Research Article

Reading Mixed Buildings from the Perspective of Public Space: The Case of Zorlu Center

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Abstract

Mixed buildings bring together different functional units scattered throughout the city and show their users a new face of public space under a single roof. While the spatial qualities that shape the architecture at the design stage offer goals that improve public life, they highlight the continuity of the urban fabric within contextual implications. Large-scale mixed buildings are strongly involved in the urban pattern as a building typology that is being applied and scaled up more and more day by day; with its large volumes in the combined parcels, it determines not only the quantity of its own areas but also the quality of the urban area. Mixed buildings should have a feature that is responsive to human movements, and that communicates through the public spaces they create, not with two-dimensional surfaces in the areas where they come into contact with the city. Living and moving spaces are shaped by architectural structures and systems. In this sense, architectural spaces prepare the ground for the formation of contemporary experience beyond visual interaction. In the study, the changing qualities in the relationship between physical architecture and thematic formations that shape the design of Zorlu Center were examined through spatial analysis. These analyzes made on mixed building designs and discourses, which are at the center of current discussions, have brought a different perspective to the phenomenon of public space in memory with site-specific shaping and design decisions, and an infrastructure that will allow the production of information for new designs has been constructed.

Keywords: Mixed Structure, Public Space, Spatial Quality, Living Center, Zorlu Center.

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Araştırma Makalesi

Karma Yapıların Kamusal Mekân Perspektifinden Okunması: Zorlu Center Örneği

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Özet

Karma yapılar, kent içinde dağılmış olan farklı işlevsel birimleri biraraya toplayıp, kullanıcılarına kamusal mekânın yeni bir yüzünü tek çatı altında göstermektedir. Tasarım aşamasında mimariye yön veren mekânsal kaliteler, kamusal yaşamı geliştiren hedefler sunarken, bağlamsal çıkarımlar içinde kentsel dokunun sürekliliğini ön plana çıkarmaktadır. Büyük ölçekli karma yapılar günden güne daha çok uygulanan ve ölçek büyüten bir yapı tipolojisi olarak kentsel örüntüye güçlü bir etkinlikle dahil olmakta; birleşik parsellerdeki büyük hacimleriyle sadece kendi alanlarının niceliğini değil, aynı zamanda kentsel alanın da niteliğini belirlemektedir. Bu tipoloji, büyük ölçekli kamuya açık alanları ve işlev çeşitliliği dolayısıyla kent kullanıcısının birçok kullanım biçimi için önemli bir çekim alanı oluşturmakta ve bir anlamda kentsel kullanımı da yeniden tarif etmektedir. Karma yapıların, insan hareketlerine duyarlı, kentle temas ettiği alanlarda iki boyutlu yüzeylerle değil yarattığı kamusal mekânlar yoluyla ilişki kuran özelliğe sahip olması gerekmektedir. Yaşanılan ve hareket edilen mekânlar, mimari yapılanış ve sistemlerle biçimlendirilmektedir. Bu anlamda mimari mekânlar, görsel etkileşimin ötesinde güncel deneyimin oluşumuna zemin hazırlamaktadır. Çalışmada, Zorlu Center tasarımına yön veren, fiziksel mimari ve tematik oluşumlar ilişkisinde değişen kaliteler, mekânsal analizler ile irdelenmiştir. Güncel tartışmaların odağında olan karma yapı tasarımları ve söylemleri üzerinden yapılan bu analizler, yere özgü biçimlenme ve tasarım kararları ile bellekte yer alan kamusal mekân olgusuna farklı bir bakış açısı kazandırmış, yeni yapılacak tasarımlar için bilgi üretimine olanak sağlayacak altyapı kurgulanmıştır.

Anahtar Kelimeler: Karma Yapı, Kamusal Mekân, Yaşam Merkezi, Mekânsal Kalite, Zorlu Center.

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INTRODUCTION

The spaces that aim to meet the social and cultural needs in different places on the urban scale appear with the feature of being packed into a box. The concept of a meeting place, a single roof where people can be together and symbolize their power, is changing and developing. Today, depending on the developing technique and technology, the use of mixed structures, in which different units are together, gains importance among the problems that are tried to be solved with sustainable approaches. What is perceived as innovative design today is not only reduced to the fiction of physical space. At the same time, the necessity of the building program to integrate with the urban space and direct the communities comes to the fore.

Human in order to survive, it must interact with the environment and other people in order to meet some of its social and physical needs. A person who changes his environment in line with different economic and social norms is affected by all the components surrounding him in every sense. Due to the social, physical, behavioural and psychological effects of mixed structures on users, planning and organization gain importance in order to predict a healthier society and a better quality of life (Şahin & Tavşan, 2018, p.842-847).

The main point regarding the reading of public spaces in the general perception of the city is that space should have semantic and usage qualities for the individual or society. In this context, the criteria that determine and reflect publicity lie primarily in the use of the space itself, and then in the relationship of use depending on the needs and conditions arising from the social structure. The ability of urban residents and users to identify with the space they live in depends on the qualities offered by public spaces. While well-designed and implemented public spaces contribute to the image of the city, they help to create more harmonious spaces (Şahin, 2011, p. 219). For public spaces to be lively hybrid zones, instead of neutralizing differences, they should be spaces that support the theme and cosmopolitanism (Demirtaş et al. 1996, p. 39-44). In addition to understanding why mixed buildings are public spaces, revealing their contribution to urban life are important as a problem area and approach to spatial formation and usage possibilities.

Mixed building designs, which started from the planning stage and brought to the usage stage, offer new living spaces to their users with the qualities they contain. Mixed building designs that provide the formation of an urban environment, integrates its own texture with the urban texture, with the preservation of local features and, if any, neighbouring settlements. Mixed buildings, which are designed with different theme features, ensure that the requirements are met in order to integrate into the city with their sustainable infrastructure (Şahin & Hocaoğlu, 2015, p. 1). With the opportunities offered, this building group should be examined in detail with its diversity of user potential, increase/decrease in density, and its symbolic aspect that introduces the city.

DESIGN OF MIXED-USE BUILDINGS AND PUBLIC SPACE

Buildings with multiple functions, different capacities and serving different users are called mixed-use structures or multifunctional structures (Soja, 2000; Aslankan, 2014, p. 18). Multifunctional buildings appear as a building style imposed by the chaotic production style on modern cities. The need for production to come together with marketing and administrative functions is gradually starting to bring the buildings where these functions meet into urban life. These buildings

are presented as a single block in the chaos of the city, and sometimes as a site consisting of interrelated blocks (Derman, 1989; Bilgin 2006, p. 5-9).

In terms of people's mutual relations with their environment, people-human groups show different characteristics as they are under different and multifaceted conditions (economic, socio-cultural, historical-social, life process, personality and group characteristics, etc.). It is considered important to investigate the needs related to the space, which can be explained as a result of condition-ground, perception and behaviour. The needs that can be explained regarding the physical space, social and cultural environments of people can be examined in different scales such as the city, the city part and the city region within the theories of perception and behaviour (Çevik, 1991, p. 48).

Mixed-use buildings are defined in two categories within the physical criteria;
Category 1; are monoblock structures in the city. These structures are generally located in city centres or close to the centre, where there is intense human circulation; next to shopping malls, office function, residence or hotel, hospital etc. It consists of adding different functions (Figure 1, 2).

Figure 1-2. Meridien (architectural design: EAA) and YDA Center (architectural design: YDA) monoblock mixed buildings views (Authors Archive, 2022).

Category 2; are the sites just outside the city centres and on the coast. Usually, the production function is added on these sites. Due to their size, production creates the need to spread out over several blocks. While these sites include wholesale groups and shopping centres in addition to production, office centres within the same group are included in the project in cultural and social functions. Mixed

Figure 3-4. Kuzu Effect (architectural design: EAA) and Torun Center (architectural design: EAA) mixed buildings views (Authors Archive, 2022).

buildings are buildings that meet the needs of the time and integrate with the urban fabric (Hoppenbrouwer & Louw, 2005, p. 967-983), (Figure 3, 4).

Mixed-use buildings form a city model with their different functions and sizes. These structures, which form a micro-city within the city, have recently been in great demand by the citizens. All kinds of needs are now met in these structures without wasting time. These requirements are related to each other, they are ground-breaking and they show transitive features (Bora, 2009, p. 65).

From past to present, building typologies have always emerged as a product of the context of the societies in which they were produced, as a part of their social life styles, they have been included in this context with a cyclical effect. As a contemporary building typology, mixed-use buildings are also a part of the pattern of events, situations and relations created by the contemporary metropolis as the ground on which the building typology is produced and by the social actors active in its production. In the modern world, metropolises, which are the heart of social life, are considered as important elements that shape the metropolitan area and therefore social life due to the volumes they increasingly occupy (Özoral, 2015, p. 1).

The residential function in the mixed building typology example is integrated with the other functions in the building; with the effects of consumption indicators that highlight brand value; offers the user a new modern lifestyle and social identity. The existence of the housing function also creates a core consumer mass that is there at all hours of the day. This positively affects the human circulation and economic mobility in the space (Bali, 2002, p. 122).

In many examples, the office function is designed with spatial variants. In a free market economy, where commercial relations are determined by private initiatives, the trust created by work offices in the market is an important determinant; for this reason, office units in typology are mostly marketed with an emphasis on prestige. In a modern world where working time and leisure time are separated with clear lines, a close single integrated structure creates a consumption-oriented free time user group. This situation makes an important contribution to economic mobility. (Noraslı & Doğan, 2020, p. 3).

Shopping centres, which are the counterpart of the trade function, constitute important urban attraction points in societies where shopping is constantly triggered, and leisure activities are associated with consumption-oriented activities. It appeals to a wide audience in terms of usage, and a variable consumer group from different socio-economic levels is in the domain of a comprehensive commercial cycle where items that are not needed are also constantly accessible (Şahin & Tutkun, 2007, p. 52-60).

Functions such as movie theatres, performance centres, entertainment and playgrounds, which are produced on the axis of entertainment and culture-art activities have recently found a place in the typology with an increasing momentum. These functions mean that the user can access both consumption-oriented and cultural leisure activities together by deactivating the transportation factor in the remaining time of the working time. This integration significantly increases shopping-oriented economic mobility as well as the direct income from entertainment functions (Şahin, 2008, p. 84-90).

In addition to accommodation services, which are the basic functions of hotels, they also include additional services such as food and beverage, sports and entertainment; usage characteristics of tourism functions that provide vitality

throughout the project; The fact that it offers accommodation to non-daily users is a very important trigger in terms of user volume. In addition, the presence of strong hotel brands in the building, which are recognized on the basis of society and identified with the perception of prestige, directly contributes to the public representation of the building operator and creates an urban attraction with brand associations (Varol, 2009, p. 43).

The fact that users from all walks of life make their own inferences and find alternative answers to their needs causes public awareness to come to the fore. The definition of the meeting zones where active and passive interaction comes together in mixed buildings, the spatial arrangement, the size-ratio formation and the grading of publicity depending on the support elements surround the new living centres (Şahin, 2011, p. 76). Constructed spatial qualities affect the meaning and causes of publicity in social organization. The meaning of the public space, which changes depending on the place and the social structure, causes it to be reinterpreted in the mixed structures designed in the concept of the city model.

Typological classifications to be made by considering the plan, number/ type of focal spaces, spatial projections-floor connections, depending on the interior setting of the centres/squares/courtyards, reveals the qualities, usage density, activities, perceptual and semantic implications of the selected focal spaces (Berk, 1996, p. 93). The fact that mixed buildings have new meeting/ living spaces and alternatives in terms of evaluating time increase the feature of popular space offered for citizens. In addition to the shopping activity, its users can gather, meet, wander, watch, learn, develop skills, etc. The qualities/ alternatives of the actions presented reveal the distinctions of mixed buildings from each other and their stance/role at the point of urban continuity (Şahin, 2011, p. 76).

One of the requirements of being public is the existence of other people and being together with them, transforming the living space into a social space and social situations (Kruse, 1974, p. 105). Adaptation to physical and social conditions (actual, potential place of action) emerges when one feels peaceful, comfortable, reliable and at home. It can be considered as harmony-active adaptation that develops in the process of mutual relationship between those who live without alternatives or forced-passively and consciously with a natural adaptation to existing-given spatial and social environmental conditions (Çevik, 1991, p. 25).

People want to connect with the places they live in. Some of these ties arise from their habits or from the activities in the places. Experiences in public space create meanings that transcend time. If the resulting meanings are positive meanings that are pleasing to the user and create excitement, they become permanent by exceeding the instantaneous experience of the place and its environment (Rapoport, 1990, p. 236-238).

In mixed buildings, in addition to creating spaces with special functions, interior spaces that enable people to come together should be designed. Urban spaces should be maintained both inside the building and attention should be paid to the design of structures suitable for transforming the interior space into a physical, functional and social public space. Therefore; the development in mixed buildings depends on the development of urban public spaces. These spaces consist of physical-architecture, use-function related, social space-related qualities (Şahin, 2005, p. 172). Mixed buildings are put into practice with a design that excludes or does not exclude from the city, under the design

approach in which urban public spaces and their gradations are presented together. The spatial reflections revealed are of a nature that corresponds to the users and the elements found in urban spaces, and they provide support for the existence of publicity in meeting the needs (Şahin, 2011, p. 4).

Mixed buildings, which are constructed with thematic design approach, gain meaning by transforming the physical space concept brought by the system into social space. Building groups, which have been increasing in numbers recently in our country and abroad, are creating new environment-friendly living spaces. Architectural space organization integrated with the city can and should be developed with the participation of the citizens. In this context; Zorlu Center mixed-use complex, chosen as the sample area, stands out in terms of presenting the combination of prototype and qualified new living spaces for other public applications.

AIM AND METHOD OF THE STUDY

The possibilities offered by alternative spaces designed with the physical architectural setup of mixed buildings are increasing. The uses of these centres in the vicinity of the city and in the urban public space features are similar. The social, cultural aspects and architectural formations of the places with the qualities they contain take the appearance of a part of the city due to the fact that people prefer these places and spend a lot of time at the point of the continuity of the city. The aim of the research is to examine the reflections of the urban public space related to the use of the centres without abstracting from the city, the interaction of social and cultural space integrity that we encounter with their separate location in the city, and the physical architectural aspect of meeting the needs under one roof. In the study, literature research, fieldwork/on-site detection, observation, photography and online interview with the designer (Emre Arolat-EAA) were used as a method.

Literature Search: A general literature search was conducted on the subject. Determining the physical and thematic space qualities adopted by Emre Arolat and Murat Tabanlıoğlu for their designs, Sketches, photographs, drawings, notes, seminars, thesis on the subject, books written and application-idea projects designed by EAA-TA offices until today were examined.

Field Study: At this stage, Zorlu Center's public spaces, in particular, are the common areas that are at the disposal of users from all walks of life and where alternatives are presented against their needs, form formations that enable them to be positioned in the piece-whole relationship, spatial order-syntactic setups, circulation-focus spaces, spatial closure-inside- external relationship and spatial reflections of other qualities that support the design have been determined in situ. Zorlu Center, which has been selected and examined on site by considering the differentiation of architectural space qualities it offers, its innovativeness beyond the ordinary, and original design thought, has been proven to be an effective example within the mixed structure function. The data obtained from the examined structure were interpreted by turning them into tables graphically for physical formation analysis.

Interview with the Designer: Questions were prepared to determine the qualities of the public space depending on the physical architectural space, and Emre Arolat (EAA) was interviewed on 03.06.2021 and 17.06.2021 in a digital environment using the online interview technique. The first interview was considered as a pilot study in order to determine the concept setup on Zorlu Center, where the fieldwork was conducted, and the physical architectural

formation analysis studies were directed with the data obtained in the second interview.

PHYSICAL ARCHITECTURE AND THEMATIC STRUCTURE OF ZORLU CENTER

Zorlu Center is located at the junction of the Bosphorus Bridge Europe connection and the Büyükdere axis, which connects the city centre to the business district Maslak (Figure, 5), with a construction area of 720,000 m², which was implemented between 2007 and 2014. The design of the project was done by Emre Arolat (EAA) and Murat Tabanlıoğlu (TA). Intellectual/intellectual approach concepts that support thematic formation include contradictions such as grandeur-modesty, public-private, institutional-local and social-exclusive (URL 1; URL 2).

Figure 5. Zorlu Center's urban location and view of road connections (Google Earth, 2022).

The reinterpretation of the hills identified with Istanbul, taking into account the structural and topographic concerns, brings different functional and social spaces to the design and turns into a building mass that integrates horizontally and separates from the vertical with the sub-base function offered for the towers rising above it. Four towers and five functional building groups are shaped within a courtyard/centre/square, taking into account the horizontal-vertical mass balance and human scale (Figure 6, 7). The squares of historical cities and the qualities of the surrounding buildings are thematically included in the design, and the structural framework is established over the sky and green arrangements (Arolat, 2021a).

Figure 6-7. Zorlu Center tower, shell formation and courtyard/ centre/square (Authors Archive, 2021).

Zorlu Center, which gives an identity to the city in the formation of a symbolic structure, shows itself in the shopping centre with the change/transformation of alternative spaces and actions that are open to everyone, while the renewed usage feature of the mixed structure is increased (Figure 8, 9). While the spatial transitivity of the building complex is ensured between open floors and with planar urban spaces, the fact that it is the meeting point of people from all walks of life and reflects the spatial identity of the usage focus strengthens the perception of public space.

Figure 8-9. Zorlu Center shopping mall main entrance and indoor common area (Authors Archive, 2021).

The soft and green hill formation, which stands out in the design parameter, transforms into an urban balcony accessed by steps, facilitating the establishment of mutual audio/visual connection with the environment and inward-looking stepped planes, accompanied by the Bosphorus view. The relationship of the building complex with the city is supported by the formation of the courtyard opening to different heights, while inviting its users to its own atmosphere with surprise spaces (digital performance arts area, exhibition area, etc.) (Arolat, 2021b).

Zorlu Center offers many functions, consisting of a shopping centre, residence, office, hotel, performing arts centre, park, courtyard and urban balcony. The part-whole relationship of the physical architectural structure, which is a mixed structure, transforms into a social space, increasing its attractiveness/ favouredness and preference for users. Although public and private use spaces are kept separate from each other, their connection with the place and its surroundings is in a holistic approach.

While socio-cultural activities and commercial areas are dispersed on different planes, its relationship with the park is ensured and the structure of the Bosphorus is reinterpreted. The roads coming out of the urban texture on the ridges of the Bosphorus open to green gardens, public/semi-public spaces, open/semi-open streets and show the contemporary urban feature throughout the building (URL 3; URL 4; URL 5; URL 6).

ANALYSIS OF PHYSICAL ARCHITECTURAL SPACE QUALITY

The mass-space relationship, which is shaped in line with various approaches in architectural design, can be observed through physical dimensions and solution proposals. It is the design qualities of public spaces that reveal the healthy relationship between buildings and other components that make up the urban environment. These qualities constitute the city-specific pattern language

that enables the spatial and formal conditions of the city to be formed with a meaningful integrity. While designing new/different faces of publicity, the physical architectural features it offers are seen as effective in the quality of life of the society and include all kinds of physical, social, psychological and economic values that people need in the environment they live in. Many theorists researching the quality of physical architectural space construct their studies on perception and information processes. It is also stated that urban structures and their environments may change according to the perceptibility of the images of that place and the ease of coding them into spatial memory.

A group of comparator concepts and terms such as complexity, diversity, visual dispersion, perceptual richness, order, legibility, clarity and coherence come to the fore to describe the factors of physical architectural space-related qualities. While the search for spatial quality is based on differences that respond to needs, people are expected to be in public spaces in their daily activities and to perceive and transform the presented environmental data into a series of preferences. It is argued that architectural quality should be considered not only with its functional features, but also with many features that define it or make it meaningful because of its multidimensional and layered nature. The physical architectural spaces of urban public spaces can be read through qualities related to use-function and connected to social space. In accordance with the purpose of the study, spatial quality inferences are made from researches and analyses on physical formations and public spaces, and a method for understanding the form and getting to the essence of the building and space is revealed. In this context, the following sources were examined for the determination of the physical formation qualities that come to the fore in the design of Zorlu Center and the analysis methods.

- David J. Madden (2010). Urbanism in Pieces: Publics and Power in Urban Development
- Jan Gehl, Birgitte Svarre (2013). How to Study Public Life
- Jan Gehl (2010). Cities for People
- Rob Krier (1979). Urban Space
- Amos Rapoport (1977). Human Aspects of Urban Form: Towards a Man-Environment Approach to Urban Form and Design
- Jürgen Habermas (1994). The Structural Transformation of the Public Sphere: An Inquiry Into a Category of Bourgeois Society
- Matthew Carmona, Matthew Carmona, Tim Heath, Taner Oc, Steve Tiesdell (2010). Public Places Urban Spaces: The Dimensions of Urban Design
- Stephen Carr, Mark Francis, Leanne G. Rivlin, Andrew M. Stone (1992). Public Space
- Miodrag Mitrašinović, Vikas Mehta (2021). Public Space Reader
- Ali Madanipour (2003). Public and Private Spaces of the City
- Mattias De Backer, Lucas Melgaço, Georgiana Varna, Francesca Menichelli (2016). Order and Conflict in Public Space
- Quentin Stevens (2007). The Ludic City: Exploring the Potential of Public Spaces
- Jostein Gripsrud, Hallvard Moe, Anders Molander, Graham Murdock (2010). The Idea of the Public Sphere: A Reader

From the definitions, explanations, examples and evaluations put forward by the authors who were researched to determine the techniques and qualities of physical formation analyses; form formation; deduction, addition, deduction and addition, division, integration are provided freely, but for mass analysis; spatial order, syntactic construct, circulation, focal spaces, spatial closure, interior-exterior relations and other qualities on the structures constitute the basis of spatial readings(Table 1, 2, 3, 4).

● **Formation of Form:** According to Ching (2002) the prime geometric shapes are triangle, square and circle. Other geometric shapes are considered to be variations derived from them. Applying different changes to the prime forms brings out the basic shapes (square, triangle, and circle) involved in architecture. Interventions to the form can be in the form of adding, deduction, or by combining the two for more comprehensive forms. In this case, it is known that in addition to the visual effects of the geometry used in the effect, the arrangement style and organization will also have a visual effect (Onat, 1991, p. 4).

● **Spatial Order-Syntax Construct:** Space is defined as a formal phenomenon related to the whole of architecture. Being able to perceive the space is seen as the easiest way to grasp and understand the structure (Gür, 1996; Demirkaya, 1999, p. 8). The fiction method designed to provide alternative responses to user needs, to differentiate and diversify the spatial organization and to match the content of the actions, provides the sequential space formation (Şahin, 2011, p. 221).

Architectural design includes the organizational process that presents spatial togetherness in an aesthetic, useful and durable way. Spatial experiences make the black box thoughts of the designer visible and help to embody and understand the fluidity of fictional space and shared products/objects. In the organization of space, besides the tools used by the designer, factors that will affect the designer and the process emerge (Dinçer, 2005, p. 37).

● **Circulation:** Circulation areas are an important component of the physical environment and exist semantically, formally and conceptually at every scale from city scale to building scale. Circulation areas connecting different spaces can be seen conceptually as well as physically, such as volume or surface (Ataoğlu, 2009, p. 19). The formation of circulation and the organization of space directly affect each other. Deciding on the shape of the circulation system, especially in buildings with complex functions, in a sense means determining the spatial arrangement of the building (Ching, 2002; İnceoğlu, 2004, p. 35).

● **Focal Space:** Focal points gain a new character with the transformation of the symbolic, formal and practical feature of a limited space into an operational/ behavioral space. Elements and components that differ from the features of the environment and functionally central spaces are considered as focal points. The quality, quantity and diversity of the activities offered affect the intensity of use positively/negatively and cause the spatial patterns to differ (Şahin, 2011, p. 120).

● **Spatial Closure:** The fact that the space has the effect of closure makes the space easy to read and brings with it the effects of siege that surrounds and encompasses people. Determination is a basic character of every space; being there is considered as a basic type of environmental closure (Çevik, 1991, p. 24). In addition, among the factors that make a place an active and social place, the effect of the closure rate has a high value (Özdoğan, 2002, p. 89).

• **Internal-External Relationship:** Transparent covered interiors, which are a part of a building or building complex with a special function and open to outside users, make a direct contribution to urban life and constitute an important centre of attraction. They have more intensive programs in terms of spaces and functions. The building is sometimes more central and introverted to its urban location and function, sometimes integrating with a street or nature, creating an area of attraction (Ersoy & Süer, 2002, p. 64).

• **Other Qualities:** In the system of relations between action space, space and objects/items as action tools, fulfilling the space of realization in response to the different needs of users ensures that spatial quality is at the forefront (Çevik, 1991, p. 18). Other qualities; physical architecture is important in terms of determining and emphasizing the quality of the space and increasing its quality (Şahin, 2011, p. 66).

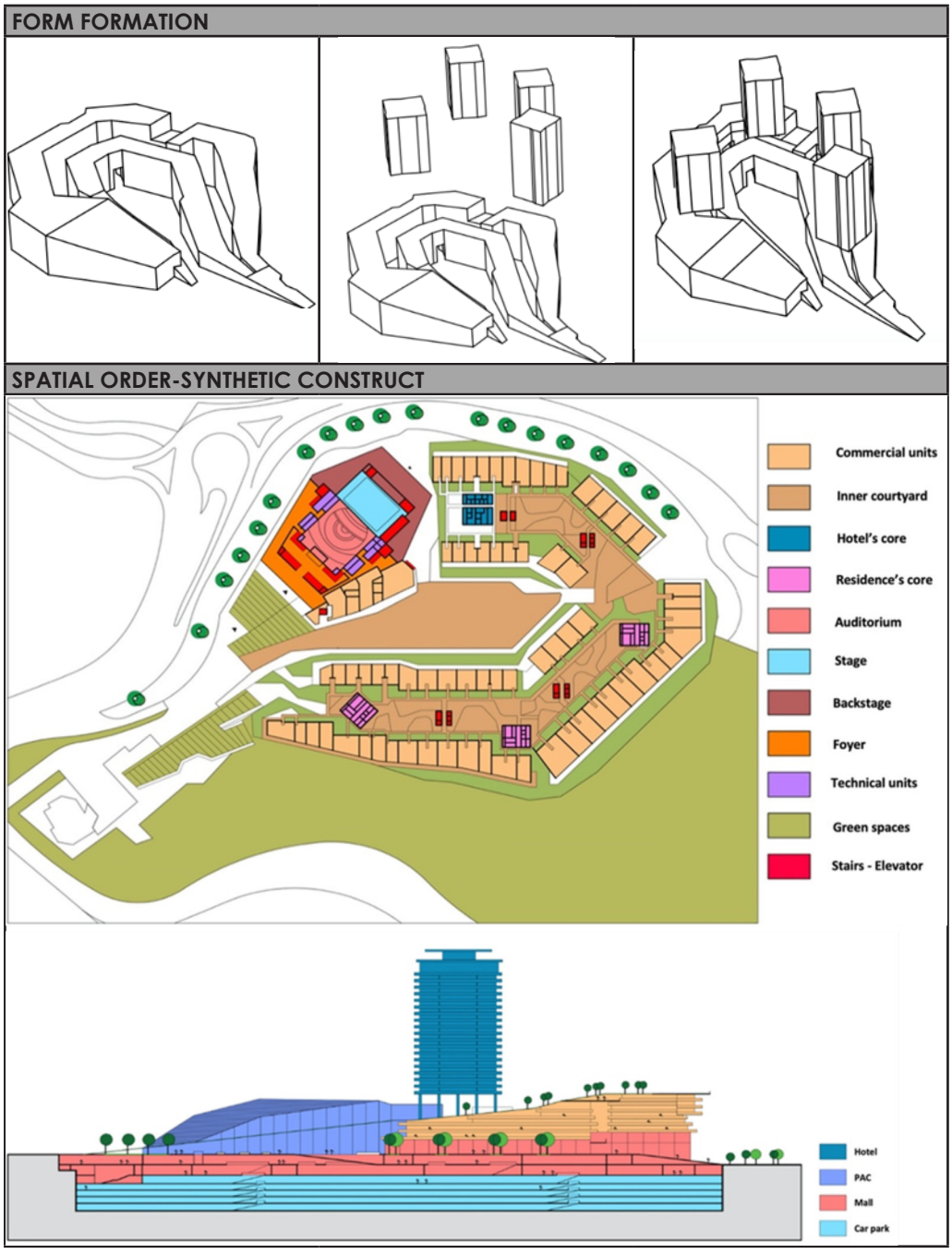
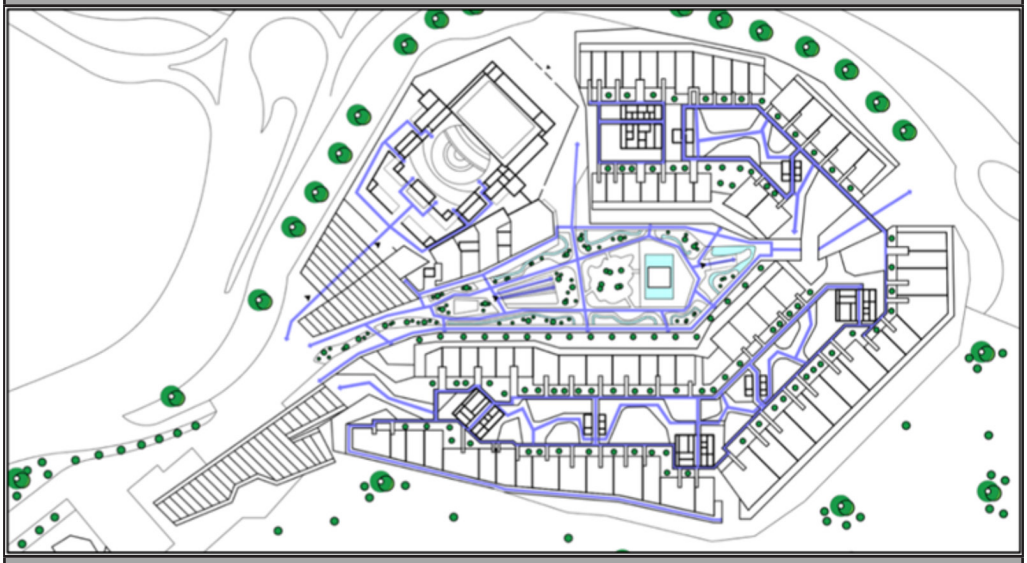
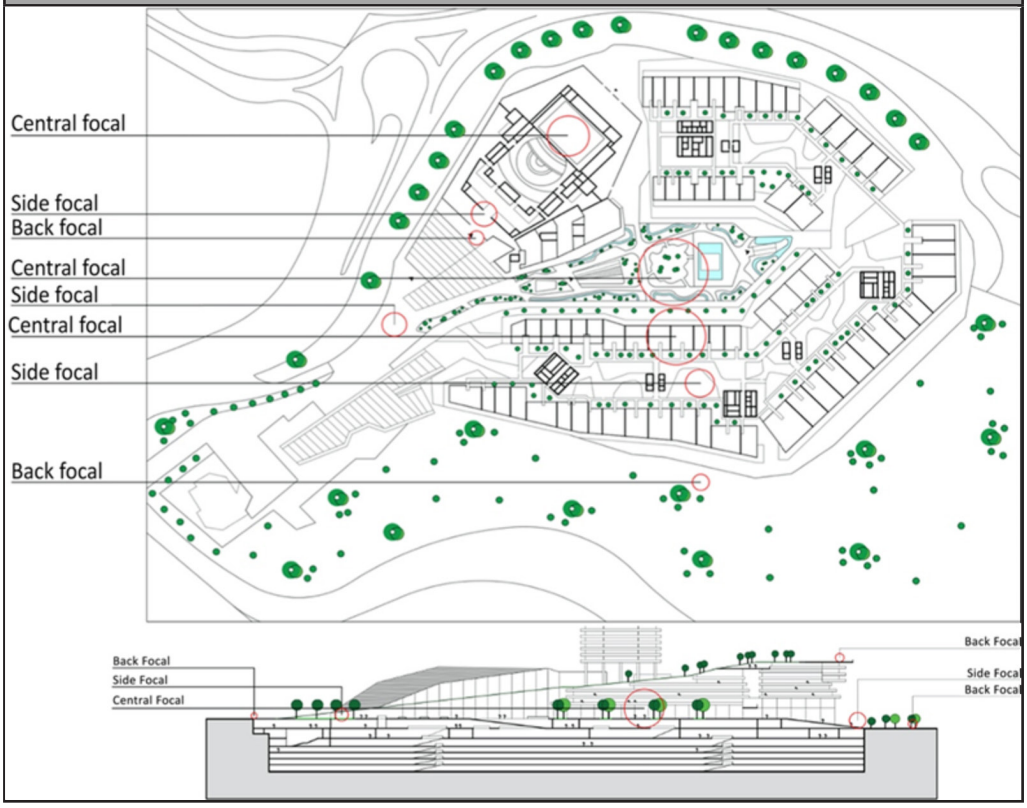


Table 1. Zorlu Center form formation and spatial order - syntactic construct analysis (Diagram/modelling was done by the authors).

Table 2. Zorlu Center circulation and focal space analysis (Diagram/modelling was done by the authors).

CIRCULATION

FOCAL SPACE


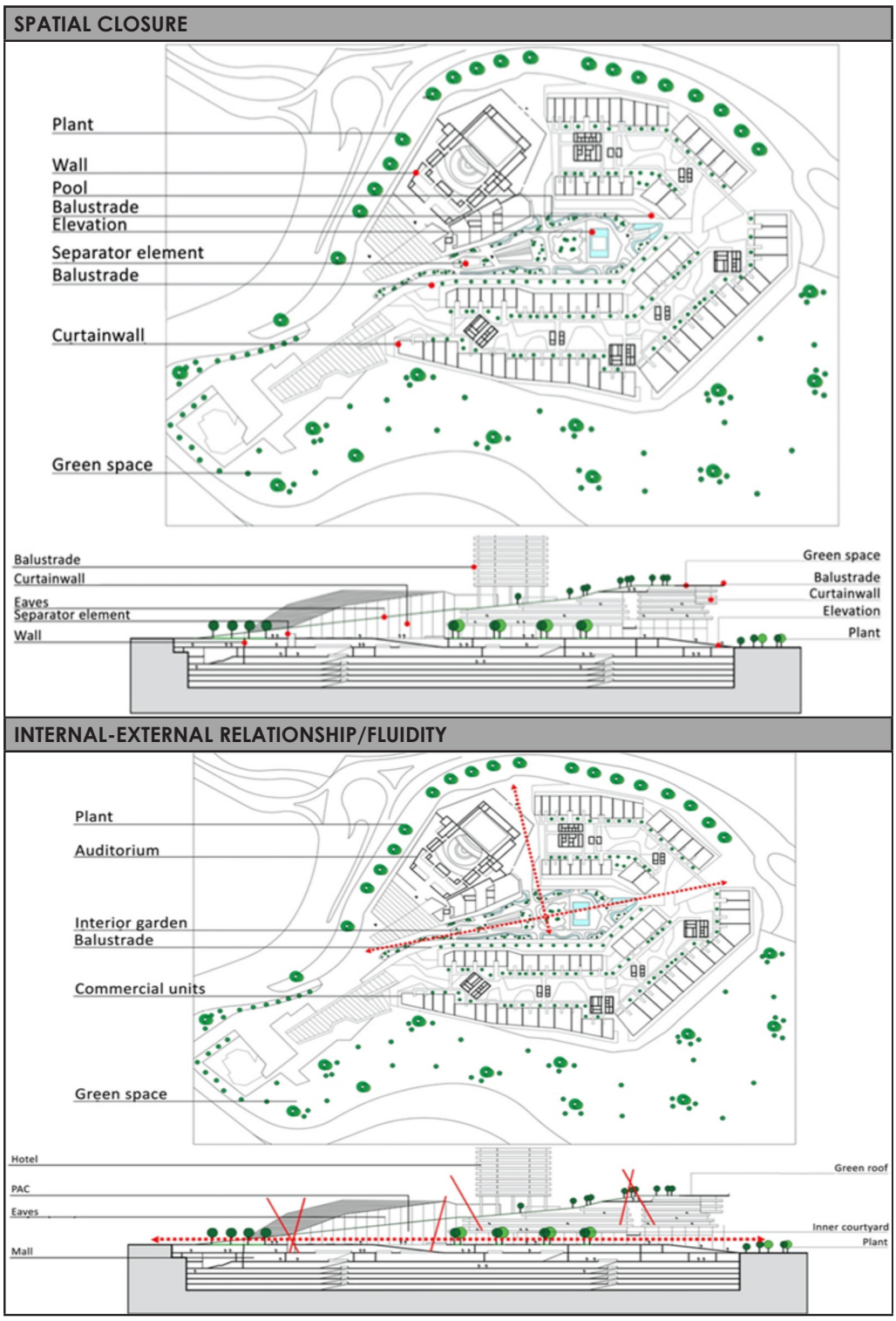
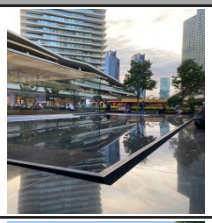
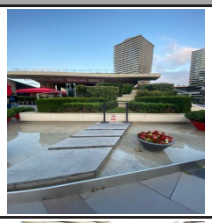
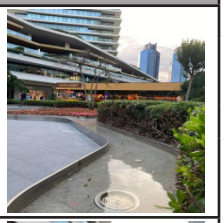


Table 3. Zorlu Center spatial closure and interior-exterior relationship/fluidity analysis (Diagram/modelling done by the authors).

Table 4. Zorlu Center other qualities analysis (Authors Archive, 2021).

OTHER QUALITY					
WATER					
Pool	●				
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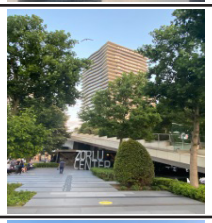
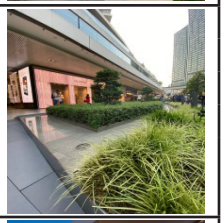
Canal	●				
Natural					
GREENS					
Grass	●				
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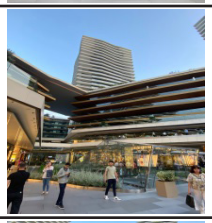
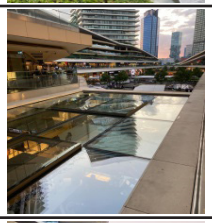
Bush	●				
Tree	●				
LIGHTING					
Natural/Facade	●				
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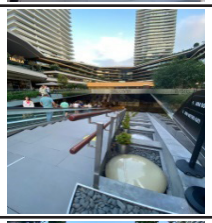
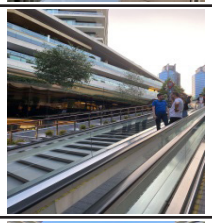
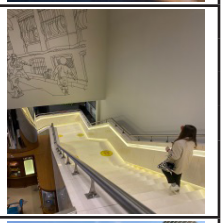
Artificial/direct	●				
Artificial/Indirect	●				
HEİGHT DİFFERENCE					
Ramp	●				
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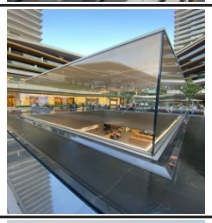
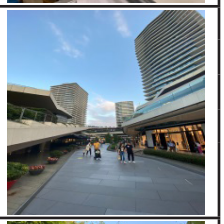
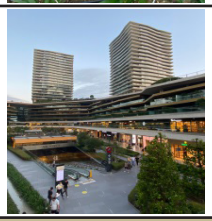
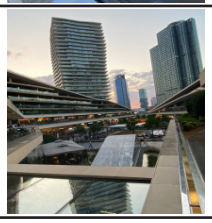
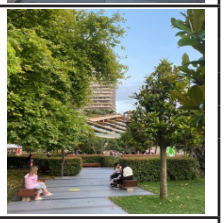
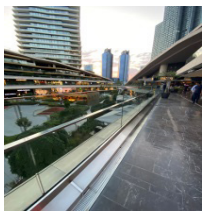
Demotion	●				
Elevation	●				
COLOR					
Primary					
Secondary	●				
Hot					
Cold	●				
TEXTURE					
Natural	●				
Artificial	●				
Hard	●				
Soft	●				
MATERIAL					
Wood	●	Metal	●		
Natural stone	●	Glass	●		
Plastic		Concrete	●		
Plaster	●	Composite	●		

FINDINGS AND EXAMINATIONS

In this study, in which the public space phenomenon of Zorlu Center, designed by Emre Arolat (EAA) and Murat Tabanlıoğlu (TA), is examined, the analysis of the physical architectural formations of the building has been completed and social space examinations have been made. The analyses in the studies were matched with the following headings; factors defining public space, form formation, spatial order, syntactic construction, circulation, focal space, spatial closure, interior-exterior relation/fluidity and other qualities.

● **Form Formation:** Structure emerges by making additions to a free form. The structure emerges by subjecting a free form to additions. The formation of a massive green plinth connected to the ground provides the separation of the 4 towers with different functions, while strengthening the relationship between the part and the whole and the visuality of the building. Horizontal and vertical linear continuity makes the movement between floors sustainable and legibility, while defining the green valley as a static space, which is offered as a common use area. While permeability is supported by different panorama presentations, protection of visual axes, use of topography and carrier system performance, physical accessibility, spatial diversity and architectural qualities directing the structure form the form.

● **Spatial Order:** Since the spaces surround an area and are arranged in a direction, the structure is seen to have a linear organization. While the functional separation provides fluidity in the indoor-outdoor interaction, which guides the spatial setup, specialized masses emerge with the formation of the core. While spatial gradations are arranged as closed, semi-closed, semi-open and open, the action-oriented organization is supported by the cover system and furniture. While temporal and seasonal changes affect architectural objects and green, instead of monotonous/customary spatial organization, design arrangements that contain various surprises/attractive/interesting designs facilitate living/ experienced spatial transformation.

● **Syntaxic construct:** The structure has various functions and is divided into two interconnected main masses. While the first mass serves the performance and art centre, the other mass contains the remaining functions. Entrances to the building area are provided from two opposite entrances, one of which is the main entrance. Both entrances are directly connected to the inner courtyard, which provides dispersion within the building. The performance and arts centre, which is close to the main entrance, first greets the users with the foyer. It then directs them to the hall sections on the ground and upper floors with vertical circulation. Passing through the inner courtyard, there is a transition to the shopping centre located on the lower floors of the building, and to the hotel and residence towers that provide entrance from the ground floor. There is a multi-storey parking garage under the building.

● **Circulation:** In this building, pedestrian circulation starts from the entrances and spreads to the inner courtyard surrounded by the building. After the inner courtyard, the circulation line extends to all spaces and units such as the hotel, residence and shopping centre by dispersing through the doors in all directions besides the performance and art centre. The presence of vertical circulation elements in various parts of the building provides convenience for users to reach different places.

● **Focal Space:** Various spaces such as the stage of the performance hall, sales units, hotel rooms and the inner courtyard, which provide the main functions of the building, are perceived as central focal space. While the foyer area of Performance Art Center, the entrance area of the inner courtyard and the social areas of the floors are the side focus spaces, the entrance areas of the building and the park are the back focus spaces.

● **Interior - Exterior Relationship/Fluidity:** Interior - exterior space connections are visually provided by glass curtain walls. The elements that completely separate the interior from the exterior are the roof, eaves and walls. The fact that the building is open to pedestrians from one side to the opposite side without

interruption provides an important fluidity feature for the user. The visual fluidity feature is achieved with glass curtain walls and terraces on the upper floors.

● **Other Qualities:** There are many ornamental pools as water elements. Green areas are in the form of grass, bushes and trees in the interior and exterior of the building. The lighting of the building is naturally provided by the glass-surfaced façades. Artificial lighting is provided directly and indirectly. As elevation differences, the elevation is in the form of stairs and ramps indoors and outdoors. While predominantly (Primary/cold) black, white and (Secondary/cold) gray colours come to the fore in the structure, diversity is increased by choosing brown (Secondary/warm) and red (Primary/warm) in some materials such as wood. While green elements are used as natural soft texture in the building, hard textures are formed with material, elevation and structure repetitions. Mainly metal is used as material, glass in façades and balustrades, wood and composite materials are used in furnishings and ceilings.

Zorlu Center's creation of an intermediate transition zone to the city, the existence of data that will transform the traces between the past and the future into urban life, adopts the idea of developing a sustainable design. Starting from the relationship of the proposed public space pattern with the city to the building physics comfort conditions required by the new functions, it has been analysed through on-site observations/detections made at different scales and the following findings have been reached:

- Environmental compatibility
- Sample/quality editing guidelines
- Shaking the image
- Architectural permeability
- Quality living/living space setup
- Urban texture continuity and urban meeting/focus
- Urban courtyard/square/center identity
- Contribution to the functions, vision and city of the building
- Identification with the place
- An urban benchmark
- A building/space that can be defined as a landmark/symbol/sign
- A change/transformation that will thematically balance different spaces

When the pedestrian transportation possibilities and vehicle approach routes are examined, it is seen that the main transportation point of the land is arranged parallel to the E-5 highway and Büyükdere Street Road in Istanbul Zincirlikuyu. At the main entrance of the complex, it is aimed to transform the courtyard/square/centre, which includes the large public space, into a kind of sign/symbol that will enable it to be noticed by the commercial axis and performance art area, as well as from the immediate surroundings. The façade orientations with horizontal spaces, which transform the mass movements of the blocks on the shell into the identity of special structures, are supported by separate entrances.

The landscaping of the campus is continued under and above the shell, and the meeting of the pedestrian artery/street with the Bosphorus is presented in visual richness. The architectural shell, designed with the influence of general

architectural tendencies, turns into an intermediate layer for this mixed-functional complex. Right in front of the pedestrian entrance, which is arranged in different directions, there is a city balcony overlooking the sea, which does not show a gradual but parallel rise and opens outwards. It is considered as a thematic approach that the shell emphasizes qualified transformations instead of divisive contradictions. However, at some points, it is foreseen to benefit from a reverse working situation, in other words, to evaluate the potential of the shell. In this context, functions that cannot be integrated with a real public are equipped with vertical circulation units that bypass the shell and are raised above it. The four blocks, which establish a kind of piloti relationship with the shell, or rather aim to break away from the shell with the pilotis, are divided into office, hotel and residence functions. Lowering the level on the linear line with the entrance and courtyard increases the perceptual quality of the performing arts centre by providing linear continuity. In these areas, which create their own microclimate, without the need for any air conditioning, the experience of a tree-filled, airy and outside light is offered.

At Zorlu Center, attracting users to the public space and increasing the possibility of spending more time are made through the change of alternative functions (programs/functionality). By creating living spaces, it is seen that the urban public space is functionalised in accordance with the human life in the region and the purpose of the building. The variety and attractiveness, change (adventure, surprise, excitement), possibilities (relaxing, getting rid of daily troubles) offered in the courtyard/square/centre show the desired and desired usage space applications. Being the scene of social events and actions in connection with social identity in common areas; In addition to this, people come together regarding the power-space relationship. The qualities of being democratic, freedom of action, being demanded, developing talents, protection/security, being meaningful in the formation of social space transform the urban focus into interaction/communication space.

Since the Zorlu Center project is a mixed-use structure that can be used by everyone and responds to different needs, it transforms into a destination that creates living new public spaces rather than the system setup that offers introverted simulation of our age. Generally; the fact that it is sustainable at the human scale, with its mass distribution and recreation areas in different layers, and the balancing of flexible indoor and outdoor public spaces show that the building can also be used as a socialization tool apart from its functions. The importance of supporting each other in the physical architectural and social-social space qualities in the part-whole relationship of a complex that is compatible with its main functions and that the building can be an alternative focal/meeting point in the city comes to the fore.

CONCLUSION

Mixed-use buildings support the thematic design setup with the alternative units and spaces they contain. These structures, which have or do not have an architectural concept depending on the location in macro and micro design scales, show a gradation at the point of integration into the city. Accordingly, the spatial qualities considered during the design phase shape the architectural structure of mixed-use buildings and enable the transformation of physical spaces into social and social spaces. Instead of looking at the Zorlu Center mixed-use building complex project from the perspective of constructing well-designed beautiful structures in the environment/ground; it comes to the forefront that it is the product of an idea/thought that prefers to use it to produce an opinion about people, the city and nature, and to develop an idea for establishing space.

Accepting the courtyard/square/centre, which is one of the important parts of the project in common use, between the shopping mall, the performing arts centre and the green roof as the only public space of the age, emerges as an orientation that offers architectural permeability in this design, contrary to general current trends. In this context, it strengthens the concept of an open-top meeting centre by presenting a new typology for Istanbul while completely solving all the requested functions. Zorlu Center's mega-structure design distinguishes it from other mixed-building examples in that it gains textural continuity, symbolic value and identity in the urban context, and supports the user-oriented spatial search, without making any distinction between interior and exterior spaces, with unusual alternatives. It is understood that the main goal of the design is to create an alternative place that includes the potentials of outward expansions, urban balconies that integrate with the sea, and green spaces that work like lungs in the dense texture of the city. It can easily be argued that the public space fiction nature of this project constitutes the backbone of the design decisions.

Mixed Building Design, which includes Zorlu Center, residence, office, shopping enter, hotel, performing arts centre and recreation areas, reinterprets the concept of creating public spaces open to everyone inside/outside a shell, according to the changing needs depending on time. With its sustainable architectural formation, it carries the urban continuity into the building with the spatial qualities it offers beyond the urban wall/border quality, and prepares the ground for the indoor/outdoor space to be transformed into a public space physically, functionally and socially.

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Conflict of Interest

No conflict of interest was declared by the authors.

Authors' Contributions

The authors contributed equally to the study.

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Ethics committee approval was not required for this article.

Legal Public/Private Permissions

In this research, the necessary permissions were obtained from the relevant participants (individuals, institutions, and organizations) during the survey and in-depth interviews

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