İleri Teknoloji Bilimleri Dergisi

Journal of Advanced Technology Sciences

ISSN:2147-345

MODERN KENT MOBİLYASI TASARIMI VE KENTSEL MEKAN KALİTESİ

Barış KARA¹

¹ Adnan Menderes Üniversitesi, Ziraat Fakültesi, Peyzaj Mimarlığı Bölümü, Güney Kampüsü 09970, Çakmar/Aydın, TÜRKİYE bkara@adu.edu.tr

Özet-Kentler bizim oturma odalarımızdır. Günümüzde okul, iş, alışveriş ve rekreasyon gibi farklı amaçlar için çocuk oyun alanı, spor alanı, sokak, yaya bölgesi, meydan ve park vb. kentsel mekanlarda zamanımızın büyük bölümünü geçirmekteyiz. Bu kentsel mekanlarda otobüs durakları, bisiklet parkları, banklar, piknik masaları, aydınlatma elemanları, çöp kutuları, bitki kapları, çeşmeler, babalar/bariyerler, çitler ve ağaç korumaları vb. kent mobilyalarını kullanırız. Kent mobilyalarının sağlam ve kullanışlı olması yanı sıra estetik olması da çok önemlidir. Kent mobilyalarının estetik olmasında özgün ve modern tasarım ürünü olması önemli bir etkendir. Estetik özellikleri, özgün ve modern tasarımları ile kent mobilyaları kentlinin estetik görüşünün, kentsel mekanların da kalitesinin artmasına katkıda bulunmaktadır.

Makalede kent mobilyaları estetik ve tasarım açısından incelenecektir. Modern kent mobilyaları örnekleri verilecektir.

Anahtar Kelimeler- Modern kent mobilyası, kent mobilyası tasarımı, estetik, kentsel mekan kalitesi, rekreasyon

MODERN URBAN FURNİTURE DESİGN AND URBAN SPACE QUALİTY

Abstract-Cities are our living rooms. For different purposes (such as school, work, shopping and rcreation), today we spend most of our time in urban spaces such as playground, sport area, street, pedestrian area, square, park etc. We use urban furnitures (such as bus shelters, bicycle stands, seatings, picnic tables, lighting, litter bins, planters, drinking fountains, bollards/barriers, railings and tree protections) in these urban spaces. Besides being firm and useful, the aesthetics of urban furniture is very important. Being a product of original and modern design is a significant factor in aesthetics of an urban furniture. Urban furnitures with aesthetic features, original and modern designs contribute to improve urban dwellers' aesthetic view and urban quality.

In this paper, urban furnitures will be examined in the aspect of aesthetics and design. Examples of modern urban furnitures will be given.

Key Words- Modern urban furniture, urban furniture design, aesthetics, urban space quality, recreation

Bu makale, 4. Uluslararası Mobilya ve Dekorasyon Kongresi'nde sunulmuş ve İleri Teknoloji Bilimleri Dergisi'nde yayınlanmak üzere seçilmiştir.

1. INTRODUCTION (GİRİŞ)

Urban design is a comprehensive and integrated approach to the design and development of urban public spaces. Urban design is also defined as the art of organizing and joining the elements in the built environment to shape the interaction between people and their environment and create environments that represent their values. Urban design includes architecture, urban planning and landscape architecture disciplines [1]. Urban design affects the processes that ensure the formation of successful communities [2].

Urban spaces are the places where people's current and social lives take place [3]. Urban spaces enable us to relax and affect our quality of life and physical and psychological well-being [4-5]. The fact that users get the experience of becoming a city-dweller as a result of cultural identities, personal developments and interactions with each other occurs in these spaces [6]. The identification of the city, in other words, the image formation of that city takes place in urban spaces.

Quality is the total features that allow meeting the needs [7]. In architecture, quality is defined as a concept that depends on the satisfaction of the needs of users [6]. Spatial quality is noticeable, remarkable differences in the design [8].

Design-related space quality contains four principles: function, order, identity and appeal/attraction [9]. It is stated that a high-quality environment brings the feelings of welfare and happiness to the population with the features that may be physical, social or symbolic [10-11].

Street furniture or urban furniture includes various objects such as benches, picnic tables, shading elements, street lamps, waste containers, tree grids/protectors, plant pots, bollards, post boxes, advertising boards, direction (information) signs, fences, fountains, bicycle parks, telephone booths and bus stops that are placed in urban spaces such as street, road, park, children's playground and square, etc. for various purposes [1-12-13-14-15].

Street furniture plays various roles in a city. Urban furniture improves the visual quality of urban areas (makes an aesthetic contribution) by creating high-quality spaces and also has various functions such as providing an opportunity to exercise and play, making spaces more secure, comfortable, more attractive, encouraging their use and making them more enjoyable, creating identity in urban spaces, developing the sense of space and the quality of space, gaining space vitality, creating a mental image and an urban sign, transferring valuable messages/informing, culture and history transfer/education in the community, ensuring that citizens are involved in more interaction, ensuring that citizens are involved in more interaction, and reducing vandalism [16-1-5-15-17-18-14-19].

Attractive and functional urban furniture helps urban spaces become an extension of living spaces. It also transforms urban spaces into public spaces that encourage the formation of a friendly environment and a successful and well-intentioned society. Street furniture is a complementary element of street design or public spaces [20].

The urban environment is a difficult environment. Street furniture can easily be damaged and worn down. Repair and renovation costs arise. Damage to street furniture is mostly due to vandalism as well as weather conditions. It is compulsory to identify appropriate materials to ensure that street furniture can withstand bad conditions of use every day. The selection of the

right material in the production of street furniture extends the life of street furniture and reduces the need for expensive repairs or renewals.

Modern materials and production techniques mean providing a high resistance without sacrificing aesthetic appearance. Engineering products, polyurethane, wood, concrete, stainless steel, natural stone and plastic are the main materials that are widely used in the production of urban furniture [21-17-18]. Maintenance friendly, known and environmentally friendly materials can be used [17].

Street furniture is also a public art form. Public art projects also provide significant opportunities to involve the local community, to offer job opportunities for artists, to contribute to the city's artistic tradition, and to strengthen the city's attraction as a unique tourist attraction center [22].

Research and development studies are carried out by different manufacturers to ensure continuous innovation in furniture design for public spaces. The companies producing urban furniture employ multidisciplinary teams consisting of qualified architects, industrial designers, engineers and production specialists to achieve this purpose [23].

Street furniture should be included in the design of a public space to develop different purposes. Designers should fully comprehend the design that brings together the furniture elements used for these purposes. In this way, designers can be creative in shaping the spaces and achieve their goals in the long term. The factors to be considered by designers in the design of street furniture are as follows: [17-22-14].

- How to effectively serve the purpose of being in need of an element (meeting the needs of different groups such as children, elderly people and people with disabilities),
- To decide on the placement of elements in appropriate places,
- To check whether there is a connection between the designs of different elements,
- Resistance to vandalism, weather conditions and deterioration.

Nature has always been a source of inspiration for people. The "imitation of nature" has been a popular theme in almost every kind of art, social and science fields for centuries. Biomimicry is taking the models from nature or the imitation of nature. Nowadays, numerous disciplines such as architecture, sculpture, painting, interior architecture and industrial design and landscape architecture also benefit from biomimicry. In the context of biomimicry, furniture designs have been inspired by the shapes and structures in nature. Biomimicry, as a design method, gives us the chance to use the system, technique, colour, harmony, ratio, etc. that nature has offered to us in our designs [24].

Leading designers and manufacturers influencing the street furniture industry in Europe produce modern design collections consisting of seating units, benches, waste containers, lighting elements and tree protections. Landscape architects who want a modern concept use these products in their projects [25].

Modern street furniture is a nice solution that is compatible with the requirements of the modern street design. Modern design award-winning street furniture provides quality in our cities, promotes and facilitates the public pleasure [20-23].

In the article, the examples of modern city furniture designs from the world were examined, and their features and importance and effects on the quality of urban space were revealed.

2. METHOD (YÖNTEM)

The written/visual printed and internet-based literature on urban space, urban furniture and space quality constituted the research material. The resources on modern urban furniture in different countries of the world were examined in the study. Among the modern urban furniture examined, 19 modern pieces of urban furniture were evaluated in terms of their design criteria, features and effects on space quality.

3. FINDINGS (BULGULAR)

In the study, the following 19 modern pieces of urban furniture were examined [16-26].

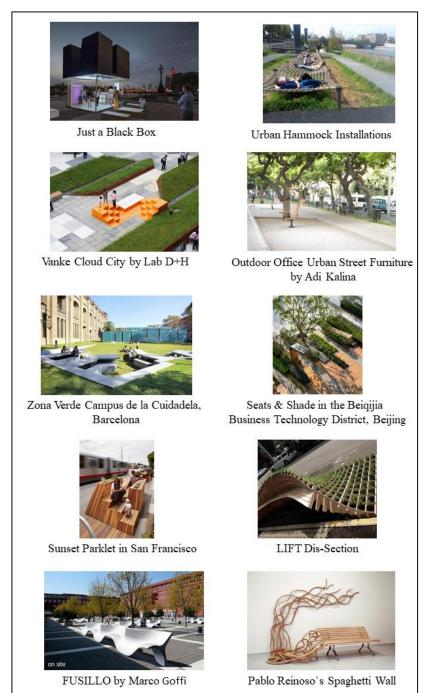


Figure 1. Modern kent mobilyaları örnekleri (Examples of modern urban furniture)

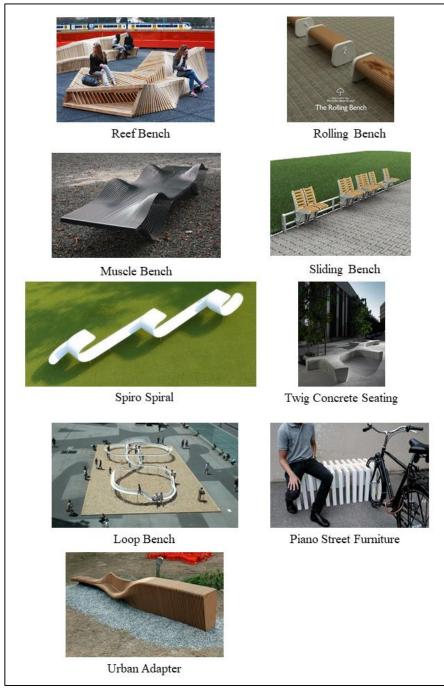


Figure 1. Modern kent mobilyaları örnekleri (Examples of modern urban furnitures) (Continued)

Just a Black Box: Furniture Transforms Into a Kiosk: A cube named "Just a Black Box" with a semi-private seating unit feature designed by Max Boano and Jonas Prismontas transforms into a kiosk that provides commercial or public service at nights or when requested. The box is transformed into a replaceable space that can be used for sale, cafe, bicycle repair shop, ticket sales outlet or mini theatre purposes by raising itself on hidden hydraulic columns.

Urban Hammock Installations: A comfortable hammock for a short sleep was introduced into urban spaces as urban furniture in different forms by The Chartered Institute of Housing. The hammocks in vivid blue are placed on the walking trail along the Paprocany lake in Poland. These hammocks were redesigned to hang from Copenhagen fire pipes.

Vanke Cloud City by Lab D+H: Vanke Cloud City is a mixed-use development project in Guangzhou, China. The project includes a group of proud creative public seating spaces designed by Lab D+H. The cloud line is an ongoing steel tubular structure containing benches, sag bars, parallel bars and other uses. The Cloud Seat is a series of interactive modular spaces made of perforated steel plates. The seating units are stacked vertically.

Outdoor Office Urban Street Furniture by Adi Kalina: If we were able to reach urban furniture similar to the creative urban furniture designed by Adi Kalina, most of us would leave our working places and work in the clean air. The Outdoor Office is an ergonomic wooden chair with a long backboard, and this backboard extends and transforms into sunshade. It revolves around its own center. Thus, the sun is prevented from coming on your face at all hours of the day.

Zona Verde Campus de la Ciudadela, Barcelona: The tables and benches were placed on the grass area outside the school in Barcelona and have become a part of the landscape. The new gathering area separates the two green terraces where there are benches that can serve the groups of different sizes.

Seats & Shade in the Beiqijia Business Technology District, Beijing: The small benches that can only be seated by two people are integrated with the wooden pavement. It is located in Beijing's Beigijia Business District. The benches rising upwards are then curled.

Sunset Parklet in San Francisco: It is located just outside a shop and cafe in San Francisco. Sunset Parklet was designed by INTERSTICE Architects. This space was built in place of 3-4 parking lots. In this way, the parking lots have been transformed into a useful space for passersby and cafe customers. In this area, there are seating units, tables, plant pots, dog-tying places and bicycle stands at different levels.

LIFT Dis-Section: There is a bench on the side facing the pavement of the urban plant pot in the form of a wooden net. Lift Dis-Section is a modular seating unit that aims to bring nature to the ineffectiveness of urban sprawl in addition to serving as a recreation area.

FUSILLO by Marco Goffi: The wave-shaped social seating unit, called Fusillo, makes it easier for users to talk by sitting on either side of it. Designer Marco Goffi says "Interaction occurs when all people sit comfortably in their own space, and the relationship is encouraged". This is the aim of Fusillo created by Marco Golf. The form is created by simultaneous rotation and movement of a triangular star. Numerous seating units are defined by the continuous movement of the skin of the living species.

Pablo Reinoso's Spaghetti Wall: This is a bench made of Portuguese chestnut, wood and iron. Pablo Reinoso's Spaghetti Wall bench has brought a new concept to the classic design. The complex edge of the bench means bringing an artistic approach to the known design and adding the sense of sustainability to modern landscaping.

Reef Bench: This magnificent bench of Dutch designers Remy & Veenhuizen was created in a high school in Zoetermeer, Netherlands. Students should be able to play with the environment in order to relax and enjoy creativity. Natural elements to escape the modern, static impression of the high school building were used in this wonderful bench.

Rolling Bench: Since benches get wet after the rain, they are not used for a length of time. The rolling bench is a bench with the possibility to turn the dry side with one arm even if it gets wet in the rain.

Muscle Bench: The Muscle bench by Alexandre Moronnoz reinforces the idea that large outdoors can also be modern relaxing places. The bench has an interesting design and curved lines. This bench, which is located in a modern environment, provides an opportunity to sit and lie. The Steel Muscle bench filters the sunlight and adds a different dimension to its dazzling visual effect.

Sliding Bench: When you want to be alone, the location of the bench can be changed by sliding. This bench, designed by Mutlu Kılınçer, offers the option of freedom. With its modern sliding appearance, this bench takes the action of sitting to a separate dimension in parks.

Spiro Spiral: This nice bench was designed by Zoran Sunjic. The bench located in modern urban seating areas circles around itself and looks like a moving hair braid. The design allows Zoran to play with the form and create different variations.

Twig Concrete Seating: The branch-shaped concrete seating unit, which is suitable for a very modern area, is used as a recreational area by people travelling in the city. The design resembles the shape of a branch. However, concrete is masking the idea of environmentally friendly. The branch is a perfect touch on a modern urban area. This bench system invites you to relax and is fascinating with its rounded corners and modular design.

Loop Bench: This urban furniture in the form of a partial art form, partial bench and partial slide was created by Jeppe Hein. It ensures communication by allowing people to approach it. In particular, entertainment and relaxation are in harmony with each other in such a design that attracts different generations.

Piano Street Furniture: This urban furniture produced by ADDI occupies little space and has an aesthetic appearance. It is both a bench and a bicycle parking element in half shares. This bench is suitable for every city in a period during which demand for ecological transport increases.

Urban Adapter: Rocker Lange Architects prepared this proposal for urban furniture seating areas. The Urban adapter made for Hong Kong streets aims to make a city brand with its unique shape. The designers have combined different concepts in this beautiful bench and have created a resting area and a visual jewel.

4. CONCULUSION AND DISCUSSION (SONUÇ VE TARTIŞMA)

It is a known fact that the quality public space in cities and towns has always had a positive influence on the comfort and happiness of residents and visitors. Street furniture is considered to be a very necessary element in creating safe, useful and attractive spaces [17]. Street furniture has a great influence on people who use parks, city squares and parking lots [20]. A good seating unit is a place where a person can observe, speak or think to discover the world.

Detail is complementary in product design, which is infinite. Design affects the life of the product. Urban furniture should be designed to be safe, ergonomic, functional, requiring low maintenance, resistant to vandal acts and easy to replace its damaged parts [23].

It is important that street furniture is resistant to the difficulties of daily urban use. Therefore, appropriate materials should be identified to extend the life of street furniture, and this reduces the need for expensive renovation. Street furniture should be designed and produced for public and private spaces with high-quality materials and modern designs. High-level user satisfaction should be ensured with great attention to details and endurance [17].

5. REFERENCES (KAYNAKLAR)

- [1]. Gouvea, L., and Mont' Alvao, C., (2013). Observing the Urban Space: A Protocol to Analyse Street Furniture in Public Squares, Proceedings of the Human Factors and Ergoomics Society, 57th Annual Meeting, 555-559
- [2]. Co-ordinated Street Furniture Urban Design Guidelines, (2009). The Regional Municipality of York, Ontario, Canada.
- [3]. Sabouri, M., Samie Yousefi, M., and Samie Yousefi, F., (2015). Role of urban sculptures in beautification and improvement of quality of urban spaces (case study: Fuman County), Cumhuriyet Üniversitesi Fen Fakültesi Fen Bilimleri Dergisi, 36(3), Ozel Sayı, ISSN: 1300-1949
- [4]. Abbasi, A., Alalouch, C., and Bramley, G., (2016). Open Space Quality in Deprived Urban Areas: User Perspective and Use Pattern, Urban Planning and Architecture Design for Sustainable Development UPADSD 14- 16 October 2015, Procedia - Social and Behavioral Sciences 216,194-205
- [5]. LMG Lucid Mgmt Group, Street Furniture Maufecturers, http://www.lucidmanagementgroup.com/street-furniture-manufacturers (accessed September15, 2017).
- [6]. İnceoğlu, M., and Aytuğ, A., (2009). Kentsel mekânda kalite kavramı (The concept of urban space quality), MEGARON;4(3), 131-146
- [7]. Burt, M. E., (1978). A Survey of Quality and Value in Building, Building Research Establishment, Watford, UK.
- [8]. Rapoport, A., (1982). The meaning of the built environment: A nonverbal communication. Beverly Hills, CA: Sage Publications.
- [9]. Greene, S., (1992). Cityshape: Communicating and evaluating community design, American Planning Association. Journal of the American Planning Association; Spring 1992; 58, 2; Academic Research Library, 177-189.
- [10]. Lansing, J. B., and Marans, R. W., (1969). Evaluation of neighborhood quality. Journal of the American Institute of Planners, 35(3), 195–199.
- [11]. Pacione, M., (2003). Urban environmental quality and human wellbeing—a social geographical perspective. Landscape and Urban Planning 65(1–2), 19–30.
- [12]. Furnitubes, Design & Innovation Since 1946, Designers and Manufacturers of Street Furniture, http://www.furnitubes.com/ (accessed September15, 2017).
- [13]. Van Uffelen, C., (2010). Street Furniture, Braun Pulishing, Lodo, UK, ISBN 978-3-03768-043-8
- [14]. Mourthe,C. R., and Bezerra de Menezes, J., (2000). Ergonomics Methodology for Comparative Study of Street Furniture in Different Cities, Proceedings of the Human Factors and Ergonomics Society Annual Meeting, 44(8), 28-31

[15]. City of Hamilton Co-Ordinated Street Furniture Guidelines, Final, (2015). MMM Group Limited

[16]. weburbanist, Architecture, Art, Design & Built Environments, The City Is Your Living Room: 15 Modern Street Furniture Designs, http://weburbanist.com/2016/08/31/the-city-isyour-living-room-15-modern-street-furniture-designs/ (accessed September12, 2017).

- [17]. Best Street Furniture, Contemporary Street Furniture Design for Public and Private Spaces, Commercial Street Furniture, https://factoryfurnitureblog.wordpress.com/ (accessed September10, 2017).
- [18]. Yücel, G. F., (2013). Street furniture and amenities: designing the user-oriented urban landscape, InTech, 623-644.
- [19]. City of Ottawa Integrated Street Furniture Policy and Design Guidelines, (2009). Remillward Associates Ltd. http://ottawa.ca/calendar/ottawa/citycouncil/trc/2009/08-26/ISFP%20Design%20Guidelines%20Final%20Draft.pdf (accessed September 10, 2017).
- [20]. Street Furniture from Bailey Street Scene, (2017). (http://www.baileystreetscene.co.uk/) (accessed September 11, 2017).
- [21]. architectsdatafile (adf), (2014). Street Furniture: Material Choices for the Modern Urban Environment, http://www.architectsdatafile.co.uk/news/street-furniture-material-choices-for-the-modern-urban-environment/ (accessed September 11, 2017).
- [22]. Brighton & Hove City Council, (2010).Street Design Guidelines, First Edition, http://www.brighton-hove.gov.uk/sites/brightonhove.gov.uk/files/downloads/transport/Streetscape_Design_Guidelines.pdf (accessed September 10, 2017).
- [23]. Street Furniture, (2017). A Sense of Place http://streetfurniture.com/au/design-philosophy/a-sense-of-place/ (accessed September 10, 2017).
- [24]. Tavsan, F., and Sonmez, E., (2015). Biomimicry in Furniture Design, 7th World Conference on Educational Sciences, (WCES-2015), 05-07 February 2015, Athens, Greece
- [25]. Pulic Spaces, (2017). Public Spaces as a Designer, Manufacture and Distributor Brings Contemporary Street Furniture to the British and Irish Marketplace, http://www.publicspaces.eu/ (accessed September 09, 2017).
- [26]. Freshhome, (2010). 15 Urban Furniture Designs You Wish Were on Your Street, //freshome.com/2010/10/04/15-urban-furniture-designs-you-wish-were-on-your-street/ (accessed September 09, 2017).