



Journal of Applied Sciences

ISSN 1812-5654

science
alert

ANSI*net*
an open access publisher
<http://ansinet.com>

Developing a Public Open Space Network: A Case Study in Ortaca District (Mugla, Turkey)

Cigdem Kilicaslan

Mugla University, Ortaca Vocational School Ortaca, Mugla, Turkey

Abstract: Enclosed with agricultural lands, Ortaca is well known with its holiday resorts such as Sarigerme with a long coastal strip and Dalyan with the sea turtles and the rock graves of the ancient city of Kaunos. In line with recent policies aimed at opening the region to tourism, Ortaca is growing fast and unplanned. The starting point of this study is the unplanned, insufficient, divided and disconnected public open spaces of Ortaca which are far away to respond the requirements of people. In this context; the purpose of this study is to argue out entirely the public open spaces of Ortaca district to redevelop the image of the town and to make a progress in the physical, cultural and socio economical structure.

Key words: Outdoor space, Turkey, urban green areas, master plan, urban design

INTRODUCTION

The population growth, migration from rural areas to cities cause the carrying capacity of the urban areas to be constrained which bring forth undesired living standards in cities in quality and quantity. City is defined as an allocation unit where public development is constant, requirements such as working, resting, entertaining, settling are answered and when compared; the density of the population is more than the density of the rural areas (Kucukerbas *et al.*, 1997). In this context with several different properties, cities are not only economic and functional systems, but places where social life takes shape and where the quality of the environment influences the living quality of its inhabitants (Juvara, 2001).

Public open spaces which are the most important part of the cities are the spaces like parks, public squares, streets, pedestrian malls where during the history, celebrations and ceremonies have been arranged, different activities with different purposes have been done (Hepcan *et al.*, 2001) and they are the reflections of the cultural values and practices of various ethnic groups and social class strata (Arefi and Meyers, 2003).

The people find it more desirable to live close to public open space suggests that open space can influence the defining features of the urban landscape, such as the location and density of residential development and the overall size of the city (Wu and Plantinga, 2003).

The irregular development of the cities causes the public open spaces to be insufficient in quality and quantity, to be divided and disconnected. The connection

of the public open spaces will influence the urban landscape feature positively and will preserve the landscape character. On this account, public open spaces that are evaluated in a system, planned, designed and managed in this manner will influence the socio-economic, politic and cultural dynamics positively and will create a vision for the cities (Ozkan *et al.*, 2003).

Discussing entirely the public open spaces of Ortaca District in quality and quantity and connecting in a system for redeveloping the image of the town that will make a progress in the physical, cultural and socio economical structure is the aim of the study.

MATERIALS AND METHODS

The research material is the public open spaces of Mugla Province-Ortaca district (Fig. 1). The video records, photographs, reports taken from the public bodies, books, journals and internet are the other materials of the study. The main sources that are used to display the findings and to form the basis of the method and the evaluation are Anonymous (2003, 2005a, b), Ozdemir (2000) and Tan (2006).

The research method consists of four phases; definition of the research area, site inventory, analysis and synthesis (Fig. 2). In developing the method, beside the personal approaches, it's made use of the references Gould Evans Goodman Associates (2001), HNTB Corporation and Development Concepts, Inc. (2001), Ozkan *et al.* (2003), The Arlington Park and Recreation Commission (2005), The Blacksburg Collaborative, MCA Urban Planning, LDR International, Inc. Communities (2001) and Teal *et al.* (1998).

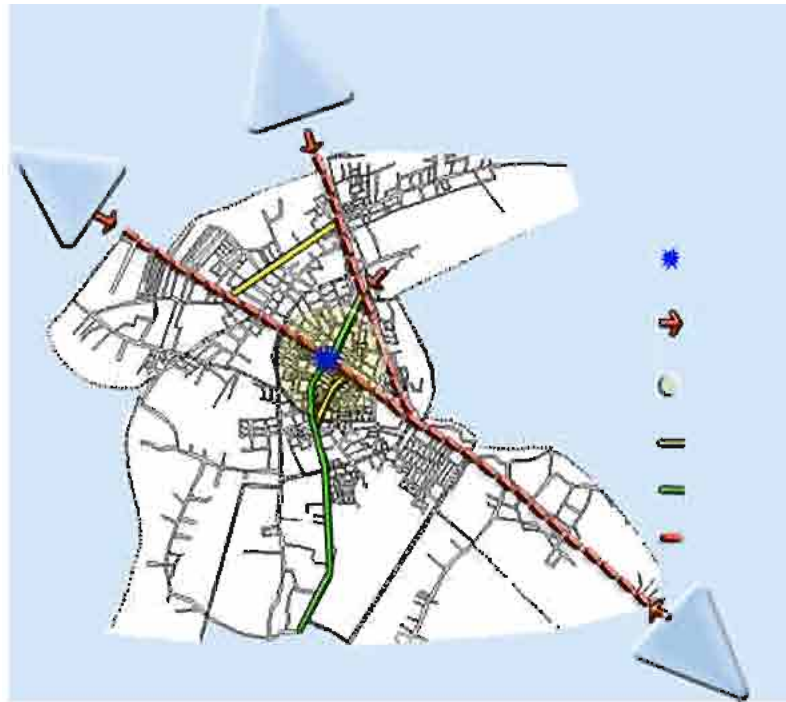


Fig. 1: The existing framework of Ortaca district

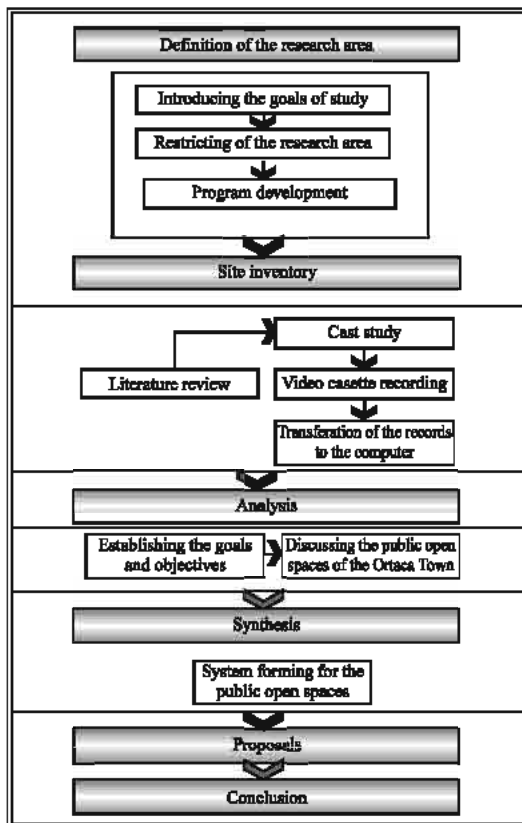


Fig. 2: The research method

- In definition of the research area phase; the aim of the study is introduced, the research area is restricted and a program for the study is developed in main features.
- In the site inventory phase; relevant literature is consulted, data is collected from the public bodies and several publications.
- In analysis phase; the goals and objectives of the study are established, the circumstances of the public open spaces are discussed, development potentialities are defined and how to approach to the public open spaces as a network are considered.
- In synthesis phase; the decision taken in previous phases are discussed entirely and a system of a public open space network is formed.

RESULTS

The main aspects of Ortaca district: Ortaca Town is situated on the North tract of Dalaman Plain (Fig. 3). To the Northeast, topography raises towards the Oren and Durak Hill sides and to the South towards the seaside, a gently sloped area extends. The lowest point of Ortaca is 15 m while the highest point is 38 m. The district is about 15 km inland and 80 km away from the Mugla province, 78 km from Marmaris and 54 km from Fethiye which are some of the Turkey's largest holiday resorts.

Table 1 Demographic structure

		1975	1980	1985	1990	1997	2000
Ortaca	Urban	8604	9030	11254	12109	15160	16923
	Rural	23582	27982	17920	17178	16615	18747
	Total	32186	37012	19174	29287	31775	35670



Fig. 3: The location of Ortaca in Mugla province and Turkey

Lake Koycegiz is a natural boundary between Koycegiz and Ortaca and the most important river of the Mugla Province; Dalaman Stream is a natural boundary between Dalaman and Ortaca. Ortaca enclosed with agricultural lands is well known with its holiday resorts such as Sarigerme with a long coastal strip and Dalyan with the rock graves of the ancient city of Caunos and with the sea turtles. Environs of Ortaca, ancient cities, Caunos and Pisilis were founded and Ortaca was under the sovereign of Carians, Phrygians, Persians, Romans and Byzantines. The economy is based on agriculture, small industry and tourism.

Pinus brutia, *Liquidambar orientalis* and Mediterranean scrubs dominate the land. Ortaca district is situated in the typical Mediterranean climate zone. The average annual temperature is 17.9°C while the lowest average temperature is 5.3°C and the highest is 48.5°C. The average annual precipitation is 1033.8 mm and the maximum daily precipitation is 374.6 mm. The dominant wind way is the North. The annual population increase is 19.71. In 2020 the projection of the population is expected to be 40.000 (Table 1).

The neighborhoods of Ortaca are Cayli, Cumhuriyet, Karaburun, Ataturk, Beskopru, Terzialiler, Yerbelen, Dikmekavak, Bahcelievler, Dalakli and Arikbasi while the most crowded residential areas are; Cumhuriyet, Ataturk, Beskopru, Terzialiler (Fig. 4).

Table 2 Public open spaces of Ortaca district

Type	In number
Parks	21
Gran ways	-
Public squares	-
Pedestrian malls	-
Play grounds	21
School gardens	22
Cameteries	1
Urban market places	2

The urban center and the commercial areas expand on the Cumhuriyet Street, Ataturk Boulevard and Cengiz Topel street (Fig. 5). There were no pedestrian malls, public squares and greenways that are linked together in a network, in much the same way as networks of highways and railroads have been linked (Table 2).

According to its public open spaces, Ortaca district is evaluated as follows:

- There is no effort seems to protect the existing structure of the town. The buildings surrounding the public open spaces are 5-6 floored, monotonous and unqualified. Public open spaces are insufficient in quality and quantity, divided and disconnected and far away to respond the requirements of people.
- As it is a small settlement and easy to reach the center, Ortaca district has a high potential of pedestrian usage and bicycle riding but there is no bicycle lane.

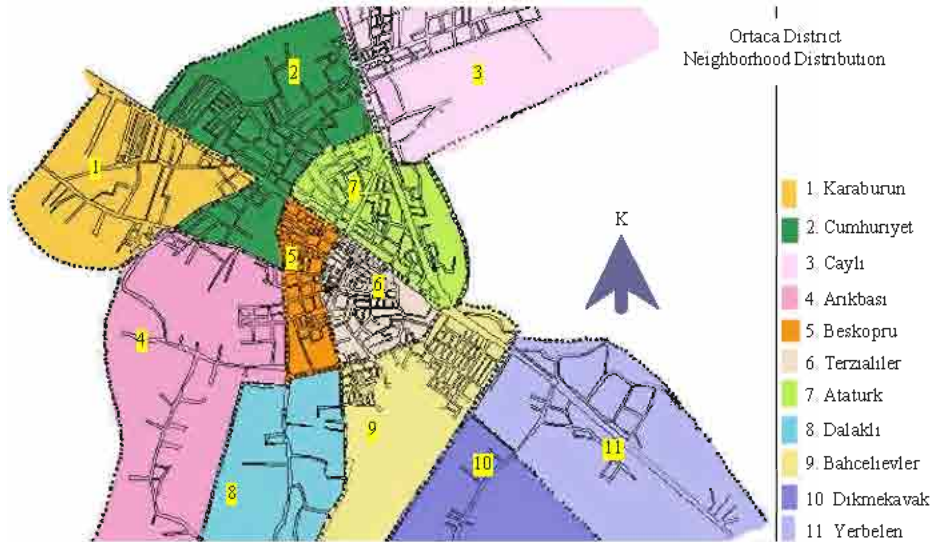


Fig. 4: Neighborhood distribution of Ortaca district

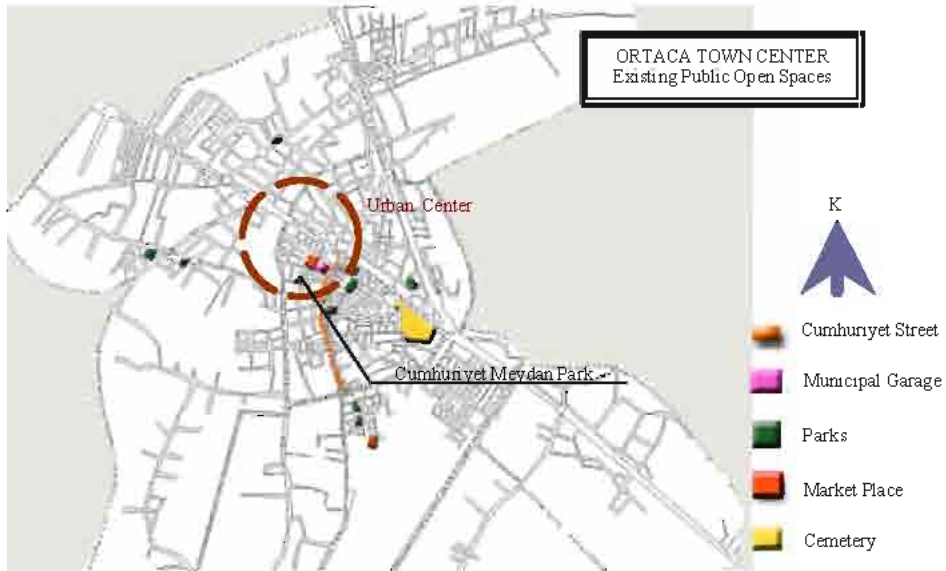


Fig. 5: The existing public open spaces

- There is no social facility for leisure time so that the social and cultural activities are minimal in general except during the Ortaca Festival. Although the existence of the Vocational School modifies the town, the lack of social facilities where the youth can pass their times, affect the dynamism of the social life negatively. In this context there is a disconnection between the university and the city.
- The main gateway to Ortaca is in the direction of Mugla-Fethiye. But the gateway was not emphasized so the access to Ortaca could not be perceived.
- The main street where high population and a mixed use can be seen is called as Cumhuriyet The cross streets that are vertical to Cumhuriyet Street are narrow, sidewalks are insufficient or occupied by the vehicles or the goods of the shops. In this context



Fig. 6: The sidewalks occupied by the goods of the shops



Fig. 7: View from the crossroads and market place

the pedestrians walk on the vehicular thoroughfare instead of the side walks (Fig. 6).

- The focal point of the town is the Cumhuriyet Meydan Park and the crossroad where the Cumhuriyet Street and the Dalyan-Ortaca highway

intersect. People pass their times, particularly their summer evenings, in the Cumhuriyet Meydan Park as there is no alternative public open space to go in the town. Cumhuriyet Meydan Park is 2500 m². Although it is the most well kept park in Ortaca, still it is insufficient in quality and quantity. The other parks of Ortaca are totally 26.130 square meters and they are also insufficient. To form a healthy city it is important to increase the quality and quantity of the public open spaces where people enjoy their times.

- Although the squares are the focal points of the cities and have considerable functions like meeting, communicating, giving a speech, exhibiting the goods, taking political decisions, there isn't an open space that is designed as a public square in Ortaca. In this context ceremonies and meetings are organized in the market place or on the crossroad where the Cumhuriyet Street and the Dalyan-Ortaca highway intersect, blocking the street to traffic and this causes a traffic jam (Fig. 7).
- The playgrounds are insufficient in quality and quantity. There aren't enough sitting places for the adults. Although it doesn't have enough capacity to respond to the demands of Ortaca district, the mostly preferred playground is the one in Cumhuriyet Meydan Park.
- There are two market places in Ortaca; one is for garments sale and the other one is for food sale. Market place for garments is in the distinctive core area of Ortaca and is vacant except the Fridays. The vacancy of the area and being out of usage except Fridays causes a visual pollution. The capacity of the market place for food is not adequate. Consequently the market area expands on the streets, blocking the streets to the traffic (Fig. 7).
- There are 21 high schools and 1 Vocational School in Ortaca District. The school gardens are minimal for recreational activities.

CONCLUSIONS

- The public open spaces must be argued out entirely to make a progress in the physical, cultural and socio economical structure of the Ortaca district. The public open spaces must be integrated and the image of the city must be redeveloped. Focusing only on the center of the district must be oriented to the other parts of the town.
- The insufficiencies of the sidewalks, the lack of the pedestrian malls where people can walk without the vehicles around, are some of the main problems of the Ortaca district. Open spaces must be designed to



Fig. 8: View and the proposal for Basoglu Street

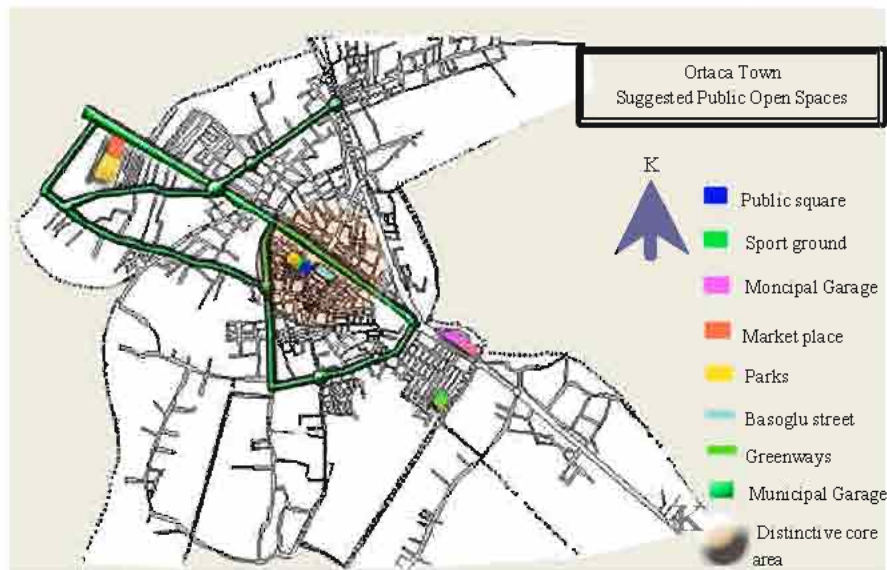


Fig. 9: Suggested public open spaces

address to people from every age and physically handicapped. In this context, Basoglu Street and Meclis Street (street between the existing market place and the municipal garage) are proposed as pedestrian malls (Fig. 8).

- There is no bicycle lane and long distance ways for pedestrians in Ortaca. In this context the roads given in Fig. 9 are proposed to alter as greenways that could perform ecological and social functions such as maintaining biological diversity, protecting water resources and promoting recreational and social cohesion, all by providing the crucial connectivity among green urban landscape (Frischenbruder and Pellegrino, 2004).

- The healthy public open spaces are insufficient in quantity in Ortaca. Particularly, one of the main problems is that there is not a public square that can be accepted as the symbol and sine qua non of the town where people can do several activities. On this account, it is proposed to alter the existing municipal garage to a public square. The existing garage area is one of the most used spaces and is on the core area of Ortaca district. Arrivals and departures of buses from the municipal garage, cause traffic congestion. The incorrect selection of the space and the buildings with the poor quality materials coated inside the garage area cause visual pollution and form a space which is not functional. Converting the

existing municipal garage area to a public square will increase the functionality and visual quality of the area. The proposed municipal garage area shown in Fig. 9 is by the wayside of Mugla-Fethiye Highway and is not in the centre of the Ortaca district where pedestrians' usage is dense. Consequently moving the garage area outside the core area of Ortaca will prevent the traffic congestion and visual pollution.

- Parks and sport grounds are insufficient in quality and quantity in Ortaca. It is important for a healthy city to increase the quality and quantity of the parks where people can have several recreational activities. In this manner, it is proposed to convert the market place which is used for a little period in a week to a park (Fig. 9). Market place and another urban park are proposed close to the vocational school where the university students can pass their times. Sport ground is figured out close to a high school as given in Fig. 9.

REFERENCES

- Anonymous, 2003. Mugla Ili-Ortaca İlçesi 1/1000 Ölçekli Uygulama İmar Planı Revizyonu ve İlavesi Açıklama Raporu.
- Anonymous, 2005a. Ortaca Belediyesi İmar Planı, Fen İşleri Müdürlüğü, Ortaca.
- Anonymous, 2005b. Mugla Bölge Haritası, Mugla Valiliği, Mugla.
- Arefi, M. and W. Meyers, 2003. What is public about public space: The case of Visakhapatnam, India, *Cities*, 5: 331-339.
- Frischenbruder, M.T. and P. Pellegrino, 2004. Using greenways to reclaim nature in brazilian cities. *Landscape and Urban Planning, USA.*, 76: 67-78.
- Gould Evans Goodman Associates, 2001. Destination Downtown Overland Park Master Plan, USA., pp: 81.
- Hepcan, S., A. Kaplan, E.V. Kucukkerbas and B. Ozkan, 2001. Kemalpaşa (Izmir) Kent Yerleşiminde Kentsel Dis Mekanların Yeterliği Üzerine Bir Arastırma, Ege Üniversitesi Arastırma Fonu 99.ZRF.019 No'lu Proje Kesin Raporu, Izmir.
- HNTB Corporation and Development Concepts, Inc., 2001. Rockville Town Center Master Plan, pp: 96.
- Juvara, M., 2001. Wise urban space. *Landscape Design*, pp: 29-30.
- Kucukkerbas, E., C. Kilicaslan, E. Argonul, H. Unuvar and E. Topcu, 1997. Selçuk Kenti Açık-Yeşil Alanlarının İrdelenmesi, Birinci Uluslararası Geçmişten Günümüze Selçuk Sempozyumu Kitabı, Selçuk Belediyesi Kültür Yayınları, pp: 157-164.
- Ozdemir, A., 2000. Ülkemizde Meydansızlaşmanın Nedenleri, Peyzaj Mimarlığı Kongresi, 19-21 Ekim, Ankara, pp: 477-487.
- Ozkan, B., E. Kucukkerbas, A. Kaplan, S. Hepcan, E. Malkoc Yigit and H. Sonmez, 2003. Mugla Kenti Kamusal Dis Mekanları Bağlamında Master Plan Çalışması, Ege Üniversitesi Basımevi, ISBN 975-93154-0-8, Izmir.
- Tan, K., 2006. A Greenway Network for Singapore, *Landscape and Urban Planning, USA.*, 76: 45-66.
- Teal, M., C. Hung and J. Rodiek, 1998. Open space planning for Travis County, Austin, Texas: A collaborative design. *Landscape and Urban Planning, USA.*, 42: 259-268,
- The Arlington Park and Recreation Commission, 2005. Arlington Virginia Public Space Master Plan, pp: 86.
- The Blacksburg Collaborative, MCA Urban Planning, LDR International, Inc. Communities, 2001. Rediscovering the Heart of Blacksburg, A Master Plan for Downtown, USA., pp: 47.
- Wu, J. and A.J. Plantinga, 2003. The influence of public open space on urban spatial structure, *J. Environ. Econ. Manag.*, 2: 288-309.