements in extant and recently designed urban spaces for sustenance of public life.

This study presents the model of a doctoral thesis that provides a detailed and comprehensive analysis and method proposal. In the thesis, the Dumlupınar transportation corridor, located outside the city center in the Ankara-Eskişehir axis, which is rapidly changing and growing unplanned, and is believed to create areas that meet the diverse needs of city dwellers, was selected to be tested with the proposed model. The urban open spaces along the transportation corridor were thoroughly examined through multidimensional analyses to explore their potential to become urban public spaces. As a result of this examination, it became apparent that the planning decisions made by urban plans are insufficient in the public use of urban spaces. The necessity of producing and implementing planning decisions within the scope of urban design was identified. The development of urban design will ensure a holistic understanding and continuity in the urban space.

When evaluating the quality of urban public space, in addition to the functional and physical characteristics, the characteristics of user-space relationship and interaction should also be taken into consideration. This situation, which provides the opportunity to socialize, allows the individual to gather and share the space with other members of the society. Urban open spaces are transformed into living spaces with the continuity of public life. All characteristics that enable the quality of public space ensure the continuity of public life. Walkable, vibrant, and alive public areas benefit users.

The production and implementation of urban design will increase the continuity of public life by supporting the formation of public open spaces. The transition between public and private space and the holistic approach of the boundaries forming this transition gain importance in terms of ensuring the relationship between social structure and urban space. The creation of spatial environments and inclusive nodes covering social activities is important in terms of considering social integrity in the urban environment and prevention of urban/spatial fragmentation. With the development of urban design, a holistic understanding and continuity will be provided in urban space.

The existence of public spaces in cities is critical for the city's livability and the people's societal requirements. It is clear that the importance of the concept of publicness and public space emphasized in this study and the need for public open spaces will increase. It is thought that the method of systematically analyzing the defined framework to meet this requirement will contribute to academic research and applications for new or renewed urban open spaces.

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