



Adana Yüreğir Kıyı Park Tasarımı ve Kentsel Rekreasyon Planlamasındaki Rolü

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Öz

Kentsel planlama açısından günümüzün en önemli sorunu; hızla artan yapılaşma ile birlikte kentsel yeşil alanların hızla azalmasıdır. Kent planlamasında kentsel yeşil alan sistemleri kentte yaşayan insanların rekreatif faaliyetlerinin karşılanmasında önemli rol üstlenir. Kentsel yeşil alan sistemi içerisinde de kent parkları; estetik görünüşler sağlamak, gürültüyü azaltmak, havayı temizlemek, mikroklima oluşturmak ve kirliliği azaltmak gibi faydaların yanında ayrıca kentsel yeşil alan sistemindeki kopuk biotopların birleşmesine, yeşil koridor hatlarının nüvelenmesine ve kentteki yaban hayatının sürdürülebilirliğine katkı sağlamaktadır. Bu çalışmada; Adana ilinin Yüreğir ilçesi sınırları içinde kalan ve Yüreğir Belediyesi tarafından kentsel yeşil alan olarak ayrılan alanda “Adana Yüreğir Kıyı Park Projesi” olarak isimlendirilen çevre tasarımı projesi hazırlanmış ve bu projenin Adana'nın kentsel yeşil alan sistemi içerisindeki fonksiyonu değerlendirilmiştir. Değerlendirmelerde aktivite, fonksiyonlar, kullanılan malzemeler, estetik tasarım ilkeleri, konfor, imaj, güvenlik ve bakım gibi kriterlere dikkat edilmiştir.

Anahtar kelimeler: Çevre tasarımı, kıyı parkı, dijital çizim teknikleri, Yüreğir/Adana.

The Design of the Adana Yüreğir Coastal Park and its Role in the Planning of Urban Recreation Areas

Abstract

Today's most important problem in terms of urban planning is rapidly diminishing urban green areas due to rapidly increasing housing. In urban planning, urban green space systems play an important role in meeting the recreational needs of people living in the city. Thus, within the urban green space system, urban parks contribute to the unification of disconnected biotopes in the urban green space system, the development of green corridor lines, and the sustainability of wildlife in the city as well as its benefits such as providing an aesthetic look, reducing noise, cleaning air, creating a microclimate, and reducing the pollution. In this study, “Adana Coastal Park Project” has been prepared for an urban green area in Yüreğir, Adana, which was reserved by Yüreğir Municipality and its function in Adana's urban green space system has been evaluated. In the evaluations, criteria such as activity, functions, materials used, aesthetic design principles, comfort, image, security, and maintenance have been taken into consideration.

Key words: Environmental Design, Coastal Park, Digital Drawing Techniques, Yüreğir/Adana.

1 Introduction

People living in urban areas need to move away from the disruptive ecosystem of the city and have recreational activities such as resting, having fun, and enjoying themselves in natural or semi-natural environments. Social, cognitive, and cultural spaces and facilities within the city are needed to meet these recreational needs consistently and sufficiently. These spaces are planned as active green areas in urban planning. The most important active green area in a city is the city parks. In general, city parks are green spaces that give a chance to urban people to get away from the tiresome noise and complexity of the city and commune with nature, to rest, and to have fun. Although urban green spaces that are subject to different designs differ in terms of size, function, and accessory elements, they show the same characteristics in terms of providing services to those living in the city, which is the ultimate goal (Tarakcı Eren, 2019).

Urban parks have many benefits such as providing aesthetic looks, reducing noises, cleaning the air, creating a microclimate, and reducing pollution (Lam et al., 2005; Wong & Domroes, 2005; Yılmaz & Mumcu, 2016). In addition, the need for green spaces in cities is diversified by countries, regions, and user needs, and as the population increases, the need for green space also increases (Oğuz, 1998; Yılmaz & Mumcu, 2016). Recently, cities have a continuously growing population due to intensive migration. The number of housing and social and public spaces has increased due to rapidly increasing population, whereas urban green areas, which are rapidly declining, have become the most important problem of our time in terms of urban planning. Thus, the activities of local governments, the minimum amount of green area reserves on development plans, and the passive green areas on the side of roads are unfortunately far from solving the problem. Urban parks are essential especially in metropolitan areas that have a dense population.

Urban green spaces, the common gathering areas of the city, are designed to appeal to all urban users. Urban parks are areas within the urban settlements that are; generally located centrally, a visual component of a city, and within walking distance for the people. These areas provide people the opportunity to escape from the urban hustle and bustle of the city and enable individual or group actions such as walking, running, sitting, having a picnic, playing games etc. (Oğuz, 1998; Yılmaz, Duzenli & Dincer, 2017). In general, urban parks have a domain with a radius of 1-10 kilometers and are designed as 4-80 ha in terms of surface area (Polat, A. T. 2002). Urban parks should be planned on a natural or semi-natural area located in the city center and the surface area of a park for 1000 people should be at least 12 ha. As city parks are active green areas, they should be accessible with a 30 or 60-minute walk (2-4 km) or with public transportation (5-20 km) (Yorulmaz, 2006; Özdingiş, 2007). Functions such as sports fields, view towers, social facilities, zoos, botanical parks, and picnic areas should definitely be included in planning.

In the design of city parks, the expectations and visual preferences of the users are effective as well as the physical state of the area. The visual preferences of the users considered in design depend on various factors. The social and cultural structures of the region and its users are the most important criteria for shaping these preferences. In addition, demographic profiles of users (age, gender, occupation, income etc.) should also be taken into consideration for design. In this study, “Adana Coastal Park Project” has been prepared for an urban green area in Yüreğir, Adana, which was reserved by Yüreğir Municipality and its function in Adana’s urban green space system has been evaluated. In the next process of the study, it will be examined whether the application is carried out in accordance with the project.

2. Material and Methodology

2.1. Material

In this study, the “Adana Coastal Park Project” was designed on a 130.000 m² area located in Yüreğir, the central district of Adana. The area located on the Seyhan riverfront, is currently an idle recreation area and also used as the tree nursery of the Regional Directorate of Forestry.

Adana Coastal Park Project was given to MDesing firm in 2017 by Adana Yüreğir Municipality and the project was carried out under my consultancy. The application of the designed project was completed in 2019. Planning stages were designed via AutoCAD 2017 and Adobe Photoshop CC 2017 programs and 3D images were made with 3Ds Max 2017 program.



Figure 1. Plan view of the study area

2.2. Methodology

The “Adana Coastal Park Project”, which aims to meet the recreational needs of all urban users, was evaluated according to the following criteria (Project for public spaces, 2000; Yücel & Yıldızcı, 2006; Ozkan et. al., 2015; Özkan, Alpak & Var, 2017; Cengiz vd. 2018).

- Activities and Utilization
- Reachability, Legibility, Accessibility
- Comfort and Image
- Safety and Maintenance
- Functional Fields and Attributes
- Recreational Functions
- Protection of Threshold Areas,
- Aesthetic Functions
- Social, Psychological, and Economic Functions

3. Findings and Discussion

In urban planning, green spaces have different levels ranging by building, neighborhood, district, city, and district (Yücel & Yıldızcı, 2006). Especially in the planning of active green areas, it is very important to design an urban park that varies according to the size of the city in order to meet the recreational needs of the people living in the city. People who are directly affected by the negative ecosystem of the city need to be in a natural environment in their leisure time. Therefore, the adverse impacts of living in a city can be minimized by a reachable, accessible, and functional urban park. The project was highlighted by an active walkway (promenade) on the Seyhan riverfront and different focal points were created on a colored activity path forming the functional activity spine. In the project, it has been adopted that people go out on the water by platforms rather than just walkways. These points feature places for viewing and for recreational activities (hand-line fishing, nature photography, wildlife observation etc.). For this purpose, viewing platforms, wooden jetties, lighthouse, water skiing facility, marina amphitheater, optimis marina and sailing club areas were designed along the coastline. (Figure2).



Figure 2. 3D images of the designed project

Considering cultural facilities, a picnic area was designed on the northern part of the parking lot entrance. In the area, an alfresco café and restaurant are planned for the handicapped and elders, which are surrounded by facilities such as children's playgrounds, activity tracks, ziplines, and water parks. Especially the areas for children were provided with natural and artificial safety components and they are designed enabling the parents to easily watch their children.

An observation tower with steel and glass construction was built in order to view the entire area three-dimensionally and to create a striking effect in the area. This tower also forms the green amphitheater square where the floating stage is located. Both the park area and the iconic buildings of Adana; Taşköprü and Sakıp Sabancı Mosques, can be seen from the observation tower. This area can also be used at weddings or other dining organizations. Therefore, the area has been designed as a social facility with a 2000 m² indoor area and a terrace, allowing special occasions to be experienced.

While structuring the vegetation of the area, it is thought to be established as a botanical park and 99% of the trees are kept, whereas %1 is planned to be moved. Due to the convenient ecological conditions of the area, it is decided to keep the diversity of the plant species high in order to provide the users with a training on nature and to constitute a base for scientific studies. For this reason, several gardens in terms of color, smell, and medical plants are planned in the area.

A small botanical garden was created in the project area using 149 natural and exotic species (Figure 3). These taxa consists of; 44 Leafy Trees, 6 Coniferous Trees, 9 Palm Trees, 112 Leafed and Coniferous Shrubs, 13 Succulents, 4 Hanger and Trailers, and 6 Grass mixtures. The identification plates of these plant species have been placed under groups to enable the users learn more about the species. Besides visual planting, an area was planned in the park where observations for scientific studies can also be carried out.



Figure 3. Samples of planting design from the area

2.1. Activities and Utilization

A city park must be the most important focal point within the urban green space system and link active or passive green spaces with green corridors. It should have an integrity in itself in terms of activity, land, plan, and design. According to related evaluations, the Adana Coastal Park Project has a waterfront walkway and a colorful activity path connecting all of these to each other, and it forms a design integrity in itself (Figure 1). The project was highlighted by an active walkway on the Seyhan riverfront and different focal points were created on a colored activity path (Figure 4 right) forming the functional activity spine (Figure 4 left).



Figure 4. Figures of riverfront walking path (left) and colored activity path in the project area (right)

Urban parks are expected to include some facilities and utilities (Uzun, 1987, Bayraktar & Özkan, 1988, Kılıç, 1997). For example, in an urban park, the existence of sports fields, swimming pools, children's playgrounds, bicycle paths, horseback riding, skating rink, golf course, fishing, boating, and riding facilities allow the activity diversity, and thus, the utilization potential to be increased.

The Adana Coastal Park project have unifying and socializing character and include various units to serve all ages and cultures. The project design allows people to stand out on the water and take advantage of the platforms for viewing or fishing purposes (Figure 5 left). Another function planned on the field is the picnic areas. The picnic areas are located in the north of the entrance parking lot to screen off, allowing easy access for people. In the area, an alfresco café and restaurant (Figure 5 right) are planned for the handicapped and elders, which are surrounded by facilities such as children's playgrounds (Figure 6), activity parks (Figure 7 left), ziplines (Figure 7 right), and water parks (Figure 2).



Figure 5. Figures of viewing platfotms (left) and picnic areas in the project area (right)



Figure 6. Figures of children's playground in the project area



Figure 7. Figures of activity parks (left) and zipline in the area (right)

2.2. Reachability, Legibility, Accessibility

Urban parks should provide integrity between the green areas in the city and constitute the assembly points for green corridors. In the urban system, a road network with suitable vehicle and pedestrian connections should be planned and this road network should be connected to commercial and residential areas of the city. Whereas, in the urban park, the units with different functions should not be apart. Therefore, the design should have an integrity and it should appeal to all ages and cultures. Besides, solutions for the handicapped must be developed and direction signs that appeal to all age groups and foreign guests must be designed. When these criteria are taken into account, it is possible to say that the Adana Coastal Park project is attainable, legible, and accessible.

2.3. Comfort and Image

The urban parks positively transform the existing physical appearance of cities by adding color, vitality, and aesthetic. Although this change seems to only be a visual beauty for the people living in the city, through the positivism it brings to human psychology, it has a positive effect on mental health. Thus, in cities with active urban parks, people are healthier and happier. Therefore, urban parks should be designed for yearlong use and appropriate maintenance work should be planned for continuity. The entrance of the park should be flamboyant and allees must be used throughout the paths from the entrance to different fields. Vehicle roads and allees should be provided with pavements with sufficient width on both sides. A good few benches should be placed (Figure 8 left). Lighting elements have been designed considering that the area will be used at any time of the day (Figure 8 right). When these are taken into consideration, it is observed that Adana Coastal Park project meets the comfort and image criteria.

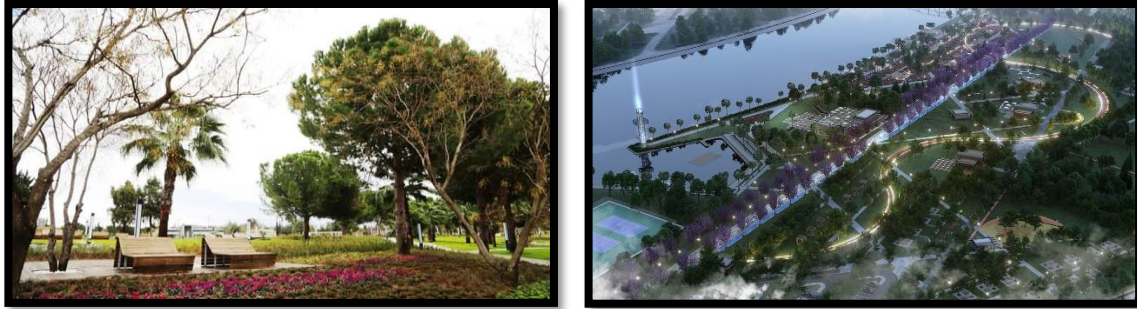


Figure 8. Figures of benches (left) and lighting elements (right)

2.4. Safety and Maintenance

Transportation and security are of the most important issues in the functionality of urban parks. There should be a suitable security camera network in urban parks as well as the security personnel. In addition, with the isolation and screening of the noise, people should be able to rest in a peaceful environment. For this purpose, vegetal screening should be used at biotopes and water areas. Adana Coastal Park project is deemed a design that takes the safety and maintenance criteria into consideration.

2.5. Functional Fields and Attributes

In the urban parks; there should be recreational areas such as concourses, picnic areas, viewing areas, water areas, small hills, woodlands, and country houses. They should also be designed to allow for the realization of many social activities such as outdoor performances, cinema, theater, and wedding organizations.

An observation tower with steel and glass construction was built within the Adana Coastal Park project in order to view the entire area three-dimensionally and to create a striking effect in the area (Figure 9 left). This tower also forms the green amphitheater square where the floating stage is located. Both the city and the iconic buildings of Adana; Taşköprü and Sakıp Sabancı Mosques, can be seen from the observation tower. Another functional area is the social facility with a 2000 m² closed area and terrace facing the Seyhan riverfront (Figure 9 right).. It is planned to have wedding ceremonies and large organizations in this facility and to serve local food such as Adana kebab and turnip juice.



Figure 9. Figures of observation tower (left) and social facility (right) in the area.

Functional areas such as scientific and educational facilities, science center, culture center, botanical garden, zoo, observatory, greenhouse, Turkish garden, Islamic garden should also be designed. Plants should be grown in groups in botanical parks and each should be explained by using identification plates. These plates should provide information on the characteristics of the plants, their living, growing, and maintenance conditions, and the region where they are grown naturally.

While the plant heritage of the Adana Coastal Park project was being formed, the area was designed as a botanical park. For this purpose, different plant species were preferred and introductory leaflets were planned to enable the users learn more about the characteristics of these plant species. Therefore, planting design of the park was made not only for visual purposes but also for creating an area where observations and scientific studies can be carried out.

Art parks can be designed for those who do not have the habit of visiting indoor areas such as museums and art galleries. The art works are exhibited outdoor, in the nature. Color, smell, and medical plant gardens are also planned in the scope of the project. These gardens are used both for the handicapped and for scientific studies. The list of medical and aromatic plants used in these gardens is given in the table below (Table 1).

Table 1. Species used in color, smell, and medical plants gardens

<i>Achillea ageratum</i> L.	<i>Nepeta x faassenii</i> Bergm.
<i>Aloe arborescens</i> Mill.	<i>Olea europaea</i> L.
<i>Artemisia absinthium</i> L.	<i>Pistacia vera</i> L.
<i>Cerastium tomentosum</i> L.	<i>Punica granatum</i> L. var. "Nana"
<i>Ceratonia siliqua</i> L.	<i>Ribes aureum</i> Pursh
<i>Cistus salviifolius</i> L.	<i>Rosmarinus officinalis</i> Linn.
<i>Eleagnus angustifolia</i> L.	<i>Salvia officinalis</i> L.
<i>Eleagnus x ebbingei</i> Boom	<i>Salvia officinalis</i> L. "Aurea"
<i>Eleagnus pungens</i> Thunb. "Maculata Aurea"	<i>Solanum capsicastrum</i> Linn.
<i>Juniperus sabina</i> L. "Tamariscifolia"	<i>Sambucus nigra</i> L. "Guincho Purple"
<i>Lavandula angustifolia</i> Mill.	<i>Teucrium fruticans</i> L.
<i>Melianthus major</i> L.	<i>Thymus officinalis</i> L.
<i>Myrtus communis</i> L.	<i>Thymus serpyllum</i> L.

Facilities for service, such as technical units, administrative units, post office, emergency service, ATM, operational facilities, restaurants, and cafés should also be planned in urban parks. Toilets and some sanitary facilities should be located in the unseen parts of the park area. There must be a nursery or greenhouse area in the area in order to cultivate the ornamental plants to be used in the park. A zoo should be planned at a distant part of the park. The fact that plant production and breeding greenhouse and a zoo were not planned in the Adana Coastal Park project was considered as a deficiency.

2.6. Recreational Functions

People living in the city need active green spaces where they can spend their free time with various recreational activities besides the basic needs of daily life such as accommodation, education, and transportation. In this regard, urban parks are the most important areas where people can easily reach and meet their recreational needs. Children playgrounds in urban parks also contribute to the physical and mental development of children, thus develop their cognitive skills. In this respect, children's playgrounds should be designed in shaded and safe places where allees unite. The areas to be created for weddings and other organizations should be sparsely wooded places close to the entrance or exit areas in general. When these criteria are taken into account, it is seen that the Adana Coastal Park project fulfills the recreation criterion.

2.7. Protection of Threshold Areas

The topographic features of the land must be in harmony with the physical environment in the design of urban parks. Natural resources in the geomorphological structure of the settlement area of the park such as forest, sea, stream, lake, and flora should be protected and the protection zones to be formed for them should be indicated on the plan. Natural monuments of cultural heritage must also be preserved. In plant designs, attention should be paid to the micro-ecological conditions of the region and the selection of plant species resistant to polluted air of the city. In the Adana Coastal Park project, 99% of the existing items were preserved and 1% was proposed to be

transported while the flora of the area was being constructed. It has therefore been found that utmost attention was paid for the protection of existing cultural and natural assets in the area.

2.8. Aesthetic Functions

Aesthetic principles should be taken into account in the planning and design of the park. In general, the design is prepared in natural, classic, or modern styles or a combination of these. The most important points in planning are parceling, the selection of living and inanimate materials, and their composition. Moreover, natural stone pavement, bridges, side slopes, and stairs should be placed in the park. The Adana Coastal Park project is thought to be a design that takes the aesthetical functions into consideration.

2.9. Social, Psychological, and Economic Functions

Additionally, urban parks are laboratories where nature education is given. The fact that the city's icons, historical and cultural values, and landscape characteristics are included in the designs attracts people living in the city and prevents them to feel like a stranger. In addition, urban parks act like a safe shelter for wildlife in the city and strengthen people's ties with wildlife.

Urban parks also have positive effects on urban ecology. It reduces the formation of urban heat island and saves energy. It also adds vitality to the city by transforming the monotonous structure from stability to mobility. It links or separates social facilities, open-air exhibitions, concert, theater or show areas, fairs, commercial and business areas, transportation, education, health, and recreational areas organically, and protects these areas from potential environmental problems.

At the same time, urban parks increase the value of lands and the residential or commercial areas in the immediate vicinity and contribute to providing employment. It also plays an important role in urban tourism. When these criteria are taken into account, it is considered that Adana Coastal Park project is a design project where social, psychological, and economic functions are regarded.

4. Conclusions

Adana Coastal Park design project is an urban park project planned on the Seyhan riverfront in Yüreğir, the central district of Adana, which aims to meet people's need for entertainment, relaxation, and recreational activities. This area, which has been idle for some time, will be rearranged thanks to this project and gain an active green space identity, thus it will be an important focal point in the urban green space system of Adana. With the Adana Coastal Park project, this urban park will be one of the most important symbols of the city in the future. The coastal park project will not only provide quality environmental services to those living in the city but will also contribute to the unification of disconnected biotopes in the urban green space system, the development of green corridor lines, and the sustainability of wildlife in the city by breaking the intense monotonous structure of the city. When the criteria examined in the survey are classified; it is seen that the Adana Coastal Park Project is not only a walking and excursion area, but prepared to appeal to different user groups through its activities and functions. The availability of reaching the city center and other focal points at a walking distance, as well as the availability of access by means of motorways, increased the attraction of the area. Although it has a modern style because of the materials used and aesthetic design principles, it seems that the traditional line has continued because of the protection of existing living and non-living structural elements in the area. Unlike other environmental designs applied in Adana, structures such as the observation tower and other social equipment show that the project features innovation and sociality (Eren & Var, 2017; Düzenli, Yılmaz & Tarakci Eren, 2018). When Adana Coastal Park project has been evaluated by considering some other quality criteria such as comfort, image, security, and maintenance, it has been observed that the socio-demographic differences between the users do not affect their perception and appreciation. In order to ensure the sustainability of natural green spaces, which are part of the city's ecosystem, it is necessary to keep and maintain inventories on a regular basis. The urban parks with many benefits and functions in the urban green space system make economic, social, cultural, and psychological contributions to the people living in the cities. For this reason, in the design of new city park projects, it is suggested to observe users and prepare innovative and sustainable concept designs in line with needs.

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