

Hasan Arslan/ Mehmet Ali İçbay/ Kosyo Stoychev (eds.)

Current Researches in Geography

IASSR

INTERNATIONAL ASSOCIATION OF SOCIAL SCIENCE RESEARCH

This book is the scholar work of International Association of Social Science Research (IASSR). It is also printed with the financial support from IASSR.

The papers are first reviewed by the independent reviewers, and then proof-read and edited by the editors. The opinions and views expressed in articles are not necessarily those of this volume's editors.

iassr.org

DEĞİŞECEK

ISBN 978-83-943963-3-6 (E-book)

ISBN 978-83-943963-3-6 (Print)

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Foreword

Dear colleagues and friends,

Here is a collection of articles that reflects the efforts of IASSR in Sofia, 2017. The presented articles concern a very wide range of issues and problems and are an invaluable source for the transfer of experience and knowledge in these areas. Modern society is dynamic and open to innovation and changes, which will be supported by conferences that not only serve academic needs but also create conditions for building trust and mutual respect.

Issues related to governance, education, social activities, the economy, and sectoral policies have their own behavioral aspect, logic, and even origin. No matter in which country we live, the need for individual and public satisfaction will always make us look for regional behavioral patterns, appreciate cultural differences, follow the inertia of traditional stereotypes. It is so that smaller nations explore the experience of the larger ones. As a result, at the public level, large and developed countries have achieved a higher degree of institutional organization, as they primarily explore themselves, while small nations are copying behavioral institutional models but implementing highly informed individuals. This effect is so strong that at the end of the process the smaller societies have prepared a large group of individualists who, however, lack the necessary institutional environment. We must overcome this.

Learning experiences in neighboring countries, in countries that have had antagonistic sentiment at certain periods of history, is a key factor.

Achieved results, published publications, and the issues involved only complement the picture of diversity, the complexity of behavioral and social research on a regional and global scale, therefore, the bulk of work in this area is yet to come.

I wish all authors and readers new scientific achievements and challenges.

With respect,

Assoc. Prof. Kosyo Stoychev, PhD

Head of Regional and Political Geography Department

Sofia University "St. Kliment Ohridski"

Geographical Distribution Characteristics of the Romanies making a Living from Traditional County Fairs in Turkey

Vedat Çalışkan

Introduction

Traditional county fairs are quite colorful and unique organizations which left their mark on the shopping and entertainment culture of a period in Turkey. Having become widespread by reaching their heyday in the 1960s in the numerical sense, the traditional county fairs began to gradually decrease as of the 1980s. Some of the traditional county fairs which were unable to keep up with the changing needs and demands of the society in connection with the socio-economic and technological developments as well as the changes in the understanding of entertainment turned into entertainment or trade fairs or festivals in this process, whereas some traditional county fairs disappeared without leaving any mark behind. This process experienced has created the probability that the remaining examples of the traditional county fairs will also disappear in the near future. Likewise, we have discovered that about two-thirds of the traditional county fairs (115 traditional county fairs) disappeared in the Republican period (Çalışkan, 2015:106).

Traditional county fairs are still an important appeal in those rural environments into which the organized retail commercial activities developing and becoming widespread in urban areas have not been able to sneak yet. Likewise, the 71 existing traditional county fair organizations are distributed in 63 settlements in 21 provinces. Although traditional county fairs have now completely disappeared at the city centers, they go on being set up as “merchandise (commodity) and/or animal fairs” predominantly in districts and partly in villages at specific dates every year (Çalışkan, 2015:106). Sales of farm animals (sheep/goats, cattle, poultry, and draft animals), various entertainment events (e.g. Luna Park, concerts, and shows) and traditional events (e.g. oil wrestles) are also organized in some traditional county fair organizations. In this respect traditional county fairs constitute an entertaining example of annual and comprehensive shopping with no alternative in rural environments.

Even though the traditional county fairs are now distant from their former magnificent past, they still succeed in attracting “visitors” and “mobile fair tradesmen” from a vast area thanks to the diversity of the functions they offer collectively. Doubtlessly, “the function of entertainment” has a quite significant role among these functions, which provide the traditional county fairs with the pull force. At today’s traditional county fairs, Luna Parks and entertainment stands form the basis for the understanding of entertainment at the traditional county fairs; furthermore, sometimes concerts and/or entertaining stage performances are also provided. Such activities as penalty kicks with prizes, wheel of fortune, dice games, shooting ranges, throwing of rings (hoops) onto prizes, and lottery drawing are available at the entertainment stands of traditional county fairs, and they receive great attention. These forms and instruments of entertainment at the traditional county fairs have survived up to the present time without undergoing profound changes.

In Turkey, the entertainment sector of traditional county fairs has long been identified with Romanies. The presence of Romanies among those who organize and present the entertainment affairs at the traditional county fairs is striking. Of the members of this ethnic group, a large number of people have long been making a living only from the traditional county fairs, particularly from the entertainment sector at the traditional county fairs. Doubtlessly, today the entertainment culture has substantially changed in parallel with the technological developments and the increased expectations of the society in this process. Such developments have also led to a marked decrease in the interest in traditional county fairs. However, despite all these

developments, the Romanies who work in the entertainment sector of traditional county fairs carry on this way of livelihood that they have virtually been handing down from generation to generation (Çalışkan, 2016:54). Called Romanies or Gypsies, this group has been named differently worldwide. “Gypsies” and “Romanies” are the most common ones among such naming practices. Nevertheless, with the First World Romani Congress that met in London in 1971, it was stated that all Gypsies worldwide should be named with a common name and it was decided to accept it as “Roma”. The expression “Roma” means “a human being”, which is also present in the Romani languages, and it is considered to have entered Turkish as Roman and Romanies by taking the plural suffix (Yağlıdere, 2011: 20). Moreover, all citizens who describe themselves as “Romanies” in Turkey are the Gypsies who migrated to Turkey from Europe. Özkan (2000) states that all Romanies he interviewed in his research into Romanies in Turkey were migrants from Greece, Bulgaria, and Romania (Özkan, 2000). However, the use of the name “Romani” instead of “Gypsy” has become widespread in Turkey in the recent years. Nevertheless, such uses as “Gypsy”, preferred in some national sources by authors and researchers, have not been changed in the citations in the text.

Data and Method

The data presented in this study basically have two sources. Firstly, the Romanies working in the entertainment sector at the traditional county fairs, the people working as tradesmen at the traditional county fairs, the elderly people from the local residents and the representatives of the relevant institutions and organizations (e.g. municipalities, district governorships, and offices of village headmen) of that settlement were interviewed (interviews with experts) during the fieldwork carried out at the sampled traditional county fairs. Some 13 traditional county fair examples distributed in 13 provinces were selected as samples from a total of 63 traditional county fairs distributed in 21 provinces of Turkey today within the scope of the research project. The fieldwork completed between September 2013 and September 2014 was carried out at the following traditional county fairs, respectively: the Pehlivan köy Traditional County Fair (Kırklareli), the Gere de Traditional County Fair (Bolu), the Pınar pazarı-Eğirdir Traditional County Fair (Isparta), the İn hisar Traditional County Fair (Bilecik), the İznik Traditional County Fair (Bursa), the Boyabat Traditional County Fair (Sinop), the Zile Traditional County Fair (Tokat), the Yenice Traditional County Fair (Çanakkale), the Gönen Traditional County Fair (Balıkesir), the Karade de Traditional County Fair (Bafra, Samsun), the Simav Traditional County Fair (Kütahya), the İspir Traditional County Fair (Erzurum), and the Seferihisar Traditional County Fair (İzmir). Secondly, a questionnaire was mailed to the municipalities or the offices of village headmen of those settlements which did or do have a traditional county fair example. The questionnaire included the questions of “whether Romanies came” to the traditional county fair set up in the settlement in order to work and, if they did, “from which settlements of Turkey they came”. Responses could be received from 63 of a total of 110 questionnaires sent with a letter.

Significance, Purpose and Scope of the Study

The research encompasses the situation of presence of Romanies at all existing traditional county fairs in Turkey today and an evaluation of the distributional characteristics of “traditional fair Romanies” according to their places of residence. Hence, all existing traditional county fairs in Turkey today and all settlements inhabited by the Romani groups going to these traditional county fairs in order to work constitute the scope of the study. There are very few field studies which reveal the geographical distribution of the Romanies living in Turkey; moreover, the geographical distribution characteristics of the Romani population are not a

subject that has been very well documented in Turkey yet. Therefore, the comparison of the findings of our research with the findings by Özkan (2000), acknowledged as the basic reference on this issue, is also quite important. On the other hand, the unavailability of any research into those Romanies who make a living substantially from traditional county fairs is rather surprising. Within the scope of the research, it was aimed to determine, on the district and provincial scales, the settlements inhabited by those Romanies who made their living from traditional county fairs and to specify the residence-based geographical distribution characteristics. Secondly, it was aimed to show the spatial connections between the settlements in which “the Traditional Fair Romanies” resided and certain traditional county fairs.

Origins of the Romanies in Turkey

Discussions and estimations about the origin of Gypsies had been made for a long while, and towards the late 18th century and considering their languages, it was acknowledged that their motherland was India (Berger, 2000:9). The estimations about the onset of migration from India and about the dissemination of Gypsies worldwide vary within a very extensive time interval between the 5th and 15th centuries. When the Gypsies reached northern Mesopotamia and the eastern borders of the Byzantine Empire towards the late 10th century and in the early 11th century, they split into three main migratory communities. The largest Gypsy group among them was headed for the west, i.e. Asia Minor and the Balkans, wherefrom it went to Central and Western Europe in time (Marushiakova and Popov, 2006: 15). Byzantine historian Nikephoros Gregoras (1290-1360) recorded that Gypsy acrobats reached Constantinople in 1322. This group came from Egypt and spread over an extensive area from Thrace to Macedonia (Özkan, 2001:15). In addition, it is also seen that they were recorded as ironworkers and stablemen for Constantinople much earlier than this date, i.e. in the 10th century (Özkan, 2001:21). So, the Romanies reached the Anatolian and Thracian territories. In light of the research carried out to date, it is possible to state that the Gypsies entered Anatolia between the 9th and 14th centuries.

It is seen that the presence of Romanies was first encountered in the Ottoman records in the Fief Book, dated 1430, of the Sanjak of Nikopol in Bulgaria (The Report by the Turkish Romani Workshop, 2009). It is adequately clear that when the process of conquest of the Balkans by the Ottomans commenced in the 14th century, there were Gypsies who had been living in this region for a quite long while. The Gypsies were included in the Balkan life in various ways such as nomads, mobile artists, and the craftsmen and merchants who adopted a sedentary life (Marushiakova and Popov, 2006: 24).

According to what Marushiakova and Popov (2006) quoted from Alexander Paspatis (1870), the author of the first book on a Greek doctor of İstanbul and the Gypsies in the Ottoman Empire, *“Although Gypsies were present in all regions of Rumelia in the first half of the 19th century, the Gypsies most populated the former Thracian territories. It is surprising that black tents suddenly appear around big cities besides poor villages and towns in the hot months of the year... Gypsies sometimes leave their winter houses, called kışla, in mid-April and go to various regions according to the season. Some of them leave the north and extend as far as, and tour, Asia Minor on the Balkan Peninsula, whereas some of them climb up the northern sections of the Balkan Mountains and return in mid-October... They almost always spend the winter in the same place; furthermore, they generally camp near the villages next to a spring. It can be seen that their tents are pitched at the center of the village in those Turkish villages where their tents are not scorned very much”* (cited from Paspatis, 1870 by Marushiakova and Popov, 2006: 74). The estimations published regarding the number of Gypsies living in the European section of Turkey in the second half of the 19th century substantially vary between 50,000 and 620,000 people. However, the expression “There are not as many Gypsies in the European countries as

those in the Ottoman Empire” in the 19th century by Ami Boue is quite important (Marushiakova and Popov, 2006: 65). Those Gypsies who had gone to Europe via Turkey began to migrate to Anatolia again as the Ottomans began to lose territories in Europe. Doubtlessly, the population of Gypsies in Turkey further increased with the migrations following the Treaty of Lausanne (1923).

Geographical Distribution Characteristics of the Romani Population in Turkey

Since the studies on the life, geographical distribution, and populations of the Gypsies in Turkey have not been at an adequate level yet, it is rather difficult to speak of clear data on this matter. One of the most comprehensive studies carried out to determine the populations of Romanies in Turkey belongs to Ali Rafet Özkan. Instead of approximate figures, Özkan (2000) tried to determine a net number by obtaining information from the Romanies themselves, the local people living in their vicinity, and local administrators. In this way, he tried to determine in detail the Romani population in Turkey according to the provinces and the neighborhoods in those provinces and calculated the total Romani population living in Turkey as 403,190 people. Özkan (2000) also adds that this figure, determined by him, might be incomplete: *“We tried to go to all provinces and districts that Gypsies were claimed to live in. Even if we suppose that the number of Gypsies in the places we are unable to see or reach is 50 thousand with an exaggerated estimation, their number cannot even reach 500 thousand. The total number of fully migratory Gypsies does not exceed 30 thousand. Add to this the semi-sedentary people and the number of migratory Gypsies approaches 100 thousand. According to these figures, the total number of all Gypsies living in Turkey approaches 600 thousand”* (Özkan, 2000). There is no doubt that there are numerous challenges to the determination of the real size of the Romani population in Turkey. Thus, it is seen that there are great differences among the figures presented with respect to the Romani population in Turkey. For instance, according to the researchers working in the ERRC/hYd/EDROM research, which covered the cities in the seven regions of Turkey, this number is estimated to be between 4.5 and 5 million people (Marsh, 2008: 22).

Today Gypsies live in dispersed condition almost everywhere in Turkey. According to the result of the research by Özkan (2000), the Romanies are distributed in 40 provinces in Turkey (Figure 1). The primary places mostly populated by them are the Marmara, Aegean, and Mediterranean Regions, followed by the Black Sea, Central Anatolia, Eastern Anatolia, and South-eastern Anatolia Regions (Özkan, 2000: 30). In the Marmara Region, the Thracian locality undoubtedly constitutes the environment in which the Romani population is most densely distributed. Likewise, according to the results of the research by Özkan (2000), 62,000 Gypsies live on the European side of İstanbul, 27,700 Gypsies in Tekirdağ, 6,000 Gypsies in Kırklareli, and 50,300 Gypsies in Edirne. When we add the 5,800 Romanies in Çanakkale province, two districts of which are on the Thracian Peninsula, to this number, the Romani population in Thrace is found as 96,000 people. According to the results of some studies, however, the Romanies in the Thracian region constitute 6-7% of the population in the region, while the ratio of the Gypsy communities in Turkey (Romanies, Dom people, Lom people, and Nomads) to the population of the country is 2% (Marsh, 2008: 22).

Geographical Distribution Characteristics of the Romanies

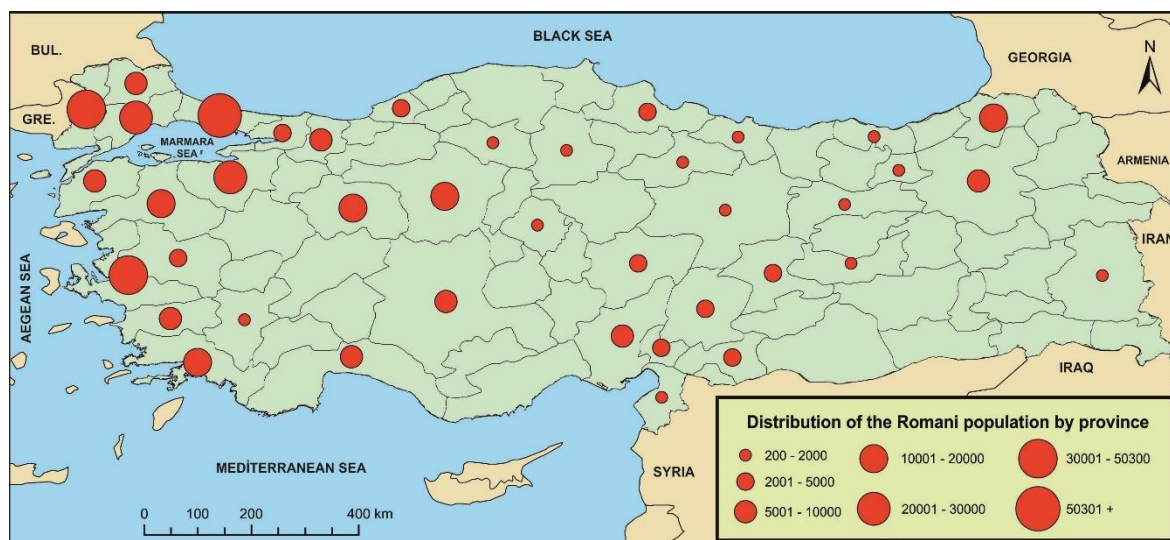


Figure 1. Distribution of the Romani Population in Turkey. It was prepared on the basis of the data by Özkan (2000).

There are some reasons why the Romani population is concentrated in the Marmara Region, particularly in Thrace. The Gypsy population was widespread in Thrace in the era of the Ottoman State too. According to what Marushiakova and Popov (2006) quoted from Alexander Paspatis, the author of the first book on a Greek doctor of İstanbul and the Gypsies in the Ottoman Empire, although there were Gypsies in all regions of Rumelia in the first half of the 19th century, they mostly populated the former Thracian territories (cited from Paspatis, 1870 by Marushiakova and Popov, 2006:74). According to the result of the Treaty of Lausanne, concluded with Greece in 1923, a large number of Gypsies also arrived in Turkey together with the Turks who migrated (Özkan, 2002; Marushiakova and Popov, 2006). However, as no racial discrimination-based population census was carried out in the Treaty of Lausanne, there are no definite data on how many Gypsies arrived. Nevertheless, it is estimated that almost all Romanies who arrived depending on the population exchange settled in the Aegean and Marmara Regions.

Occupations of Romanies and Traditional Fair Romanies

Today Gypsies have substantially adopted a sedentary life in Turkey. However, the nomadism-related lives of Gypsies have always been striking throughout history. Except for the hunter-gatherer and grazing (being a nomadic shepherd) nomads within the classification of nomadic communities made so far, Gypsies are considered within the classification of commercial (trading) nomads as a universal type (Özkan, 2000: 1). Nomadism both is an essential instrument for them to make their living in simple ways and helps them carry on their traditions and lead their secluded lives.

In the Gypsy culture shaped under these conditions, some occupational fields they have widely adopted have stood out. Moreover, at some localities in Turkey, Gypsies have been named with the occupations they have adopted as a group. Whilst Gypsies are predominantly called “Romanies” in the Marmara, Aegean, and Mediterranean Regions by the non-Gypsy communities, they are known as “poşa” around Ardahan, Artvin, Erzurum, Iğdır, and Kars (Öncül, 2015:713) but with such names as “arabacı (driver)”, “kalaycı (tinsmith)”, “elekçi (sifter maker/seller)”, “sepetçi (basket maker/seller)”, and “bohçacı (cloth/garment seller)” in many places of Anatolia (hAodha, 2007:143). Gypsies are influenced in their occupations by traditions and their cultural and socio-economic conditions. It is possible to list the traditional

Gypsy occupations as being ironworkers, horseshoe makers/sellers, basket makers/sellers, sifter makers/sellers, stablemen, healers, fortune-tellers, people making bears dance, acrobats, musicians, dancers, cloth/garment sellers, and carvers. Today, however, some Gypsy occupations have disappeared under the changing conditions. When the distribution of the jobs and occupations of Romanies is examined, it is seen that they are generally included in the group of small tradesmen suitable for the mobile spirit and facilitating working flexibly or engaged in marginal jobs (Özkan, 2000:68; Yağlıdere, 2011:160). When we address the jobs Romanies widely perform both worldwide and in Turkey in terms of males and females, we discover that males are predominantly engaged in small handicrafts, being porters, scrap iron buying & selling, animal buying & selling affairs, being street vendors, shoe painting, being musicians, being workers, traditional county fair business, being lotto game sellers, playing the drums, tinsmithing, and basket making/selling. The jobs that females are widely engaged in are cleaning jobs, cloth/garment selling, being musicians, dancing, fortune-telling, begging, and scrap iron collecting (Çoşkun, 1998: 8-21).

Traditional county fair tradesmen are at some point between the mobile peddlers who perform trade without paying any tax and retailing shop sellers (e.g. grocery, market, and store), while they present an example of a periodic semi-mobile commercial activity. Perhaps “the traditional county fair business” has therefore become a popular occupation predominantly among those Romanies who are accustomed to a mobile life. Although Çoşkun (1998) expresses that the occupation of “traditional county fair business” is common among male Romanies, as we clearly observed in the fieldwork, Romanies attend the traditional county fairs as a family. Furthermore, Romani families that stay altogether as three generations in the tents they pitch around the fairgrounds are frequently encountered. The women and young girls belonging to these families also generally work actively at the entertainment departments.

Essentially, entertainment and music have long been an integral part of the Gypsy life. It is a fact that music and entertainment are not performed for art but for a livelihood among the Gypsies of Turkey and the world. As is the case all around the world, Gypsies were generally assigned the role of entertaining in the Ottoman period too. Likewise, according to Evliya Chalabi, a famous traveler of the 17th century, the name of Gypsies was first mentioned in the 10th Guild among the people making bears dance, consisting of 70 people in total, in the list of craftsmen that comprised a total of 57 guilds. The Musicians’ Guild, the 43rd Guild, was comprised of 300 people, the majority of whom were Gypsies. On the other hand, the 45th Guild consisted of players, mime artists, and male dancers (Marushiakova and Popov, 2006: 52). The Gypsy musicians were dominantly present in the society also in the period of regression of the Ottoman Empire. According to Paspatis (1870), who described the life of the Gypsy musicians coming from the villages in the vicinity of İstanbul, Gypsies “used to make music and sing songs by touring from village to village at all festivals and celebrations of both Christians and Turks” (Marushiakova and Popov, 2006: 76). The Gypsies of Turkey have also made themselves accepted in dance and dancing. Dancing has become one of the most important occupations that Gypsy girls perform (Özkan, 2000: 68).

It is not something new that Gypsies assume roles in the entertainment and music sectors. It is quite clear that Gypsies have existed in the entertainment sector throughout history. In Turkey, Romanies have adapted the occupations in which they reflect their various abilities – primarily the entertainment affairs – to traditional county fairs, thereby opening a field of business for themselves around the traditional county fairs. Likewise, it is due to these connections that entertainment has been remembered together with Romanies at traditional county fairs to date. It is possible to divide the departments of entertainment services into several sections in the examples of traditional county fairs that have survived up to the present time. We may group them as those engaged in hoops and counters of games of chance, wheel of fortune-type drawing games, shooting ranges, penalty corners, and Luna Park. Doubtlessly, the branches at the

entertainment department used to be far more diverse in the past. Especially tent theaters, places where acrobats performed and circuses were the most striking examples among them. The again non-existent *üstüvane* (motorcycle acrobatic shows), magician (illusionist) shows and fortune-tellers should also be added to them. In those periods when there was no television or when it had not been so common in the provinces and rural sections yet, traditional county fairs used to represent the most entertaining, active, and colorful days of the environments in which they were set up. We may determine that this period almost lasted until the late 1980s in many places. In this period, Romanies were present actively in various positions as those who organized the affairs and who performed their occupations and as workers in the entertainment sector at traditional county fairs (Çalışkan, 2016:57).

Research Findings

To date, there has been no research into the semi-nomadic Romani groups that make their living from traditional county fairs in Turkey. However, “the traditional county fair business”, which represents a traditional occupation among Romanies, appears to have been recorded only by Çoşkun (1998) among the studies on Romanies.

According to the municipalities and the offices of village headmen that responded to our questionnaire by letter, Romanies attend 39 traditional county fairs in Turkey. Whilst no participation of Romanies was observed in the 12 settlements where traditional county fairs were set up, this question remained unanswered in 12 settlements (63 questionnaires in total). According to the responses to this question, the following are the municipalities informing that no Romanies attended the traditional county fair set up in their respective settlement: Söke (Aydın); Malkara and Çorlu (Tekirdağ); Gömbe (Antalya); İnhisar and Söğüt (Bilecik); Eflani (Karabük); Aybastı (Ordu); Şalpazarı (Trabzon); Ayancık (Sinop); Gerede (Bolu); and Pınarpazarı (Isparta). Even though the responses were so, we also determined the presence of crowded Romani groups in Aybastı and Gerede during the fieldwork.

The mayors and village headmen who stated that Romanies attended the traditional county fairs in their settlements were also asked from which settlements in Turkey the Romanies attending the traditional county fair came. Some 32 municipalities or offices of village headmen responded to this question. Also by including the information obtained during the fieldwork in these data, the number of settlements inhabited by those Romanies who attended the traditional county fairs reaches 40 (Table 1). Obtained according to the results of the questionnaire for municipalities and village headmen, this information also reveals that the Romanies attending the traditional county fairs resided in 16 provinces of Turkey. Besides confirming these provinces, our fieldwork revealed the presence of the Romani groups that attended the traditional county fairs from 6 different provinces too (Antalya, Aydın, Bilecik, Çankırı, Yalova, and Kütahya). So, we clearly discovered that the Romanies attending various traditional county fairs in Turkey resided in a total of 22 provinces. When we make an evaluation for Turkey in general, we may state that the traditional county fairs are attended by those Romanies who predominantly reside in the provinces of the Marmara and Aegean Regions. In the Marmara Region, there are Romanies who attend the traditional county fairs from all provinces except for Kocaeli. The traditional county fairs in Çanakkale and Balıkesir provinces are predominantly attended by the Romanies who reside in these provinces again, whereas it is striking that the Romanies going to the traditional county fairs in the Central and Eastern Black Sea Subregions from Antalya are also added besides those going from the other provinces.

Table 1. The Traditional County Fairs attended by Romanies and the Settlements in which they reside according to the Data obtained from the Interviews with Experts in the Fieldwork and from the Questionnaires for Mayors and Village Headmen. The asterisk (*) traditional county fairs are non-existent.

Name of the Traditional County Fair	Settlements that the Romanies come from	Name of the Traditional County Fair	Settlements that the Romanies come from
Pehlivanköy	Çanakkale, Çatalca, Keşan, Babaeski, Edirne, and Tekirdağ	Gerede	Havran, Edremit, and Dikili
Gönen	Havran, Edremit, and Gönen	Mihalgazi	Kastamonu, Sakarya, Eskişehir, Uşak, Bilecik, and Kütahya
Korucu	Havran, Edremit, and Balıkesir	Gölpazarı	Balıkesir and Yalova
Dursunbey	Havran and Balıkesir	Taraklı	Balıkesir and İzmir
Balya (*)	Balıkesir	İznik	Çanakkale
Şamlı	Balıkesir	Harmancık (*)	Balıkesir, Çanakkale, and İzmir
Kepsut	Balıkesir	Yenipazar	Bursa
Kocakonak	Balıkesir	Osmaneli	Sakarya
Pazarköy	Edremit, Manisa, and Çanakkale	Gökçebey (*)	Kastamonu and Bolu
Savaştepe	Balıkesir (Merkez District)	Ağlı	Samsun
Manyas	Mustafakemalpaşa, Gönen, Balıkesir, Bursa, and İstanbul	Karadede, Bafra, Samsun	Antalya, Dikili, and Ünye
Ayvacık	Çanakkale	Kargı	Bafra, Havran, Edremit, Çanakkale, Menemen, Dikili, and Antalya
Akçakoyun	Edremit	Boyabat	Kırkağaç, Dikili, Tepecik, Menemen, Muratpaşa, Havran, Çankırı, and Samsun
Yenice	Ezine, Havran, Edremit, Ayvalık, and Burhaniye	Durağan	Bafra, Balıkesir, and Menemen
Çan	Merkez District of Çanakkale	Karlı(*), Sinop	İzmir and İstanbul
Ezine	Balıkesir and Çanakkale	Bektaşaga, Sinop	Balıkesir, Aydın, İzmir, Antalya, and Yalova
Biga	Çanakkale and Balıkesir	Kabalı(*), Sinop	İzmir
Çardak	Ezine, Bayramiç, and Çanakkale	Dikmen (*)	Balıkesir and Tekirdağ
Simav	Balıkesir, Uşak, and Manisa	Zile	İzmir, Tekirdağ, and Antalya
Göynük	Adapazarı, Eskişehir, Balıkesir, İzmir, and Kastamonu	İspir	Antalya, Balıkesir, and İzmir

According to Özkan (2000), the Romani population in Turkey is distributed in a total of 40 provinces. Nevertheless, we also determined that some Romani groups attending the traditional county fairs in order to work resided in Bilecik, Bolu, Uşak, Kastamonu, Kütahya, and Yalova provinces, in which Özkan (2000) did not take into account the presence of the Romani population. When we add the 6 provinces we determined in our research to the data by Özkan (2000), this number reaches 46. So, it is understood that there are participants in the traditional county fairs from almost half of (22 provinces) the provinces where the Romani population is distributed in Turkey. As can be seen on the map we organized according to the data by Özkan (2000) (Figure 1), Romanies residing in the provinces to the east of a line to be drawn from Artvin towards the Gulf of Mersin were not encountered at the traditional county fairs during our fieldwork.

We should also herein add that we determined that some data in the research on the distribution of the Romani population in Turkey by Özkan (2000) were erroneous or incomplete. For instance, Özkan (2000) made a calculation by showing the Malkara district of Tekirdağ in Edirne. Although Romanies are distributed in various districts in Kırklareli province, Özkan

Geographical Distribution Characteristics of the Romanies

(2000) included the presence of only the Romanies living at the city center in the calculation. Merely Bandırma, Edremit and Susurluk districts were taken into consideration for the presence of the Romani population in Balıkesir province, but Merkez district and Havran district were not evaluated. In İzmir province, the presence of Romanies only at the neighborhoods of Konak, Karşıyaka, and Bornova was considered. However, presence of the Romani population in Dikili and Menemen districts of İzmir is very well known. Again in the research by Özkan (2000), the presence of Gypsies in Uşak and Kastamonu was not mentioned. Nevertheless, presence of Romani groups residing in these provinces and regularly attending the traditional county fairs was determined according to the data in the questionnaires for mayors and village headmen. This information indicates that new and comprehensive research should be made into the presence of the Romani population and its geographical distribution in Turkey.

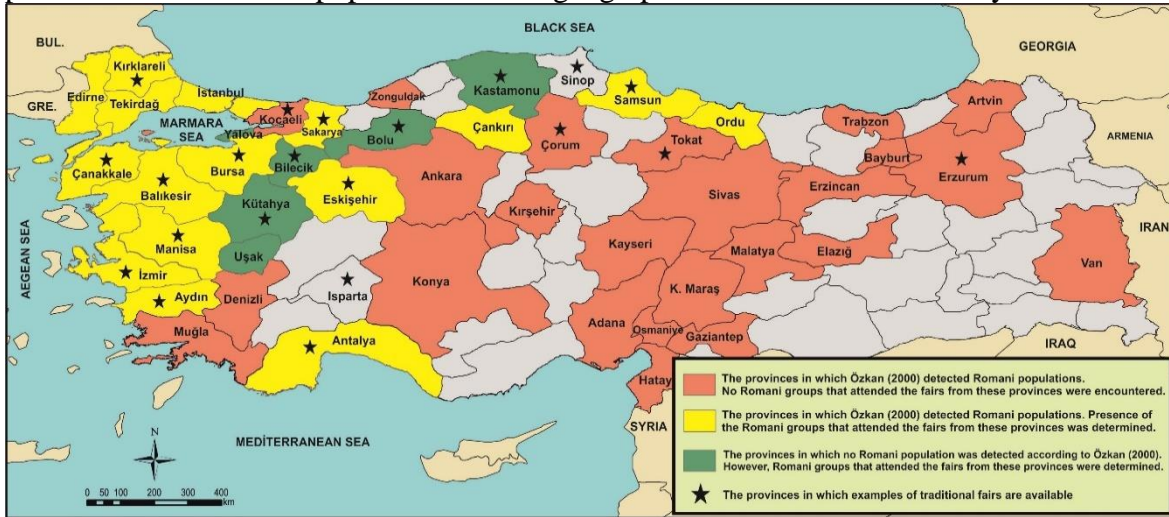


Figure 2. A comparison of the provinces determined to be inhabited by the Romanies attending the traditional county fairs in Turkey within the scope of the research with the research findings by Özkan (2000).

In spite of the availability of examples of traditional county fairs and the presence of the Romani population in Erzurum, Tokat, Kocaeli, and Çorum provinces, Romanies residing in these provinces were not encountered at the traditional county fairs. On the other hand, although examples of traditional county fairs are available in Sinop and Isparta provinces, there is no Romani population in these provinces, according to the available data. Romani groups attending the Boyabat (Sinop) traditional county fair from various places of Turkey were determined, whereas it was discovered that no Romani groups attended the Pınarpazarı (Eğirdir, Isparta) traditional county fair. On the other hand, no traditional county fair example is available in İstanbul, Uşak, Çankırı, and Ordu provinces. Nevertheless, presence of Romani groups attending various traditional county fairs in Turkey from these provinces was determined (Figure 2). There were 6 provinces for which presence of the Romani population was not mentioned in the research by Özkan (2000) but in which we determined the participation of Romani groups in the traditional county fairs in our research. Whilst examples of traditional county fairs were available in four of these provinces (Kastamonu, Bolu, Bilecik, and Kütahya), no examples of traditional county fairs were available in two of them (Yalova and Uşak). It is rather difficult to make any estimation about the number of Romanies who make their living from traditional county fairs. Both the local governments and the Romanies are rather unwilling to respond to the questions on this matter. However, there is a feature that we determined in the fieldwork. The Romani groups residing in specific places operate only by attending specific traditional county fairs. For instance, the Romanies whom we interviewed in Yenice during the fieldwork and who came from Edremit stated that they did not attend the

traditional county fairs in Balıkesir, but the traditional county fairs there were attended by other Romani groups. Similarly, during the fieldwork, we discovered that the Romanies attending the Karadede and İspir traditional county fairs and the Romanies at the Boyabat and Yenice traditional county fairs were the same groups. The Romanies residing in Çanakkale province generally attend the traditional county fairs in Çanakkale, whereas the Romanies residing in Balıkesir province attend the traditional county fairs in Balıkesir. Nevertheless, the Romanies residing in these two provinces attend the other remaining traditional county fairs of Turkey. Those who organize the Luna Park affairs at the traditional county fairs in the Marmara Region are the Romani families coming from Çanakkale, Edremit, Manyas, and Manisa. The entertainment departments at the Black Sea traditional county fairs are again operated by Romanies, while the Luna Park operators are not Romanies anymore. This changed in the recent past.

There are quite various barriers for thousands of Romanies who make their living from traditional county fairs to carry on this way of livelihood. “Romanies’ being confronted with discrimination because they are Romanies” in those places where they go ranks first in our interviews among such issues. It is understood that as a result of the events which broke out at some traditional county fairs in the past, Romanies were not allowed into the traditional county fairs concerned in the following periods or they were confronted with various barriers. The Romanies we interviewed stated that they experienced the greatest challenge for their participation in the traditional county fairs in Zile and İzmit but expressed that they were already not allowed at the Osmancık and Durağan traditional county fairs. In our interviews, it was understood that the Romanies were not confronted with many problems at the traditional county fairs in the Marmara Region. Likewise, the traditional county fairs Romanies most preferred in Turkey were determined as all traditional county fairs in Çanakkale, along with the Pehlivanlık, Gönen, İvrindi, Sındırgı, Gölpazarı, and Taraklı traditional county fairs in the Marmara Region. In the process of the research, we detected that no Romanies were present at the İnhisar, Pınarbaşı, Söğüt, Ayancık, Seferihisar, Bozcaada, Gökçeada, and Tekkeköy traditional county fairs.

“The Traditional Fair Romanies” living in the urban areas in the seasons other than those when the traditional county fairs are set up make their living from scrap iron business, shoe painting, and fish selling at marketplaces, whereas the Romanies living in the rural areas in the coastal sections of İzmir, Çanakkale, and Balıkesir provinces work as agricultural workers in tangerine and olive jobs. The Romanies making their families’ living from traditional county fairs spend about 6 to 7 months of the year as being unemployed. Apart from the services at the entertainment department of traditional county fairs, Romanies also work as peddlers and perform affairs like collecting offal during the slaughtering of animals. In addition, only at the Pehlivanlık traditional county fair, the Romanies coming from various settlements in Thrace sell horses and foals. Carried on by Romanies, this example was encountered merely at the Pehlivanlık traditional county fair.

Those Romanies who follow the series of traditional county fairs and make their living from traditional county fairs generally begin to attend traditional county fairs in May. In a period of about 45 days called “yaz arası (summer break)” or “panayır arası (fair break)” starting from mid-June, Traditional Fair Romanies again become unemployed or go to the series of festivals where they can again do the same jobs. With the commencement of fall fairs as of late August, traditional fair Romanies again get into action in order to attend traditional county fairs.

Conclusion and Recommendations

The Romani population is distributed in 40 provinces located in various regions of Turkey. The occupations of Romanies have long been comprised of specific occupations with a traditional side. One of these occupations mostly with a mobile-nomadic character as well is “the traditional county fair business”. The Romani groups identified with traditional county fairs in Turkey for a long while move from 22 provinces of Turkey and attend various traditional county fairs today. In addition, the Romanies making a living from traditional county fairs most reside in Balıkesir, Çanakkale, İzmir, Kırklareli, Tekirdağ, Samsun, and Antalya provinces.

In Turkey, Romanies show great interest in traditional county fairs for traditional and economic reasons. This is so particularly for those Romani groups that make a living substantially from traditional county fairs. Done by “the Traditional Fair Romanies” going from one traditional county fair to another throughout the year, these jobs are generally occupations which are in the entertainment sector and which are family traditions. In other words, those who make their living from traditional county fairs have substantially traditionalized this occupation from generation to generation. Likewise, the elderly Romanies we interviewed at the traditional county fairs also expressed that they had been touring the traditional county fairs with their families for as long as they could remember. Nevertheless, life is gradually becoming difficult for the Romanies whose livelihood depends entirely on traditional county fairs. The gradual decrease in traditional county fairs, their reduction in scale, the shrinkage of entertainment services at traditional county fairs and their conversion into festivals or fairs worry Romanies about the future. During our interviews, they frequently expressed that they were unable to enter bids particularly in fair- and festival-type organizations as well as the claims of avoidance of employing them there. Since the Romanies who are substantially uneducated and have no occupation also lack an economic saving and an adequate accumulation of capital, they do not have any opportunity of doing/setting up another business. Hence, it appears that this cycle will continue unless the lives of Traditional Fair Romanies are improved and developed today. Essentially, this is not the bad scenario because the rapid successive disappearance of the traditional county fairs has resulted in the probability that the current living conditions of “Traditional Fair Romanies” will further regress. Moreover, under current conditions, it does not seem possible for Romanies to carry on this job by means of out-of-date entertainment tools and methods. The failure of “Traditional Fair Romanies” to keep up with the change experienced in the entertainment understanding of the society and with new demands indicates that the danger of the probability of disappearance of an important source of living for Romanies has occurred.

There is a need for supporting studies to be addressed on the national scale in order for this disadvantaged group, having preferred living out of sight or in some way neglected by the state for years, to be able to develop its own business. There is a need for training activities to guide the Romanies with respect to the quality and presentation of services in the entertainment sector at the traditional county fairs. Further measures are required in order for the children of hundreds of families to go on attending formal education. In this respect new studies and steps required to be taken rapidly are needed. First of all, the Romanies making their living from traditional county fairs should be detected clearly. Through the training and consultancy services that the Romani groups will be provided with concerning business development and the providing of occupations, they may be enabled to adapt their occupations to current conditions. Doubtlessly, it is also quite essential to support this group with inadequate savings through special loan opportunities & microloans. The departments consisting of renewed entertainment counters will mean significant earnings for everyone.

Acknowledgements

We would like to extend our thanks to TUBITAK (the Scientific and Technological Research Council of Turkey) for the support provided to Research Project No. 113K239.

References

- Berger, H. (2000). *Çingene Mitolojisi [Mythology of Gypsies]*, (trans. Musa Yaşar Sağlam). Ayraç Publishing House, Ankara..
- Çalışkan, V., Sarış F., Gültay B., Öztürk M. Z., (2015a). “*Impact of demographic and socio-economic characteristics of visitors on their preference in Utilisation from functions of traditional county fairs*”, *International Journal of Arts & Sciences*, no.4, pp.105-114.
- Çalışkan, V., (2016). Geçmişten Geleceğe Kültürel Bir Miras: Pehlivanlık Panayırı [A Cultural Heritage from Past to Future: the Pehlivanlık Traditional County Fair], Cultural Publications by Pehlivanlık Municipality, Kırklareli.
- Çoşkun, N. (1998). Romanya ve Antalya Zeytinköy Romanlarının Toplumsal Bütünleşmeleri [Social Integration of the Romanies of Romania and Zeytinköy], Unpublished Graduate Thesis, Institute of Social Sciences at Sakarya University.
- hAodha, O. M. (2007). *Migrants and Memory: The Forgotten “Postcolonials”*, Cambridge Scholars Publisher, November 1, 2007, p. 145.
- Marushiakova, E.; Popov, V. (2006). Osmanlı İmparatorluğu’nda Çingeneler [Gypsies in the Ottoman Empire], Homer Bookstore, İstanbul.
- Marsh, A. (2008). “*Etnisite ve Kimlik: Çingenelerin Kökeni*” [Ethnicity and Identity: Origin of Gypsies], *Biz Buradayız: Türkiye’de Romanlar, Ayrımcı Uygulamalar ve Hak Mücadelesi*, [We Are Here: Romanies in Turkey, Discriminatory Practices and a Struggle for Rights], Mart Printing House, İstanbul pp. 19-27.
- Öncül, K. (2015). “*Cultural Politics And Poşa’s Sampling Kars*”, *Turkish Studies International Periodical For The Languages*, Volume 10/4 Winter 2015, p. 707-716, Ankara.
- Özkan, A. R. (2000). Türkiye Çingeneleri, [Gypsies of Turkey], Publications by the Ministry of Culture of the Republic of Turkey, Ankara.
- Paspati, A. (1870). *Etudes sur les Tchingianes ou Bohemiens de l’Empire Ottoman*, İstanbul.
- Toprak, Z.; Timurcanday Özmen, Ö.N. ve Tenikler, G. (2007). İzmir Büyükşehir Bütününde Romanlar, [Romanies throughout İzmir Metropolitan City], Nobel Publications, Ankara.
- Yağlıdere, A. (2011). İzmir Romanları, [Romanies of İzmir], Ozan Publications, İstanbul.
- Türkiye Roman Çalıştay Raporu [A Report by the Turkish Romani Workshop], (2009). , see: <http://t24.com.tr/haber/roman-calistayi-raporu/71526>.

Art Nouveau and the European influence in Brazil: the contributions of Victor Dubugras bourgeois house to the Brazilian Architecture

Amanda Bianco Mitre

Introduction

Introduced in a context of mutability in the architectural parameters, the Art Nouveau style manifested itself from ideological, aesthetic and technical developments due to a conformation and suitability with the emerging urban industrial reality. It occurred simultaneously in several Western European and American countries, receiving different terminologies: in England was known as "*Liberty Style*", in Germany as "*Jugendstil*", "*Sezession*" in Austria, "*Style Nouille*" or "*Art Nouveau*" in France, "*Arte Nova*" in Portugal and Brazil, and "*Stile Liberty*" in Italy (Champigneulle, 1984).

The style established itself as a disruptive proposition towards the previously architectural conventions, basing their concepts in to the present reality or even in futuristic visions. Due to the particularity of use of new materialities and the search for new practices, the style was qualified as one of the first attempts to replace the classical systems from French Beaux-Arts. The *art nouveau* is exposed by Barilli (1991) as a progressive process of regional experiments linked to the use of available technical innovations, in a way that aesthetic and theoretical characteristics depended on the country in which they were developed.

Considering this aspect, Champigneulle (1984) discusses:

Their forms of expression reflected deeply the individualism of the authors. Departed to adventure, each one according personal techniques, temperament, tenderness, reflections, spiritual trends and means of expression. To create a modern art applied to their time, they handed themselves to the feats without future, believing that they did it on purpose to stagger the public (p. 89).

While in the eighteenth century, the European architecture depended on the patronage from the Church, the Government and the aristocracy, in the nineteenth century this reality gradually changed and the aspirations of a new industrial class gained space. The buildings sponsored by the bourgeoisie established themselves as one of the main representatives of the new architectural language, since the purchasing power acquired by this class made possible a significant renovation in the constructions. The bourgeoisie, considered this context, became a sponsor of what was the most sophisticated in terms of technique, method and building materials.

With a superior prevalence in the urban centers, the *art nouveau* had a cosmopolitan quality associated within, which was defined by Argan (1989):

... The Art Nouveau is a phenomenon ... that should satisfy what is believed to be the "need of the art" of the entire community. It establishes between them (European and American industrial countries) a cultural regime and customs almost uniform, despite the slight local variations, and explicitly modern and cosmopolitan character. It's a typically urban phenomenon. It appeals to all categories of customs: the urbanism of entire neighborhoods, the construction industry in all its types, equipment, urban and domestic, figurative and decorative arts, tools, clothing, personal ornaments and the spectacle (p.189).

2. The development of the style in Brazil and the architect Victor Dubugras

In Brazil, starting in the mid- nineteenth century, the spread of the coffee production and the subsequent progress of the economy made possible the development of urban infrastructure and the means of transportation.

The confluence of the coffee economy with the population growth caused by immigration gave the basis to a new social order that integrated those who held capital (farmers and small foreign entrepreneurs searching for social ascension). These two groups were responsible for changing the cities physiognomy, by making use of architecture as signals of status and wealth (Fabris, 1987). Carvalho (2008) indicates that, due to the surge of the economy, a considerable number agriculturalists families moved to the cities and started to make use of the railways to bring, in a quick and efficient way, "the imports for the construction of luxury homes and their owners, like clothing and home furnishings" (Carvalho, 1998, p.20).

Motta (2012) considers that, with the installation of industries and railways, it was introduced an euphoria in relation to new materialities and technologies applied to the buildings. The *art nouveau*, in this scenario, was qualified as a gesture of "spiritual crowning in the life of those people who enriched with the coffee and began in the industrial life" (Motta, 2012, p.25).

Since the country hasn't had neither a consolidated technology sector nor the same cultural conditions from the European countries in the which the concepts of style were established, the *art nouveau* architecture was distinguished by the activity of a small number of architects – gaining prominence in the work developed by Victor Dubugras – in a way that, in many situations, the style was engaged in the country as an "exotic art" imported by the rural aristocracy and the bourgeoisie that were inspired in large European cities. The concepts were used in architecture as a form of reproduction (several times, in a decorative way) of elements associated to European *art nouveau*. "Indeed, in São Paulo there wasn't exactly a pure '*art nouveau*' style. The constructions that more achieved the desired purity were, undoubtedly, those of authorship of the architect Victor Dubugras" (Loureiro, 1981, p.38).

Born in the city of Sarthe (France), Victor Dubugras (1868-1933) received his professional training in architecture in Buenos Aires (Argentina) and began his professional career in the office of the Italian architect Francisco Tamburini, where he worked between the years 1883 to 1891. In 1891, due the death of Tamburini, the architect settled his residence in Brazil, in the city of São Paulo, and began his career by working initially in the Technical Office Ramos de Azevedo.

In the early twentieth century, when consolidated in his own office, Dubugras developed several private projects, among which a large number of residential projects in the city of São Paulo, especially in prosperous areas such as Avenida Paulista, Vila Buarque and Higienópolis. Through the residential projects for the bourgeoisie, it is possible to observe in Dubugras architecture a gradual approximation with the *art nouveau*. Unlike the most of the architects who made use of the style, the architecture of Dubugras was discernible by the conscious use of certain elements or ornaments, always integrating them in the composition of the volumes, through a simplified language.

In fact, throughout his professional career in Brazil, the architect showed a great sensitivity in the face of different architectural trends of his time, in line with the development of Latin American architecture of the nineteenth and early twentieth centuries, making use of the repertoire Neo-gothic, *Art Nouveau*, Neocolonial and the Modern Movement.

The Dubugras works with the *art nouveau* style made use of distinctive trends, approaching, in some moments, more organic and natural motives (especially in his early work) – as detected in the architecture of Victor Horta (1861-1947) and Henri Van de Velde (1863-1957) – and in others made use of geometrical shapes that emphasized the vertical lines – such as those produced in the architecture of Charles Rennie Mackintosh (1868-1928) and in the Vienna Sezession. Related to this aspect, it is possible to observe in Dubugras architecture an

integration of the *art nouveau* and other architectural styles trending in the period, such as neo-gothic and neocolonial.

As an object of analysis for this article, it was selected three residential projects from Dubugras to the bourgeoisie, which incorporated, in minor or larger scales, a variety of *art nouveau* characteristics: the Vila Uchôa, the residence of Horácio Sabino and the residence of Baroness of Arari.

3. The residences

All residential projects reviewed in this paper were located in relatively short distances to each other, in high-valued areas of the city of São Paulo, and had their locations indicated in the middle of the fields, away from the street alignment, which according to Lemos (1985, p.148) was unusual because there were very few *art nouveau* buildings isolated in their gardens. While the residence of Horácio Sabino occupied an entire block (scoped by the Avenida Paulista, the residence of Baroness of Arari and the Vila Uchôa were located in smaller sites, but still remained isolated. It's interesting to highlight that in the case of Vila Uchôa, the iron fence of the property – probably imported from Europe – had *art nouveau* qualities in the use of iron and the curvy lines.

Considering his initial work transitioning to the style, the Vila Uchôa (1902), despite having a predominantly neo-gothic exterior, made use of some exterior and interior details of *art nouveau* language. In the design, the architect made use of an asymmetric and orthogonal volume with few decorative elements that contrasted with the eclectic buildings of the era. The finer decorative elements, in neo-gothic style, were restricted to some points of the building: the upper part of the Tower, the main entrance door and window sills of the terraces (Kings Son, 1997).

The entrance railings to the property, the railing of the access ramp porch, the car coverage, the basement ventilation grids and some doors of the ground floor were developed in iron and had stylized lines inspired in the *art nouveau*, showing some resemblance to the work elaborate by Joseph Maria Olbrich and Henry Van de Velde.

The access ramps and automobile coverage, with *art nouveau* inspirations, were two important notes, with its curves overlapping the severe project of the house. Both of extraordinary strength, by its dimensions and its features, changed completely the building, providing a smooth and engaging relationship with the garden that integrated with the architecture (Reis Filho, 1997, p.43).

Following a common practice among European *art nouveau* architects, the design, which in its details reached the scale of furniture and the description of the materials, had much of the furniture in dining room and in office of Flavius Uchôa designed by Dubugras, demonstrating "lines that resembled the works of Van de Velde" (Reis Filho, 1997, p. 43). The architect took advantage of various materialities, applying elements of concrete, iron and wood (Motta, 1957). In the grand entrance hall, a variety of paintings and adornments on the walls and on the ground made use of natural themes and curved lines – alluding to *art nouveau*. "The decorative paintings, *art nouveau*, largely inspired by the Brazilian flora, have been executed under sketches of the architect " (Toledo, 1905, p. 76).

With some vocabulary analogies, in the residence of Horácio Sabino (designed in 1903) the projected lines showed a little more austerity, where stood out some architectural elements that incorporated the *art nouveau* language as the terraces with sills of ceramic modular elements in stylized curves and the cut out pediments "with obviously plastic purposes" (REIS FILHO, 1997, p.49).

Considered by Homem (1996) as one of the most important *art nouveau* buildings of Dubugras, the volume was marked by its asymmetry and by a series of prominent balconies and terraces in the main façade. "Its volume, as the Vila Uchôa was not driven so much by its symmetries as by the imbalances, becoming gently moved, although a little heavy. The lightness was in the arches, pediments, balustrades and the columns caps in the balconies" (MIYOSHI, 2012, p. 93). The dining room, which received a prominent position in the residence, was emphasized by the large front porch and columns which had bases that resembled roots and capitals surrounded by branches and foliage. "In some occasions, Dubugras sacrificed the constructive logic in favor of a plastic solution" (Motta, 1957, p. 51). The plastic artifice for Toledo (1985) seemed to have a direct influence on the entrance door of Guimard's Béranger Building (1894), while for Miyoshi (2012) suggests a reference to Horta's Maison Tassel (1892). As in the Vila Uchôa, some of the furniture was designed by Dubugras, as an integral part of the architectural proposal.

Regarding the Baroness of Arari residence (1916) design, the proposal distances itself in a certain way from the other two cases mentioned above because, although presenting certain *art nouveau* attributes and a complex volumetry, the ornamentation introduced on the facade presented an exacerbated taste, "with some monumental sense" (Reis Filho, 1997, p.77). The entrance door frame in twisted iron has some analogies with Victor Horta's style and the large window in the posterior facade demonstrated an approximation to the *art nouveau* promoted in Mackintosh's architecture, as in the construction of the Public School of Martyrs (1894) and some areas of Glasgow School of Art (1897).

In some ornaments and compositions (mainly in the upper part of the volume), the project of the Baroness exhibited the next architectural style that would be adopted by the architect: the neocolonial.

It is worth emphasizing that, as well as in the Horácio Sabino's residence, the balconies of the project gained a remarkable plastic feature in the composition, which for Bruand (1981) was one of the fundamental characteristic in Dubugras architecture.



Figure 1. Vila Uchôa. (FAAUSP Archive).



Figure 2. Horácio Sabino's residence. (FAAUSP Archive).



Figure 3. Baroness of Arari residence. (FAAUSP Archive).

In relation to the environments arrangements¹, the programs of Dubugras designs followed a bourgeois logic of grouping the rooms in three zones: living, service and rest, disassociated from each other through foyers and/or hall (Homem, 1996). In the organization of the different functions, the architect draws most of the potentiality of the spaces in a way that there is no unused environment and there is always a programmatic association.

At the residence of Horácio Sabino, all functions assigned to the public life were concentrated in the ground floor of the building while the functions intended for the private life of its residents were located on the upper floor (bedrooms, bathrooms and office).

The residence did not present superposition of functions, since each of everyday life activity had a corresponding and specialized space (like in the rooms: dining, visits, sewing and the children's dining room). "The parlour located between the pantry and the dining room could have been intended for the lady room. But the winter garden, an innovation at the time, eventually attracted the being of the family "(Homem, 1996, p.200).

It is interesting to note that some architectural elements, such as the frames of the doors and windows of the social areas (as in the hall and the winter garden), were composed by thin metallic elements that incorporated curvy lines, in a clear *art nouveau* style.

All the functions dedicated for the service sectors, such as the kitchen, pantry and maid's bedroom were placed in the back part of the house and had reduced dimensions when compared to the social and private areas.

The compartmentalization of the rooms in this project, in one hand allows a superior privacy of the residents; however, while in one of the rooms remained such privacy and had no passages to another bedroom, the master bedroom had communication with a second bedroom.

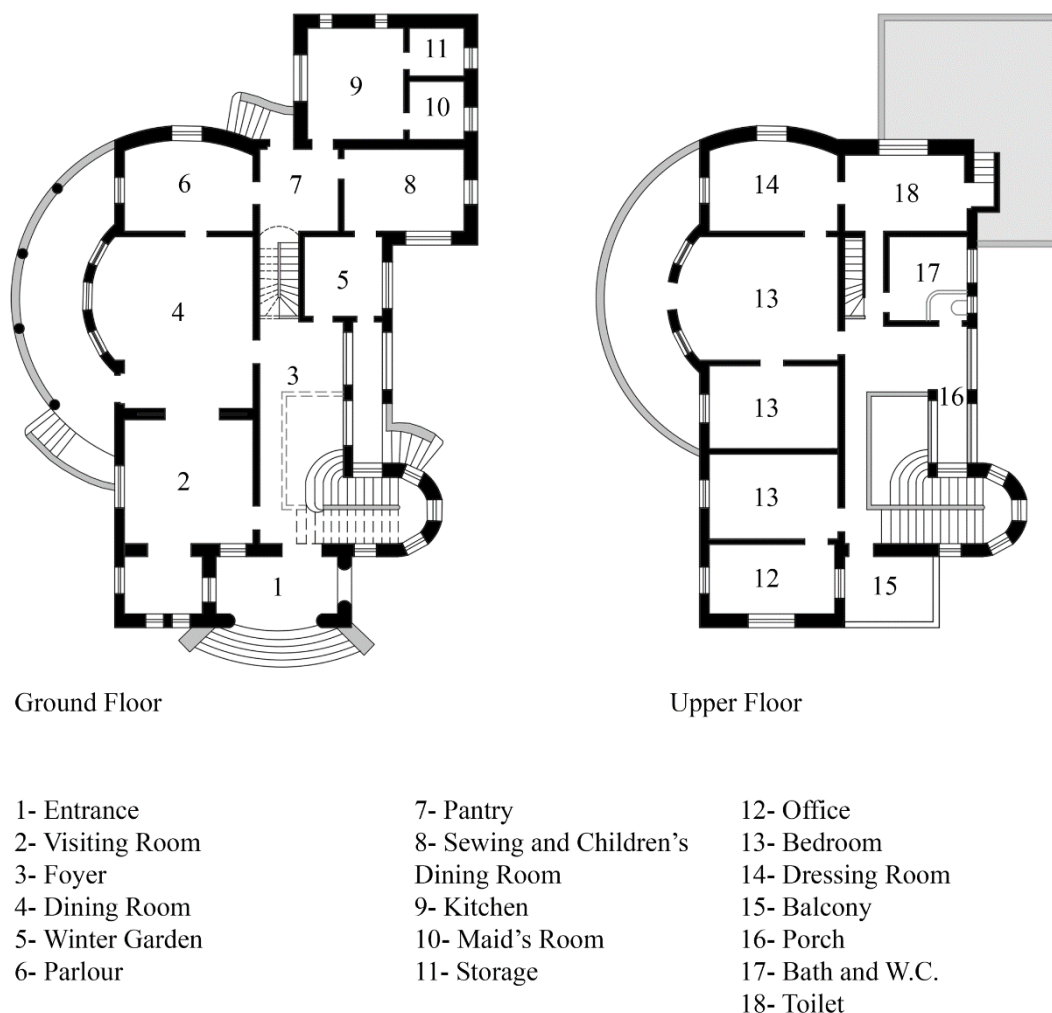


Figure 4. Floor plans of Horácio Sabino's house.

In the residential program of Baroness of Arari, there was much more intense compartmentalization and higher degree of functions, although the association between public and private areas were the same as those found in the house of Horácio Sabino.

The residence focuses on the ground floor a range of specialized rooms that encouraged public life, such as the dining room and sitting room, music rooms and visits room. The great entrance hall distributes the flow and leads to two physically close stairs, but with distinct functions: while one of them had a social function (since it had a superior plastic characteristic and arrived directly at the upper floor), the second staircase is simpler and provided access to a small pantry. As a way to maintain the privacy of the family, the project placed a dormitory and a toilet on the ground floor, while the other rooms were on the upper pavement (however, all the rooms of the upper floor had connection with each other). While in the residence of Horácio Sabino only a single toilet on the upper floor was available, in the residence of Baroness there were four toilets for the eight bedrooms distributed on the upper floor.

Overall, "the residences of Dubugras seemed to seek a balance between our traditions, the etiquette and the French refinement of our elite, alongside to the new trends in architecture" (Homem, 1996, p.205).

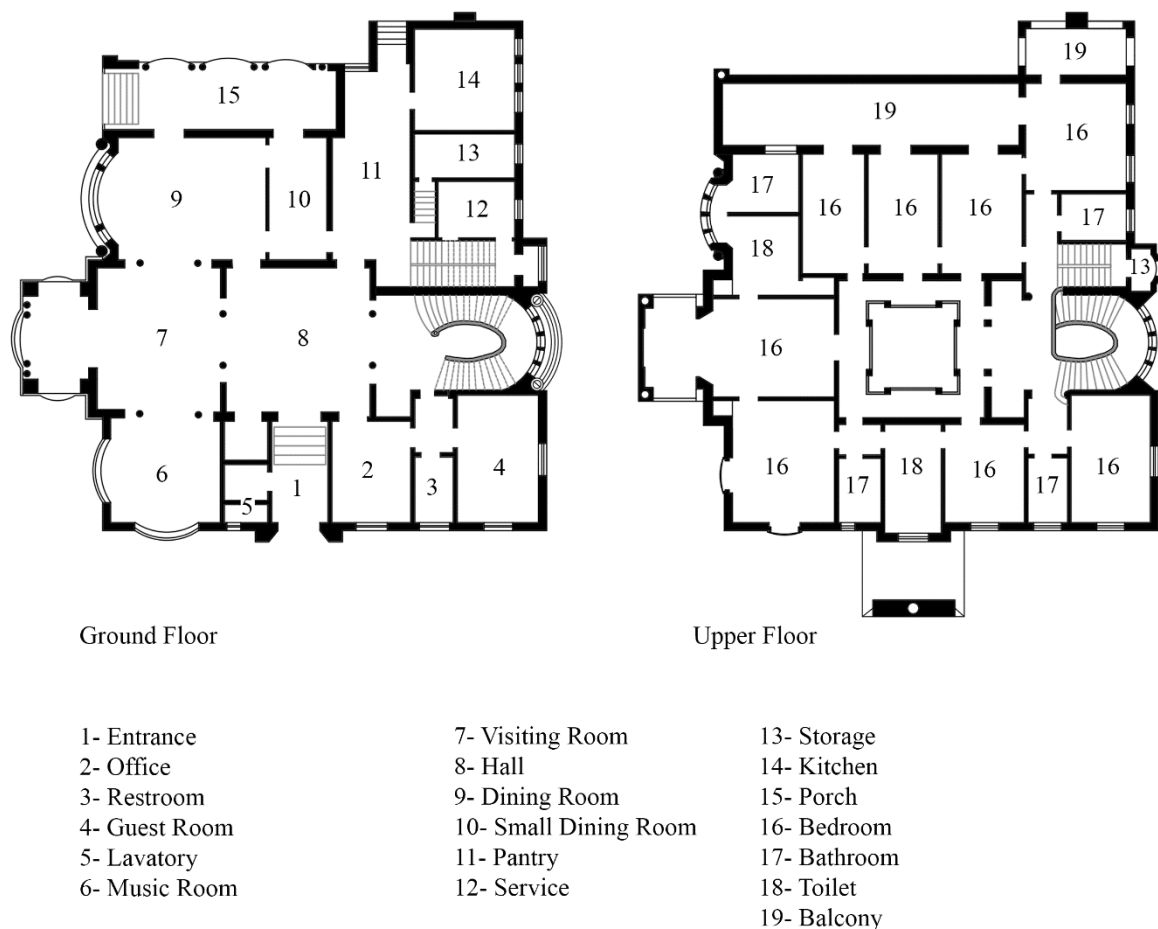


Figure 5. Floor plans of Baroness of Arari's house.

4. Conclusion

In this context, the study demonstrates that the design freedom and the nonexistence of a closed definition based on visual criteria and rules were particularities of art nouveau that allowed a greater originality in the solutions proposed by Dubugras. In fact, all the art nouveau works

addressed in this article received different formal treatments and design specifications; each work is the result of an individual reflection of the architect regarding the style.

The innovative volumes were always discernible by the compositional asymmetry, which guarded a great balance between formal and constructive aspects. In the designs of the Vila Uchôa and the residence of the Baroness of Arari, despite the use of distinct styles in combination with the *art nouveau* (neo-gothic and neocolonial, respectively), the integration and unity achieved by the construction was given from the extensive participation of Dubugras in all project scales, going from the architectural to the furniture design.

In most projects of bourgeois homes, there was a clear need to separate the public area from the space of the intimate life. In the Dubugras projects, the intention proved to be visible; in the structuring of the compositions, the largest portion of the ground floor was occupied by the social sector – such as living and dining rooms and other specialized environments (sewing music, visits, etc).

Therefore, it's possible to emphasize that the residences analyzed in this paper can be considered a reflection of social, cultural and economic conditions, mainly due to the fact that the bourgeoisie built-needs programs express the importance given by this social group to its own public image.

5. Acknowledgement

Supported by Fundação de Amparo à Pesquisa do Estado de São Paulo (FAPESP), under grant 2015/02470-0.

6. References

- Argan, G. C. (1998). *Arte moderna: do iluminismo aos movimentos contemporâneos* [Modern art: from the Enlightenment to contemporary movements]. São Paulo: Companhia das Letras.
- Barilli, R. (1991). *Art Nouveau*. São Paulo: Editora Martins Fontes.
- Bruand, Y. (1997). *Arquitetura Contemporânea no Brasil* [Contemporary Architecture in Brazil]. São Paulo: Editora Perspectiva.
- Champigneulle, B. (1984). *A Arte Nova* [The Art Nouveau]. São Paulo: Verbo/Edusp.
- Carvalho, V. C. de. (2008). *Gênero e artefato: o sistema doméstico na perspectiva da cultura material – São Paulo, 1870-1920* [Gender and artifact: the domestic system from the perspective of material culture - São Paulo, 1870-1920]. São Paulo: Edusp; Fapesp.
- Fabris, A. (1987). *Ecletismo na Arquitetura Brasileira* [Eclecticism in Brazilian Architecture]. São Paulo: Ed. Nobel/ Editora da Universidade de São Paulo.
- Homem, M. C. N. (1996). *O Palacete Paulistano* [The Paulistano Palace]. São Paulo: Martins Fontes.
- Lemos, C. A. C. (1989). *Alvenaria Burguesa* [Bourgeois Masonry]. São Paulo: Nobel.
- Lemos, C. A. C. (1979). *Arquitetura Brasileira* [Brazilian Architecture]. São Paulo: Edições Melhoramentos / EDUSP
- Lemos, C. A. C. (1993) *Ramos de Azevedo e seu escritório* [Ramos de Azevedo and his office]. São Paulo: Editora Pini.
- Lemos, C. A. C. (1987) *Ecletismo em São Paulo* [Eclecticism in São Paulo]. In: FABRIS, A. (Org.). *Ecletismo na Arquitetura Brasileira* (pp.68-101.) São Paulo: Ed. Nobel/ Editora da Universidade de São Paulo.
- Loureiro, M. A. S. (1981). *Evolução da casa paulistana e a arquitetura de Ramos de Azevedo* [Evolution of the Sao Paulo home and Ramos de Azevedo architecture]. São Paulo: Voz do Oeste,

- Miyoshi, A. *Victor Dubugras, arquiteto dos caminhos* [Victor Dubugras, architect of paths]. (2012) Retrieved at June 22, 21016, from <http://www.unicamp.br/chaa/rhaa/downloads/Revista%2012%20-%20artigo%204.pdf>.
- Motta. F. L. (1957). *Contribuição ao estudo do Art Nouveau no Brasil* [Contribution to the study of Art Nouveau in Brazil]. (Chair Thesis). Faculdade de Arquitetura e Urbanismo, USP, São Paulo-SP.
- Motta. F. L. (2012). *São Paulo e o Art Nouveau* [São Paulo and the Art Nouveau]. In: MARTINS. M. L.R.R. (Org.), *Vila Penteado 1902-2012: Pós-Graduação 40 anos* (pp. 23-30). São Paulo: FAUUSP.
- Reis Filho, N. G. (1997) *Racionalismo e Proto-Modernismo na obra de Victor Dubugras* [Rationalism and Proto-Modernism in the work of Victor Dubugras]. São Paulo: Fundação Bienal de São Paulo.
- Reis Filho, N. G. (2005). *Victor Dubugras: Precursor da arquitetura moderna na América Latina* [Victor Dubugras: Precursor of modern architecture in Latin America]. São Paulo: Edusp.
- Toledo. A. de. (1905). Vila Flávio Uchôa. *Revista Politécnica*, 2, 75-77.
- Toledo, B. L. de. (1987). *Álbum iconográfico da Avenida Paulista* [Iconographic album of Avenida Paulista]. São Paulo: Editora Ex Libris e João Fortes Engenharia.

¹ It was not possible to analyze the interior arrangement of the Vila Uchôa due to lack of available materials about the design.

Universal Design and Urban Squares: A Case Study of Trabzon Meydan Park, Turkey

Reyhan Midilli Sarı, Fatih Yazıcı

1. Introduction

Streets, squares, parks, urban open spaces that are important in the formation of cities are vital areas which provide city dwellers to come together, reach and get connect with each other and constitute a society belonging by connecting the city's function. So, urban squares being vital parts of urban life and used by city dwellers for the purpose of social, cultural, political and commercial needs both in special days and usual days are public areas. Being an important instrument of participation to social life, the urban squares must be discussed carefully in the context of form, function, and spatial organization for the potential users (Seeland, 2006). And also, urban squares have to be equal, accessible, perceptible, secure, and utilizable and offer diversity for the individuals that constitute the society. At this point, the universal design approach stands out by developing a different perspective for user factor in design and remarks as an approach appreciating the human.

Universal design is an approach which adopts an understanding that human who is described as the user do not have standard characteristics and abilities. It defends that all the products and environment can be used by people as many as possible regardless of age, ability, gender, and situation. It also integrates individuals and contributes to the existence in the society. Elders, disabled, kids, people who have different measurement like too tall, too short, too weak or too fat, people who have continuous or temporary disease, healthy people, people who lost physical qualification, pregnant, parents that have children and so many different users do not be parsed with universal design approach. On the contrary they are included in design by an inclusive and holistic view. All these people with different abilities and qualifications using the product or environment without hindrance and participating in the social life can be possible only with designs and applications that are considering universal design policy.

1.1. Aim and Method of Study

Urban squares designed in our cities and forming dense areas cause usage and accessibility problems in consideration of user variety, especially for the elders, disabled and children. From this point of view, the aim of this paper is examining Trabzon Meydan Park and its surroundings, being the city's most important gathering, socializing and transition zone, in the context of the user variety and universal design approach. In the study, firstly main standards about disability and design for all are investigated then the checklists for the study were formed (DEB, 2015; UN, 2015; ADA, 2015; Accessibility Monitoring and Inspection Form, 2013). The investigated issues in the study are wayfinding and signages, pavements and walkways/paths, zebra crossing, ramps and curb ramps, stairs and handrails and street furniture (seating, bins, public phones, drinking fountains and lighting). The checklists were filled via on-site monitoring, measurement, observation and photography techniques. The obtained data were transferred to the maps and results were interpreted. In the conclusion, the utility of Trabzon Meydan Park in the context of the universal design was commented and suggestions were made.

1.2. Study Area

Trabzon Meydan Park is an urban open space with 10.000 m² land use being a meeting point for social activities, recreation and resting (Figure 1). It is a meeting and crossing area of heavy

pedestrian traffic coming from Uzun Street, Maraş Avenue, and Kunduracılar Avenue. Also, the area is working as a big crossroad where public transportation vehicles and private cars pass. The area is an important transition and standstill place for all users as elders, youngsters, disabled, pregnant, kids because of the central location and being an intracity transfer point.



Figure 1. Location of Trabzon Meydan Park, Trabzon, Turkey

2. Findings

2.1. Wayfinding and Signage

There are not any information board in Meydan Park and signages (S1-S5) are inadequate in number (Figure 2). It is seen that existing signages do not have any visual-audio differentiation for disabled people.

While S1, S2, and S3 signages are acceptable for international standards in legibility, color, sign and remarkability, their heights are not acceptable. Tourist information box's sign (S4) is acceptable for the international language but it has a few problems with the perceptibility. These problems are the color and small size of the signage and boughs that are blocking the signboard. Signage could not be seen at dark due to the absence of lighting and coloring systems. Because of the position taking the sun shines directly and the material reflecting light, the toilet sign (S5) lost its legibility. In addition, big boughs obstruct the visibility of toilet entrance and entrance sign from far away (Figure 2).



Figure 2. Wayfinding and Signages

2.2. Pavements and Walkways/paths

All of the pavements (P1-P8) and walkways (W1-W6) are suitable in width (150cm-500cm) for the two-way access and are purged from all the barriers that make passing difficult. Apart from P2, all of the pavement heights are between 3-15cm and are suitable for universal design.

standards. P1, P4, P5, P6 pavements and W1 walkway are pedestrian routes of having %5 gradient, so they are suitable for easy and comfortable walking (Figure 3).

That crenels, manhole covers which are on the P3, P8 pavements and W4, W2 walkways are not uniplanar with the pedestrian route is an obstacle for the users with mobility vehicles (Figure 3/P3). Nonoperative ground lightings on the W1, W4, W5 and W6 became an obstacle for comfortable and easy walking due to the wrong material choice and application defects (Figure 3/W5,W6)(Figure 5). W7 has cobblestone paving and joint gaps are changing between 2-4 cm. These dimension cause walking and passing difficulty for chairmans, women wearing court shoes, little boys and people with walking stick. Other pavements and walkways do not have such problems. All of the pavements and walkways' material is fixed, durable, smooth and non-skid. But there are some problems derived from craftsmanship and application defects in some places as broken stones and discharges under the stones.

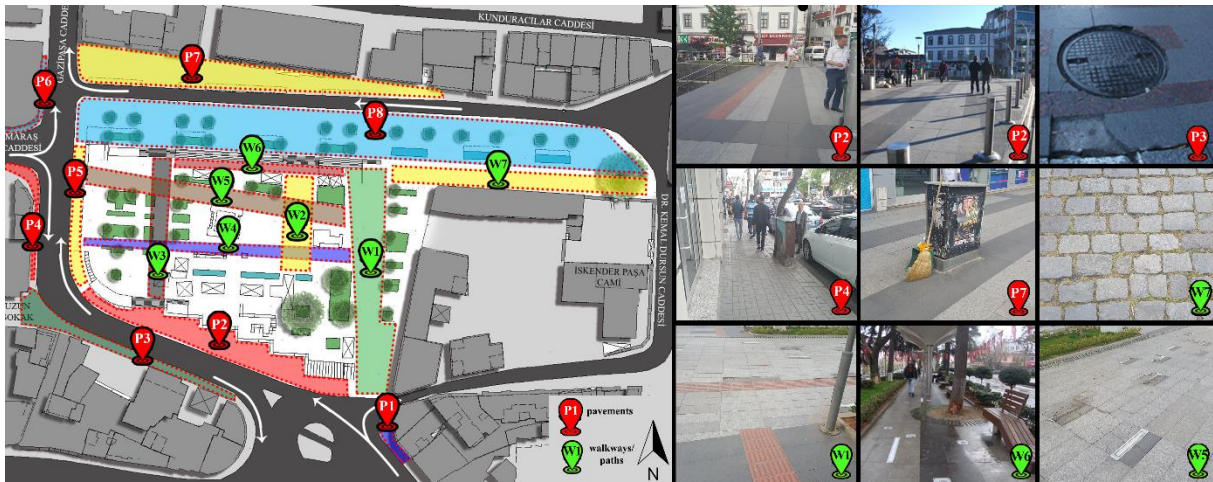


Figure 3. Pavements and Walkways/paths

Curbstones used on P1 and P3 pavements are differentiated with just texture but are not differentiated with color. (Figure 4/P1). Except P3, P4, P7 all the other pavements' curbstones are purged sharp corners and smoothed.

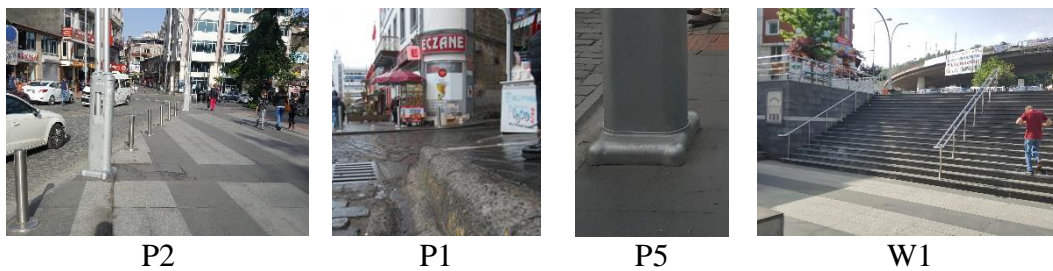


Figure 4. Pavements, Lightings and Stairs

Some vertical items like transformers, lamps, urban canopy, seatings etc. in P7 and W6 prevent and slow down pedestrians mobility or passing (Figure 3/P7,W6). However, placing the vertical obstacles on one axis in P2 pavement makes pedestrian passing easier as well as setting bound to roadway to create a secured area (Figure 4/P2). Only street lamps on P1, P2, P5 and P8 pavements have a base which is compulsory for firm and vertical obstacles like street lamps (Figure 4/P5). Bollards in 80cm height are used on P2, P5, P8 which are alongside of roadway, for providing the pedestrian traffic security (Figure 3/ P2).

Tactile paving surfaces are seen at W1, W5, W4, W7 walkways, and P2, P5, P6, P7, P8 pavements (Figure 3). But they have serious problems. However warning and deflection surfaces

are not used on lots of points as stairs, ramps, on curb ramps etc. as in W1 (Figure 4-W1). Tactile paving surfaces especially the amenity surfaces have been splited, eroded and broken overtime because of weather conditions, wrong material choice and application defects (Figure 5). This situation creates utility difficulties not for only blind or visually impaired people but also elders, kids, and mobility vehicle users.



Figure 5. Defected tactile paving in walkways and ground lightings

2.3. Zebra crossing

All of the zebra crossings (ZC1-3) are marked around Meydan Park (Figure 6). None of the zebra crossings are on the same level with the pavement and it is observed that curb ramps on the zebra crossings have some problems. ZC1 bestrides curb ramps of the pavements. However, the location of these curb ramps is not on the passing axis. ZC2 also has curb ramps in two sides but the wideness of these curb ramps is not same with the zebra crossing, in addition its gradient is higher. ZC3 has any curb ramps in two sides and there are car parkings on the zebra crossing which is an obstacle for all users.

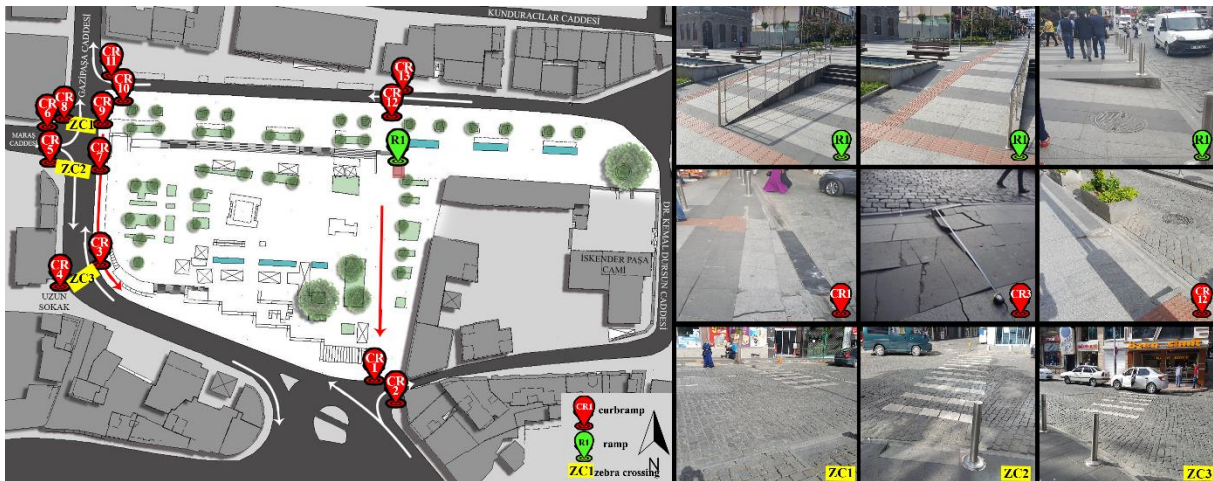


Figure 6. Ramps, Curb Ramps, and Zebra Crossing

2.4. Ramps and Curb Ramps

Because of sloping pavements around the Meydan Park, there is only one ramp (R1) in the area connecting the inner rise (Figure 6/R1). Wideness, nonslip ground material, having railing, having landing at beginning and end point of the ramp are compatible with universal design features. However, not having suitable guidance, absence of tactile surfacing and protecting kerbs are decreasing the utility. Also, amenity surfaces cutting the ramp entrance can cause confusion for visual impaired users (Figure 6/R1). In addition gradient is 11% and it is pass over the standard of max. 8%.

All of the curb ramps (CR1- 13) have suitable wideness (min. 120cm) in Meydan Park. However except CR2, CR7, and CR10, gradient of all curb ramps pass over 8% being the maximum. Flared sides are designed only at CR1, CR2, CR6, CR9, CR10 curb ramps and their gradient pass over 10% being the maximum.

Planting for providing the security is seen only in CR11 (Figure 7/CR11). It is detected that tactile paving surfaces are used in only CR1, CR2, CR4, CR6, CR7, CR10, CR12 and CR13 but their dimensions and location are insufficient and wrong (Figure 7/CR10,CR11,CR12). Besides, raceway which is located in the roadway side of the curb ramps is an obstacle for users with wheelers.



Figure 7. Wrong applications of tactile paving

2.5. Stairs and Handrails

There are two main stair axes which are located in East-West direction (Figure 8). One of these axes is composed of ST1, ST2 and ST3 stairs and are located in the north side of the park. These stairs are very wide but do not have any railing. All of the steps are suitable in wideness (30cm) and riser (16cm). Wideness and riser of the step are equal along the stair at ST2, but are different in ST1 and ST3 stairs. All the stairs noses are overhanged. At the end of the steps there is not any nonskid band for security and peceptibility of the step-end. In addition, tactile surfaces are not implemented for visually impaired users (Figure 8). However, material of stair surfaces are flat, firm and nonslip due to universal design features.

The other axis is composed of ST4, ST5, ST6, ST7, S8 and ST9 stairs and it is located on the west side of the area (Figure 8). All the steps have suitable wideness (30cm) and riser (16cm). Railing is designed only at ST4 and ST5 stairs but the frequencies are insufficient. End and beginning point design of the existing railings is suitable for the universal design, so the accidents are hindered (Figure 8/ST4). ST4 stairs do not have any middle-landing even though it passes 2.5m heigh. At the end of the steps there is not any nonskid band for security and peceptibility of the step-end. In addition, tactile surfaces are not implemented for visually impaired users. However, material of stair surfaces are flat, firm and nonslip due to universal design features.

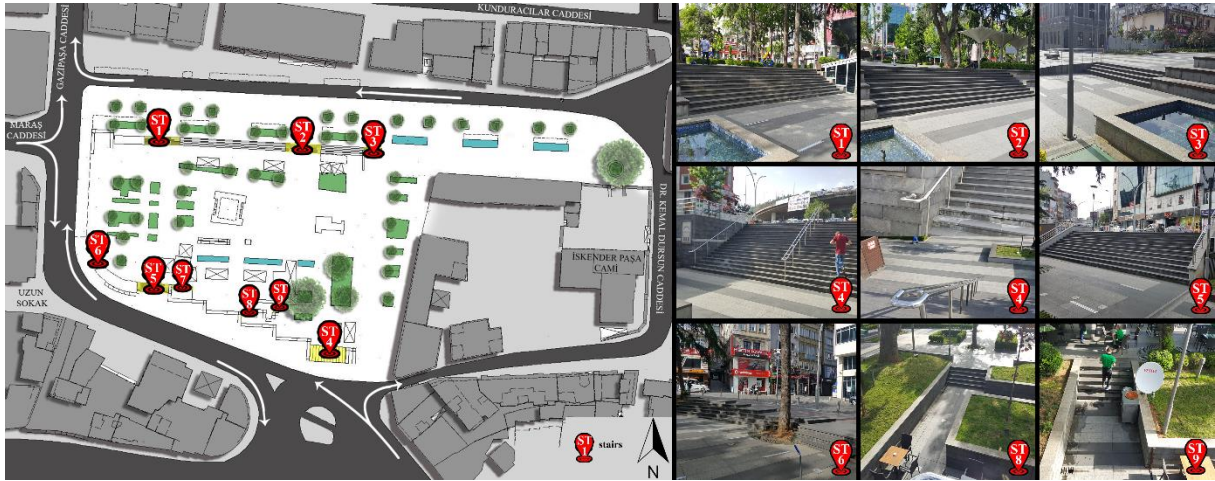


Figure 8. Stairs and Handrails

2.6. Street Furniture

Street furniture includes seating, bins, telephone booths, drinking fountains, lighting and flagpoles, plant boxes, and bus stops. Street furniture must be ergonomic in measures, useful, perceptible and accessible for everyone. At the same time, it must be enough flexible, secure and variable for every single user.

2.6.1 Seating

While some seatings in Meydan Park are well positioned and do not form any obstacle to pedestrian routes, this design principle is not applied to all seating elements in the area (Figure 9). Though the used materials are generally wood and metal, required color contrast with the walkway surface is inadequate, so the perceptibility of the furniture is not increased. Especially in north line of the park, level positioned seatings are not differentiated from surrounding in terms of their forms (Figure 9/SE2).

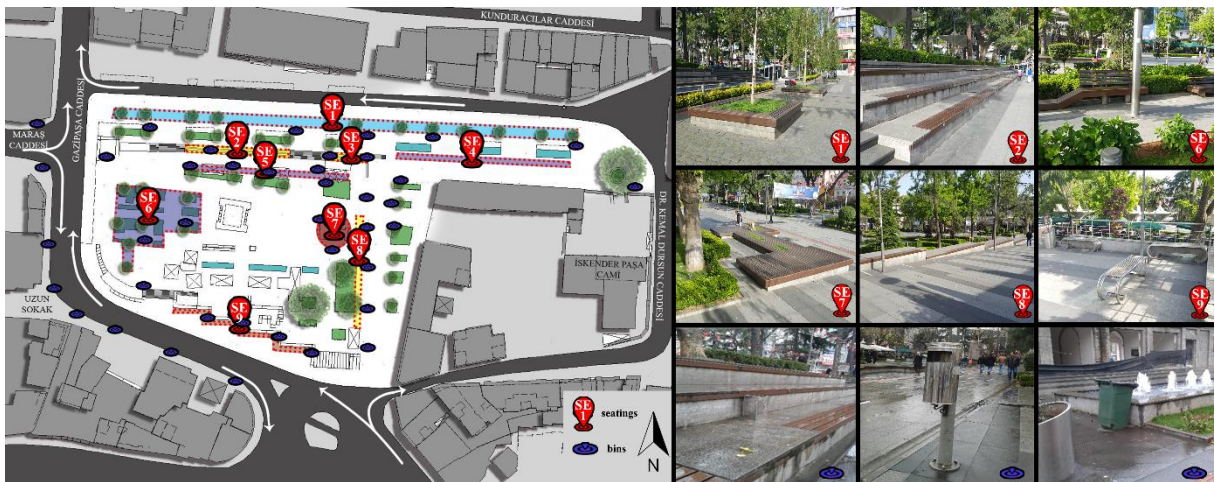


Figure 9. Seatings and Bins

There must be enough space near the seatings for people using baby carriages or mobility vehicles/tools for resting, sight-seeing or socializing as the healthy people and adults. However, when seatings are examined, only a few furniture have space for such purposes (Figure 10).

Seatings are in different height levels for different age/height groups while offering difference and variety in shape. But, there is not any arm support on the seatings and nearly half of them do not have back support, so these features decrease the ergonomics of the elements (Figure 10).



Figure 10. Seatings in various heights and spaces for mobility vehicles

2.6.2. Bins

In the study area, it is noticed that there are three kinds of bins. Those are mounted to stud, mounted to ground and mobile bins (Figure 9/B1, B2, B3).

Located on a pedestrian route, bins hold the risk of injury by crashing both for any individual who are confused and for visual impaired users. When the heights of those bins are examined, it is seen that they could be reachable with arm distance for both disabled people and non-disabled people (38cm-135cm). When the color contrast with the surface is examined, they are in different color with the ground and they are perceptible for people with vision impairments or walking as confused.

The heights of the bins used by the users on seatings and surrounding are adequate. However, the location of those bins are on the line of pedestrian route and their colors are very close to floor covering. The color contrast with the ground is inadequate and this feature could cause accidents for people with vision impairment and confused due to imperceptibility. Besides that, the fact that every bin not having cover makes it easy to use by one hand for the user with limitations but it also creates a hygiene problem.

The bins that are mounted to lighting studs are located in the reverse side of pedestrian route. So that, there is not any risk of hitting and hurting possibility for people with disability and other users. When the accessibility height is taken into consideration for all users, it is observed that they are located higher than (120-145 cm) the optimum height (max. 120 cm)

2.6.3. Public Phones

There is not any public phone booth in the park. There are only 4 public phones located next to each other (Figure 11/T). In order to use phones located in stair wall, the people have to use stairs, in addition there is not any approaching/maneuver space and sitting bench. Due to the location, phones are not accessible for wheel chair users, elders, pregnant, people who have baby carriages. Besides, there is not any arrangement for people with vision impairments in the apparatus of the phones and the height is too high for people with short stature and children.

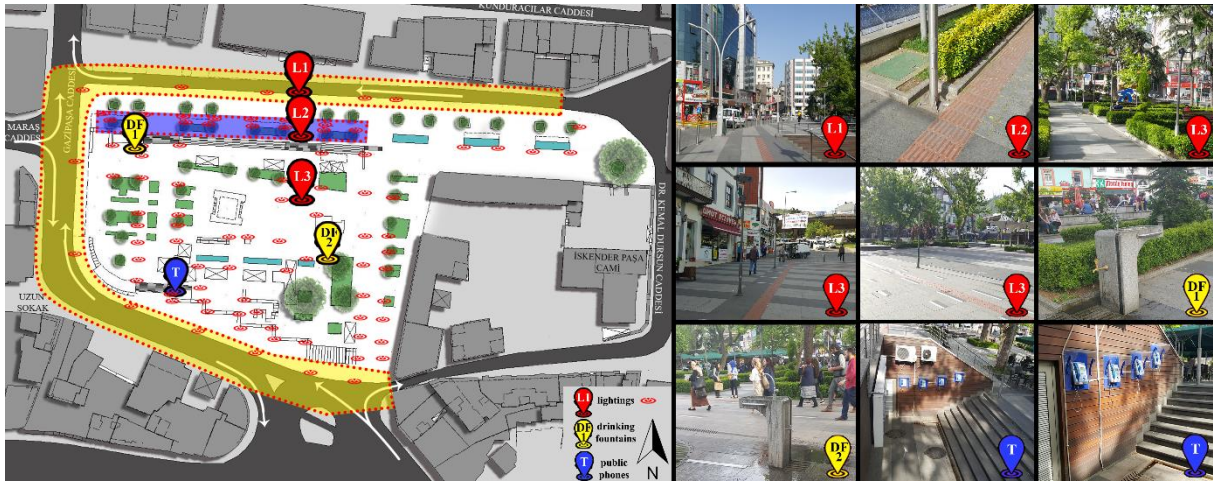


Figure 11. Public Phones, Drinking Fountains and Lightings

2.6.4. Drinking Fountains

In Trabzon Meydan Park, there are two drinking fountains (Figure 11/ DF1, DF2). DF1 is not an accessible fountain. In front of DF1, there is loopholes designed for rain water disposal and this disposal forms an obstacle for chairman, users with walking stick and also for women wearing court shoes.

There are not any signages, amenity or warning surfaces for drinking fountains. Knee spaces on fountain makes it easy to use and approach for people with wheelchair (Figure11/ DF1). Having grab bars in two different parts of the fountain also makes it easy to use by people with power limitation and people with disabilities. As drinking fountains are built in a very large area, there is enough maneuver place for people with wheelchair. Being in same color with the ground cover and surrounding, it has the potential risk of not being noticed. Additionally, drinking fountains have two height of sink and this let every user to use fountain easily (Figure 11/ DF1,DF2).

2.6.5. Lightings

Lightning elements in the study area are classified in three groups (Figure 11). First of them is L1 lighting that enlightens vehicle road and pavements. Those elements are vertical in shape, do not cause any obstacle for pedestrian movement and are on a platform heightened 10 cm. In order to make them more visible, 30 cm lighting elements are located in the middle parts of the poles. However, some of these elements are covered advertisement posters and some are broken.

The second lighting group, L2s are located in the north pedestrian route of the Meydan Park (Figure 12). Those elements are located right at the edge of green areas, so they do not constitute any obstacle to walk. As the L2 lighting elements are located in green areas, there is not any need for platforms to heighten. There is not any warning surface or strip to make them visible.

As the last group, L3 lightning elements enlighten the inner parts of Meydan Park (Figure 12). There is not any platform or strip to make them more visible. In general, lightning elements are located on the edges, on green areas or among bushes in order not to constitute obstacle to walk but some lighting elements are still in the axis of walking route. And even more, some of them are just in the middle of walking line. This situation cause problem for many people, especially for people with visual impairments.



Figure 12. Lightings

3. Results and Recommendations

Unimpeded access with equal opportunities to services such as working, housing, culture and recreation, of all individuals within a society, are under the responsibility of legislators, politicians, administrators and particularly the designers. The creation of inclusive physical environment can occur through human understanding of the different competencies and transferring this knowledge into the design. In this context, with a holistic point of view, universal design approach that includes all people not just people with disabilities and that sustains this perspective by the end of the beginning of the all design processes, is the biggest advisor.

Being a transition, resting, waiting, meeting area for the children, youth, elder or disabled shortly the society Trabzon Meydan Park is evaluated from this perspective of understanding and the results obtained in the study are as follows:

Serious deficiencies is found in the wayfinding and signages. Accessibility to tourist information office, toilets, public phones became difficult for the inadequacy of the signs.

It is determined that pavements and walkways are inadequate and inaccurate in terms of tactile paving surfaces. Amenity surfaces were cut off, warning and deflection surfaces are lacking, curbstones do not beveled, not colored and broken in some places, manhole covers and grill surfaces constitute surface level differences on pavements and walkways. There is no warning surfaces or platforms around the lighting elements and trees on the walkways. In addition some cars parked in a way to create obstacle for pedestrians on pavements.

Zebra crossings do not have any signages. Ramps are designed in nonlevel crossings. However, some of the ramp surfaces are corrupted, there are not any warning surfaces and gradient, width and arrangement are not suitable.

Curb ramps are among the most incorrect application among analyzed elements. As a result of the measurements, nearly none of the ramps has a suitable slope. Absence of warning surfaces on the beginning and end, lack of planting and security precautions are the other problematic issues.

It is unhealthy and uncomfortable ups and downs that stairs and risers are not in the same measures along the stairs. Lack of additional handrails in wider stairs and absence of railings for children are the other negative situations. It is a threat not having signs for step endings and warning surfaces for stair on the beginnings and endings for people who have visual impairments and careless people.

Seatings in the area vary in quality and quantity. However, some seating elements have shortcomings in terms of design. Prevention of pedestrian route, the lack of equipment in the arms and backrest and the lack of suitable area for the mobility tools near the seating are the main deficiencies.

A majority of the bins are not accessible in height and interrupts the pedestrian route due to the wrong location. Creating enough contrast with the environment in colors, they could be easily perceived by the users.

There is not any public phone booth in the area. The phones located next to the stair wall constitutes difficulty for all users. It is impossible to access these phones for wheelchair users and for the users who walk with stroller.

There is no amenity and warning surfaces referring to the area where the fountains located. Due to a close tone with floor surface color, it is a bit tricky for fountains' to be noticed. But, there are knee spaces under the fountain, grabbars and faucets in different heights make the fountains' accessible for users with different abilities.

Lighting elements will not interfere with pedestrian routes, located in safety areas from preventing accidents by crashing, marked with strips and having bases in some places. But the same sensitivity do not seen in the whole area.

Taking the diversity of users into account, Trabzon Meydan Park has unsuitable areas with regard to universal design. Because of the designing and application problems, regulations must be done urgently for all users who must be use the area equally, with less energy use, away from danger, flexible, perceptible and in suitable size. These regulations should include the tactile paving surfaces in missing pavements and walkways and they must be continuous. Walking routes should be purified from all kinds of elements that cause accident. Obstacles must be on a raised platform, the required signages should be apply and signages should be place in an axis, regulation on grids, manholes and lightings should not interrupt pedestrians walking. Pavements endings should be clarified by separation from curbs' colors. Zebra crossings sould have the required markings, ramps should be regulated and that should be provided linear transition. Way findings and signages must be easy to use, street furnitures should be in contrasting colors and size should be arranged so as not to cause an accident. As an alternative to stairs with significant level differences, at least one of those ramps, elevators or lifts should be placed.

Acknowledgement: Thanks for the contributions to Evşen Yetim, Elif Sever, Kader Keskin, Ozra Arfouzi, Ömer Aslanöz and İmran Kavaz.

4. References

- Seeland, K., & Nicole, S., 2006, Public Green Space and Disabled Users, *Urban Forestry and Urban Greening*, 5 (1), 29-34. doi:10.1016/j.ufug.2006.03.001
- UN (United Nations). (2004), *Design Manual for a Barrier-Free Environment*, Retrived at September 12, 2015, from <http://www.un.org/esa/socdev/enable/designm/>
- DEB (Dünya Engelliler Birliği Akreditasyon Merkezi, Turkey). (2015). *Engelliler İçin Evrensel Standartlar Kılavuzu*. Retrived at September 17, 2015, from <http://www.medlis.com.tr/files/tr/engelli-erisimi/engelli-erisim-kanun-ve-yonetmelik/engelliler-icin-evrensel-standartlar-kilavuzu.pdf>
- ADA (2015). 2010 ADA Standards for Accessible Design. Retrived at September 2, 2015, from <http://www.ada.gov/regs2010/2010ADASTandards/2010ADASTandards.htm#c5>
- Accessibility Monitoring and Inspection Form, 2013, Official gazette date: 20.07.2013, Number of official gazette: 28713.

Sinope Natural Harbor

Babur Mehmet Akarsu

1. Introduction

The geographical characteristics of Sinope within the borders of Paphlagonia which was a region of antiquity formed the factors such as population, settlement, and economic activities (Ünal, 2008, 23). Sinope which had a natural harbor was also sailing point of the hinterland and became the most important harbor of Paphlagonia Region due to its geological, geomorphological, hydraulic and climate characteristics (Dereli, 2013, 20). There are not many harbors on the Southern coasts of Black Sea which provide protection against the wind coming from the north (Graham, 1982, 122). Geographer of antiquity Strabon also noticed the importance and the beauty of Sinope in his work called Geographika (Strabon, 2000, 22,23). Historian of antiquity Herodotos also mentioned Sinope as a famous city of Black Sea in his work known as The History (Herodotos, 2014, 43, 44). The neck on the west of Sinope peninsula connects the peninsula to the mainland. The Sinop peninsula lies towards the east like a horsehead and is also called the Cape of Boztepe (Arıkan, 2009, 115).

The city of Sinope is a settlement area which have been settled since Chalcolithic Age. As stated in the ancient resources, Sinope was colonized twice in the 8th century BC and 7th century BC. However, the data obtained through excavations held in the city Sinope point out that the movements in the 8th century BC were exploration-oriented although the actual establishment of the city was 7th century BC. Because, vast number of archeological findings which were dated to the end of the 7th century BC were obtained through excavations held in the city center between the years of 1951 and 1953 (Dereli, 2013, 18, 19).

The city of Sinope with the most sheltered harbor on the Southern coasts of Black Sea which was established by the people of Miletos on a peninsula was the main colony. Eusebios, the historian of the antiquity, gives the date of 631 BC as the establishment of the city of Sinope. However, Eusebios himself had given the date of 756 BC for the establishment of the city of Trapezous (Trabzon) and it is known that the city of Trapezous (Trabzon) was a colony of the city of Sinope (Graham, 1982, 123). The city of Sinope which experienced the periods of Pontos Kingdom, Roman Empire and Byzantine Empire after the people of Miletos was always active in terms of sea-trade. The city of Sinope exported numerous products such as sealed Sinope Amphores and tiles, olive and fish products during the Hellenistic Period (Dereli, 2013, 20). During the period of Roman Empire, investments were conducted in the city with the perception of superior service. For example, the Governor Pliny brought water to the city from kilometers away through canals and arches in the year of 110 BC (Tarakçı, 2014, 8).

As we learned from the ancient texts, the people of Miletos who experienced a bright civilization and enlightened the other civilization with their own civilization established ninety colonies such as Sinop, Amisos and Olbia in the Black Sea region, Kyzikos in the northern coast of Marmara Sea and Naukratis in Egypt (Akurgal, 2014, 356). The idea of colonizing the city of Sinope also became a current issue during the following periods. Isokrates who lived during the period of Philippos the II (382-336 BC) defended Pan-Hellenism in his brochure called "Philippos" and suggested that they should fight against Persians and sweep the Persian kingdom away. He also suggested that they should fight the Persians to conquer the Mikra Asia from the Sinope on the north to Kilikia on the south even if they can't capture the entire Persia. Thereby, those new lands to be conquered would be filled with the unemployed people from the Greek cities (Mansel, 1988, 402). When the history of Sinop is analyzed, it may be seen that the perception of colonization was repeated for many times. For example, the Greek migrations at the end of 7th century BC, at the end of 5th century BC, in the 4th century BC and in the 3rd

century BC; the Roman migration in the middle of the 1st century BC; Turkish migration in the 12th century and the migrations from Balkans and Caucasus in the 19th and 20th centuries are among the repeating facts of migration. It is understood that, Sinope functioned as a base prior to the diffusions to the neighboring sites throughout the migration processes of those masses (Doonan, 2004, 69).

In the city Sinope and neighboring sites which was one of the major routes of sea trade during the antiquity, it is thought that there are numerous submerged ships of the antiquity and the following periods except the known ones. Because, we may conclude that there were hundreds of ships under the water if we accept one ship submerged at the harbor of this busy city and around it in every ten years from the period the Sinope was colonized by the people of Miletos until today. The natural formations around the province of Sinope cause the deformation of the seafloor along with the currents which reach to 8 knots from time to time and it is highly possible that there are submerged ships around those natural formations.

2. Method, Findings and Conclusions

Today, Rasim Yaşar Tarakçı who is a lecturer at Sinop University found archeological remains which may be considered as the underwater cultural heritage at two different points during his underwater studies conducted in 1980's and 1990's and he reported them to the archeological museum. He recorded those archeological findings during the studies he conducted with the staff of museum who were underwater archeologists.

When we look at the underwater cultural heritage of the Sinope city which is known and registered officially that remained from the Roman Empire period and Eastern Roman Empire period which is also called as Byzantine Empire, through the data obtained from the lecturer Rasim Yaşar Tarakçı, we may see archeological remainings at two different locations. The first of them is a submerged ship from the Byzantine period. The ship is about 200 meters away from the coast in a bay protected against the northern winds and 8 meters deep around Sinop Karakum location. The load of the ship which contains terracotta roof tiles can be seen clearly (see Figure 1-2-3). On the sand on the seafloor, the complete amphoras, pieces of amphoras and numerous broken pieces of ceramics which may be dated back to Byzantine period were seen. The pieces of wood of the ship which is dated to the Byzantine period that are assumed to be the bottom of the ship were protected well due to the layer of sand and mud on the ship (see Figure 4). Majority of the load of the ship, the roof tiles made from the terracotta is non-damaged and those tiles which were shipment of hold of the ship kept the position when loaded, under the sea. A broken piece of glazed green plate was found next to the submerged ship. The pieces of amphora were found around the submerged ship.



Figure 1: Submerged ship from the Byzantine period. The load of the ship which contains terracotta roof tiles. (From Rasim Yaşar Tarakçı archive)

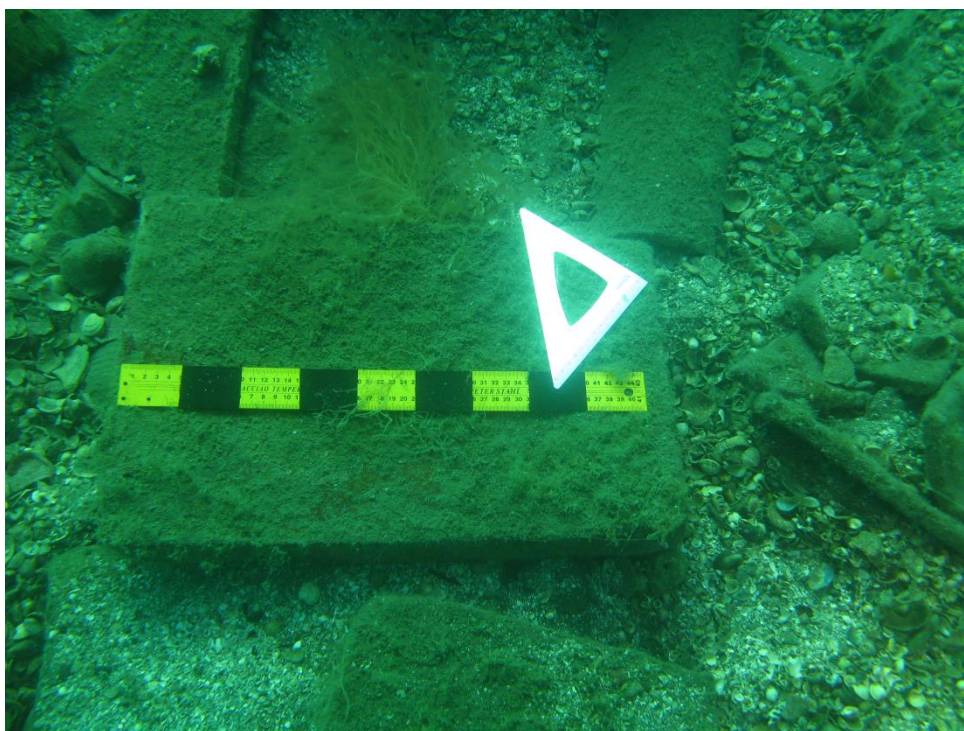


Figure 2: Submerged ship from the Byzantine period. The load of the ship which contains terracotta roof tiles. (From Rasim Yaşar Tarakçı archive)

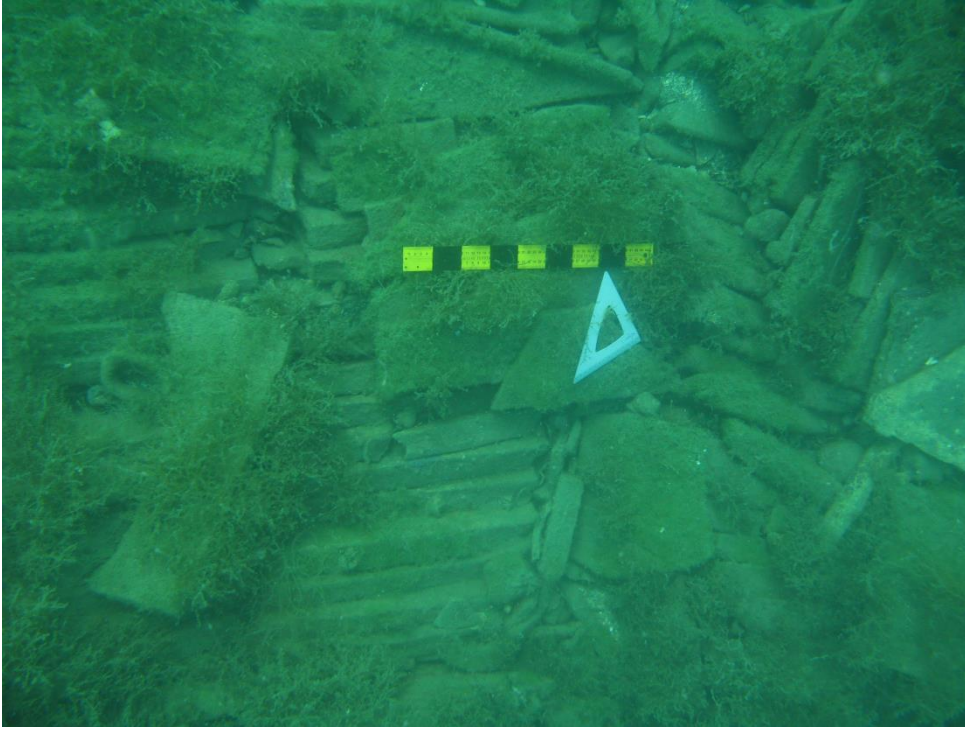


Figure 3: Submerged ship from the Byzantine period. The load of the ship which contains terracotta roof tiles. (From Rasim Yaşar Tarakçı archive)

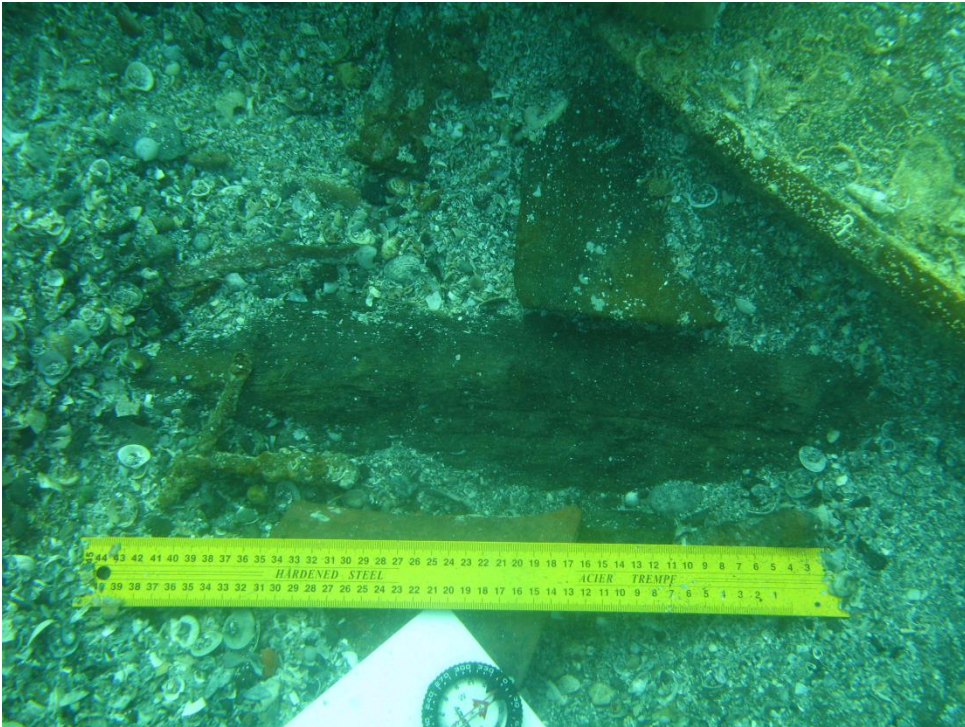


Figure 4: Submerged ship from the Byzantine period. The piece of wood of the ship. (From Rasim Yaşar Tarakçı archive)

The other underwater cultural heritage lies scattered at the depth of 8-14 meters, at Sinop Boztepe Cape Adabaşı location on the eastern coast. In this field, the sarcophagus crate and the sarcophagus covers are scattered to a large area. Around the pieces of sarcophagus which are assumed to belong to the submerged ship and dated back to Roman period, there are ceramic

findings, pieces of amphora, and handles of pots made of terracotta. It is estimated that there is a ship wreckage under the sand.

The sarcophaguses were exposed to the abrasive effects of the sea by time. The roots of algae and brown algae honeycombed the surface of the sarcophaguses. Due to the layers consisted by the sea creature adherent on the surface of the sarcophaguses, deformations of forms were observed in the majority of the sarcophaguses. Their status as the archeological remaining isn't clearly understood at the first sight due to the form deformations.

The archeological remaining which is the closest to the coast is a broken sarcophagus cover (see Figure 5). It is possible that it hit to two rocks and broken into three pieces while the ship was submerging. It is at the depth of 8 meters. The dimensions of the sarcophagus cover is as follows; the long side is 2,15 m. while the short side is 75 cm.

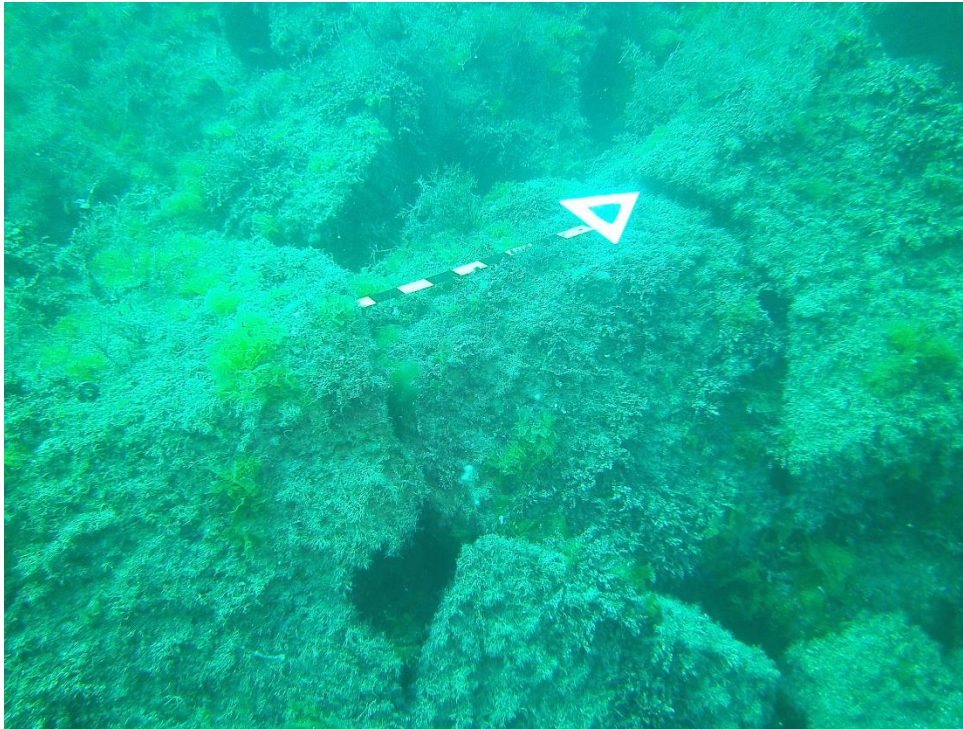


Figure 5: Submerged ship dated to Roman period. A broken sarcophagus cover. (From Rasim Yaşar Tarakçı archive)

On the southeastern direction of the broken sarcophagus cover, there lie two rectangular sarcophagus covers back to back under the sea at the depth of 14 meters (see Figure 6-7). Since those sarcophagus covers were probably submerged as the load of the ship, it is possible that they kept their position in the hold of the ship. They are on the direction of east and west, namely, one of the short sides look at the east while the other short side is directed towards west. The dimensions of the sarcophagus cover is as follows: the long is 2,15 m. while the short side is 75 cm.



Figure 6: Submerged ship dated to Roman period. Two rectangular sarcophagus covers back to back. (From Rasim Yaşar Tarakçı archive)

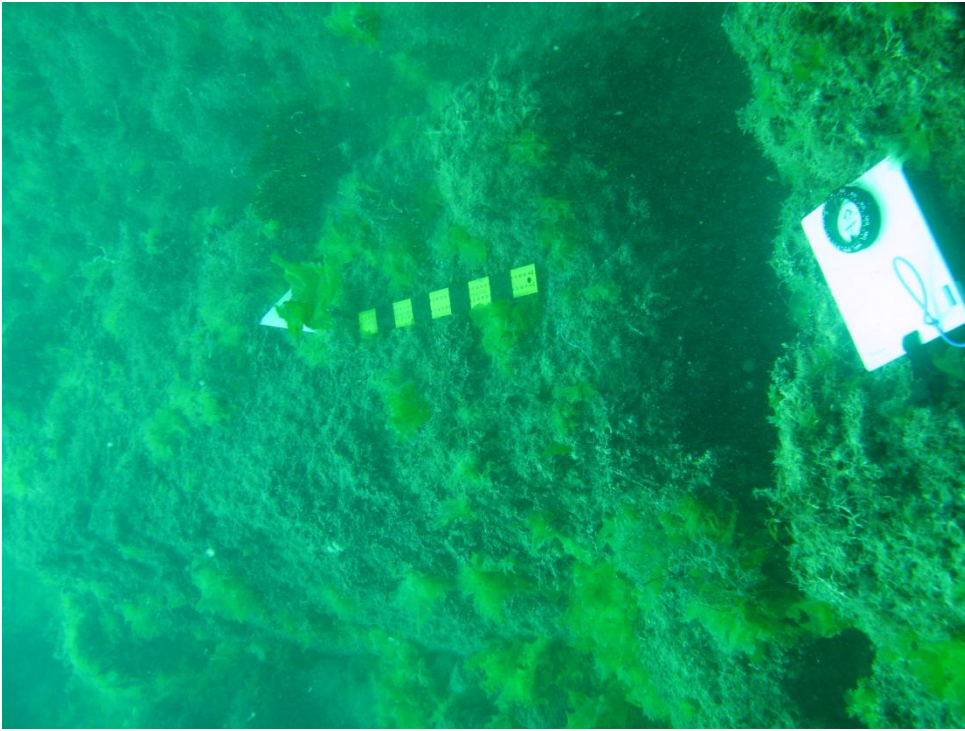


Figure 7: Submerged ship dated to Roman period. Two rectangular sarcophagus covers back to back. (From Rasim Yaşar Tarakçı archive)

On the southeast of the two sarcophagus covers, there is a sarcophagus crate without cover and in the form of rectangular may be seen (see Figure 8). Although it was covered with sand on the seafloor up to its top levels, it lies recognizable on the seafloor and no signs showing that it was damaged were observed. However, the roots of algae and brown algae honeycombed the surface of the sarcophagus and due to its long-term staying under the water, the sea creature adhered on them and formed a layer.

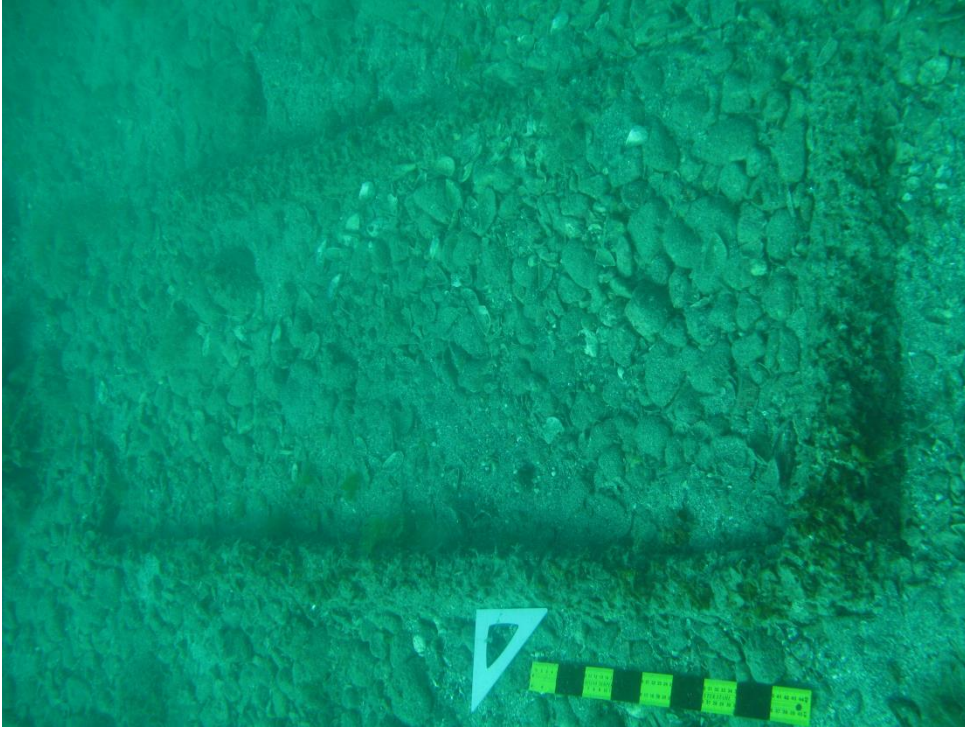


Figure 8: Submerged ship dated to Roman period. A sarcophagus crate without cover. (From Rasim Yaşar Tarakçı archive)

On the southerneast of the sarcophagus crate which was buried into the sand, triangle archeological findings in two separate pieces, possibly pieces of a sarcophagus cover, were determined. One of those two pieces is buried on the sand in the upturned position (see Figure 11). The other piece is on the sand in the position of triangle (see Figure 9-10). One of the short sides of the piece on the sand is closed while the other short side is open. There is a distance of 3-4 meters between the two triangle shaped pieces. Both of the archeological foundlings is in the shape of triangular prism and has the following dimensions: The length of bottom is 100 cm., the length of isosceles sides is 75 cm. each and upper side is 110 cm.



Figure 9: Submerged ship dated to Roman period. Triangle archeological finding. (From Rasim Yaşar Tarakçı archive)

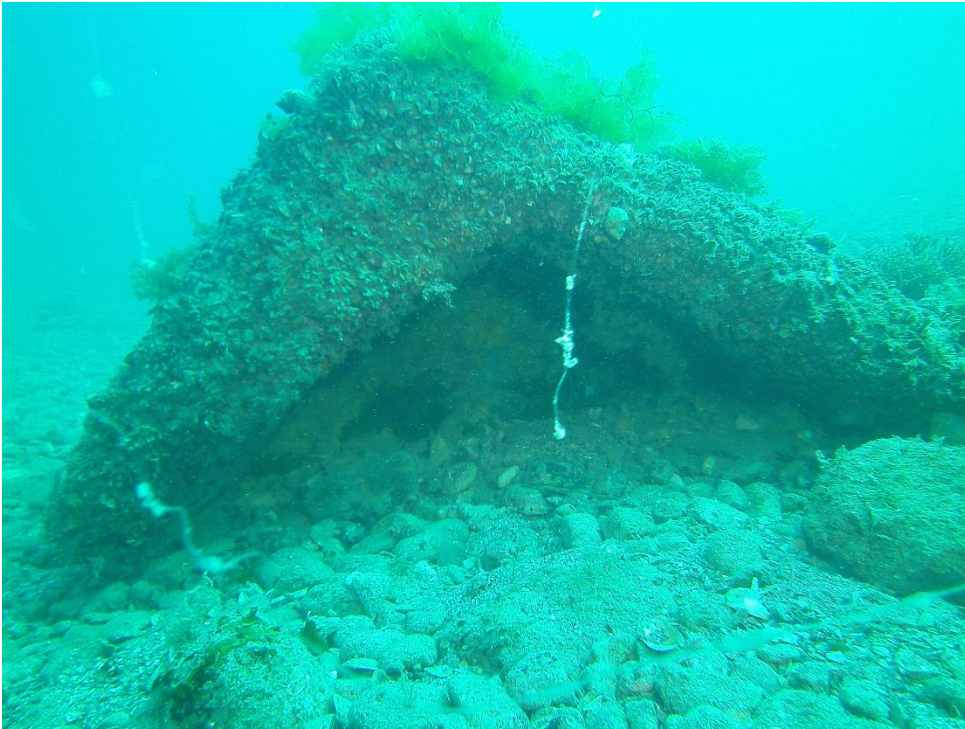


Figure 10: Submerged ship dated to Roman period. Triangle archeological finding. (From Rasim Yaşar Tarakçı archive)



Figure 11: Submerged ship dated to Roman period. Triangle archeological finding. Upturned and buried on the sand. (From Rasim Yaşar Tarakçı archive)

Around all those pieces of sarcophagus, the pieces of terracotta pots and broken pieces of amphoras are all scattered to a large area. It is known that the deep structure of the Black Sea provides limited opportunity of sight, the sighting distance fall down to 50 meters from time to time, deep structure is covered with mud particles in some places, sand and mud movements completely cover the submerged ships, the movements of waves and currents reveals the findings on the deep surface on some weather occasions and re-covers them in a very short time. For that reason, it is estimated that some more findings can be found under the sand of the seafloor.

3. References

- Akurgal, E. (2014). *Anadolu Uygarlıkları*. Ankara: Phoenix Yayınevi.
- Arıkan, Z. (2009). Kırım Savaşı ve Baskını (1853). In Z. Arıkan, L. Sancar (Ed.), *Türk Denizcilik Tarihi 2* (pp. 107-121). İstanbul: Deniz Basımevi Müdürlüğü.
- Dereli, F. (2013). Sinop'un Tarihi. In A. Cengiz, E. Yaman, H. Tosun, F. Dereli (Ed.), *Sinop Tarihi ve Kültür Envanteri* (pp. 18-20). Sinop: T.C. Sinop Valiliği İl Kültür ve Turizm Müdürlüğü.
- Doonan, O. P. (2004). *Sinop Landscapes: Exploring Connection in a Black Sea Hinterland*. Philadelphia: University of Pennsylvania Museum of Archaeology and Anthropology.
- Graham, A. J. (1982). The Colonial Expansion of Greece. In J. Boardman, N. G. L. Hammond (Ed.), *The Cambridge Ancient History: Volume III Part 3 The Expansion of the Greek World, Eighth to Sixth Centuries B.C.* (pp. 83-162). Cambridge: Cambridge University Press.
- Herodotos (2014). Tarih. (M. Ökmen, Trans.). İstanbul: Türkiye İş Bankası Kültür Yayınları. (Original work published in antiquity)
- Mansel, A. M. (1988). Ege Ve Yunan Tarihi. Ankara: Atatürk Kültür, Dil Ve Tarih Yüksek Kurumu Türk Tarih Kurumu Yayınları.

- Strabon (2000). *Geographika: Antik Anadolu Coğrafyası Book XII-XIII-XIV* (A. Pekman, Trans.). İstanbul: Arkeoloji ve Sanat Yayınları. (Original work published in antiquity)
- Tarakçı, R. Y. (2014). *Sinop Deniz Savaşı*. Sinop: Sinop Belediyesi Kültür Yayınları.
- Ünal, M. A. (2008). *Osmanlı Devrinde Sinop*. Isparta: Fakülte Kitabevi.

Population Movements In Turkey: Internal Migration

Özlem Sertkaya Doğan

Introduction

Migration is referred to as the movement by people from one place to another in order to live temporarily or permanently in a new location. The desire to move to more favourable places to find jobs, earn a livelihood or have better living conditions underlies the migration phenomenon. From this viewpoint, it can be asserted that people migrate out of necessity rather than for pleasure. Migration is closely related to and highly influential in social, cultural, financial, and political components of a community. Migrations typically occur from rural to urban, rural to rural, urban to urban and urban to rural areas. In Turkey the flow is mostly from rural to urban and urban to urban areas. Urbanization has gained momentum thanks to industrial developments in Turkey, which in return has boosted migration rates. Since 1950s, migration has been gradually increasing. Then direction of the flow was from rural to urban areas due to the effect of industrialization and urbanization, whereas it majorly occurred from urban to urban after 1980s. Populational movements caused by industrial activities after 1950s resulted in rapid discharge of human population from countryside and a population boom in urban areas, which gave way to uneven distributions in rural and urban areas and caused heterogeneous demographic patterns. Only if rural conditions are ameliorated and a more prosperous life is established through investments can this irregular distribution be sorted out.

Ongoing population movements since 1950s are influential in the distribution of urban and rural population. Migration is categorized and discussed in two groups: internal and external migrations.

When people choose or are forced to leave their place of residence and to temporarily or permanently settle in another place, it is called migration. Migration can be an individual act as well as a collective movement.

The intention to earn a (better) livelihood or lead a more well-to-do life, primarily by finding a job, underlies human migration. From this viewpoint, it can be inferred that migration is taken up out of necessity rather than for pleasure.

It is an effective phenomenon tightly related to society's all building blocks, such as social, cultural, economical, political factors and the like. Due to its multi-faceted nature, it has been a matter of discussion of people from a wide variety of professional background, such as anthropologists, sociologists, city planners, administrators and so on. It leads to fluctuations in populations of countries or small communities, and potentially causes changes in age and gender profiles of populations. Such changes are felt in each and every sub-components of a society over a short period, besides the extent of effect is in close relation with the volume of migration.

Migration has always been around throughout human history. It is possible to explain the concept of migration in various ways. Migration is a population movement to emigrate or immigrate that changes economic, cultural, social and political elements of a society (Özer, 2004: 11). First of all, migration is a change of place. People emigrate or immigrate for numerous reasons. This could be temporary or permanent. Short-term change of residence for education and professional reasons can also be counted as migration (Sağlam, 2006, 34). The person who migrates is called "migrant (refugee)". The drive behind migration can be both the desire to avail of unevenly distributed resources and "acts of God" or such authority-related causes as exiles, rebellions and wars (Kaygalak, 2009: 9). It is not typical of a single place but can take place anywhere and anytime. People move for a variety of reasons but almost all are the same across the world.

People migrate from rural to urban, rural to rural, urban to urban and urban to rural areas. It is mostly from rural to urban or urban to urban in Turkey. Urbanization gained momentum following industrialization, which eventually resulted in increasing migration rates. The rates have been rising since 1950s, particularly the rate of movements from rural to urban areas owing to industrialization and urbanization. However, the trending migration pattern after 1980s was urban-to-urban. Industrialization-related developments such as relatively improved transportation, rural-to-urban migrations due to growing population, establishment of factories intended for different sectors brought about the concept of urbanization (Sertkaya Doğan, 2009 :3).

Migration in Turkey has resulted in interregional population differences. The most abandoned regions are Black Sea and Eastern Anatolia, while the most immigrated are Marmara and Aegean Regions. A substantial amount of the population used to live in villages when the Republic of Turkey was proclaimed. Later on, majority of the population poured in cities, the primary cause of which was rural-to-urban migration. Whereas migration between administrative regions accounted for 9.34% of the population, it was 8.67%, 10.81% and 11.02% in 1985, 1990 and 2000, respectively. Then, around 15 million people emigrated from where they lived (Güreşçi, 2010: 79).

Initially, migrations from rural to urban areas were not considered as a problem. Plus, it was encouraged by the state. But in the following years, economic and social problems in urban areas in particular made people take rural-to-urban migration as a problem. Therefore, many national and local plans and programs were produced to prevent migration from villages (Güreşçi, 2010: 77). Southeastern Anatolia Project and Eastern Anatolia Project are good examples of such initiatives.

There are some underlying effects of migration. Petersen describes four types of migrations in terms of “causes”. These are primitive, forced/impelled, free and mass migrations (Petersen, 1958: 266). The underlying causes of rural-to-urban migration are listed as the pull factors of cities and push factors of villages, whereas the opposite is true for urban-to-rural migration. Migration to cities brings along urban sprawl and unplanned urbanization. One of the reasons for urban-to-rural migration is this urban sprawl turning cities into villages. What makes rural areas attractive are agricultural changes in villages (increasing arable lands per family, better exploitation of water resources, decreased rates payable by villagers in leasing system and so on), changing policies providing more agricultural incentives (direct income support, fuel support, fertilizer/manure support, animal husbandry incentives, etc.), changes in agricultural marketing system (utilizing up-to-date methods and tools to market agricultural products, which minimizes market loss of livestock, animal improvement boosting the market value of livestock), proliferation of mass communication devices in villages (which brings cities closer to villages and positively affects rural life) (Güreşçi, 2010: 82-83).

Migration from villages to cities has been regarded by people as a hope to rebuild their previous devastated order. To discuss migration in Turkey, it would be wise to tackle push factors of rural life and pull factors of urban areas. The former are developing industrialization, rapidly growing rural population, arable lands fragmented into smaller pieces by inheritance, increasing mechanization and accordingly decreasing demand for labor force, deteriorating climatic conditions in some rural areas, economic instability and social problems, insufficient non-seasonal economic activities, limited employment, inadequate educational and healthcare services (Keleş, 1996: 107-108). On the other hand, among the appeals of urban areas are abundance of and easy access to educational and medical services, better transportation, more employment due to advanced industries and services (Keleş, 1996: 113-114).

Migration as a significant demographic indicator originates from different social, economic and political factors. There are roughly two migration categories: internal and external migration.

Method

Literature research and field studies reviewed.

1. Internal Migrations

Internal migration refers to movements of people within a country from one place (i.e. region, city, town, village) to another with the intention of permanent or temporary residence. In Turkey, internal migration denotes movements from rural to urban areas, from a small city to a bigger one or to another small city, or from a big city to another.

Internal migrations are divided into two, namely temporary (seasonal) and permanent.

Internal migration is the change of place by an individual or a group of people within national borders. It is the movement by people from a region or a city to another. Internal migration does not change a country's population, but the population ratios of regions or cities. Among the causes of internal migration are labor force made redundant by industrialization as from 1950s, fast agricultural mechanization, adversely changing land-to-person ratio and desire to earn a better livelihood. Internal migrations resulting from social, economic and political causes move from relatively more developed regions and cities of a country to underdeveloped ones (Özer, 2004:24).

1.1- Temporary (Seasonal) Migrations

In Turkey, temporary migration means a temporary change of place of habitual residence by interprovincial migration in given periods of the year, mostly owing to agricultural activities. Especially nomad animal husbandry and the temporary need of surrounding regions for agricultural labor force to harvest such products as cotton, tea, nuts, tobacco and so on are the primary causes of temporary migrations. Besides, seasonal migrations require people of moving to and staying in two or more particular places at certain times of a year. Such a movement gives birth to more than one social and cultural structure. Apart from seasonal migrations, duration is a criterion that characterizes migrations (Sağlam, 2006:34). Another event that counts as a seasonal migration is the Black Sea and Mediterranean peoples' migration to plateaus in summers.

Migrations taken up due to agricultural and tourism activities for a certain period of time is referred to as seasonal migrations. Seasonal population movements caused by nomad animal husbandry typically occur in Eastern Anatolia, the Taurus Mountains, Uzun Yayla (a plateau) and Bozok Yaylası (a plateau). Population movements induced by *Plateauing* mostly take place in Eastern Anatolia Regions, Eastern and Central Black Sea Regions, on the Koroğlu and Ilgaz Mountains and in the Taurus Mountains. Seasonal migrations to satisfy the need for agricultural labor force are common in Çukurova, a city famous for its cotton fields. South eastern Anatolian families who move to this city during the cotton harvest season work in cotton and other fields return to their original place of residence. Over the last years, families from Eastern and South Eastern Regions have been migrating to the Black Sea Region to work in nut orchards. As for tourism-related migrations, people travel to the Aegean and Mediterranean Regions.

Economic activities in Turkey vary across regions due to topographical and other natural conditions. Whereas animal husbandry is prominent in Eastern Anatolia and the Taurus Mountains, people grow cotton and tobacco in the Aegean grabens, tea and nut in the Black Sea and cotton in Adana's plains. These products are the primary sources of income for these areas. Differences as such play a decisive part in migration traffic.

Temporary migration also incorporates temporary movements of male population from rural to urban areas to work in such sectors as construction, gardening and the like in cities which are highly engaged in public works.

1.2. Permanent Migrations

Permanent migrations denote permanent settlements in immigrated areas, and are considered as internal migrations. They are taken up either willingly or necessarily. People may willingly migrate to receive a better education and/or lead a well-to-do life. On the other side, obligatory migrations are imposed by the state because of natural disasters or terrorism. Time is what discerns temporary migrations from the permanent ones. Permanent migrations last longer and people leave their homes not to return. However, seasonal migrations cover a short period and are temporary changes of place. In Turkey, the rate of migration from rural to urban areas has been rapidly increasing since the proclamation of the Republic.

Table 1: Total and rural population in Turkey from 1927 through 2013, and rural population: total population ratio (%)

Years	Total Population	Rural Population	Rural population: Total Population (%)
1927	13648270	10342391	75.78
1935	16158018	12355376	76.47
1940	17820950	13474701	75.61
1945	18790174	14103072	75.06
1950	20947188	15702851	74.96
1955	24064763	17137420	71.21
1960	27754820	18895089	68.08
1965	31391421	20585604	65.58
1970	35605176	21914075	61.55
1975	40347719	23478651	58.19
1980	44736957	25091950	56.09
1985	50664458	23798701	46.97
1990	56473035	23146684	40.99
2000	67803927	23797653	35.10
2011	74724269	17338563	23.19
2013	76667864	6633451	5

As Table 1 shows, while rural population accounted for 75.78% of the population in 1927, it was down to 35.10% in 2000 and to 5% in 2013, in other words, in 86 years rural population decreased by 70%. Although fertility rate in rural areas is much higher than cities, the decreasing ratio can be associated with migrations from villages to cities. Moreover, the inclusion of all the provincial population (rural and urban) in the urban population pursuant to the Metropolitan Law in effect since 2013 set the ground for decreasing rural population. Internal migrations were not influential and theoretically remained invisible till 50s and the rural-to-urban ratio did not change substantially. Internal migrations became prominent in the 1950, when the effects of industrial revolution became prevalent in Turkey as across the world.

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There are some other causes of the increasing rates of migration, such as improved transportation systems, mechanized agriculture and accordingly decreasing need for labor force, fragmentation of arable areas by inheritance and as a result failure of households to earn adequate livelihood, insufficient healthcare and education services in rural areas; and easy employment thanks to profusion of jobs, and better education and healthcare services in cities. It should be kept in mind that internal migration in Turkey gained speed due to overcrowding in rural areas and increasing job opportunities in urban areas, which means the major factors underlying internal migration are economic.

Migration rates of 20 of 67 provinces in 1965-1970, 24 in 1970-1975, 18 in 1975-1980, 19 in 1980-1985, 20 of 73 provinces in 1985-1990, 23 of 81 provinces in 1995-2000 positively increased. As of 2013, the migration rates of 39 of 81 provinces displayed a positive increase in 2013. Almost all of these provinces are located in western Turkey. On the other side, cities with negative migration rates are located in central and eastern Turkey.

Top and bottom ten cities in terms of emigration rates (2012-2013)

	Total Population	Emigrating Population	
1	14 160 467	371 601	İstanbul
2	5 045 083	153 791	Ankara
3	4 061 074	99 681	İzmir
4	2 158 65	64 075	Antalya
5	2 149 60	62 933	Adana
6	2 740 970	61 744	Bursa
7	1 705 774	55 482	Mersin
8	1 607 437	47 949	Diyarbakır
9	1 844 438	42 291	Gaziantep
10	766 729	39 997	Erzurum
71	274 658	17 818	Kırıkkale
72	547 581	20 209	Batman
73	475 255	13 753	Şırnak

74	189 139	8 133	Bartın
75	102 782	7 633	Ardahan
76	190 424	9 779	Iğdır
77	220 122	9 808	Yalova
78	230 251	11 676	Karabük
79	128 586	6 161	Kilis
80	498 981	17 605	Osmaniye
81	351 509	11 306	Düzce

In consideration of the interprovincial migration in 2012-2013, the city which lost the most from its population due to emigrations is Istanbul, followed by Ankara, İzmir, Antalya and Adana. The least emigrated cities on the other side are Düzce, Osmaniye, Kilis and Karabük. Total populations of the existing cities, too, are influential in the emergence of such a picture.

The most and least immigrated ten cities (2012-2013)

	Total Population	Immigrating Population	
1	14 160 467	437 922	İstanbul
2	5 045 083	186 642	Ankara
3	4 061 074	113 673	İzmir
4	2 158 65	88 605	Antalya
5	2 740 970	75 518	Bursa
6	1 676 202	71 159	Kocaeli
7	1 705 774	51 468	Mersin
8	2 079 225	51 080	Konya
9	2 149 260	50 598	Adana
10	874 475	45 313	Tekirdağ

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71	285 460	10 322	Nevşehir
72	208 888	10 231	Bilecik
73		10 053	Artvin
74		8 747	Karaman
75		8 458	Tunceli
76		8 007	Hakkari
77		7 886	Bartın
78		6 882	Iğdır
79		6 566	Kilis
80		5 254	Ardahan
81		4 787	Bayburt

In terms of ratios, the most emigrated cities are, Tunceli and Artvin in 1975-2013, while the lowest emigration rates in 1975-2000 are of western cities. Antalya seems to be the least emigrated city in 1975-1985, which replaced by Bursa in 1985-2000. Moreover, Manisa and Muğla are among the least emigrated provinces. It is eminent that populations flow from eastern part of Turkey to the more developed western cities. While İstanbul and Western Marmara are among the 12 regions with positive migration rates, the case is opposite for Western Black Sea and Northeastern Anatolia. During 1965-2000 period, 58% of the migrations were from city to city, 20% from cities to villages, 17% from villages to cities, and 5% from village to village. The city with more immigration rates than emigration is İstanbul, which receives majority of the migrating population from Ankara. Whereas Tekirdağ has the highest migration rate, it is Ardahan with the lowest.

According to push and pull principles as one of three prominent migration approaches, migration decisions of individuals are influenced by push and pull factors. “Push factors” are referred to as aspects causing people to leave their places of birth and give up their regular lifestyle and move to another place. Contrarily, “pull factors” are the appealing sides of migration destinations. People resolve to migrate to another place when pull factors weigh over the push factors, which vary according to external and internal migrations. Every migration resolution is a mixture of pull and push factors, in which some intervening plights can be included. Because people know more about their place of residence, they are able to perceive push factors better than the pull factors. People tend to minimize the effects of adversities by the help of information about push factors from previous migrators.

Industrialization has ignited a migration “stampede” from rural to urban areas, which is referred to as “rural push and urban pull”. The former is caused by economic, educational, medical, social and cultural insufficiencies and sometimes war and terror. Among the urban pull factors are more job opportunities, education, healthcare, socio-cultural services.

Interregional economic differences are also eminent at provincial level. Provinces as developed cities are immigrated; underdeveloped areas lose people from its population. Cities as main pull centers become saturated of immigrations overtime, so immigrating population tends to settle

in the surrounding cities that are potentially available. Thus, these cities too come to the fore as regional attraction centers. The case in Turkey is quite similar. For example, in 1980-1985 provinces like İstanbul, Kocaeli, İzmir, Bursa, İçel were pull cities. However, in 1990-2000, the attraction zone of these cities expanded to cover Antalya, Muğla and Tekirdağ, which also became pull cities. In 2000s, Isparta, Çanakkale, Şırnak, Kırklareli and Gaziantep were listed among immigrated cities.

Discussion

Migration is generally caused by economic, social and political factors. The most important hypothesis of theoretical migration approaches in the related literature is that socio-economic inequality between regions and countries is the major push factor. Unemployment, insufficient job opportunities, inadequate income and income inequality are the primary causes of migration.

In 1980s, the terror insurgencies in Eastern and Southeastern Turkey emerged as an influential push factor and caused mass migrations due to safety concerns. It is clear to see that till the midst of 1980s, people were forced to leave their place of habitual residence due to environmental disasters, such as earthquakes, floods and landslides, and legal enforcements like dam construction and settlement law. An outstanding example of migratory movement as a result of environmental causes is the Marmara Earthquake that took place on August 17, 1999, which displaced scores of people in İstanbul and Kocaeli, and decreased the immigration rates. Marriage, education, job change/appointment, retirement, parents' migration are among the individual and family-related causes of migration. Moreover, there are some issues like blood feud, honor killing typical of Turkey, which force people to leave their place of residence.

Migration composed of some significant demographic parameters results from various social, economic, and political causes. The concept of internal migration in Turkey refers to movements of people from rural to urban areas, from small to bigger cities, or across regions, and the underlying causes can be listed as follows:

1. Increasing population in rural areas and economically underdeveloped areas, their financial difficulties and increasing poverty rates.
2. Industrial facilities in rural or surrounding areas offering relatively more job opportunities, thus standing out as pull factors for younger population.
3. Huge differences between rural and urban lifestyle and socio-economic and cultural inequalities are among the factors causing young population to migrate from rural to urban areas.
4. Cities with various service sectors and more advanced education and healthcare opportunities attract people to themselves.

Internal migrations among the reasons for the unproportionate growth of urban population in Turkey date back to 1950s, before which internal migration was rare and population growth was slow. After the World War II, just like other nations, Turkey too started to develop and harvested the yields of investigations made in the Period of Republic. Another reason of the ongoing internal migration from rural to urban areas is the agricultural policies implemented as of 1950s and agricultural mechanization following the implementation of Marshall Plan. Migration has always been on the agenda of Turkey despite the fluctuating intensity. Internal and external factors have been influential in the persistence of migratory movements. Due to these factors people have changed their places of habitual residences and become actors of migration.

Internal migrations do not change the population of a country, but the distribution of population. While rural and urban population is homogenously spread across developed countries, developing countries have a heterogeneous distribution. So if a city has intensive incoming

internal migratory movements, then it is likely to have some trouble in the future. Generally speaking, ignoring rural areas plays a notable role like the abovementioned causes of internal migrations.

The outcomes of internal migrations can be listed as follows.

1. Investments are unevenly distributed in rural and urban areas.
2. Desired results cannot be achieved in rural areas which in return become barren.
3. Urbanization disrupted by internal migrations is characterized by unplanned and irregular settlement activities, like squatting.
4. Industrial facilities are annexed into the city limits over time.
5. Due to growing population, infrastructure begins to fall short in satisfying the needs and unemployment increases.

Therefore, a couple of steps should be taken to stop or slow down internal migration. Among the steps are to intensify the efforts in development plans to develop rural areas, to create sustainable rural development projects and by this way to increase income in rural areas to keep people in villages.

Some of the practices to prevent internal migration are as follows:

1. Implementing agriculture-intensive methods to make the most of unit area.
2. Making animal husbandry more widespread.
3. Increasing the number of agricultural industrial facilities in rural areas and providing the necessary incentives like credit loans to do so.
4. Ameliorating healthcare, education and transportation services in rural areas.

References

- Güreşçi, E., 2010, <http://www.sosyoekonomi.org/11MI07.pdf>
- Kaygalak, S., 2009. Kentin Mültecileri, Dipnot yayınları: Ankara.
- Keleş, İ. 1996, Türkiye’de Kent Planlanmasının Sosyo-Kültürel Boyutları, İstanbul Üniversitesi Sosyal Bilimler Enstitüsü, İstanbul,
- Özer, İ., 2004. Kentleşme, Kentleşme ve Kentsel Değişme, Ekin Kitabevi: Bursa.
- Petersen, W., 1958. A General Typology of Migration, American Sociological Review, Cilt: 23, Sayı: 3, ss. 256-266
- Sağlam, S. 2006, “Türkiye’de İç Göç Olgusu ve Kentleşme,” Türkiye Araştırmaları, Sayı: 5, İstanbul.
- Sertkaya Doğan, Ö. 2009, Nüfus Coğrafyası Açısından Bir İnceleme: Silivri, Marmara Coğrafya Dergisi, Sayı: 10 s. 1-19, İstanbul.

The Relationships Between Northern Black Sea Region and Western Black Sea Region of Anatolia

Rasim Yasar Tarakci

1. Introduction

The society of Miletos which was a sailor society established numerous colonies in Black Sea and storage warehouses in Southeastern Black Sea region travelling through Aegean coast to the Black Sea in the 8th century BC. The second emigrant society who travelled to Sinop from Miletos around 630 BC also developed the sea trade between Northern Black Sea and the coasts of Western Black Sea of Anatolia. Later on, the citizens of Pontos, Rome, Byzantine, Trebizond Greek Empire, Venice and Genoese owned important trading colonies in the Black Sea region. Hard struggles for the throne were seen in the period of Pontos Kingdom in Sinop which is a natural harbor of Paphlagonia Region of antiquity of western Black Sea region of Anatolia (Akarsu, 2016, 860). Therewithal, İstanbul increased the political and commercial importance of Black Sea as the capital of Byzantine.

2. Method, Findings and Conclusions

When Alpaslan the Seljuk Sultan defeated Byzantine army in 1071, Turks who had settled in Anatolia previously and were going on coming, rapidly started the conquering activities. Iznik was conquered in 1075 by Süleyman Shah and then Sinop was conquered by Karatekin in 1079. However, Byzantine recaptured Sinop again in 1085. Anatolian Seljukshad enlarged their borders until the coasts of Marmara and Black Sea coasts. They constructed patrol stations and custom offices on the shores of Üsküdar and Kadıköy and they started to collect taxes from the ships crossing the Bosphorus. The Byzantines organized attacks to Turkish patrol stations on the Anatolian coasts of Bosphorus and forced Turks to retreat. However, Byzantines signed Dragos Water Treaty with Seljuks in 1081 under the pressure of Patzinak Turks coming from Balkans and Slav and Latin peoples' attacks who came from the north through Dnieper and Don rivers.

In 1211, İzzeddin Keykavus I took the control of Anatolian Seljuk State. Sinop was captured by Seljuk soldiers on November 4, 1214. The Sultan who fortified the Sinop Castle built a citadel and kept the shipyard inside this citadel. The merchants went to Suğdak on the Crimean coast from Sinop and sold the goods they had brought from the Middle East and Far East. On the way back, they brought furs, iron, salted fish and male and female slaves.

When the merchants were robbed and similar attacks increased, Sultan Alaaddin Keykubat I assigned Hüsameddin Çobanoğlu Bey from Çoban Oğulları family for the excursion to Crimea with the title of Melik ül-ümera (the Chief Commander). The agitation of the States of Venice and Genoa played an important role of his decision he had given.

Upon the death of Mesut in 1301, his son, Gazi Çelebi, took the control of Pervaneoğulları Beylik. He made an agreement with Trebizond Greek Empire and organized excursions towards Crimea and Kefe. In 1313, he defeated Genoese navy in front of Kefe. Later on, he started excursions to Trebizond Greek Empire in 1319. In 1322, he successfully prevented the army of Genoa who attacked to Sinop. Gazi Bey conducted non-stop attacks to ships and colonies also. Those attacks wasn't limited with Genoese people. He also targeted Byzantine and Venetians. It is estimated that he had at least eight galleys in 1313.

After he captured İstanbul in 1453, Fatih Sultan Mehmet, conquered Amasra in 1459, Sinop in 1461 and Trabzon in 1462. In 1475, Crimea was become a khanate dependent Ottoman State. Thus, the slave trade was ended when the colonies of Genoa and Venice died out. In 1484, Bayezid the II captured Akkerman and Kili. Kanuni took over the control of Bucak in 1538 and

then Black Sea became a Turkish sea. Maritime trade was conducted through the ships of the countries under the control and allowance of Ottoman State.

In 1686, Russia participated the holly alliance which was signed between Austria and Poland when the Ottoman army was defeated for the second time around Wien. In 1687 and 1689, the wide-ranging excursions organized to Crimea and Kefe were defeated by the Ottoman and Tatarian armies. In 1695, Petro I was much better prepared in terms of military and politics. The Char captured Azov Castle on July 26, 1697. Afterwards, the Black Sea witnessed battles between Ottoman and Russian armies. Through the treaty of Karlowitz, Russians started to build ships in the Sea of Azov. For that reason, Ottoman Empire attached importance to the Black Sea Naval Forces. After the running wars between the Turks who have held sea trade here for many centuries and Russians who have desired to reach to the warm seas, Azov was left to Russians (1739). Through Küçük Kaynarca treaty (1774), the Black Sea was opened to the Russian merchantships. Crimea was left to Russia and Georgia was left to the protection of Russia (1783). Austria was permitted to trade in Black Sea (1784). Upon the request of Russians, afterwards, the merchantships of the European countries were given authority to pass to Black Sea. The Ochakov Castle was occupied by the General Potemkin in 1788. Russians captured Hocabey on September 25, 1789. Hocabey would never be returned to Ottomans. Its name was changed into Odessa and turned into a commercial and cultural base of Russia through overtaking all the other ports in Black Sea in the 19th century in terms of its location (Bilici, 2009, 37).

Through the Treaty of Jassy (1791), Russia added the region between Bug and Dinyester into its lands and completely ruled over the northern coasts of the Black Sea after 1815. According to the Edirne Treaty (1829), Russia occupied the entire Caucasia and took the control of Northern and Eastern Black sea coasts. At the end of those battles, the general status of both Ottoman Empire and Black Sea underwent changes after the treaties of Zistovi and Jassy (Jorga, 2009, 96).

Later on, Ottoman Empire underwent a breakup process. From the 18th century until mid-19th century, internal revolts and wars in Balkans and Caucasia continued. The UK realized that breaking up of Ottoman was against its interests. When the Russian Black Sea gained power, Russians would be able to control Bosphorus and thus the Russians would become a threat for the UK in the East Mediterranean. Hence, the way to India would fall into danger. Immediately, UK and France gave guarantee to Ottoman State through diplomatic activities and they gave promise to ally with Ottoman in case a war exists and encouraged Ottomans to fight against Russians. On October 4, 1853, Ottoman State declared war against Russia (Arıkan, 2009, 112).

On November 17, 1853, the Pervâz-ı Bahri Steamboat which was sent to Ereğli to load coal by Patrona Osman Pasha came across with the Russian Vladimir Frigate around Amasra-Kerempe Cape. The Russians attacked; the boat of Pervaz-ı Bahri heroically fought for 6 hours despite the wounds on its board side and rigging (Özcan, 1990, 102).

On November 24, 1853, a Russian fleet consisting of three galleons and a steam ship at the command of Visamiral Nakhimov the Commander of Russian Fleet in Black Sea approached to the Ottoman ships about two times more than the artillery shooting range about 7:00 in the morning. Russians conducted this expedition activity in order to learn the shooting power of the Ottoman navy. Russian fleet abandoned the harbor at 10 am. Sinop naval warfare is regarded as the last battle where sailing boats were employed. Moreover, the cannons developed by Henry Joseph Paixhans, the French General, were employed for the first time in this sea battle and they had rather destructive effects on the wooden ships.

At 12:00 o'clock on November 30, the first class Russian battleships launched their whaleboats which were filled with sailors and soldiers to the sea around the Cape of Boztepe in the entrance of Sinop harbor. The ships entered into Sinop Harbor in two lines. They approached to the Ottoman armada until they reached to the riddle-range.

The first line consisted of three battleships which had cannons on their two decks and eighty four cannons. The fleet under the command of Visamiral Nakhimov consisted of the ship called Queen Mariya afore and then Veliky Kinyaz Konstantin and Çaçma (Çeşme) after it. The first line moved parallel to the Southern coasts of Sinop Peninsula towards the middle of the crescent where Osman Pasha and Hüseyin Pasha were located. The second line under the command of Commodore Novasilsky consisting of three ships had three three-decked galleons. Each of those ships had hundred and twenty cannons. Commodore Novasilsky had a wide arch with the flagship of Paris and the other ships called Tri Svyatitelya and Rostislav following it and progressed from much south of the peninsula to the center of Ottoman fleet, towards in parallel to the southwestern wing of the Ottoman fleet which had formed a crescent. Meanwhile, the Russian fleet had reached very close to the Ottoman fleet. However, no shooting was conducted from the both wings of the Ottoman ships and batteries on the coast(see Figure 1-2).



Figure 1: Two steel cannons from the 1st battery located in the south shore of Boztepe Cape.
(From RasimYaşarTarakçı archive)

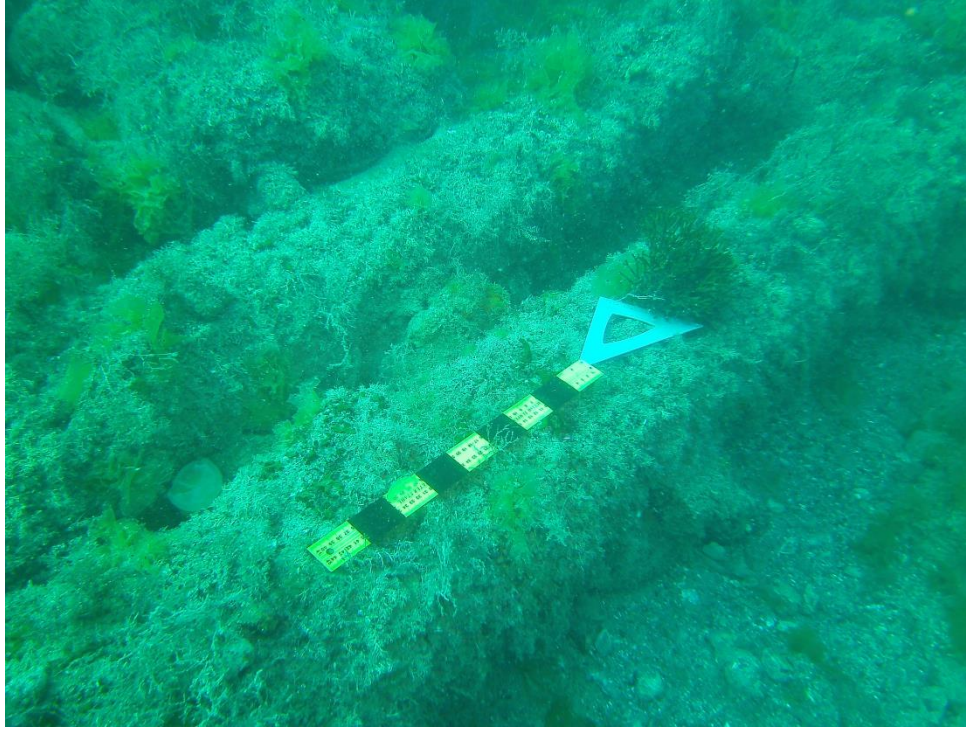


Figure 2: Two steel cannons from the 1st battery located in the south shore of Boztepe Cape. (From Rasim Yaşar Tarakçı archive)

When the Russian ships came to so close and hesitated to attack, it is understood that they gave up going alongside at the last moment. Moreover, the number of the crew in the Russian ships was two times more than that of Ottoman armada. At 12:30, the flagship of Commodore Nakhimov, the galleon Queen Mariya covered the frigate Avnillah II which carried the personal flag of Patrona Osman Pasha, the corvette of Necm-i Efşan, the corvette of Fevz-i Mabut, and the 5th battery in front of Sinop Castle with fire (see Figure 3). The galleon Veliky Kinyaz Konstantin covered the corvette Feyz-i Mabut, the 4th battery and the frigates of Fazlullah and Nesim-i Zafer with fire. The galleon of Çasma (Çeşme) covered the 3rd and 4th batteries with fire. The Flagship of Commodore Novosilsky, Paris covered the Kaid-i Zafer Frigate, the Dimyat Frigate, the 5th Battery and Nizamiye Frigate with fire. The galleon of Tri Svyatitelya covered the corvette of Gül-i Sefid, Kaid-i Zafer Frigate and the 6th Battery with fire. The galleon of Rostislav covered the Navek-i Bahr frigate, Kaid-i Zafer Frigate and the 6th Battery with fire (see Figure 4-5-6-7) (Tarakçı, 2014, 56,57,60, 61,62,63).



Figure 3: Swords and pistols of Patrona Osman Pasha. (From Cemalettin Kaya archive)



Figure 4: A steel cannon of submerged Navek-iBahri frigate. (From RasimYaşarTarakçı archive)



Figure 5: A steel cannon of submerged Navek-iBahri frigate. (From RasimYaşarTarakçı archive)



Figure 6: The piece of wood of submerged Navek-iBahri frigate. (From RasimYaşarTarakçı archive)



Figure 7: A steel cannon of submerged Navek-iBahri frigate. (From RasimYaşarTarakçı archive)

When the war ended, the stranded ships were located in the positions given below; beginning with Kayseriye bastion; (1) the corvette of Gül-i Sefid stranded in front of Kayseriye Bastion. (2) Kaid-i Zafer Frigate stranded on the rocky area 4-5 meters deep near old Bahçeler wharf. (3) Dimyat Frigate stranded on the Bahçeler beach towards Sinop. (4) The paddle steamer boat called Ereğli stranded in front of the beach currently belongs to the Institution of Credits and Dormitories. (5) The corvette Necm-i Efşan stranded at a point close to the bastion near Ice Plant. The positions of the submerged boats are as follows; (6) the corvette of Fevz-i Mabutis very close to the main entrance of the coast guard which is remained under the breakwater of fishing shelter. (7) The Fazlullah Frigate submerged around and on the south of the stairs of the current wharf. (8) Nizamiye Frigate submerged at a location between old prison and down the

Agriculture office although it was anchored. (9) Navek-î Bahri Frigate is at 14 meters of depth in front of the current DSI Leisure Facilities. (It was blown up by its commander, İmamoğlu Ali Bey). (10) Avnillah II Frigate submerged at the depth of 23 meters around the location called currently Mobil Beach since its iron hawsers were cut off. (11) The Russians who captured Nesim-î Zafer Frigate took the frigate to offshore of Demirciköy and sunk the ship at the depth of 36 meters (see Figure 8).

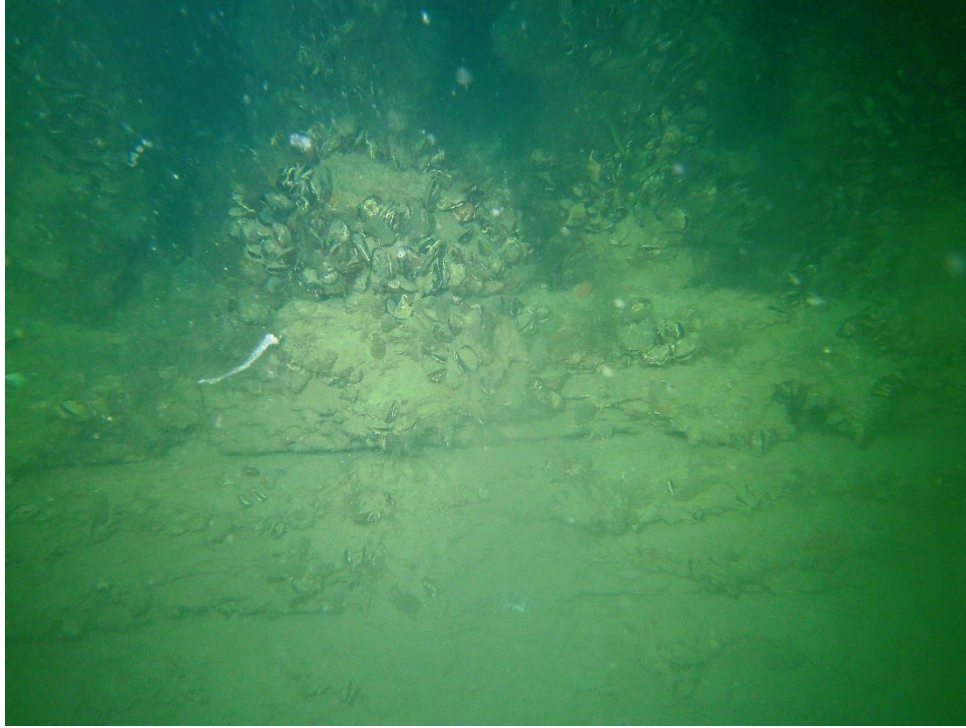


Figure 8: Submerged Nesim-î Zafer Frigate in the offshore of Demirciköy at the depth of 36 meters.

During the battle in Sinop Harbour, the paddle steamer British transport vessel with the name of Mole was burned down and one of its crew died. This ship submerged on the south of the exit of the fishing shelter. On the east of that ship, three Turkish transport vessels, fishing boats and numerous rowboats were burned and sunk inside the shelter opposite to the Customs wharf. In the offshore of current S.K.Y. sailing club, a transport vessel sank by burning. Later on, Ottoman State disassembled some parts of the ships which were burned then stranded and located the cannons on the bastions after removing them from the ships. Some hardware removed from the ships were transported to İstanbul as scrap. The wooden parts remaining from the ships, trees obtained from the forests of İnceBurun and the timbers obtained from Akliman Harbor and the ship wreckage were shipped in the Sinop Harbor to send as fuel to Crimea during the Crimean war. Of the eleven pieces of ships, some pieces of wooden parts, a steel cannon, a bronze cannon, numerous Russian cannon balls (Lumbara) which stroke but unexploded, the stone and solid iron cannon balls belonging the ship and two pieces of water tank remained from the Navak-iBahri Frigate located in front of DSI facilities. Nesim-iZafer Frigate lies at the depth of 36 meters, located on the direction of east-west, covered with mud, some wooden parts visibly and untouched since Russians left. Other ruins were disassembled by the junk dealers through dynamites. The wooden parts are gradually vanishing through the effect of fouling. At the furthest point on the east of the Cape Boztepe, two pieces of steel cannon balls of the superimposed soil bastions shown as the first battery may be seen at the depth of 14 meters down. The circular castle of the 2nd battery on the southern coast of the peninsula had eleven cannon ports and was destroyed by Russians who landed

here after burning the Ottoman armada. The neighboring buildings (buildings of quarantine) and quarantine wharf were also destroyed. The cubic stone feet of this wharf still remain and can be seen.

3.Refereneces

- Akarsu, B. M. (2016). Two Queens in the Anatolia of the 2nd Century BC: Nysa from Kappadokia and Laodike from Pontos. *Uluslararası Sosyal Araştırmalar Dergisi*, 42(9), 858-861.
- Arıkan, Z. (2009). KırımSavaşıveBaskını (1853). In Z. Arıkan, L. Sancar (Ed.), *Türk DenizcilikTarihi 2* (pp. 107-121). İstanbul: Deniz Basımevi Müdürlüğü.
- Bilici, F. (2009). XVIII. YüzyıldaKaradeniz’deOsmanlı-RusMücadelesi.In Z. Arıkan, L. Sancar (Ed.), *Türk Denizcilik Tarihi 2* (pp. 27-37). İstanbul: Deniz Basımevi Müdürlüğü.
- Jorga, N. (2009). Osmanlı İmparatorluğu Tarihi 5 (1774-1912) (N. Epçeli, Trans.). İstanbul: Yeditepe. (Original Work Published 1913)
- Özcan, B. (1990). *Rus Donanmasının Sinop Baskını*. (Unpublished doctoral dissertation). Atatürk University, Turkey.
- Tarakçı, R. Y. (2014). *Sinop Deniz Savaşı*. Sinop: Sinop Belediyesi Kültür Yayınları.

Evaluation the Relationship Between Human and Environment in Scope of Land Art

Feray Ünlü

1. Introduction

Humans define a semantic or symbolic world in their relationship with the environment. The relationship between physical environment and human behavior is analyzed by Environmental Psychology. This field of science also analyzes humans' compatibility with nature and addresses the issues such as alienation, air pollution, the pressure on humans caused by constructed environment, indifference to natural environment, and degradation of ecology.

From 2003 to today, students in different fields have made a large number and kinds of project-based, in other words applied, works in the Environmental Psychology course which I continue to improve within the scope of courses and workshop. These applied works can be categorized in three groups: 1. Works that focus on changing the behaviors in physical environment; 2. Works that focus on emphasizing the behaviors and perception in physical environment without assigning function to the environment; 3. Works focusing on perceiving and understanding the natural environment by evaluating the examples of Land Art.

This study addresses the perception we developed to understand the nature and beings in our environment by associating it with Land Art and includes works within the scope of nature, ecology and landscape, excluding the applied works in the first two groups.

Design of the Environmental Psychology Course

The content of Environmental Psychology course focuses on the factors in the human-environment relationship and their effects. In this course, the concept of environment is assigned the meaning of “those that surround the circumstances and effects in which someone lives or develops” (Terence, 1976, p. 9). According to the main acceptances of Environmental Psychology, which analyzes the human-environment interaction, environment affects humans' perception, and ultimately, behaviors (Ittelson et al., 1974). Environmental Psychology addresses the environment from the individual, social and cultural aspects and analyzes the examples made by artists in the field of Land Art around the world.

This course aims to raise awareness on physical environment and understand the social and personal behaviors, and as a result, evaluate the perception and produce correct designs for new environments in practice.

Since the course sheds light on human-environment relationship from various aspects, it also includes the theories used by the Environmental Psychology Field of Science. These theories include the “ecological psychology” which is used to analyze and categorize indoor and outdoor behaviors, the “environmental perception theory” which is used to understand the environment specific to each individual by significating the physical environment in mind through sense organs, the “environmental cognition theory” which explains the objects in the environment gaining a significance by being interpreted in mind and is used to describe the spatial schemes in mind (Ittelson et al., 1974), the “psychoanalysis theory” which is used to reveal the personality of environment users, the “Gestalt psychology” which evaluates the environment as a whole, and the neurobiological, phenomenological, cognitive and behavioral approaches which explain human behavior from different aspects in environment and space (Gür, 1996; Cüceloğlu, 1991).

The teaching and learning methods of the course focuses on analyzing the link between physical environment and human behavior. The methods and theories on this subject are discussed using examples through visual data such as tables, figures, photographs and videos, observed as they are experienced, and new ideas are produced through criticism. As a result, this course try to explain the sources of human behaviors and how expression develops.

1.2. Experiential Learning and Signification in Environment

The spatial solutions based on the information on behaviors are not always reflected on the design while environmental and spatial problems are analyzed and designed. What is essential is not the behavior itself; it is the user's experiences on their behaviors. Experiences are the perceptions of behaviors based on aims, values and attitudes. Experiences play a very important role in measuring reactions in physical environment design (Bechtel, 1978).

Humans' learning capacity allows them to continuously change their life style and behaviors and adapt to the changing environmental conditions. Learning ability enables humans to create and control their own environment when it is combined with other cognitive methods. Each new environment created by humans brings new responsibilities and problems. As a result, it produces new effects on humans and leads them to create more complex newer environments. The environmental learning that occur as a result of this process is defined by Kızıl (1978, p. 73) as “the link between a stimulant and a behavior”.

Ittelson et al. (1974) states that environmental learning occurs purposefully, randomly, consciously, simply or complicatedly. Environmental learning analyzes motivation, cognition and emotions and explains humans' adaptation to their environment based on their behaviors and experiences. Because, everything a person sees, interacts and feels in their environment affects their learning (Ittelson et al., 1974). The experiential approach based on the idea that signification of environment arises from the experiences in physical environment (Relph, 2007) is also based on the fact that individuals develop this signification when they first encounter the environment (Kurdryavtsev et al., 2012).

The concept of “sense of place” draws and increasing attention in environmental education. “Sense of place lies behind many environmental learning initiatives” (Thomashow, 2002, p. 76). Although the sense of place, which is covered in comprehensive theoretical and empirical studies that have been developing since 1960s, draws an increasing attention in place-based and other place-related education types, it is not applied to environmental education sufficiently (Kurdryavtsev et al., 2012).

Studies on the sense of place include the studies that analyze the concepts of place and sense of place related to childhood development (Bott et al., 2003; Chawla, 1992; Wilson, 1997); restorative experiences and meaningful actions (Kaplan & Kaplan, 2005); well-being (Sampson & Gifford, 2010); pro-environmental behavior, knowledge and attitudes (Duerden & Witt, 2010; Vaske & Kobrin, 2001); place-based education (Gruenewald & Smith, 2008; Semken & Brandt, 2010; Sobel, 2005); situated pedagogy (Kitchens, 2009); place-based perceptual ecology (Thomashow, 2002); children's preference of place (Derr, 2002); creative education (Fettes & Judson, 2011); critical pedagogy of place (Gruenewald, 2003; McInerney et al., 2011); and higher education (Barlett, 2005; Orr, 1992). The concept of “sense of place” was suggested by geographers first (Lynch, 1960; Relph, 1976; Tuan, 1977) and is important in that it constitutes the starting point of the applied works in this study.

Malpas (2010) defines the sense of place as attachment to a place, or a sense of spaces that carry the meaning and characteristics of place. This study addresses natural experiences together with the sense of place and improves them in line with the participants' perceptions and significations. Prof. Dr. Jale Erzen is another academician who carries out this kind of studies with her students in METU in Turkey. The Environmental Aesthetics course that I received

from her while I was studying at university is the reason behind my decision to include this kind of studies in the content of the Environmental Psychology course.

Land Art

Land Art covers a wide range of art works from small sculptures to large gestures, from ephemeral works to permanent ones (Brady, 2007; Andrews, 1999; Ross, 1998). The isolation from nature due to the growing cities aroused a new interest in nature and a curiosity for ecology, rural areas and natural life in 1980s (Erzen, 2015; 2006). The re-arousal of the interest in nature in the mid-20th century is about the degradation of earth. The field of art called as Environmental Art, Land Art and Ecological Art directed many post-Second World War artists towards natural works (Erzen, 2015). Heidegger (1964) defends that these kinds of works “symbolize the struggle between earth and world” (p. 650-708).

While many Land Artists draws attention to the beauty, quietness or supremacy of nature, some artists want to draw attention to natural processes by making some interventions to the nature such as Dennis Oppenheim in his work called Annual Rings where he drew circles on snow, Robert Smithson in his work called Spiral Jetty in Utah Salt Lake which he did using pebbles, soil and salt, Walter de Maria in his work called The Lightning Field which he did using 400 steel poles (Erzen, 2015; Cerver, 1995). However, Crawford (1983) criticize Christo and Jean Claude since he thinks the dimensions, engineering complexity and synthetic components are against nature (Brady, 2007; Crawford, 1983). This leads to the discussions of Land Art, nature and aesthetics. In Land Art, or another art intervention, nature is transformed and is not regarded as only nature. Adorno (1970) states that “perception of nature can give us hope on a beautiful day” (p. 108-110). In short, nature is signified through these kinds of works. According to Kurdryavtsev et al. (2012), earthworks are maybe the most conflicting kinds of human-nature relationships; included in the art works displaying a kind of aesthetic egoism. Ross (1998) defines “the works of Heizer and Smithson as masculine gestures in environment, since their scales require inaccessibility and climatic extremes of desert” (p. 210).

They are in exactly the opposite of the earthworks called as ephemeral art, or which Ross (1998) called as short-term gestures in environment. The artists such as Goldsworthy and Singer can be examples of this category (Kurdryavtsev et al., 2012).

On the other hand, Kurdryavtsev et al. (2012) state that ecological art provides the clearest situation of offering an aesthetic point of view on nature. These kind of works draw attention to humans’ responsibilities for environmental crisis. Some artists can be given as examples of this kind of art: Sonfist, Denes and Hans Haacke; Helen Mayer Harrison and Newton Harrison; Herman Prigann and Patricia Johanson. In ecological art, nature is valued and brought to the forefront while works are based on the role of human. Various types of ecological art draw attention to the non-instrumental value of nature and, thus respect is raised for nature, produced through artistic instruments and creative intentions (Kurdryavtsev et al., 2012).

The sense of natural beauty has changed since ecological concerns became the subject of arts. The specific beauty of the areas such as steppe or desert is noticed. The artists working in nature has brought different natural characteristics to our attention (Erzen, 2015, p. 51). It is essential to try to understand and tell the human-nature relationship in art works produced in and with nature with its emotional, sensory, aesthetic and metaphysical aspects that appeal to our perceptions, beyond the scientific and objective data (Erzen, 2015, p. 89).

Since earthworks, ephemeral art and ecological art include a multi-dimensional discussion and perspective of the aesthetic-ethical interaction of short-term and ecological art with natural environments, objects, processes and living creatures, the Environmental Psychology course

partly analyzes the relationships of individuals and communities with the world, and artistic approaches differently from aesthetic as a philosophical subject within the framework of architectural environment together with the natural environment surrounding it. Within the scope of Land Art, experiential studies are produced which investigate humans' perception of their environment and the sincerity of the relationship between the pressures on humans and their body. The significant point here is to understand the environment specific to individuals. It is important to address the subject with a phenomenological approach in order to understand how the ecology-nature-human relationships and humans' ability to perceive are affected.

The aim is to produce a correct value system regarding the environment, make people have the sense of responsibility and raise their awareness on environment by analyzing the approaches in Land Art through the visual data provided by the applied works of students.

This study aims to investigate the relationship between humans and their environments using the applied works on natural environment. It also aims to reveal how environment is perceived and signified.

2. Method

2.1. Scope of the Study

This study included the applied works produced by university students on nature within the scope of the Environmental Psychology courses in three universities; Atılım University, Başkent University and Hacettepe University, in Ankara, the capital city of Turkey. The perception of environment was analyzed using the nature-focused applied works produced by the students in Department of Interior Architecture and Environmental Design in Atılım University and the students in different departments of Başkent University including the Department of Interior Architecture and Environmental Design within the scope of their courses between 2003 and 2016, as well as the students in different design and art departments or divisions of Hacettepe University within the scope of the workshop in the VIIIth Encounter of the Mediterranean Art Schools-ECUME.

The place-based education was adopted; and thus, the sense of place was investigated through trips and observations in natural environment and ideas were discussed which aimed to raise awareness and understand personal behaviors. As a result, the application and visualization methods were evaluated in which participants can assess their personal perceptions and express themselves in the best way. At this point the focus was put on the analysis of the characteristics and significance of the selected physical environment and the link between the participants and place. The participants were free to select their work area, and preferred working in urban and natural environments.

The students were expected to produce the final work by brainstorming with open-ended questions, dimensional thinking, experiencing the sense of place to exhibit their talents, and stimulating their internal motivations. This study included the applied works produced between 2003 and 2016.

Evaluation the Relationship Between Human and Environment

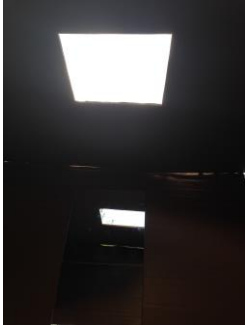


Figure 1. Özlem Acar, Nursel Çopur, Damla Halis, Aylin Özçelik, Mert Benli Work, 2014-2015 Spring Semester



Figure 2. İnanç Burak Gümrükçü, Mehmet Köksal Work, 2014-2015 Spring Semester



Figure 3. Emre's Work, 2004-2005 Fall Semester



Figure 4. Ömer Aydın and Kadriye Kestigül Work, 2005-2006 Fall Semester



Figure 5. Can Çelik and Selva Tosun Work, 2005-2006 Fall Semester



Figure 6. Erişcan Türk and Efe Varol Work, 2005-2006 Fall Semester



Figure 7. Orkun Sanal Work, 2005-2006 Fall Semester



Figure 8. Meltem Akkuş, Yeliz Pazarcı and Meltem Sabı Work, 2005-2006 Fall Semester



Figure 9. Çiğdem Işık and Sintia Israelyan Work, 2006-2007 Spring Semester



Figure 10. 2006-2007 Spring Semester



Figure 11. 2006-2007 Spring Semester



Figure 12. Çaka Bademli Work, 2006-2007 Spring Semester



Figure 13. Serra Ekşi Work, 2005-2006 Spring Semester



Figure 14. Canan Dinçer Work, 2006-2007 Spring Semester



Figure 15. Mustafa Aytaş Work, 2007-2008 Spring Semester



Figure 16. Emre Arı and Utku Demircioğlu Work, 2008-2009 Spring Semester



Figure 17. Gizem Özer Work, 2008



Figure 18. Kanat Jakshybekov Work, 2008

Note: All the photographs were taken by the author, Ünlü, 2004-2015.

3. Results

The significations from the works produced by the students in Department of Interior Architecture and Environmental Design of Atılım University were as follows: the works applied in the landscape of a constructed environment focused on building a relationship with

the building, criticizing the building and making humans notice the natural environment and its elements (such as plants, trees, soil, air, water) (the work produced using cardboard boxes and mirrors, which emphasizes that humans are a part of nature and exist together with natural environment was named as “black box of nature”), and criticized the destruction of nature (painting the cut trees with water based paint) (see Figure 1 and 2).

The significations from the works produced by the students in different departments of Başkent University were as follows: the importance of waste materials and recycling was understood (using beverage cans and plastic cups); the relationship between urbanization/structuring and natural environment was criticized (putting the air and buildings into an iron circle frame); the fact that the nature surrounding us has become ordinary in daily life was criticized (raising the soil at a point of the garden and covering it with grass); acquiring the conscious of protecting the nature (dressing trees with trash bag and sticking pencils into the soil); the fact that the nature's own materials are not waste or rubbish was comprehended (using stones, dry leaves, etc.); destruction of living creatures was emphasized (creating a fish bone using dry branches and shadow); the contact with nature and the relationship between the nature and human body was noticed (a figure of human hugging dry branches); the integrity of nature was displayed using displacement method (creating a tree figure on the ground using stones); and a reaction was formed for destruction of the nature and the importance and value of a single leaf (lawn mower and creating a sculptural metal branch) (see Figure 3-12).

The significations from the works produced by the students in Department of Interior Architecture and Environmental Design of Başkent University were as follows: children's awareness of nature as of early ages was emphasized (the spiral created in a kindergarten's garden using stones); the living creatures in nature were noticed (wrapping the only tree in the field with cotton cloth); and the respective value and importance of each element of the nature was comprehended (dividing the natural view using ropes and painting stones with water based paint) (see Figure 13-16).

The significations from the works produced by the students in the workshop of the VIIIth Encounter of the Mediterranean Art Schools-ECUME were as follows: the nature-body relationship was comprehended (forming a t-shirt using leaves); and shadows were noticed (covering the tree shade with pine cones) (see Figure 17 and 18).

The Department of Interior Architecture and Environmental Design of Atılım University was observed to carry out practices that focus on the criticisms about Land Art examples and artists, the requirements of the profession, the constructed environment and changing human behavior in six hours of the Environmental Psychology course, which is provided for two hours a week in 14 weeks. The same is valid for the Department of Interior Architecture and Environmental Design of Başkent University. However, it was observed that the students focused on the applied works regarding the nature in number and context during the elective courses provided for different departments of Başkent University. This may be because different points of view in different areas of profession.

During the one-week VIIIth Encounter of the Mediterranean Art Schools-ECUME workshop, all of the six participant students performed nature-focused practices at the end of information for a total of 35 hours in a week; seven hours in a day.

Some similarities and differences were found between the course content in which Land Art was discussed for the six hours of the 14-week program carried out with the students of the department and the applied practices in the one-week workshop program. While environmental theories and practices were more introduced in 14 weeks, it was possible to connect with the subject with more examples, observation and discussions in one week.

While works could be produced to change the activities in architectural usages in 14 weeks, no workshop participator showed a tendency to this issue. Using the garden as the workshop area

might have affected this situation. The works in the workshop were produced upon reflecting what was perceived.

The workshop participants stated that they enjoyed being a part of such a practice without concerning for their grades. They expressed that they could act more freely and their creations became experimentally more active. Since they had not experienced such a practice, they could produce the works in the workshop out of the course using a technique different from the practices used in the course; and participants' knowledge and perceptions on the environment became more intense.

More opportunities to establish a dialog since the workshop participants consisted of six people. During the 14-week program, this dialog could not always be established when there is a high number of course participants; and the students only interested in, helped and understood each other's works during the criticism of the practice.

During practices carried out on the nature in both the 14-week courses and the one-week workshop, the participants may perceive a physical connection between the elements observed in the nature every day and their bodies. Regarding what is in the opposite as a realm of existence does not cause a difference in terms of time. The participants who produce such works had become individuals who have the conscious of protecting the nature and living together with it rather than being individuals who track, exploit and suppress the nature. The participants showed a tendency to use the nature's own materials without damaging the nature and preferred recyclable materials when they needed to use different materials.

4. Conclusion and Discussion

Only theoretical environmental education is not sufficient for students to understand and feel the environment. Experiential learning, and raising awareness by changing the environment should be made widespread for students to make their own decisions, think creatively, evaluate and feel. Because, experiential learning is a very effective method in training individuals who are more sensitive to signify the natural environment, protect the values of the environment, and multiply the environment with its values. Courses should be designed to allow students to build a connection with the nature. Environmental education should be developed focused on the mission of creating a sense of place instead of only encouraging the behaviors and attitudes. Besides, using the experiential learning approach in environmental education will enable to make information, perception and signification, in other words, life-long learning.

In addition to the importance of environmental experiments and research, the works which signifies the nature with a phenomenological approach instead of objectivizing it and creating artistic work environments is necessary and will be useful because it creates a knowledge and feeling that will be transferred to the next generations to expand students' point of view. Using operational ideas about the nature together with phenomenological synthesizing will create new ways of thinking and discovering. Experiential environmental education will provide an opportunity for studies that analyze our sense of link with body and that vary with the large number of theoretical interpretation, context and research methods. For these reasons, the experiential learning approach regarding the natural environment was included in the content of the Environmental Psychology course. Studies conducted with different points of view can support new and creative environmental education approaches and increase our perception of environment.

The works of Land Art provide information on the sense, creative expression and concept-based forms of the value that humans attach to the nature. Artistically established relationships considerably help us comprehend the various ways to aesthetically evaluate the natural environment as well as showing the connections between aesthetics and moral values.

Particularly some forms of the Environmental and Land Art will enrich and enhance our observation-based knowledge on aesthetic value. These kind of works will enable to better understand the characteristics that allow a more balanced evaluation according to the natural conditions.

Heidegger (1961) states that “‘Being there’ (Daisen) is the same thing as existing” (p. 24). Spending more time in nature will be a great opportunity to feel it.

5. References

- Adorno, T.W. (1970). *Aesthetic theory*. (C. Lenhardt. Trans.). New York: Routledge & Kegan Paul.
- Andrews, M. (1999). *Landscape and western art*. New York: Oxford University Press.
- Barlett, P.F. (2005). Reconnecting with place: Faculty and the Piedmont Project at Emory University. In P.F. Barlett (Ed.), *Urban place: Reconnecting with the natural world* (pp. 39-60). Cambridge, MA: The MIT Press.
- Bechtel, R.B. (1978). *Enclosing behavior*. Strousbourg: Dowden, Hutchinson and Ross Inc.
- Bott, S., Cantrill, J.G., & Myers, O.E. (2003). Place and the promise of conservation psychology. *Human Ecology Review*, 10 (2), 100-112.
- Brady, E. (2007). Aesthetic Regard for Nature in Environmental and Land Art. *Ethics, Place & Environment*, 10 (3), 287-300. doi: 10.1080/13668790701578538
- Cerver, F.A. (1995). *Landscape art*. Barcelona: Ganduxer.
- Chawla, L. (1992). Childhood place attachments. In I. Altman & S.M. Low (Ed.), *Place attachment*, Vol. 12 (pp. 63–86). New York, NY: Plenum Press.
- Crawford, D. (1983). Art and nature: some dialectical relationships. *Journal of Aesthetics and Art Criticism*, 42, 49–58.
- Cüceloğlu, D. (1991). *İnsan ve davranışı [Human Behavior]*. İstanbul: Remzi Kitabevi.
- Derr, V. (2002). Children’s sense of place in Northern New Mexico. *Journal of Environmental Psychology*, 22 (1-2), 125-37.
- Duerden, M.D., & Witt, P.A. (2010). The impact of direct and indirect experiences on the development of environmental knowledge, attitudes, and behavior. *Journal of Environmental Psychology*, 30 (4), 379-92.
- Erzen, J. (2006). *Çevre estetiği [Environmental Aesthetic]*. Ankara: ODTÜ Yayıncılık.
- Erzen, J. (2015). *Üç habitus yeryüzü, kent, yapı [Three Habitude Earth, Urban, Building]*. İstanbul: Yapı Kredi Yayınları.
- Fettes, M., & Judson, G. (2011). Imagination and the cognitive tools of place-making. *The Journal of Environmental Education*, 42 (2), 123-35.
- Gruenewald, D.A. (2003). The best of both worlds: A critical pedagogy of place. *Educational Researcher*, 32 (4), 3-12.
- Gruenewald, D.A., & Smith, G. (2008). Introduction: Making room for the local. In D.A. Gruenewald & G.A. Smith (Ed.), *Placebased education in the global age* (pp. xiii–xxiii). New York, NY: Lawrence Erlbaum.
- Gür-Öymen, Ş. (1996). *Mekan örgütlenmesi [The Organization of Space]*. Trabzon: Gür Yayıncılık.
- Heidegger, M. (1961). *An Introduction to Metaphysics*. New York: Anchor Books.
- Heidegger, M. (1964). The Origin of the Work of Art. In A. Hofstadter & R. Kuhns (Ed.), *Philosophies of Art and Beauty* (pp. 650-708). Illionis: University of Chicago Press.
- Ittelson, W., Prohansky, H.M., Rivling, L.G., & Winkel, G.H. (1974). *An introduction to environmental psychology*. USA: Holt Rinehart and Winston Inc.

- Kaplan, R., & Kaplan, S. (2005). Preference, restoration, and meaningful action in the context of nearby nature. In P.F. Barlett (Ed.), *Urban place: Reconnecting with the natural world* (pp. 271–98). Cambridge, MA: The MIT Press.
- Kitchens, J. (2009). Situated pedagogy and the situationist international: Countering a pedagogy of placelessness. *Educational Studies*, 45 (3), 240-61.
- Kızıl, F. (1978). *Tophumsal Geleneklerin Konut İç Mekan Tasarımına Etkisi ve Tophumsal Geleneklerimizi Daha İyi Karşılacak Konut İç Fiziksel Çevre Koşullarının Belirlenmesi [Determination of the Effect of Social Traditions on House Indoor Designing and the House Indoor Physical Environmental Conditions which better Meet Our Social Traditions]*. Ankara: Hacettepe Üniversitesi Yayını.
- Kudryavtsev, A., Stedman, R.C., & Krasny, M.E. (2012). Sense of place in environmental education. *Environmental Education Research*, 18 (2), 229-250. doi: 10.1080/13504622.2011.609615
- Lynch, K. (1960). *The image of the city*. Cambridge, Massachusetts: The MIT Press.
- Malpas, J. (2010). New media, cultural heritage and the sense of place: Mapping the conceptual ground. *International Journal of Heritage Studies*, 14 (3), 197-209.
- McInerney, P., Smyth, J., & Down, B. (2011). Coming to a place near you? The politics and possibilities of a critical pedagogy of place-based education. *Asia-Pacific Journal of Teacher Education*, 39 (1), 3-16.
- Orr, D.W. (1992). *Ecological literacy: Education and the transition to a postmodern world*. Albany, NY: State University of New York Press.
- Relph, E. (1976). *Place and placelessness*. London: Pion.
- Relph, E. (2007). On the identity of places. In M. Carmona & S. Tiesdell (Ed.), *Urban design reader* (pp. 103-7). Oxford: Architectural Press.
- Ross, S. (1998). *What gardens mean*. Chicago, IL: Chicago University Press.
- Sampson, R., & S.M. Gifford. (2010). Place-making, settlement and well-being: The therapeutic landscapes of recently arrived youth with refugee background. *Health & Place*, 16 (1), 116-131.
- Semken, S., and Brandt, E. (2010). Implications of sense of place and place-based education for ecological integrity and cultural sustainability in diverse places. In D.J. Tippins, M.P. Mueller, M. van Eijck, & J. D. Adams (Ed.), *Cultural studies and environmentalism: The confluence of ecojustice, place-based (science) education, and indigenous knowledge systems* (pp. 287-302). Dordrecht: Springer.
- Sobel, D. (2005). *Place-based education: Connecting classrooms and communities*. Great Barrington, MA: The Orion Society.
- Terence, L. (1976). *Psychology and the environment*. London: Methuen.
- Thomashow, M. (2002). *Bringing the biosphere home: Learning to perceive global environmental change*. Cambridge, MA: The MIT Press.
- Tuan, Y.F. (1977). *Space and place: The perspective of experience*. Minneapolis, MN: University of Minnesota Press.
- Vaske, J.J., & K.C. Kobrin. (2001). Place attachment and environmentally responsible behavior. *Journal of Environmental Education*, 32 (4), 16-21.
- Wilson, R. (1997). A sense of place. *Early Childhood Education Journal*, 24 (3), 191-194.

Assessment Of Urban Riverfronts Based On Landscape Design: The Case Of The City Of Amasya

Habibe Acar, Nihan Aktaş

1. Introduction

Coastal areas have been the spaces where the great civilizations settled since the early ages. (Karaşah, Sarı & Güneröğlu, 2010). "Coast" is defined as the area between the coastline and the shore edge line, as specified in the code no 3621. According to the same code, the "coastline" is the line that is formed by the collection of the points where the water touches the land in seas, lakes and streams and "shore edge line" is the natural border of sand, gravel, rocky, stony, reed, marsh, and similar areas created by water movements next to seas, lakes and rivers next to the coastline towards the mainland. The coastal settlements between the coastline and the shore edge line, defined as coastal areas, included different characteristics all over the world and at any given time (Akköse, 2007). The water that forms the coasts is the first element of choice and the most important source of visual attraction in landscaping and recreational activities. The significance of water as an aesthetic element in landscaping was based on Mesopotamian and Egyptian gardens (Güneröğlu, 2017). Furthermore, it is impossible to deny the contribution of aquatic culture, innovations due to the existence of water, water transport, and other opportunities to the urban culture and humanity (Akköse, 2007).

Within the scope of the present study, rivers that flow through the city were discussed as water sources. The stream coastlines were addressed. These areas are also considered as coastal areas in terms of points of contact with water. The focus of the present study was the ways that these areas fulfilled the needs of users for open spaces and landscape designs in river coastlines.

Use of water in urban areas from past to present

Water sources has been one of the most important factors that affect the settlements due to different reasons throughout history (Yavuz & Kuloğlu, 2015). Riverbanks, lakesides, seashores have become spaces where people gathered and formed large settlements. Especially, the rivers and banks that interlaced the world like a network were the areas where great civilizations were established and developed. Although these areas were preferred for purposes such as a resource of drinking water, cleaning and irrigation, they also provide several possibilities for agriculture, animal husbandry, mining, energy production, transportation, recreation, tourism and aesthetic purposes (Güneröğlu et al., 2014). As a result, since the establishment of the earliest civilizations in the world, coastlines and coastal areas became the starting point of civilizations in every period of history and achieved social significance for settlement and utility purposes (Canik, 2014).

In the past, people utilized water and its benefits only for their basic needs, while today, water resources such as seas, rivers or lakes add value to the urban area in different aspects. The first of these is to ensure that the city has access to and communication with other settlements, similar to the early settlements. The city is located within a natural transport network. Thus, it has a strong contact with different settlements. This enables the city to be open to innovations and developments and has an effect that accelerates versatile development.

Furthermore, as a gateway to the external world for the cities, coastal areas became a meeting and communication-interaction space for urbanites where different activities took place (Akköse, 2007). Urban coastal areas could be naturally located next to marine, lake, stream shorelines and in immediate surroundings. The benefits and resources of these coastal areas could be different based on the location and length of each coastal area.

Significance of natural stream environment for urban areas and urbanites

The presence or absence of an aqueous element in the natural urban structure, whether it is a coastal city or not, is a condition that affects the function and the image of the whole city. The coastline is the area where the urban meets the nature. In other words, the city is integrated with the nature due to the presence of a coastline (Akköse, 2007).

The streams with the features of a natural resource and form a coastline within the city offer several opportunities by forming river corridors. River corridors provide significant contributions to the cities where they provide added value as a natural resource, support biological diversity, provide wild aqueous cycle, transportation, a habitat for agricultural species, ecological continuity, recreational potential, raw materials and drinking water. The availability of such significant uses of aqueous areas accelerated the development of the river banks around it (Sarıçam & Hepcan, 2015). For these reasons, river corridors are main axes that reveal the character of the cities.

The presence of a hydrological structure in urban and rural areas provides significant contributions to the formation of landscape in that area. Streams provide movement and vitality for landscapes, rendering its environment more when compared to the still water. Furthermore, streams are a recreational element that removes the monotony in landscape with small waves, introducing significant differences. Particularly, urban streams have significant functions such as creating recreation areas, conserving urban flora and fauna, and organizing urban ecology (Sağlık, Erduran & Çelik, 2012).

The streams are a significant landscape value that provides the city with an urban identity. Water elements, which affect the urban identity and character and exist naturally in the urban space, are also an important design element (Sarıçam & Hepcan, 2015). In addition to having aesthetic and visual properties, when joined with areas that contain architectural elements harmonious with nature in terms of vegetation, texture, color and form, water in landscape increases visual quality and is preferred by users for recreational purposes (Güneroğlu, 2017). In an aqueous environment, there is a magnetic force strong enough not to be compared with other materials and elements. The reaction of humans to the aquatic environment is due to the visual characteristics of the water, as well as the sound, smell, and the feeling created by contact (Sarıçam & Hepcan, 2015).

In recent years, natural streams and coastal areas, which are quite significant for the city and urbanites all over the world, are meticulously addressed in urban design studies. To this end, projects are being developed and implemented to produce recreational solutions that provide ecological restoration of coastline and water resources, improvement of water quality, and produce recreational solutions that bring the citizens and the water together that address urban stream corridors with their surroundings (Sarıçam & Hepcan, 2015).

Landscape design approaches in river environment

Streams provide several significant contributions to the city such as ecological, economic, aesthetic, identity, recreation, and affinity to nature. Planning and designing stream coastal areas, which have a significant urban value, are also very important for the city and the urbanites. The produced policies and practices should primarily aim at solving the problems in these areas, and then highlight their existing values.

Sustainability of natural water resources such as rivers, lakes and seas for urban identity is extremely important. These water resources are sometimes utilized for visual purposes only and sometimes to enable direct human contact with water. When utilized for visual purposes, individuals are not allowed to get in touch with the water, primarily for safety reasons. However, people do not enjoy this situation (Yavuz & Acar, 2016). Because users prefer to get

in touch with the water. Thus, if conditions are suitable, there is a need for solutions that enable direct human contact with the water in these areas.

It could be observed that serious problems are experienced in addressing urban streams with an ecological and holistic system approach by utilizing their ecological, social and cultural potential and in developing comprehensive strategies. Thus, each discipline approaches to the issue with a different perspective based on its own interests and also certain administrative problems are experienced (Özeren & Hepcan, 2013). A planning and design approach to the issue would demonstrate that the initial action should be to decide how stream environment should be utilized while conducting the urban planning. In planning approaches, the green belt that runs through the city along the river and transportation must be considered with the same continuity. Within this continuity, an exigence program should be designed in accordance with the needs and desires of the urbanites about the area in determined spots based on the obtained analysis data. The activity areas proposed in the exigence program along the riverbank represent the design areas as well. Accordingly, the open space recommendations, which will be subjected to the landscape design, should be considered based on the criteria determined in the design process. These criteria can be categorized as sustainability, accessibility, a design approach for all, meeting with water and contact with water. However, it should not be forgotten that there may be restrictive factors in the design process. These are generally related to the problems that arise from the stream (such as depth of the water during the year, flow rate, pollution, etc.), the city (topographic structure, relation with water, presence of adequate coastline areas, urban transportation, etc.), and the users (cultural differences, expectations, use of open spaces, etc.).

One of the most important issues that should be considered during implementation is the establishment of regulations for the extended use of the coastline by the public, apart from the definition of the public belt in the coastline, the provision of certain facilities to meet the needs, their maintenance, repair and supervision. This is entirely an administrative task, and it is directly related to the capacity of public spaces (Sesli, Aydınoğlu & Akyol, 2003). There are several landscaping design applications available in Turkey and worldwide.

2. Material and Methodology

2.1. The Aim of the Study

The cities through which natural streams pass are considered to possess river-city characteristics. River cities should make good use of these potentially valuable public open spaces. However, the implementations in Turkey and the example of the city of Amasya, which is the study area, reflect various problems. Thus, the aim of the present study is;

To conduct assessments on landscape design by emphasizing the significance of its use in natural stream coastlines that are important for the city and city dwellers,

To demonstrate the most important applications of riverside use in the world, its development and design approaches in this type of areas via literature review,

To address the present physical condition of Yeşilirmak River that passes through the study area, the city of Amasya,

To compare the present physical condition of Amasya riverside and qualified application specimens worldwide,

To present recommendations for Yeşilirmak River area in the city of Amasya per the abovementioned comparison.

As a result, it was aimed to provide clues for urban riverside landscape design studies based on the example of the city of Amasya and to contribute to the applications in this topic.

2.2. Stages of the Study

Based on determined objectives, the study was conducted in 3 stages (Figure 1).

Stages of the study	Research questions
Literature review	What are the historical developments in riverside use? ← What are the application examples worldwide? ← Which design approaches are used in these examples? ← What are the sample designs for open space activities? ←
Study area physical space analysis	Where is the location and what is the significance of the study area? ← What is the physical condition of Yeşilırmak riverside? ← What the area is used for? ←
Assessment	What could be the landscape design approaches for urban riverside areas? ← Which activities could be conducted in urban riverside areas? ← Which of these activities are present in the city of Amasya? ← Which additional open spaces could be recommended based on the opportunities provided by Amasya riverside? ←

Figure 1. Stages of the study and research questions

1st Stage: Literature review

What are the historical developments in riverside use?: As mentioned in the introduction section of the study, cities were established in areas close to the water to satisfy the basic needs related to the water. Today, water and its surrounding areas has become locations with visual and recreational values that provide access for people to the nature and meet the need for open spaces in urban areas. Therefore, these areas should be designed based on the needs and demands of the urbanites by emphasizing the natural value of this urban space and also in line with the needs and expectations of the people that visit the city.

What are the application examples worldwide?: There are several cities in the world that possess river-city characteristics. In the present study, the most known and most touristic cities were addressed. Riverside uses and open space activities in these cities were scrutinized. Because these activities provide clues about for what the riversides were used and how. The river cities both in Turkey and rest of the world determined for this objective were examined (figure 2,3), listed and tabulated (table 1).



Figure 2. Some of the world's river cities (URL1).

Assessment Of Urban Riverfronts Based On Landscape Design



Figure 3. Some of the river cities in Turkey (URL2).

Table 1. Some of the river towns in Turkey and rest of the world and conducted activities

	WORLD													TURKEY												
	Bern, Switzerland	Venice, Italy	Rome, Italy	Amsterdam, Netherlands	Zurich, Switzerland	Rotterdam, Holland	Londra, England	Paris, France	Newyork, ABD	Boston, ABD	Cairo, Egypt	Seoul, South Korea	Texas, ABD	Gaziantep	Antakya	Divarbakir	İstanbul	Kastamonu	Edirne	Eskisehir	Adana	Sivas	Bayburt	Artvin	Amasya	
Boats/gondola rides	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					✓	✓	✓			✓		
Canoeing	✓				✓			✓	✓	✓	✓		✓						✓	✓	✓					
Rafting	✓																						✓			
Swimming	✓	✓			✓				✓	✓																
Contact with water	✓	✓			✓			✓		✓		✓	✓				✓				✓					
Taking photos	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Eating-Drinking	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Viewing	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Relaxing	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Sunbathing	✓		✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	

Which design approaches are used in these examples?: Coastal areas are one of the important natural resources for individuals. The most important factor for the conservation of these areas and rational use is urban design studies. The aim of the urban design of coastal areas should be to create and transfer their beauty along with the natural and cultural values to future generations and to utilize these rich resources properly (Kaynaroglu, 2009).

The abovementioned examples demonstrate that there is usually a continuous green area in stream coastlines in addition to hiking and cycling trails along that route. Furthermore, there are sightseeing, resting, sunbathing and eating spots at appropriate locations, which allow people to approach the water. These spaces are designed very close to the water and sometimes even to allow contact with water based on the location of the area. Sometimes they are located above the water level. Furthermore, it is observed that there were also a boat / gondola rides along the river that offers a tour of the city. There are also opportunities to participate in sporting events such as rafting and canoeing where the location avails. All these activities are aimed at allowing people to establish contact with the water in the urban area, creating breathing points,

meeting the open space needs of the users of all ages and promote the city by attracting outsiders. This would also contribute to the local economy.

What are the design examples of open space activities?: As observed examples of activities conducted in the riverside in river cities, it is possible to create different constructs for each space. The spaces that are determined by the exigence program can be applied in different forms and using different material. Formal organizations can vary depending on the nature of the activity, the possibilities available in the space, the approach of the designer, the concept, creativity and other spatial solutions in the environment. The spaces need to be positioned to be continuous. It is very important to determine the capacities based on the user potential.

2nd Stage: Physical space analysis for the study area

Where is the location and what is the significance of the study area?: Amasya province is in the interior Central Black Sea Region. It is surrounded by Tokat province in the east, Tokat and Yozgat provinces in the south, Çorum province in the west and Samsun province in the north. The city was established on two the banks of the Yeşilirmak River where it flows in the east-west direction and between 34 ° 57 '06 " - 36 ° 31' 53" eastern longitudes and 41 ° 04 '54 " - 40 ° 16' 16" northern latitudes. The average elevation (altitude) is 1,150 m, and at the provincial center it is 411,69 m. The surface area is 5701 km². Since the area for settlement is limited between the castle remains and king tombs on the north coast of Yeşilirmak, and Yeşilirmak, the settled area forms a thin strip. The main urban settlement and development area is on the southern bank of Yeşilirmak. The neighborhoods separated by Yeşilirmak are connected by 12 bridges on the river (Governorship of Amasya, 2017).

It is one of the Turkish cities known for its natural beauties and historical monuments (Tuzcu, 2007). The city which received the title of "The City of Princes" is also known as "the museum city". This is due to the fact that a promenade on the banks of Yeşilirmak would reveal the works of almost all past and present civilizations in Anatolia (Uzun et al., 2015).

Today, the city preserves its location hidden in the valley and exists as the sole large city built in a "V" shaped valley floor in Anatolia. Also Amasya is attractive for tourism due to its pristine cultural values (Governorship of Amasya). Among these values, examples of local architecture are quite remarkable. Reflections of Yalıboyu (Coastline) Houses on the river extending along Yeşilirmak represent the fourth dimension of the city. The positioning of local architectural examples on the coastline, which a natural landscaping value, further enhances the value of the city. Furthermore, the winds of the river valley do not allow air pollution to decrease this value. Therefore, along with all the above mentioned values, the river corridor and its immediate hinterland play an important role as a green corridor in planning the city's open green space system (Uzun et al., 2015). The images that represent the past and the present city are shown in figure 4.

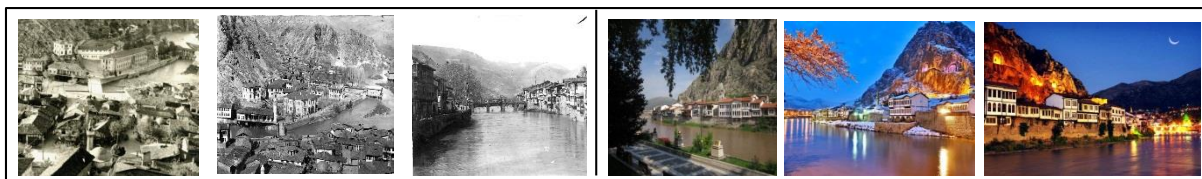


Figure 4. Past and present Amasya (URL3).

What is the physical condition of Yeşilirmak Riverside?: Based on the objectives determined for the study, it was aimed to assess the use of the immediate environment of Yeşilirmak river that passes through the city based on landscape design. The length of the river within the city limits is 129 km. Evaluations for the uses of the riverside were conducted to include only the central district. Accordingly, the open public spaces in the immediate vicinity of the river within the study area were determined as Şehzadeler Premenade, Memorial Square, and the spaces named Inner City Streets, historical areas and areas with cultural value were determined as Yalıboyu Houses, Bimarhane (Sabuncuoğlu Medical and Surgical Medicine Museum), King

Rock-Tombs, Girls' Palace, bridges, Amasya Archeology Museum, Amasya Castle, Amasya Miniature Museum, Şehzadeler Museum and Saraydüzü Barracks Independence War Museum. There are also vehicle and pedestrian roads along this route. The locations of all these facilities are indicated in figure 5 on the map sheet.

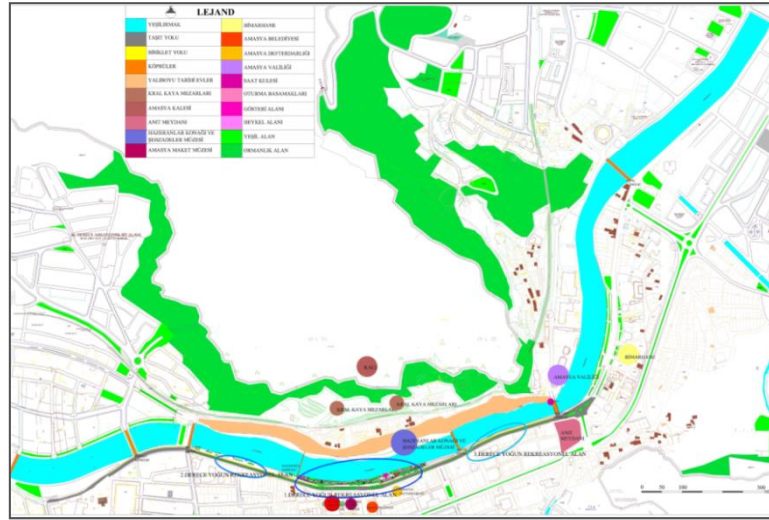


Figure 5. Yeşilırmak River and vicinity utilization in Amasya urban center

What the area is used for?: The vicinity of Yeşilırmak River in the study area is used extensively by the people who live in the city or those who visit the city during certain periods. Because Amasya is a city with a touristic potential due to its historical and cultural values. Especially, the preserved conventional architectural texture and rock tombs are situated right beside Yeşilırmak River, causing the intensive use of the riverside by the tourists. The Amasya International Atatürk Culture and Art Festival is held on June 12-22 in Amasya and the events organized during Ramadan also increase the use of this area. During periods when climate conditions are favorable, hiking, strolling, eating and drinking activities along the river route and related open spaces are frequently conducted. Furthermore, the fact that the city is settled in a valley and its settlement cannot reach higher elevations due to the topographic structure increases the potential of the valley floor, hence the riverside. All the above suggest that the river vicinity is an important recreation area for the people.

However, the capacities of these sites are not adequate, especially during the periods of high tourism. Thus, people cannot fulfill their outdoor needs (seating, eating, drinking, resting, etc.) adequately. During the times of high utilization such as festivals etc., the capacity of the seating areas at the ring is not sufficient. Thus, during such times the adjacent road is closed to traffic and people are allowed to watch the shows on foot. Furthermore, in river cities, people are enabled to establish intimate relations with water. People can approach the water. However, in Amasya, there are not sufficient and qualified spaces to provide this opportunity. At the same time city-water-green relationship is not sufficient. The quality of the present green areas should be improved. Near the riverside, improvements should be conducted on vehicle-pedestrian-bicycle routes. The continuity of the bicycle route should be ensured. As a result, the urban-water-green relationship in the Amasya city riverside should be strengthened to enable the satisfaction of the open space requirements of the people and provide space solutions where they could establish a relationship with water.

3rd Stage: Assessment

What could be the landscape design approaches for urban riverside areas?: River coastlines that are used for different purposes in the world and in Turkey over time were damaged and deformed due to urbanization, use of resources, and search for raw materials and energy resources. These may even turn into areas that have lost their landscape quality by becoming

deserted spaces, causing even life and property losses, as a result of the abovementioned circumstances. Rehabilitation and restoration projects should be conducted primarily on such stream coastlines. As a result, it was determined that these areas would present recreational opportunities, gain an identity again, improve in the quality of landscape and value and achieve significance as adequate areas for users with their attractive and impressive appearances (Güneroğlu, 2017).

Coastlines also attract individuals with their natural, economic and microclimatic characteristics. Because such areas offer recreation opportunities for individuals (Yavuz & Acar, 2016). Therefore, these areas should be designed to include spaces that would meet individuals' needs for outdoor spaces in the city. Gehl categorized outdoor activities that people conduct in open spaces under three groups. These are compulsory activities (school, work, etc.), elective activities (sunbathing, sitting, walking, etc.) and social activities (Günay et al., 2016). Recommended activities for riversides could be addressed under these categories. Thus, individuals' behavior in open spaces would be considered.

Which activities could be conducted in urban riverside areas?: The open space activities conducted in riversides in domestic and international cities that were scrutinized in the study were (table 1) boating, rafting, canoeing, eating, sitting, relaxing, viewing, walking, cycling, and contact with water. An analysis of other examples demonstrated that the activities conducted in these cities were similar. Therefore, when landscape design is conducted in such a field, appropriate similar activities could be recommended.

Which of these activities are present in the city of Amasya?: In the city of Amasya, the activities such as sitting-resting, eating-drinking, taking photographs, demonstration-gathering, and viewing could be observed along the route of Yeşilırmak that passes through the city center. However, these need to be reconsidered and improved both in quality and quantity.

Which additional open spaces could be recommended based on the opportunities and limitations provided by Amasya riverside?: Opportunities in the immediate vicinity of the river in the city should be assessed for their capacity and spatial qualities based on their use during the year. Thus;

The existing pedestrian route should be expanded in line with the means available in the area and a more convenient walking route should be established. The presence of a quality hiking trail will encourage the city inhabitants to walk instead of using their vehicles. At the same time, visitors to the city will be able to enjoy more comfortable circulation along the river route. A bicycle track along this route might also be recommended. Thus, the use of motor vehicles in the city will be reduced, and the movement will be encouraged, contributing to a healthy life. A green belt should be established between the pedestrian and bicycle trails and the vehicle road. Thus, the vehicle route will be separated from other paths and a continuous green space system will be constructed.

Furthermore, along the same route, areas dedicated to promenades, sitting, recreational and photography should be designed with higher transport capacity than the existing ones in appropriate elevations on the riverside.

During the year, spatial solutions that would decrease the distance between the people and the water as much as possible could be conducted by assessing the changes in the river water level during the year. Thus, steps and terraces that go down from the road elevation to the water level could be designed for sitting, walking and sunbathing.

Furthermore, as seen both in Turkey and abroad, boating activities in the river could be recommended. The water level of the river is an important factor for this activity. The activity should be conducted at certain times during the year. Thus, historical and cultural values could be introduced in river tours conducted with professional guides.

The endemic plant species in Amasya have a significant landscaping value. Use of endemic species in landscape design applications in the city is extremely important. Priority should be

given to the use of endemic species based on the requirements of the site, in recommended riverside open areas. Improvements should be made on planting, especially on the lower parts of Yalıboyu Houses.

3. Results and Recommendations

Related studies and examples of application demonstrated that it is possible to discuss the results based on the city of Amasya in general. Thus, based on the city of Amasya, the current physical condition in the area, the usage status and the potential of the city should be considered to increase the quality of the river environment. To accomplish this, improvements should be conducted by evaluating the recommendations mentioned in the third stage. As a result, more qualified open spaces will be created for both the city and the users.

A general approach to the topic apart from the Amasya example would demonstrate that it is possible to make evaluations based on planning and design. The rivers flowing through the cities are a significant source of value for the city. These areas need to be addressed with a holistic approach within the urban system. Initially, projections for present and future that assign different functions to these areas should be conducted to rehabilitate the rivers and coastlines that have lost their function over time due to interference of various uses and interventions, creating negative conditions.

Recommended design areas should be evaluated at appropriate spots on the river shores with rehabilitation and renovation studies. Landscape design studies in these areas should consider urban, user and stream data in conjunction. The location of the stream within the urban area, its width, problems related to the current status, assessments by users and expectations for the area should be considered. The presence of natural and cultural elements in the immediate vicinity of the river are important points to be considered in design. Because, as a result of the design, these values should be preserved and highlighted. This would increase the number of visitors visiting the city and transfer these values to future generations.

Transportation and circulation are other significant factors that need to be addressed in design. First, urban access to the riverfront should be provided. Thus, pedestrian, vehicular and bicycle routes if adequate should be organized. Later, circulation roads along the river for pedestrians, cyclists and boaters, water resources permitting, should be established. Thus, people in the city would have access to the nature. The design for all approach should be considered in these solutions. It should not be forgotten that everyone has equal access to public spaces.

Following the rehabilitation and transportation solutions, an exigence program should be established for the river hinterland based on the needs of the city, the inhabitants and the visitors. In this program, open space possibilities that could be constructed along the river should be determined and solutions should be created. One of the aims of the present study was to make open space recommendations for the riverside, based on the examples in the world and Turkey. Based on the examples scrutinized in this context, it was observed that activities such as boating, water sports, swimming, contact with water, eating / drinking, viewing, relaxing, sitting, sunbathing, etc. were conducted. The identified activities might vary depending on the stream and the opportunities the hinterland offers. Furthermore, the needs may vary based on the local culture. Therefore, the type and number of these activities can be increased or decreased. These activities may vary based on the user as well. Activities that children, young people, seniors would like to participate in coastal areas might vary. But, every user wants to approach, contact and touch the water when possible. Therefore, solutions that would enable the contact between the users and the water are needed.

In design, together with the structural recommendations, plant solutions and green areas are also very important. The green areas offer the opportunity to be in harmony with nature in

addition to the ecological, economic and microclimatic contributions they provide to the city and the users. The green areas along the riverside are also part of the urban green space system. Therefore, a continuity in the whole city should be taken into consideration. Aesthetic and functional principles should be considered in planting designs that would be designed in these areas. When selecting species, endemic species should be preferred initially. Thus, the natural fabric of the area will be exhibited. In plant compositions, grass areas should also be designed in addition to the mass applications to create empty spaces.

As a result, rivers, which are natural water resources, possess significant urban value. Urban areas should acquire these spaces through quality implementations. Particularly in rehabilitation studies, the contributions of different professional disciplines are also required. For landscape design, the recommendations mentioned in the present study should be evaluated in applications in similar fields.

4. References

- Akköse, A. C. (2007). *Kentsel kıyı alanlarının yeniden değerlendirilmesi kapsamında İstinye tersane alanının incelenmesi [The analysis of Istinye shipyard within the context of redevelopment of urban waterfront areas]* (Unpublished master thesis) İstanbul Technical University, İstanbul, Turkey.
- Canik, G. (2014). Amasya tarihi kent merkezinde yer alan Pirinççi promenad alanının nehir ve kentle olan ilişkisi üzerine bir değerlendirme [An Evaluation of the Relationship with City and River of Pirinççi Promenade in the Historical City Center of Amasya] *Ormancılık Dergisi*, 10(1), 23-36.
- Governorship of Amasya (2017). Retrieved at December 10, 2017, from <http://www.csb.gov.tr/iller/amasya>
- Günay, K., Yavuz, A., Acar, H., Kuloğlu, N., & Sancar, C. (2016). *Kent Merkezlerinde Yaya İzleri Atölyesi [Pedestrian Tracks in City Centers Workshop]*, Edited by Nilgün K., Habibe A., Aysel Y., Kadir G., TMMOB Şehir Plancıları Odası Trabzon Şubesi, Trabzon, Turkey.
- Güneroğlu, A., Dihkan, M., Karsli, F. (2014). Dynamic management of the coasts: Marine spatial planning, *Proceedings of The Institution of Civil Engineers-Maritime Engineering*, 167, 144-153.
- Güneroğlu, N. (2017). Akarsu rehabilitasyonunun peyzaj kalitesi üzerindeki etkileri [The effect of restoration process on riparian landscapes] *Artvin Çoruh Üniversitesi, Orman Fakültesi Dergisi*, 18(1), 10-20, doi: 10.17474/artvinofd.270854.
- Karaşah, B., Sarı, D., & Güneroğlu, N. (2010). *Kentsel kıyı alanlarının peyzaj açısından değerlendirilmesi; Trabzon örneği [Evaluation of urban coastlines in respect of landscape architecture; The sample of Trabzon city, Turkey]*, Paper presented at the III. Ulusal Karadeniz Ormancılık Kongresi, Artvin.
- Kaynaroğlu, B. (2009). *Ordu Atatürk Parkı ve kıyı bandının kentsel tasarım özelliklerinin saptanması ve değerlendirilmesi üzerine bir araştırma [An Evaluation on the Concept of Properties for Ordu Atatürk Park and Coast Band]* (Unpublished master thesis), Ankara University, Ankara, Turkey.
- Özeren, M., & Hepcan, Ş. (2013). *Kent içi akarsu koridorlarının canlandırılması: İzmir kent merkezi örneği [Urban stream corridor revitalization: İzmir city center example]*, Paper presented at the TMMOB 2. İzmir Kent Sempozyumu, İzmir.
- Sağlık, A., Erduran, F., & Çelik, A. (2012). Kent içi akarsuların rekreasyonel yönden kullanımı: Çanakkale Sarıçay örneği [Recreational Use of Streams in The City: An Example of Çanakkale Sarıçay] *Biyoloji Bilimleri Araştırma Dergisi*, 5(1), 43-50.
- Sarıçam, S., & Hepcan, Ç. (2015). Porsuk Çayı Adalar Mevkii ve çevresinin rekreasyonel kullanımının belirlenmesine yönelik bir araştırma [A Research for Defining Recreational Use

of Porsuk Riverside and Adalar Area, Eskisehir], *Ege Üniversitesi, Ziraat Fakültesi Dergisi*, 52(1), 1-11.

Sesli, F. A., Aydınoğlu, A. Ç., & Akyol, N. (2003). *Kıyı alanlarının yönetimi [Coastal zone management]* Paper presented at the TMMOB Harita ve Kadastro Mühendisleri Odası 9. Türkiye Harita Bilimsel ve Teknik Kurultayı, Ankara.

Tuzcu, A. (2007). *Seyahatnamelerde Amasya*, Amasya Belediyesi Kültür Yayınları, ISBN: 9944.

URL1: Retrieved at December 28, 2016, from <https://tr.pinterest.com/ysvoice.tumbir.com>

URL2: Retrieved at December 27, 2016, from SkyscraperCity.com, mapio.net, www.diyarbakir.bel.tr, 34sanathaber.com, gezegencaksut.blogspot.com.tr, www.edirne.bel.tr, gezilmesigereknyerler.com, msxlabs.com, Kendingez.com

URL3: Retrieved at December 12, 2016, from <http://www.amasya.bel.tr/>, <http://www.dunyabulteni.net>

Uzun, O., Müderrisoğlu, H., Demir, Z., Kaya, L.G., Gültekin, P., Gündüz, S., (2015). *Yeşilirmak Havzası peyzaj atlası [Yeşilirmak Basin Landscape Atlas]*, On behalf of Ministry of Forestry of Water Affairs, Directorate of Nature Conservation and National Parks, AKS Planning and Engineering Limited Company, Ankara.

Yavuz, A., & Acar, C. (2016). Functional quality of place as permeability parameters at waterfronts, *Oxidation Communication*, 39 (I-II), 560-577.

Yavuz, A., & Kuloğlu, N. (2015). *Growing city center, changing the coastal line, differentiating user behaviours: The sample of Trabzon city*, Paper presented at the MOCADESU 2015 Conference, Trabzon, Turkey.

The Soteriological Aspect of Fountain Construction in Modern Turkish Society

Ramazan Adıbelli

1. Introduction

Supplying water has been one of the main concerns of man throughout history. Civilizations have created structures such as aqueducts, cisterns, canals, dams and wells to get, store, and transport water from its source to the desired locality. About 6,000–7,000 years ago, during the Neolithic Age (ca. 5700–2800 B.C.), the first successful efforts to control the flow of water were driven by agricultural needs after the farming villages of the Near East and Middle East became urban centers (Mays, 2010; Tamburrino, 2010). In ancient Greece wells, cisterns, water distribution, fountains, and even recreational functions existed (Mays, 2010). There were public fountains but there is no evidence that their construction had any particular religious significance (Agusta-Boularot, 2001). The Roman Empire had a very well developed water supply system. Public fountains were as the final part of the water supply system, water delivery devices but at the same time they could be a work of art decorating the atriums and patios of the villas of wealthy Romans and the monumental buildings they built to commemorate their heroes and honor their dead (Mostafa, 1989).

Islamic civilization, incorporating the construction of fountains in the concept of “hayrat” - buildings and institutions dedicated to the use of the public (Yediyıldız, 1988)- has provided them with a religious dimension. Thus, supplying water which was till that time a worldly matter concerning first of all the ruling class became from the Seldjukid period a philanthropic service shaping the postmortem existence. Endowing money for the construction of a fountain and/or a water supply line to it was seen as an act of piety which played an important role in Ottoman life. There was hardly a sultan, sultan's mother, sultan's daughter, grand vezir, or other distinguished personage who did not endow a fountain in expression of their economic, social and political standing, and fountains became an important part of the Ottoman architectural tradition. Fountains were used as decorative features of both outdoor public spaces like squares, and intimate indoor spaces in private dwellings, and they were one of the most expressive embodiment of the architectural taste and styles of their time (Republic of Turkey The Ministry of Culture and Tourism, 2016).

In the 20th century the maintenance and administration of water supply lines and fountains was transferred from the Department of Pious Foundation to the municipalities. The construction of modern waterworks brought water to every home. This change has had an important impact on the everyday life of people but it has had also a cultural effect. At the center of every district, fountains were a place of gathering for people especially for women and girls, a place where people were meeting, exchanging information, opinions, and discussing their various problems and difficulties. People no longer need to bring water from the fountain to their home. Also it is now possible to get bottled water for drinking everywhere. So, having become dysfunctional in a modern urban context street fountains would have progressively disappeared or at least their number would have decreased. Paradoxically, in Kayseri an interestingly different situation has occurred. Kayseri with about one million inhabitants is one of Turkey's largest cities. Being an important industrial and commercial center this city is at the same time with its four universities an important educational center which attracts thousands of students every year. The fieldwork carried during the years 2009-2010 showed that in the last twenty four years more than four hundred fountains were erected in the city of Kayseri. Especially since the 1990s, thousands of fountains have been built on sidewalks, in the courtyards of schools, hospitals and mosques, in parks, and cemeteries. Having expanded the scope of the research to peripheral main cities in Central Anatolia like Konya, Niğde, Aksaray, Nevşehir, Sivas,

Kahramanmaraş, Yozgat, Kırşehir, and Adana, the generality of this phenomenon have been noticed even to a greater extent.

The basic question is why do people build fountains? What is their motivation(s)? What do they expect by building such artifacts?

2. Materials and Method

In order to grasp the chronological and spatial features of the fountain phenomena synchronic and diachronic approaches were adopted. Starting from Kayseri city, the survey was expanded to the surrounding localities in Kayseri province and later to the peripheral cities mentioned above. The synchronic approach revealed the similarities and the differences between the fountains in urban and rural environments but at the same time the comparison between the different urban environments manifested the conditions for the realization of this phenomenon. The extensiveness of fountains in Kayseri and its neighborhood shows the adequacy of this region for the emergence of the modern phenomenon of fountain building.

Fountain building was a very old practice in the country. So in order to grasp the genealogy of this modern phenomenon it was necessary to examine historic fountains. The diachronic approach enabled the linkage between old and new fountains but at the same time this made absolutely apparent the deep meaning of the fountain construction, that is to say its soteriological aspect. The main function of fountains was naturally to provide water. In times when there was no water supply inside homes this material aspect was of utmost importance. Beside their physiological and hygienic functions, the soteriological aspect of fountains has been largely gone unnoticed. Modern fountains make this aspect fully apparent.

One of the remarkable features of fountains is the inscription(s) they carry. These inscriptions provide a large amount of information about the benefactor, the date and purpose of construction. Some ancient fountains were famous merely for the lettering on them. After the time of Sultan Suleyman the Magnificent it became increasingly the fashion for celebrated poets to compose the verses which celebrated calligraphists designed. Not only the fountains' edifice but also the inscriptions they carried reflected the artistic preoccupation of the time.

Inscriptions reflect above all the religious convictions of philanthropists. The commonest of all inscriptions seen on old fountains is this Quranic verse: "By water all things have life". Other verses, mentioning the four fountains of Paradise and the pool Kawthar into which they flow, are also frequent, together with references to the sacred well Zamzam, which Gabriel miraculously opened for Hagar in Mecca, to Hızır and the Spring of Life, and to the battle of Kerbela, in which Hussein and his companions were cut off from water. Likewise the central tenet of Islam, "There is no God but God and Mohammed is the Prophet of God," may be carved above the niche — sometimes without any indication of the name or epoch of the founder (Dwight, 1915).

As the identity card of fountains, inscriptions reflect at the same time the identity of the benefactor. Thanks to the inscription through the objectivity of fountains it is possible to grasp the subjectivity of people, their intimate convictions, their feelings and their beliefs, notably their beliefs and expectation related to the postmortem existence.

Even inscriptions like "sahibu'l-hayat" (owner of the hayat) reflecting the wish of the endower to stay anonymous in order to be safe from the sin of hypocrisy are products of a belief system. The last point worthy of notice is the water symbolism expressed in inscriptions. Water which is the *raison d'être* of fountains is at the same time the source of life, a celestial and sacred element, and a heavenly reward. The key notion for representing the soteriological aspect of fountains whether ancient or modern seems to be water symbolism.

2. Historical and Religious Background

One of the things that attracted the attention of many Western travelers coming to Turkey during the time of the Ottoman Empire was the importance given by Turks to cleanliness and the relatively high numbers of baths, and fountains in Ottoman cities compared to their own countries. One of them is the French traveler Jean Thévenot who arrived in Istanbul in 1655. Thévenot noticed the frequent use of public baths by Turks and the presence of public baths even in the smallest villages (Thévenot, 1665). Another Frenchman makes more precise remarks concerning the hygienic habits of people after visiting Turkey nearly two hundred years later. According to A. Bayer unlike to French people Turks accord a great importance to hygiene. Besides their habit cleaning up after the toilet, they wash their hands after meals, and take ablution five times a day. They take weekly baths and even wash their homes at least as once a week (Brayer, 1836). The function of fountains in providing water for ritual purification necessary before the five daily prayers, before reading the Quran or before entering sacred places like mosques or mausoleums was emphasized by many foreign visitors (MacGill, 1808; Conder, 1830). As emphasized by Castellan “One of the greatest benefits of Muhammad is to have required all Muslims to obey the law of ablutions” (Castellan, 1812: 153). The Danish-French geographer and journalist Conrad Malte-Brun remarked on the link between fountain construction, cleanliness and the religious dynamic promoting these enterprises. For him it is the injunction of frequent ablutions which induced rich individuals to build many public fountains and these maintain habits of cleanliness which are conducive to health (Malte-Brun, 1824).

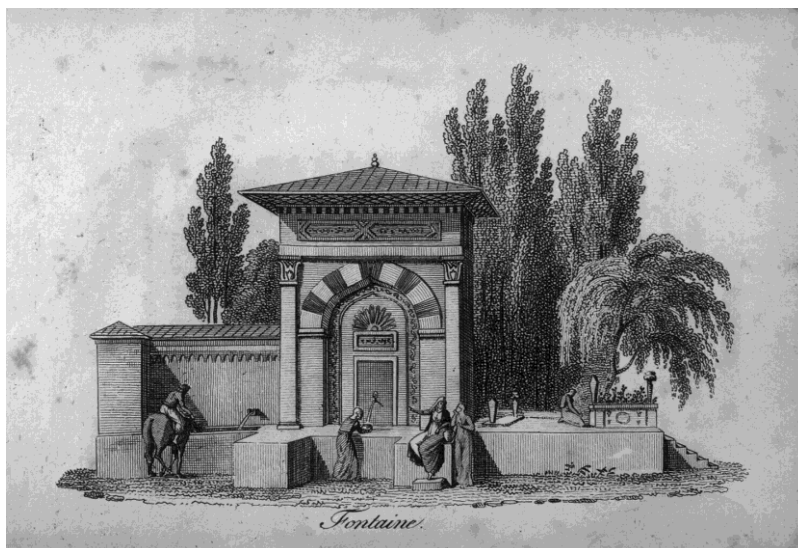


Figure 1. Historical fountain with prayer place (Castellan, 1812)

Like every strangers, James Ellsworth De Kay was “struck with the numerous contrivances around Constantinople for supplying it with pure and wholesome water” (De Kay, 1833, 110). Coming upon one of the sculptured marble fountains he noticed some inscriptions setting forth the greatness and goodness of Providence, and inviting the weary traveler to make due acknowledgments for the same. The fact that the name of the benevolent constructor does not appear on these sculptured stones caught his attention. He finally and rightly points to the principle which guides such attitudes and is summarized in this adage: “Do good and throw it into the sea; if fishes don't know it, God will” (De Kay, 1833, 111).

H. G. Dwight, the son of an American Congregational missionary who was born in Constantinople in 1875 dedicated the 12th chapter of his book *Constantinople: Old and New* (1915) to the fountains of Istanbul. Dwight’s first important remark of is about the difference of the fountains of Istanbul and those of Rome and Paris. The difference of civilization reflected in the fountain phenomenon can be seen in the work of Henry Darcy about the fountains of

Dijon. For him “the purpose of a water distribution system is to bring into the different neighborhoods of a city the amount of water necessary for their needs. This water can both serve the varied uses of domestic life; contribute to the consolidation of the city by washing the streets or sewers; be used by medical or industrial establishments which it meets in its course; it can finally become a beautification for public squares or walks, and animate a new life, springing from monumental fountains, springing into sheaves, or falling in cascades” (Darcy, 1856, p. 1). The difference between others and Turkish fountains is at first sight visual. There are no figures about them and not many of them spout or splash. However, when observed attentively beyond the visual differences lies a subtle one: intentionality. As Dwight has pertinently noticed, in the case of Turkish fountains the functional and symbolic differences which are reflected in the great variety of these small monuments are more important. Dwight divides these monuments in five categories: wall fountains, selsebils, shadirvans, street fountains and, sebils (Dwight, 1915).

The common characteristic of these water supply means is their charitable function. Charity is the fourth pillar of Islam. While *zakat* is an obligatory charity due from every Muslim on a yearly basis, *sadaqah* is an entirely voluntary act of charity which can be performed at any time of the year and, any amount can be given. One of the most common forms of charity was to commission a *sebil* - a public drinking fountain - to distribute free water. The *sebil* (from the Arabic, *sebil Allah* ‘in the path of God’) took many forms. In Ottoman Turkey, the *sabil* is related in charitable intention and function to the more elaborate *çeşme* - street fountain. The grandest here is the fountain built in 1728 for Ahmet III in front of the Topkapi Palace in the form of a square kiosk with a deep overhanging roof (Scarce, 2008). In Turkish language the word *sebil* contrary to the definition given in the *Dictionary of Islamic Architecture* (Petersen, 2002, p. 254) is not a “Turkish term for a drinking fountain”. As previously mentioned by Dwight, in Turkey the word *sebil* designated only a special kind of water supply structure. In the case of a *sebil*, the water comes into a small room or pavilion, and an attendant is supposed to keep cups filled where they will be easily accessible from the street. Dwight was told that the Seljukian Turks of Asia Minor were the inventors of this graceful philanthropy, remembering the thirst of the martyr Hussein at Kerbela and the women who brought water to the companions of the Prophet at the battle Bedr (Dwight, 1915). While in Ottoman Turkey only a few sebils were built in capital cities like Istanbul, Konya and Edirne and the term *sebil* was used only for the kind of structures described shortly before in other places (Egypt, Palestine, the Balkans) this term is generally used for designating all kind of fountains which in Turkish are called “çeşme” (Adıbelli, 2012a).

3. Findings

The modern period fountains have undergone a profound change. To a large extent modern fountains do not possess the artistic particularities of their ancient counterparts. First of all, the social status of benefactors has largely changed. In the past as a water supply device the fountain did not consist of only a monument. The water line was naturally necessary to carry the water. For this reason, the benefactor had to finance the water line. Being an onerous enterprise, only relatively wealthy people could afford such charities. In other words while being previously a “luxurious” pious act the construction of fountain has become popularized. Nowadays the benefactor of a fountain in an urban environment like Kayseri needs only to discharge the cost of the construction and pay for the amount of water used.

This change has naturally had repercussions on the inscriptions on modern fountains. Unlike the ancient fountains these are very simple, often indicating the name of the benefactor(s) or the name(s) of the persons to whom they are dedicated. The religious expressions in the inscriptions are reduced in many case to “Allah”, “Muhammed” or “Bismillahirrahmanirrahim”

written in either Arabic or Latin letters. 85% of fountain inscriptions contain the word “hayrat”. This fact emphasizes the function of these monuments: fulfilling a charitable purpose.

Even the social, visual and certain functional aspects of fountains have changed the spirit of fountain building, that is to say the phenomenological aspect has been perpetuated. The spiritual aspect of fountain construction, namely its soteriological function has become absolutely apparent in the modern period.

Modern fountains can be classified in two categories: “Commemorative” fountains and fountains which constitute the great majority of these structures. The most striking example of commemorative fountains is the fountain dedicated to a martyr. As is known, according to Islamic beliefs martyrs deserve of heaven. Therefore, they do not require to be shown to them mercy, just like infants. So what is the meaning of fountains’ inscription “hayrat of martyr...”. In other words if the martyrs deserve heaven, being the chosen people of God, why do their relatives need to perform works of charity in their name?



Figure 2. Commemorative fountain



Figure 3. Hayrat fountain



Figure 4. Commemorative fountain

3.1. Etiology of Fountains

Why do people build fountains? In a study like that of Darcy, this question may be apparent. However, in the Turkish context this is not so evident. The fountain phenomenon including multiple levels of meaning is in fact a very complex phenomenon. The concrete and the symbolic, the earth and heaven and, the present life and the postmortem levels become one within the other. The ambiguity of key terms like *sebil*, *hayrat* and *şehid* (martyr) make this phenomenon further intermingled. The overgeneralization of the term *hayrat* blurs the difference noticed shortly before between the two categories of fountain. Only in two or three examples has the expression “anısına” (in memory of) been recorded. In brief commemorative fountains are built in order to perpetuate the memory of a late beloved relative. Like a gravestone the fountain immortalizes the name of the deceased. The main difference comes probably from the symbolic meaning of water which creates an atmosphere of vitality and consequently evokes the idea of immortality.

The hayrat fountains are charitable works of a special kind. They are considered as “*sadaqah jariyah*”, that is to say as ceaseless charity. According to a saying of the Prophet Muhammad, "When a man passes away, his good deeds will also come to an end except for three: *Sadaqah jariyah*; a knowledge which is beneficial, or a virtuous descendant who prays for him (for the deceased)" (Sahih Muslim: Book 13, Hadith 4005). Fountains enable the benefactors or those

for whom they are dedicated, to benefit from them after their death, and continue to earn them reward.

The study of fountains especially the second category of fountains clearly testifies the minor value of water providing in order to satisfy the physical needs of people. Paradoxically, the *raison d'être* of modern fountains is not to provide water as H₂O molecules. The material value of water has risen since it has been bottled and sold in kiosk and markets like other commodities. The modern fountains phenomenon can be interpreted in this respect as challenge to the commoditization process spreading throughout the world. Even the material/exchange value is important; this element has a more important meaning. Thus the final aim in building a fountain is less to quench the thirst of the flesh than that of the soul. The passage from concrete to the symbolic plan is realized through the symbolic property of water. While inscriptions on fountains such as "Bon appetite", "Drink from its water to yours heart's content" or "Bon appetite to those who drink [from this water]" remind us the importance of this life-sustaining substance, they are at the same time an invitation not only to drink from the water but also to remember the utmost importance of this divine blessing. This fact also reveals the social dimension of fountains and the necessity for the existence and perpetuation of these structures not only of water but also of people who use it.

The inscriptions of the second category of fountains are the expression of an orientation toward the transcendent realm: "For God's sake", "To win the grace of God", "Will the prayers get accepted," "May God be pleased", "May God accept the charity of those who made it". These expressions or more precisely these prayers are the incarnations of the benefactors' wishes and expectations. These wishes are not related to this world. They are expectations for the world hereafter. The soteriological aspects become thus fully apparent.

3.2. Soteriology

Fountains bear inscriptions like "Be merciful to the deceased", "Have mercy on those who died," "Will all who immigrated [to the other world] be always remembered with mercy." What is requested is mercy, namely, the forgiveness of sins. Therefore fountains appear to be conceived as a soteriological tool. Fountains are considered as washers away of sins, of spiritual dirtiness. The symbolic feature of water appears once again. Water cleans material impurities, and its symbolic dimension cleans spiritual ones. The construction of a fountain is a source of a good deed for the benefactor but also for the persons to whom it was dedicated as long as people take advantage of it. Interestingly, this paradigm is based on the soteriological understanding that is in contrast to the idea of modernity. As is known, modernity is based on the idea of individuality and is reduced to the profane realm. According to this idea, the individual is the center of everything. Therefore she/he is the only one who determines his own destiny. In the final analysis the salvation of the individual is realized only by and through himself. Contrary to that idea, beneath the fountain phenomenon lies the idea of salvation realized through others. The benefactors who built or finance the building of fountains perhaps do not use even one in a millionth of this water and sometimes they often do not use it at all. Therefore, by breaking the circle of individuality in which modernity tries to clasp modern man, the fountain phenomenon seems to open the person to other people, or in other words to society. The most vivid example of this conception is given by the fountains built on the surrounding walls of villas and private houses. The water of these fountains is not designed for the use of the fountain owners, but for others. The following statement in the inscription "do not pass without drinking from its water" is the expression of an obvious call, an invitation to participate in the soteriological process. In the final analysis, this phenomenon reveals the following truth hidden in the collective unconscious of Turkish people: "My" salvation passes from the "other".

The philanthropic, humanitarian and religious links of fountain phenomenon is clearly expressed in the inscription of a fountain built in 2005 in a public Park in the center of Kayseri: “Fountains are one of the most beautiful reflections in Turkish art of human love. Beyond being structures meeting water needs, fountains are the most beautiful reflection of the deep love for creation and of philanthropy” (Adibelli, 2012b).

4. Conclusion

The soteriological aspect of fountain construction is based on the symbolic and religious value of water. Fountains are the receptacles of this divine and vital element. This particularity enables fountains to establish passages from different levels: past-present, earth-hereafter, sacred-profane. We can illustrate what we have called “the soteriological cycle” as follows:

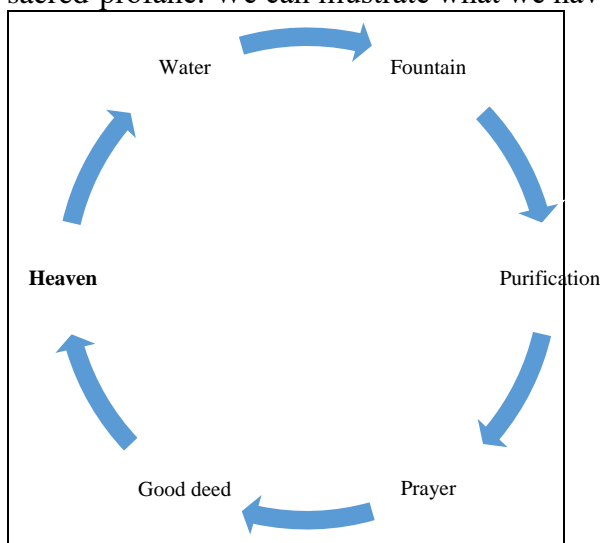


Figure 5. Soteriological cycle through ritual performance

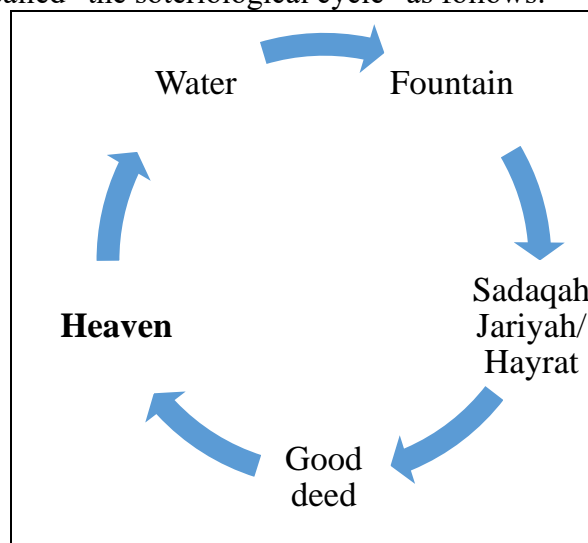


Figure 6. Soteriological cycle through *sadakah jariyah / hayrat*

The individual (Figure 5) and the social or altruistic (Figure 6) of fountain phenomenon is clearly apparent. In all cases the water is the medium of salvation. The symbolic property of water procures purification which enables prayer. The concrete value of water as a necessary element for ensuring life is also included in the soteriological cycle through *sadakah jariyah / hayrat*. Helping others is a source of good deed (*sevap*) like praying or fasting. Therefore, the phenomenological essence of fountains is their capacity to being agent of good deeds. More important, unlike other acts like prayer for example which cease to benefit the person after her/his death, fountains continue to perform this function, becoming in this way a kind of bridge between the present world and the hereafter.

The statistical repartition of contemporary fountains can be interpreted as a shift of emphasis from the soteriological cycle through ritual performance to the soteriological cycle through *sadakah jariyah* or *hayrat*.

In the final analysis the fountain phenomenon remove the rupture between the different levels of existence and creates an endless cycle. This process allows the benefactors who build fountains to be hopeful about their salvation. Although appearing to be an earthly investment, the real gain of these charitable works will be received in the hereafter. For these benefactors what is more important is to invest in the eternal life. For the real life is the eternal life, the life waiting for people in the postmortem stage.

5. References

- Adıbelli, R. (2012a). *Türk kültüründe su kültü ve çeşme fenomenolojisi* [Water cult and fountain phenomenology in Turkish culture]. Kayseri: Laçın Yayınları.
- Adıbelli, R. (2012b). Kentsel dönüşümün yansıması olarak Kayseri'deki çeşmeler [Fountains of Kayseri as a reflection of urban transformation]. In B. Asiliskender, B. Ceylan, A. E. Tozoğlu (Eds.), *Kayseri'nin yirminci yüzyılı: Mimarlık, kent tarihi ve kültürü* (pp. 295–317). Kayseri: Abdullah Gül Üniversitesi.
- Agusta-Boularot, S. (2001). Fontaines et fontaines monumentales en Grèce de la conquête romaine à l'époque flavienne: Permanence ou renouveau architectural ? J.-Y. Marc & J.-C. Moretti (Eds.), *Constructions publiques et programmes éditaires en Grèce entre le IIe siècle av. J.-C. et le Ier siècle ap. J.-C. : Actes du colloque organisé par l'Ecole française d'Athènes et le CNRS, Athènes, 14-17 mai 1995* (pp.167-236), Athènes: Ecole française d'Athènes.
- Brayer, A. (1836). *Neuf années à Constantinople* (Vol. 1). Paris: Bellizard.
- Castellan, A. L. (1812). *Moeurs, usages, costumes des Othomans, et abrégé de leur histoire* (Vol. 5). Paris: Nepveu.
- Conder, J. (1830). *The modern traveller: A description, geographical, historical, and topographical of the various countries of the globe* (Vol. 14). London: James Duncan.
- Darcy, H. (1856). *Les fontaines publiques de la ville de Dijon*. Paris: Victor Dalmont.
- De Kay, J. E. (1833). *Sketches of Turkey in 1831 and 1832*. New York: J. & J. Harper.
- MacGill, T. (1808). *Travels in Turkey, Italy and Russia during the years 1803, 1804, 1805, and 1806: With an account of some of the Greek Islands* (Vol. 1). London: John Murray.
- Malte-Brun, M. (1824). *Universal geography: Or a description of all parts of the world, on a new plan, according to the great natural divisions of the globe; accompanied with analytical, synoptical, and elementary tables* (Vol. 2). Boston: Wells and Lilly.
- Mays, L. W. (2010). A brief history of water technology during antiquity: Before the Romans. In L. W. Mays (Ed.), *Ancient water technologies* (pp. 1–28). New York: Springer.
- Mostafa, S. L. (1989). The Cairene sabil: Form and meaning. In Oleg Grabar (ed.), *Muqarnas VI: An annual on Islamic art and architecture* (pp. 33–42). Leiden: E.J. Brill.
- Murray, J. (1854). *A handbook for travellers in Turkey: Describing Constantinople, European Turkey, Asia Minor, Armenia and Mesopotamia: With new travelling maps and plans third edition revised and greatly augmented*. London: John Murray.
- Petersen, A. (2002). *Dictionary of Islamic architecture*. London and New York: Routledge.
- Republic of Turkey The Ministry of Culture and Tourism. (2016). *Fountains in Ottoman Istanbul*. Retrieved at April 23, 2016 from <http://www.kultur.gov.tr/EN,113835/fountains-in-ottoman-istanbul.html>
- Scarce, J. (2008). Sabil. In I. R. Netton (Ed.), *Encyclopedia of Islamic civilization and religion* (p. 567). London and New York: Routledge.
- Tamburrino, A. (2010). Water technology in ancient Mesopotamia. In L. W. Mays (Ed.), *Ancient water technologies* (pp. 29–51). New York: Springer.
- Thévenot, J. (1665). *Relation d'un voyage fait au Levant*. Paris.
- Yediyıldız, B. (1988). Türk kültür sistemi içinde vakfın yeri [The place the waqf within the Turkish cultural system]. *Vakıflar Dergisi*, 20, 403–408.

The Courtyard Culture in Traditional Avanos Houses and Design Properties

Meliha Aklibasinda, Esra Ozhanci

1. Introduction

Traditional residential tissues have emerged with the influence of various cultures and geographical characteristics in the world. The houses, which are the basic components of the residential areas, consisted of simple shelters for protection purposes at first; however, they evolved to multi-functional structures that included open area patterns with the increasing needs and the change in social, cultural and economic structure of the society. Houses are the reflections of culture in landscape. Houses are the focal point of human living area, and because of this characteristics, they are the place where the human activities become visible, such as the perceptions, beliefs, ideals, traditions, social order and organizations, the way of making a living of the humans that build and use them; in other words, the culture as a whole. Especially, the rural or the traditional houses have a separate importance because they are the documents of the cultural disseminations and adaptations that were experienced both in the history and in our present day and because of increasing the wealth of the earth as a “place” (Kose, 2007).

Anatolia has been the motherland for various civilizations since 10.000 B.C., and is a whole of residential areas that have a rich natural environment and a long-established cultural heritage. The different cultures that existed in different time periods of history were integrated with the cultural heritage in Anatolia; they formed new syntheses, and created a unique variety and wealth (Erdoğan, 1996).

Rural architecture in Anatolia does not face us as a monotonous and dull structure; and different conditions of different areas form distinguishing characteristics on the structures. Despite these differences, integrity attracts attention in architectural examples because of the family structure, religious beliefs and daily lifestyles that are formed with the influence of common cultural interaction that is specific to this geographical area (Anonymous, 2012).

Traditional Turkish houses consist of elements like a courtyard, a stony ground, a hall and rooms. The most important place influencing the design of the plan is the ground floor, which is the main living area in open-ended houses that have the property of reproducing as the courtyard as an important distributing and gathering place where most of the daily life activities are performed. The courtyard constitutes the focal point of the plan in terms of function and shape, and it may be in the shape of a square, a rectangle or a trapezoid changing in direct proportion with the size of the house and according to the plot of the land where the house is built (Buyukmihci, 2000).

The courtyard is the area where the activities that are not possible to perform in closed areas of the house are dealt with, or where some of the daily routines that require a certain place are performed. Although it changes according to traditional or modern societies, the courtyard is a recreational area where the members of the family rest and relax for a while during the day; a playground where the children play under control without contacting strangers (children's recreation); a watch-point where the events happening on the street are observed; a social interaction area where the members of the family have a quick word with the neighbors for a short time; a drying area for the laundry, and for winter food, etc.; and an agricultural production area where fruits and vegetables are grown or are protected, or an area where animals are kept (Bozkurt & Altıncekic, 2013). The courtyard is the open area of a house, and is mostly a semi-general place; however, this situation changes according to the differences in social relations, privacy and sovereignty understandings of cultures (Erdoğan et al., 2016).

The cultural properties are the common heritage of all mankind and provide us with information on the lifestyles, cultural levels, social and economic structures of past civilizations and on

similar topics. They ensure that societies perceive the history in an accurate manner, and look at today and the future in a righteous manner. They are also important values showing the continuity between the past and the future. Determining, documenting, protecting, introducing these values, and transferring them to future generations without losing their authenticity is an important topic that is emphasized in our present day (Kalayci, 2006). For this purpose, in this study, the houses whose history dates back as far as thousands of years have been evaluated in the traditional residential tissue in terms of the courtyard culture in Avanos, which is one of the important tourism centers in our country. The place and the functions of the courtyards depend on the cultural characteristics, and the design properties of them in houses within the ancient residential tissue have been examined in this study. It has been emphasized that the traditional tissue in the city center has an important source value in culture tourism, and that the protection works must be conducted on outdoor and street concepts, which have many cultural properties, not only on a structural basis.

2. Material and Method

The houses with courtyards, which have traditional and regional architectural characteristics in Avanos, and are located in the ancient residential tissue constitute the main material of the study (Figure 1).

In the first part of the study, the literature was scanned about the traditional houses and the courtyards in Avanos; and documents were received from Avanos Municipality and from the Provincial Management of Culture and Tourism. In the second part, the residential tissue was examined by visiting the older residential areas of Avanos; and the houses with courtyards, which were still active, were determined. In the on-site examinations about the courtyards, the relation between the houses-courtyards, and between the courtyards-the street; the positions of the houses with courtyards; their sizes, the usage of courtyards based on cultural characteristics; accessory equipment and the materials used; and the plant materials were determined and photographed. In the third part, the owners of the houses that were examined in the scope of the study, and some individuals, who lived in this cultural area and who knew the traditional life, were interviewed to receive information on courtyard culture; and the characteristics that were once used in the courtyards but do not exist anymore were determined.

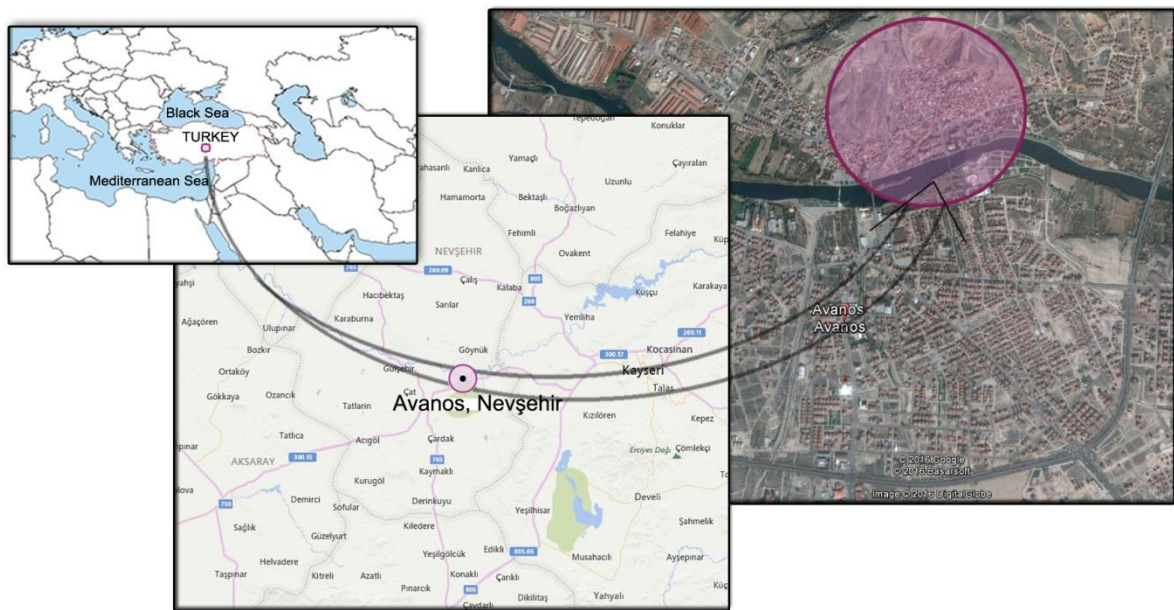


Figure 1. The Location of Avanos County, and the Old Residential Tissue

3. Findings

The history of Avanos starts with the Bronze Age, and it is known that the settlement continued with Hittites, Phrygians, Assyrians, Meds and Persian sovereignties followed by systematic settlements in 332 BC. The area became an important center after the Hellenistic Era and Roman Empire, and reached its tissue that still continues today with the Anatolian Seljukians, especially in the Karamanoğulları and Osmanoğulları periods (Berkmen, 2015).

The settlement leans back to İdis Mount located in the northern part of the city with a height of 1564 m (A.K.A. Ziyaret Mount). The Kizilirmak River runs through the city center (Figure 2). The settlement, which was once established on the northern hills of the river, developed towards the plain located on the southern part of the river in time (Aklibasinda, 2014).



Figure 2. Avanos Residential Settlement Established around the Kizilirmak River

People used to make a living with carpet business, pottery, vine cultivation, and commerce in the area; however, in recent years, economic activities based on tourism have been dominating the area. The county has a wide variety of tourism attractions like traditional handicraft, historical structures, fairy chimneys, churches, open air museums, underground cities, valleys and the Kizilirmak River; and traditional tissue and houses have also become important in recent years. The traditional houses were left to their destiny for many years, and had the chance of being renovated and repaired with the “Reconstruction Plan for Protection”, which was enacted in 1998 (Ince, 2006). While the majority of them still await being repaired, especially the traditional houses that are converted into Bed and Breakfast houses, restaurants, and cafés attract attention around the downtown area. In addition to this, it is also observed that some of the local or foreign tourists purchase some of these houses, restore them and settle in Avanos. In the old settlement area where the downtown area and the governmental buildings are located, and where the study was conducted, the majority of the buildings have a history that dates back more than 100 years. The structures that are built by adding cubic units in *row housing order* seem as though they are built on top of each other because of the topographical structure of the area (Figure 3). They have narrow and winding roads because of leaning to the mountain. The houses are built usually as two-storey, and many of them have courtyards.



Figure 3. The Images of Old Settlement Area

People who enter the houses pass to the courtyard, whose traditional name is “*life*”, which have wide wooden gates and are surrounded with high walls to isolate them from the street (Figure 4). Depending on the size and the plan of the house, the courtyards may be in square, rectangular or in irregular shapes, and are usually located in the front side the house. There are some courtyard examples that are surrounded by other structures on two -in some cases- on three sides by nearby houses (Figure 5). The courtyard is the semi-private area of a house. When the houses were being planned, no windows were placed on the wall overlooking the other house and the courtyard of the neighbor because of privacy concerns.



Figure 4. Samples of Courtyards in Traditional Houses

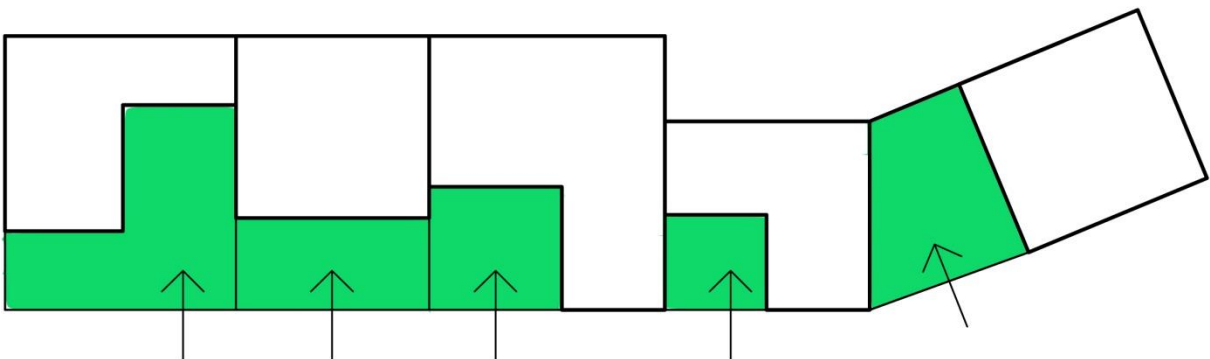


Figure 5. Common Courtyards in Traditional Avanos Houses

All the living areas open to the courtyard in houses where the ground floor is used generally in summer and winter; and the second floor is used generally in summer. There are the pergola, the winter kitchen called “*tafana*”, and the rooms called “*sofa*” and “*arched sofa*” and the stable and hayloft/leaf storage in the ground floor, where the household live; and there are the room called “*kiosk*” where the guests are welcomed in the second floor (Figure 6). People climb to

the second floor by stone stairs placed in the courtyard. In some houses, there are storage rooms added to the houses and are called “*kayıt damı*” (Kalaycı 2006) formed by carving the rocks called “*tuff rocks*” -because it is easy to carve- on the ground floor. The foods and the drinking water in jugs were kept in these cool storages when there were no fountains in the past. Again, in Avanos, there are rooms called “*hevenk damı*” in every house to keep the grapes without going bad after vine harvest, which is the result of the viniculture in the area. In this room, which is cool both in winter and in summer, the grape bunches are kept hanging on dry branches.

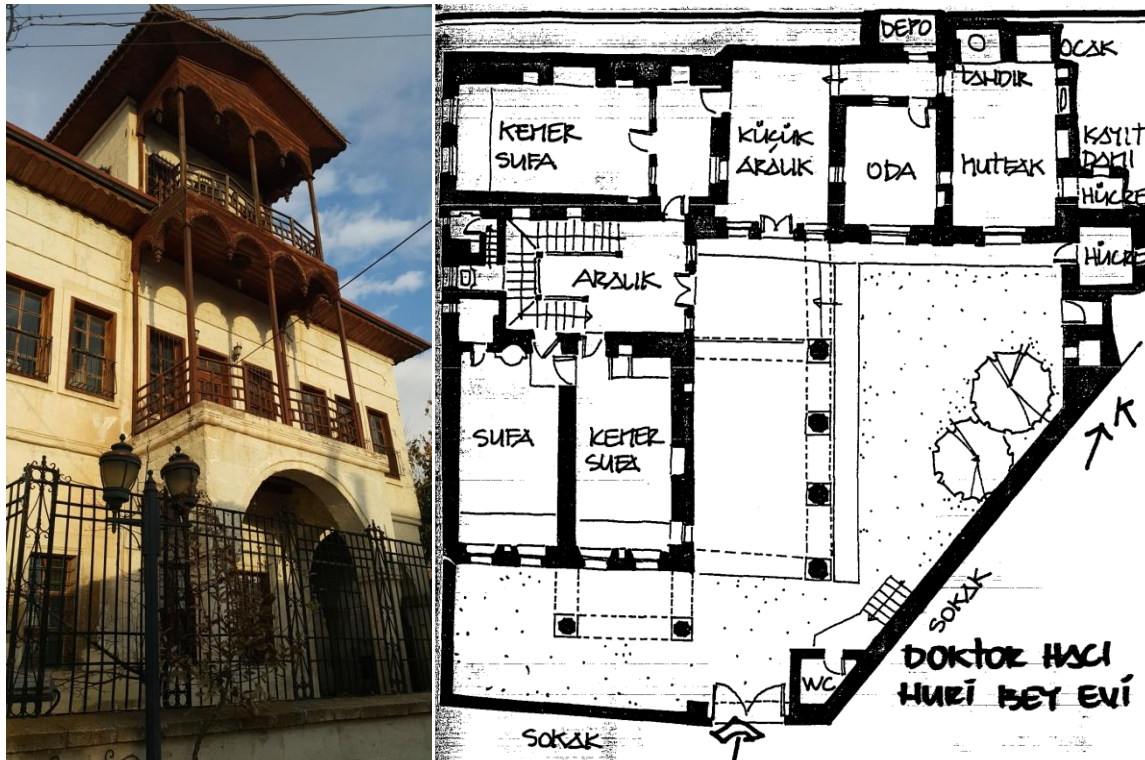


Figure 6. Traditional Avanos House and the Ground Floor Plan Provided by Erdoğan (1996)

The “yellow stone” and “*kisir stone*”, which are obtained from the quarries in the area, have been used in the buildings, in the courtyard walls and in the stairs. These stones are easily carved because they are soft when they come out of the quarry, and they become a good building block with a good isolation by becoming harder when they contact the air. The houses, which are built with these stones in yellow, white, yellowish white and pinkish color, show a visual integrity with the settlement. The stonemasonry in the entrances, doors and window sills attract attention because the stones are easily carved in the area (Figure 7).



Figure 7. Stone Ornamenting on the Doors and Windows of Avanos Houses

The toilet is placed behind the street gate in the courtyard and in a direction that is not facing the Kiblah, the direction of Mecca, in traditional Avanos houses. By doing so, i.e. by positioning the toilet in a location that is far from the daily areas within the house, the malodor is prevented and the annual cleaning of the toilet is facilitated.

The courtyard is the center and the common usage area of the house. All the circulation is ensured from the courtyard. The other elements of the houses are placed surrounding the courtyard, and their doors open directly to the courtyard. The windows of the house overlook the courtyard; and in some of them, there are guard rails in the shape of grill fixed to the stone with round-shaped irons. The soil that is called “*tirem*” is used after being squeezed in the courtyard where the whole of the daily life activities are performed. In houses whose owners had high economic status, this soil is covered with stone; and today, it has left its place to concrete. The open sides of the courtyard are surrounded by high walls both to provide privacy and to obtain shadow in summer.

There is a pergola, which is used as summer kitchen, in the far part of the toilet near the entry in the courtyard. The materials that will be used as firewood like paper, wood etc. are piled up in the “*kilamada*”, which is formed by pruning the grapevines are placed in one corner of the pergola. There is a tandoori in the middle of the pergola, and there is a furnace-oven surrounded by stones in two or three sides with 25 cm in height (Figure 8). Here, errands such as cooking, boiling water, cooking bread are made, as well as making preparations for winter such as tomato paste, boiled grape juice, jams, and cans. The majority of these usages have disappeared in today’s houses that are restored.



Figure 8. The Furnace and Tandoori Used to Cook Food, Bread, etc.

In old Avanos houses, especially in the ones that are located in rocky slopes, there are no water elements like fountains, wells, and pools. The fountains were added to the courtyards later when the drinking water supply network was provided to the houses. A “*haft*” was formed by surrounding the part where the water flowed by stone under the tap. Here, the landlady washed the dishes. Although we did not observe in the houses we visited, some of people whom we interviewed stated that there were wells in the courtyards of the houses and they were covered with a lid, some had pumps, and if there were no pumps, people used to tie a rope to a bucket and pulled water from the wells.

Carpet business used to be a common activity in Avanos culture both as an economic activity and as a marriage portion. Every house definitely has a carpet loom. The carpets are woven inside the house, while it is woven in the courtyard during summer (Figure 9). If the pergola area is wide, the loom is placed in the pergola; and if not, it is leaned to the wall of the stable or to one side of the sofa.



Figure 9. The Materials Used in Weaving Carpets and the Weaving Loom

There are the divans and wooden simple sitting units in the courtyard; and wooden stools are also used. In some places, there are stone sitting units in front of the wall. The meal is eaten in the courtyard during summer. Since the weather has slight breeze in hot summer nights, the household may sleep in the divans located in the courtyard.

When the traditional residential tissue is evaluated in terms of plants, it is observed that there is no green tissue in the streets, and there is no lawn in the majority of the courtyards. The reasons for this might be the topographic structure forcing the plots of land to be smaller, the lack of irrigation water and hot climate conditions. The houses are located in the slopes, and the gardens are located in the plain area in the coastal areas of the Kizilirmak River. However, there is definitely a grapevine outside or inside the wall of the courtyard hanging in a suitable corner of every house (Figure 10). On the other hand, roses and seasonal flowers in pots made of various materials, mainly bowls, which are the handicraft products in the area, are also used.



Figure 10. Common Grapevine Usage within the Courtyard and Over the Door

In some houses, there are *parters* formed in 50 cm widths in front of the courtyard wall, and flowers, tomatoes and peppers are grown in them. The people we interviewed stated that there were mulberry trees in the courtyards of many houses in the past. Today, on the other hand, the plant types given place in houses are as follows:

Flowers: *Calendula officinalis*, *Ocimum basilicum*, *Rosa sp.*, *Tagetes sp.*, *Dianthus sp.*, *Chrysanthemum sp.*, *Petunia hybrida*, *Pelargonium sp.*, *Aster sp.*, *Zinnia sp.*;

Clutching Plants: *Vitis vinifera* L., *Campsis radicans*, *Hedera helix* L., *Bougainvillea glabra*, *Lonicera caprifolium* L.;

Shrubs and Bushes: *Hibiscus syriacus*, *Viburnum sp.*, *Syringa vulgaris*, *Nerium oleander*;

Trees: *Cydonia sp.*, *Morus sp.*, *Malus sp.*, *Prunus domestica* L., *Prunus persica* L.

4. Conclusion

The traditional housing architecture is a cultural phenomenon revealing the lifestyle of the society that forms it, the social relations, the production and consumption styles, the beliefs and traditions of the society in the purest form that is shaped according to the needs of the people with the technique, the materials and the experience of the period in which they were built (Davulcu, 2015). It is an important part of the urban identity. However, with the changing needs, and with the fast urbanization and industrialization, these buildings are abandoned, and are becoming extinct in a fast pace.

Today, the city dwellers feel nostalgic for the past in cities that have a stereotyped image, and the interest in the traditional tissues is increasing day by day. Especially in touristic areas, it is observed that the areas where the traditional culture survives have become an important attraction center. For this reason, in our country, which has a rich cultural heritage, the studies that are intended to determine the components and design characteristics of the traditional settlement tissue are important in terms of the survival of these cultural characteristics and in terms of transferring them to future generations. When the literature is examined it is observed that there are many studies conducted on traditional houses in our country; however, the majority of these studies have focused on structural characteristics (fiction of the place, building materials, interior design properties, etc.); and the studies focusing on the outer characteristics of the buildings are very few in number. On the other hand, the protection/restoration works are mostly handled in the building scale. However, the surrounding of the houses and the open areas that are open to construction carry important traces for culture. With their constructional and plant elements as a whole, they are in the position of being the “*shop window*” of the city in major scale and of the structure in small scale.

When the traditional houses in Anatolia are examined, it is observed that the common house types have the characteristics such as being constructed around a courtyard, which is an extension of the ancient nomadic Turkish Culture which aims a life integrated with the nature. The courtyard is an extremely important resolution applied in many countries in the world as well as Anatolia, and has existed from the very first houses (Erdoğan, 1996). The projection of the person/family/neighbor relations and hierarchy within the society in settlement landscape is in the form of “room/house/residence” and “residence/street/neighborhood” and hierarchy. The “private/semi-private/semi-public/public” relation areas are placed in an order beginning from the residential area towards the street depending on the scale and quality of the privacy; and in traditional Turkish houses, the courtyard appears as the semi-private area (Kose, 2007). It is also observed that the houses are shaped according to this hierarchy in the traditional Avanos settlements as well. The courtyard is both the functional area where many errands are performed depending on the cultural characteristics, and also the place where the passage to the rooms, the stable and to the storages are located. In addition to these, family members and sometimes neighbors come together in the courtyards as a social activity and children play games. The structural and accessory equipment have been shaped around these functions that are revealed in the scope of the study. The courtyards did not have the characteristics of being a garden in the old settlement areas. The basic reasons for this are the narrow areas because of the topography of the region and the lack of irrigation water. Despite this, fruit trees (like the mulberry tree), and grapevines are given place in the courtyards, and seasonal flowers are kept at pots to make the houses become integrated with the nature.

In the old settlement area of Avanos, few houses with courtyards have survived by keeping their characteristics mentioned in the study. The majority of the houses in the area are ruined. The ones that are used for housing have changed according to today’s needs; and many cultural characteristics such as carpet weaving, animal breeding, cooking in the courtyard, and making bread have disappeared. The history of some of the houses that are close to the downtown area

dates as back as 250 years, and some of them have been restored and converted into Bed and Breakfast houses, restaurants, and art studies. A common courtyard has been formed in the houses that are merged together; and these houses are used as Bed and Breakfast houses. In one of the Bed and Breakfast houses that were examined in the scope of the study, the traditional courtyard culture has been protected as much as possible; and in another one, the courtyard has been restored and converted into an internal garden. No matter for which reasons the houses were used in the settlement, they will have active roles in the culture tourism of the city when they are revived in accordance with the historical tissue and with the identity of the city center, contribute greatly to the aesthetics of the city, and will be left to the future generations as cultural heritage. This will succeed only if the structure and the surrounding of it (the courtyard) are protected, and if the street is handled in integrity.

5. References

- Aklıbaşında, M. (2014). *Kızılırmak Nehri'nin yaşam verdiği kentlerden Avanos'ta suya dayalı rekreasyon olanakları [Water-resistant recreation facilities in Avanos, a town vivified by the Kızılırmak river]*. Avanos Sempozyumu Bildiriler Kitabı [Proceedings Book of Avanos Symposium], Avanos, 555-562.
- Anonymous (2012). *Anadolu'da kırsal mimarlık [Rural architecture in Anatolia]*. Retrieved at July 29, from <http://library.atilim.edu.tr/shares/library/files/e-kitap/AnadoludaKırsalMimarlik-Ekitap.pdf>
- Berkmen, H. (2015). Avanos kültür varlıkları çalışması, Kapadokya Bölgesinde suyun izi [Cultural heritage study of Avanos, Cappadocia in relation to its waterfront]. *MEGARON*, 10 (4), 595-609. doi: 10.5505/MEGARON.2015.00533
- Bozkurt, S.G., Altınçekiç, H. (2013). Anadolu'da geleneksel konut ve avluların özellikleri ile tarihsel gelişiminin Safranbolu evleri örneğinde irdelenmesi [The evaluation of patterns and historical development considering traditional houses and patios of Anatolia by using Safranbolu houses as samples]. *Journal of the Faculty of Forestry Istanbul University*, 63(1), 69-91.
- Büyükmihçı, G. (2000). Anadolu'da konut V: İç Anadolu Bölgesinde yer alan taş sivil mimarlık örneklerinin ortak özellikleri [Houses in Anatolia V]. *Arkitekt Dergisi [Arkitekt Journal]*, 50-68.
- Davulcu, M. (2015). Ormana yöresi geleneksel konut mimarisi ve yapıcılık geleneği [Traditional housing architecture and mastery tradition in ormana region]. *Kalemişi Dergisi [Kalemişi Journal]*, 3 (5), 47-96.
- Erdoğan, E. (1996). *Anadolu avluları özellik ve düzenleme ilkeleri üzerinde karşılaştırmalı bir araştırma [A comparative research on the features and planning principles of Anatolian patios]* (Doctoral thesis). Ankara University, Ankara, Turkey.
- Erdoğan R., Oktay H.E., Özçatalbaş O. (2016). *Türk İslam bahçe sanatında avlular [The Courtyards in Turkish Islamic Garden Art]*. I. Ulusal PEMKON Konferansı Bildiriler Kitabı [Proceedings Book of The First National Conference of PEMKON], İstanbul, 275-285.
- Hindistan, A. (2006). *Avluların peyzaj tasarım kriterleri yönünden değerlendirilmesi [Evaluation of courtyards in regard with landscape design principles]* (Master thesis). İstanbul Technical University, İstanbul, Turkey.
- İnce, İ. (2006). *Avanos*. Retrieved at July 27, from <http://avanos.bel.tr/avanos/blog>
- Kalaycı, M.G. (2006). *Geleneksel Ürgüp konutları ve Dereeler Mahallesi koruma geliştirme önerisi [Traditional Ürgüp houses and the preservation and rehabilitation proposal of Dereeler district]* (Master thesis). Gazi University, Ankara, Turkey.
- Köse, A. (2007). Balıkesir çevresinde geleneksel kırsal avlu peyzajı ve değişimi. *Eastern Geographical Review*, 12 (18), 7-38.

A Study on Cultural, Historical and Social Continuity for Urban Corridors: Trabzon Pattern

Elif Merve Alpak, Doruk Gökem Özkan, Abdullah Çiğdem

1. Introduction

Urban open and green space systems are defined as 'an alive and living organism which is a long-term balancing factor for various uses in the structure of a city and also creates various opportunities for multi-directional outdoor uses' (Özkan, 1998). These urban open and green spaces should be planned in association with each other to create a "spatial" system. Today, this necessity is accepted all over the world (Kurtaslan, 2010). In line with this acceptance, studies for the development and protection of the cities, the creation of recreational areas, ensuring the historical-cultural continuity and the protection of the ecological balance are carried out by suggesting the concepts of the green zone, green combination, green texture, and greenway.

1.1. Greenway

Greenway planning is an international approach that developed throughout the 19th and 20th centuries and is defined as linear open spaces (Little, 1990). City planners and managers tend to create connected landscape corridors to a large extent in order to provide more park and recreation functions (Erickson, 2004). These corridors are connected to each other within a network, and corridor such as highways and railways are included in the greenway system. These greenways created can extend along a natural corridor, a channel, a landscape path or route (Tan, 2006).

Greenways are the corridors that ensure the protection of the natural environment in the ecological sense and the provision of functional connections of the parts within the city, and establish a connection with the natural, cultural and historical landscape elements surrounding them and create these elements' connection with each other and with other settlements (Little C, 1995; Miller W. et al., 1998). In other words, greenways serve for connecting to natural reserves, historical and cultural sites and other protected zones (Arslan et al., 2001). Therefore, greenways are addressed as a synthesis of natural and cultural activities in landscape planning studies (Flink and Searns, 1993) and investigated in three main categories including greenways with ecological, recreational and historical-cultural values (Fabos, 2004).

Today, the physical changes caused by unplanned housing in many city centers lead the city to lose its vitality, decrease its perceptibility, come under the domination of vehicles, and a decrease in pedestrian rights. These problems raise the importance of urban corridors by affecting the disappearance of historical-cultural identity and continuity. Therefore, in this study, open and green spaces will be evaluated in terms of creating cultural-historical and social corridors.

1.2. Cultural and Historical Benefits of Greenways

People create the traditions, customs, beliefs and historical and cultural environments throughout their lives. Historical - cultural environment can be defined as people's experiences' images which are reflected on the physical environment (Keleş, 1997). The historical and cultural textures in cities form the identity of the community along with the social, economic, political and similar structures of cities changing in the development process. Today, the negative effects of unplanned urbanization have led to the disappearance of cultural identity. Thus, the fact that time-space and values were interwoven in the past has been lost in the modern

urban fabric. Today, people tend towards the historical places and are inclined to see these spaces as historical recreational areas in urban life to remember the lost urban identity again and to live the related culture in an effective manner by reviving. Therefore, taking historic places as a basis and their sustainability are important in remembering the urban identity and the space-human relationship which has been lost in the modern urban fabric again (Kurtar, 2013; Tweed and Shutherland, 2007).

In uncovering the identity of cities again, efforts to protect old urban fabrics have been maintained for many years in the world for the recovery of its lost relationship with space (Kurtar, 2013). In other words, the historic buildings, transportation systems and public spaces established by communities through their own values, traditions and beliefs should be maintained for cultural sustainability. In this context, the importance of urban corridors comes to light. The planned urban corridors in cities form the cultural sustainability by protecting historical and cultural resources and providing the use of these resources.

Urban corridors allow people to use these areas by protecting historical and cultural areas and connecting them to each other. They create a sense of belonging in the community, improve a sense of being community and create social interaction (Kappler C., Miller L. 2009).

1.3. Social Benefits of Greenways

The urban open spaces, where users perform their behaviors in line with their various needs and requirements, are the spaces of common life and use (Gür, 2000) According to Madanipour (1999), urban open spaces are the spaces that connect different regions to each other in the city. Today, the connection between urban open spaces has reached the breaking point along with the rapid and irregular urbanization. The urban corridors created in cities aim to integrate people and develop the consciousness of being community by providing the connection between open spaces. In line with these objectives, it is necessary to plan out areas that allow quality recreative activities such as urban corridors. Urban corridors allow for the utilization of recreational activities of an area and also recreational resources of many other areas they reach by means of their function to provide a connection (Kurdoğlu, 2005). Although there is planning in which transportation is an important purpose, transportation is also provided from one place to another place by performing recreative activities in some plannings although recreation is the main purpose (Shafer, Lee and Turner, 2000). As a result of the recreative activities performed in urban corridors planned for these reasons;

They help to reduce people's mental fatigue.

They allow people to gain different accumulation of knowledge.

They support the physical movements of people.

They allow people to behave comfortably and safely

They provide environmental conditions where order and complexity are used in a balanced way (Kaplan, 1983).

The issue of planning urban corridors in Turkey is still at the theoretical level. This study is important in terms of examining the important roles undertaken by urban corridors in the recreational and historical-cultural sense. The aim of this study is to investigate the social and historical-cultural characteristics of Trabzon city and the potential urban corridors that come to the forefront and examine the uses to be allowed by these areas.

2. Materials and Methods

The region between Trabzon urban square and Ortahisar areas located in the Eastern Black Sea region of Turkey was chosen as the research area (Figure 1). First of all, the experts evaluated

the open and green spaces offered by this region for creating cultural-historical and social corridors, and two different routes were determined to reach the target area.

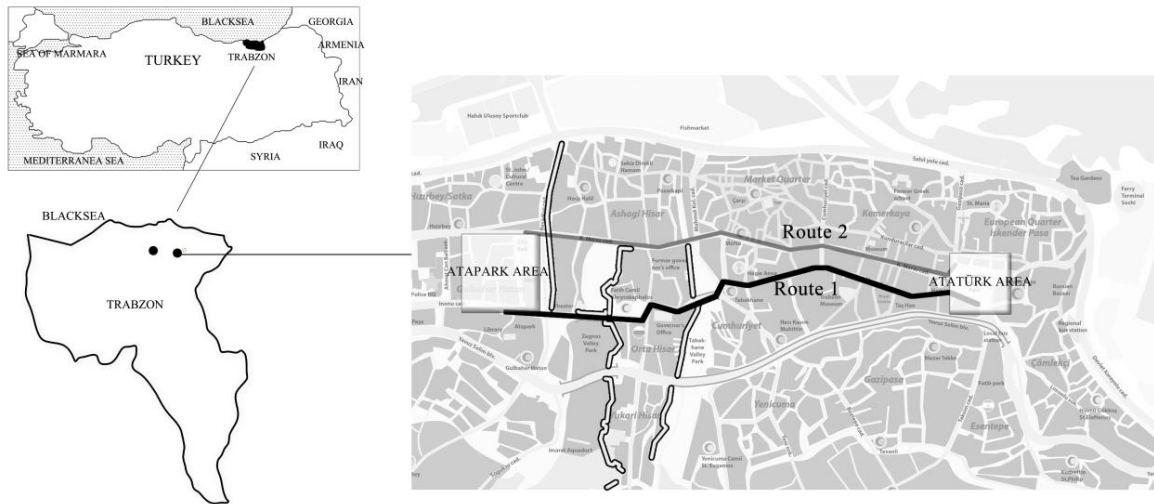


Figure 1. Location of the study area

In the study, it was aimed to bring the characteristics of the existing cultural and historical texture in Trabzon into the forefront and improve the social characteristics. In accordance with this objective, the visitor employed photography technique was used to determine to what extent the existing cultural-historical texture which is stuck within Trabzon city is perceived by the users. By this technique applied, it was aimed to create a corridor in which cultural-historical and social characteristics are brought to the forefront by determining the buildings and locations that draw the user's attention and are found worth to be photographed and increasing these locations' interaction with the users. Visitor employed photography (VEP) aims to determine users' environmental perceptions and preferences. In this technique, cameras are given to subjects and they are asked to take photos for the purpose of research (Düzenli, 2012; Inan, 2007; Mackay and Couldwell, 2004; Ying, 2006). This technique reflects the users' environmental perceptions and preferences in a more realistic way because it allows users to present their own opinions and preferences by the photos they take without the orientation of the research (Düzenli, 2012). Therefore, this technique has been preferred in this study.

Two routes which were selected to create an urban corridor in the study area were introduced to 62 users by being shown on the map. Route 1 is 1.54 km long, and Route 2 is 1.27 km long. Cameras were given to all users, and they were asked to photograph the places that attracted their attention in terms of cultural, historical and social aspects and where they spent more time on this route. In this way, which of these two routes could be evaluated and improved as an urban corridor in terms of historical, cultural and social aspects was determined. Then, the findings obtained from the participants and the route where an urban corridor was considered to be built were processed on the map. Finally, an attempt to propose an urban corridor solution for a more perceptible, preferred and functional understanding was made by doing a planning on the map to highlight the historical, cultural and social areas which are important for the city but are not recognized by the users.

A Study on Cultural, Historical and Social Continuity for Urban Corridors



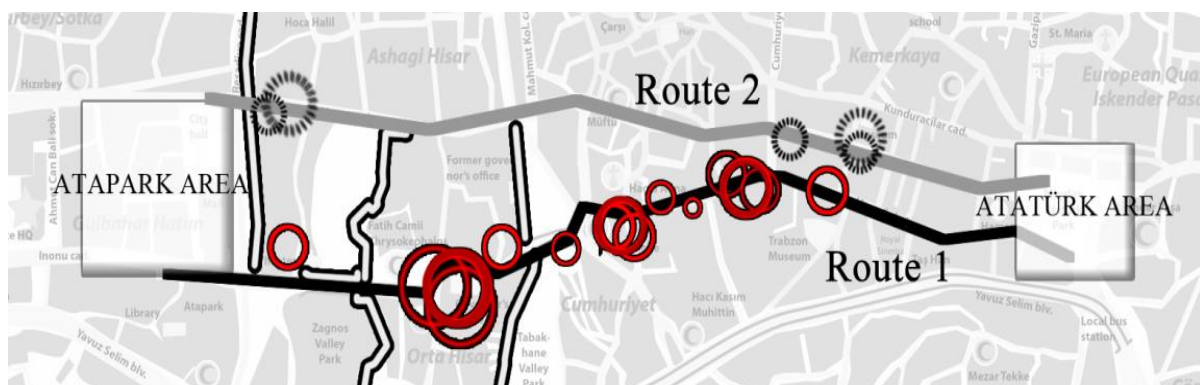
Figure 2. Photos of the route 1



Figure 3. Photos of the route 2









62 people took photos on two routes where an urban corridor was considered to be built. A total of 583 photos of 9 different regions on Route 1 and a total of 124 photos of 3 different regions on Route 2 were taken. Which region on these two routes was mostly photographed is shown in Table 1. The frequency of taking photos by regions was processed to the map (Figure 4).

Region No.	Route 1	Route 2
1	48	42
2	83	38
3	11	44
4	22	-
5	51	-
6	18	-
7	92	-
8	145	-
9	113	-



Participants further perceived and photographed the historical, cultural and social areas on route 1. In accordance with these findings, it was decided to attribute route 1 with the urban corridor function. The 1st and 2nd regions on this route are located in a pedestrianized street and function as an urban corridor. Other regions remained between the vehicle traffic. Therefore, it is mostly used for compulsory activities such as transportation. It is proposed to remove the vehicle traffic by the pedestrianization of these areas to make the urban corridor function permanent in the 1st and 2nd regions and establish connections with other regions. It was proposed to plant these areas to make historical, cultural and social areas more attractive and increase the use of them after the removal of the vehicle traffic. In addition, it was proposed to build areas such as sitting, eating-drinking, watching and resting which will reduce people's mental fatigue and where people can interact with each other and perform recreational activities (Figure 5). The current states of 4 regions which were mostly photographed and are disconnected from each other and the new functions attributed to these regions are given in Table 2.



Areas	Photographs	Design Proposals	Instructions
2			Green structure Pedestrianize Orientation
7			Green structure Pedestrianize Orientation
8			Green structure Meeting-gathering place Pedestrianize Orientation
9			Green structure Meeting-gathering place Pedestrianize Orientation

4. Discussion and Conclusion

A system which can provide physical, social, historical and cultural input to the city, and which can integrate the existing open and green areas that are disconnected from each other is required for Trabzon. Based on these needs, a number of improvements and regulation proposals to provide an urban corridor to Trabzon were suggested in this study. The available opportunities were firstly evaluated while suggesting these proposals. The potential corridor area mentioned in the findings section was associated so as to ensure integrity and continuity in itself. Uzun Sokak (1st and 2nd Region) which is already pedestrianized and gives the impression of a corridor was integrated by the pedestrianization of other regions, and it was proposed to create a corridor surrounding the city. It was aimed to increase the quality of the corridor by proposing buffer green spaces and sitting and resting areas except for the pedestrianization for these regions. Thus, these regions can also be used as activity areas where people can have passive-active relationships with each other apart from monitoring the interesting historical-cultural objects and views.

The importance of the need for open and green space systems is emphasized in studies carried out. Kurtaslan (2010) said that the suitable places within the city should be pedestrianized in greenway plannings created by the valleys. In their study, Yerli and Kesim (2009) suggested that it is necessary to create a zone surrounding the city by connecting two main corridors to each other. Thus, a physical balancing factor will be established between residential, commercial and industrial areas, and this will play a big role in reducing air and noise pollution.

5. References

- Arslan, M., Erdogan, E., & Dilaver, Z. (2001). *Greenways and the making of urban form: Ankara city*. In: Asian Places in the New Millennium: *Proceedings of 38th Conference International Federation of Landscape Architects*, Singapore.
- Düzenli, T., Mumcu, S., Yılmaz, S., & Özbilen, A. (2012). Analyzing youth's activity patterns in campus open spaces depending on their personal and social needs. *Journal of Adult Development*, 19, 201-214.
- Erickson, D. L. (2004). The relationship of historic city form and contemporary greenway implementation: A comparison of Milwaukee, Wisconsin (USA) and Ottawa, Ontario (Canada). *Landscape Urban Planning*, 68 (2-3), 199-221.
- Fabos, J. G. (2004). Greenway planning in The United States: Its origins and recent case studies. *Journal of Landscape and Urban Planning*, 68, 321-342.
- Flink, C., & Searns, R. (1993). *Greenways: A guide to planning, design and development*. Washington: Island Press
- Gür, Ş. Ö. (2000). Doğu Karadeniz örneğinde konut kültürü [*Housing culture, for example in Doğu Karadeniz*]. İstanbul: Yem Yayıncılık.
- Inan, Z. O. (2007). Kullanıcıların peyzaj tercihlerinin değerlendirilmesinde "kullanıcı katılımlı fotoğraflama" tekniği ve peyzaj mimarlığında kullanımı [Visitor Employed Photography as a Method for the Evaluation of the User Landscape Preferences and its Use in Landscape Architecture]. *İstanbul Üniversitesi Orman Fakültesi Dergisi [Istanbul University, Journal of Faculty of Forestry]*. 57(1), 123-134.
- Kaplan, R., & Kaplan, S. (1983). *Cognition and environment: Functioning in an uncertain world*. NY: Praeger Publishers.
- Kappler, C., & Miller, L. (2009). *Re-imagining the urban greenway: An alternative transportation strategy and vacant land use plan for the Woodbridge neighborhood of Detroit* (A practicum submitted in partial fulfillment of the requirements for the degree of Master of Landscape Architecture). University of Michigan,

- Keleş, R., & Hamamcı, C. (1997). *Çevrebilim [Ecology]*. Ankara: İmge Kitabevi [İmge Publishers].
- Kurdoğlu, B. Ç. (2005). *Trabzon Gümüşhane eski Devlet Karayolu'na ait Hamsiköy-Zigana köy güzergahı'nın yeşilyol olarak planlanması üzerine bir araştırma [A research on planning of Hamsiköy-Zigana village route in former Trabzon-Gümüşhane state highway as a greenway]* (Unpublished doctoral dissertation). Karadeniz Technical University, Trabzon, Turkey.
- Kurtar, C. (2013). Kentsel kültürel mirasın korunması ve sürdürülebilirliği: Ankara Hamamönü örneği [Conservation and Sustainability of Urban Cultural Heritage: The Ankara Hamamönü Example]. *Ankara Araştırmaları Dergisi [Journal of Ankara Studies]*. 1(2), 35-47.
- Kurtaslan, B. Ö. (2010). Kentsel yeşil yol planlaması: Kayseri kent bütünü örneği [Urban Greenway Planning: the Example of Kayseri Urban Complex]. *Selçuk Tarım ve Gıda Bilimleri Dergisi [Journal of Selcuk Design and Food Science University]*, 24 (4): 38-44.
- Little, C. E. (1990). *Greenways for America*. Baltimore and London: The John Hopkins University Press.
- Öztaş, Y. (1998). *Peyzaj mimarlığına giriş [Introduction to landscape architecture]*. Ankara Üniversitesi Ziraat Fakültesi Peyzaj Mimarlığı.
- Madanipour, A. (1999). Why are the design and development of public spaces significant for cities? *Environment and Planning B: Planning and Design*, 26(6), 879-891.
- Miller, W., Collins, M. G., Steiner, F. R., & Cook, E. (1998). An approach for greenway suitability analysis. *Landscape and Urban Planning*, 42, 91-105.
- Shafer, C. S., Lee, B. K., & Turner, S., (2000). A tale of three greenway trails: User perceptions related to quality of life. *Landscape and Urban Planning*, 49, 163-178.
- Tan, K. W. (2006). A greenway network for Singapore. *Landscape and Urban Planning*, 76, 45-66
- Tweed, C., & Shutherland, M. (2007). Built cultural heritage and sustainable urban development. *Landscape and Urban Planning*, 83, 62-69.
- Yerli, Ö., & Kesim, G. A. (2009). Kentsel koridorların estetik ve işlevsel yönden irdelenmesi: Düzce örneği [A Study on Aesthetic and Functional Approach for Urban Corridors: Düzce Pattern]. *Ankara Üniversitesi Çevre Bilimleri Dergisi [Ankara University Journal of Environmental Science]*, (1) 42-57.
- Ying, Z. (2006). *Landscape preference study of campus open space* (Master of landscape architecture) Mississippi State, Mississippi.

Topography as a Factor in Landscape Design Process

E. Seda Arslan-Muhacir, Banu Karasah

Introduction

From past to present people has shaped their living space using psychical and visual characteristics of topography. Spaces and functions also diversified with (toward) the opportunities of topography.

This kind of spaces are the information source for different professional disciplines with the environmental and ecological dimensions as well as social ones which are used with living and non-living materials together in the process of shaping living spaces of cultural accumulation (Akpınar ve Tazebay 2010, 249).

Among cultural and religious reasons, humans are most intended to reshape the topography for practical reasons. Humans had interfered to trees which is the earth's upper canopy now and then, also they were changed the form of the land for using different functions while reshaping topography. Interventions that are made different scales are the first studies to intend for built topography (Köse 2010, 2).

Differences about shaping topography is closely related to the perception of the designer and purposes about usage of the topography would change towards that perceptions. In this context, it is possible to say that; topography offers lots of aesthetic and functional opportunities.

The subject of this study is giving successful examples of landscape design projects which are obtained from good shaped land with mentioning advantages and usage of the topography. Within this context, the relationship between landscape and topography has studied underlying landscape concept.

Landscape Design

"Landscape" is defined an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors in the European Landscape Convention. Landscape design which gives some clues about the effective usage of the land aim to form physical strategies and shapes with considering ecological, technical, aesthetical and artistic criteria and provide sustainable relation between human and his environment with the planting design (Dong, 2009; Yaşar ve Düzgüneş 2013,32).

Geographical location, climate, flora, fauna, topography, geological-geomorphological conditions and the water are factors which constitute the natural environment (Ocakçı, 1995; Köylü and Kiper, 2007; Turgut et. al., 2012, 172). The differences of these factors make landscape designs different and unique. Topography is the main skeleton of the landscape design and one of the factors constitute the natural environment.

Relationship between landscape design and topography



Topography is derived from the Greek words "topos" (place) and "graphe" (description) and defined that display a place graphically include its unevenness (Hasol, 2002, 463).




Topography is a result of natural forces acting on the soil. Giant dunes created by winds in the Sahara desert or water effects on soil and rocks (carving) like Grand Canyon are examples of these forces. Softer samples of topography can be extremely breathtaking, especially when combined in landscape designed with art. Even, a small hill can have a dominant view. Landscape architects not only work with the content of the topography, but also actively shape it (Waterman, 2012, 76).

According to Evyapan and Tokol (2000), land forms should be evaluated as one of the main elements that shape the landscape design, especially at rugged terrain. Designer can make some land editing. However, this intervention must be proper and careful about its originality when grading.

Effective design examples were created with land formation (grading). Hiding undesirable views, put forward desired views, attenuate noise, increasing security, determining the proper circulation routes and emphasizing the structure can be provided in this process (Başal and Özdemir, 2008, 9). Besides, it is possible to provide privacy by separating the spaces, gain a flat space mobility/dynamism, enable the space multiple usage and enrich aesthetic value. Moreover, it is probable to acquire ecological and compatible with nature solutions and develop sustainable design approaches by reinterpreting the present topographic differences. 15 Landscape design examples around the World related to different usages of topography are given Table 1. For example a landscape design realized in Toronto Central Waterfront. In this design, spaces separated, circulation routes determined and a flat space gained mobility/dynamism using topography. Another example can be seen Hypar Pavilion at Lincoln Center. Designer gained a flat space mobility/dynamism and enriched the space aesthetic value using topography. It can be seen that another design in Kuşadası Setur Marina. This landscape design gained a flat space mobility/dynamism, enabled the space multiple usage, put forward desired views, enriched aesthetic value and determined the circulation routes using topography. Lastly, different usages can be seen in Dalian library's environs. Designer gained a flat space mobility/dynamism emphasized the structure, increased security, determined the circulation routes, provided privacy by separating the spaces and enriched aesthetic value.

Tablo1: Different functions of topography and landscape design samples

Function	Examples
Determine the circulation routes; Separate spaces; Gain a flat space mobility/dynamism; Enrich aesthetic value.	 <p>Toronto Central Waterfront (URL-1, 2016)</p>
Provide privacy by separating the spaces; Determine the circulation routes; Enrich aesthetic value. Enable the space multiple usage. Gain a flat space mobility/dynamism;	

	School of Art, Design and Media, Nanyang Technological University of Singapore (URL-2, 2016)
<p>Provide privacy by separating the spaces; Determine the circulation routes; Enrich aesthetic value; Enable the space multiple usage.</p>	 <p>Brooklyn Botanic Garden Visitor Center (URL-3, 2016)</p>
<p>Enrich aesthetic value; Gain a flat space mobility/dynamism; Enable the space multiple usage.</p>	 <p>Hypar Pavilion at Lincoln Center (New York) (URL-4, 2016)</p>
<p>Gain a flat space mobility/dynamism; Enable the space multiple usage; Enrich aesthetic value; Determine the circulation routes; Put forward desired views.</p>	 <p>Kuşadası Setur Marina (Aydın, Turkey) (URL-5, 2016)</p>

Topography as a Factor in Landscape Design Process


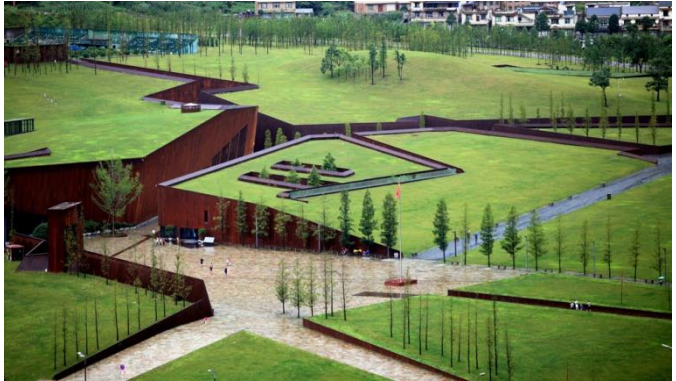
<p>Gain a flat space mobility/dynamism; Enable the space multiple usage; Enrich aesthetic value; Determine the circulation routes; Put forward desired views; Hide undesirable views.</p>	 <p>Adana Centre Park (Turkey) (URL-6, 2016)</p>
<p>Gain a flat space mobility/dynamism; Enable the space multiple usage; Enrich aesthetic value; Enable the space multiple usage;</p>	 <p>Wenchuan Earthquake Memorial Museum (China) (URL-7, 2016)</p>

Table 1 continued


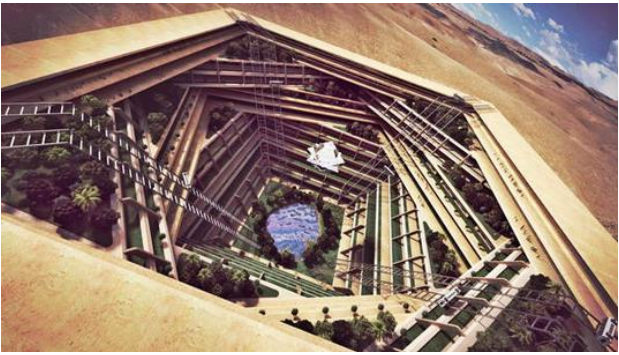
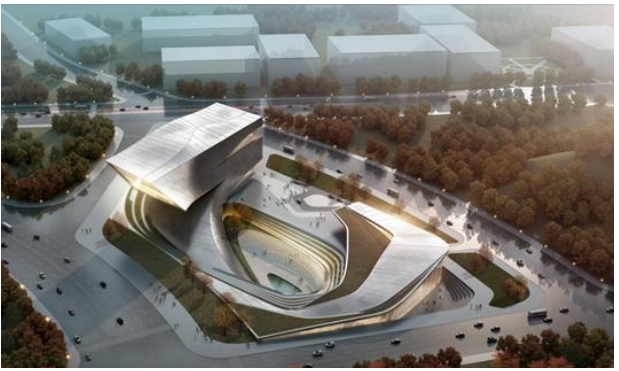

Function	Examples
<p>Enable the space multiple usage; Enrich aesthetic value; Determine the circulation routes; Put forward desired views; Attenuate noise.</p>	 <p>Seattle Art Museum (URL-4, 2016)</p>
<p>Enable the space multiple usage; Enrich aesthetic value; Determine the circulation routes; Provide privacy by separating the spaces; Gain a flat space mobility/dynamism.</p>	 <p>City in the Desert (Egypt) (URL-4, 2016)</p>
<p>Enrich aesthetic value; Determine the circulation routes; Increase security; Gain a flat space mobility/dynamism; Emphasize the structure; Provide privacy by separating the spaces.</p>	 <p>Dalian Library (China) (URL-4, 2016)</p>
<p>Enrich aesthetic value; Determine the circulation routes; Emphasize the structure;</p>	 <p>The Garden of Cosmic Speculation (Scotland) (URL-8, 2016)</p>

Table 1 continued

Topography as a Factor in Landscape Design Process

Function	Examples
Enrich aesthetic value; Determine the circulation routes; Put forward desired views;	 <p>Simons Center for Geometry and Physics (New York) (URL-9, 2016)</p>
Enrich aesthetic value; Determine the circulation routes; Separate spaces;	 <p>Burj Khalifa Park (United Arab Emirates) (URL-10, 2016)</p>
Enrich aesthetic value; Determine the circulation routes; Gain a flat space mobility/dynamism; Provide privacy by separating the spaces.	 <p>General Maister Memorial Park (Slovenia)(URL-11, 2016)</p>
Enrich aesthetic value; Determine the circulation routes; Emphasize the structure; Gain a flat space mobility/dynamism	 <p>Yanweizhou Park in (China) (URL-12, 2016)</p>

Conclusion

Topography which represent physical features of the land form is one of the most important factors for designing landscape. Both scale of city and space, topography provide lots of functions as well as shaping the identity of the landscape design with different usage alternatives. We believed that the landscape design samples in this study can contribute the designers about landscape design.

References

- Başal, M., & Özdemir, A. 2008. *Sürdürülebilir peyzaj tasarım yaklaşımları. [Sustainable landscape design approaches]* Ankara Üniversitesi Ziraat Fakültesi yayınları, 1563:516, 71sf, Ankara.
- Evyapan, G.A., & Tokol, A.S., 2000. *Peyzaj tasarım ders notları. [Landscape design study worksheets]* METU Faculty of Architecture Press, Ankara.
- Hasol, D. 2002. *Ansiklopedik Mimarlık Sözlüğü. [Architecture dictionary]*. Yapı-Endüstri Merkezi Yayınları. 551sf, İstanbul.
- Köse, C. 2010. *Mimari ve peyzaj arakesitinde topoğrafyanın kullanımı [The use of topography at the intersection of architecture and landscape]* (Yüksek Lisans Tezi) İstanbul Teknik Üniversitesi Fen Bilimleri Enstitüsü, 121sf, İstanbul.
- Tazebay, İ., & Akpınar, N. 2010. Türk kültüründe bahçe. *[Turkish garden culture] Bilig*, 54;243-253.
- Turgut, H., Yavuz Özalp, A., Erdoğan, A. 2012. Artvin ilinde doğal çevrenin kent kimliğine etkileri. *[Effects of natural environment to city identity in Artvin] SDÜ Orman Fakültesi Dergisi*. 13: 172-180.
- URL-1 (2016, August 15) Retrieved from <http://dtah.com/project/spadina-rees-and-simcoe-wavedecks/>.
- URL-2 (2016, August 16) Retrieved from <http://deasypenner.com/blog/my-green-roof-as-art/>.
- URL-3 (2016, August 15) Retrieved from <http://www.sh-dz.net/cherry-esplanade-brooklyn-botanic-garden.html>.
- URL-4. (2016, August 21) Retrieved from <http://www.creativebloq.com/inspiration/landscape-designs-11121231>.
- URL-5 (2016, August 10) Retrieved from <http://www.avmindirim.com/avmdunyasi/aydin/12086-kusadasi-setur-marina-avm.html>.
- URL-6 (2016, August 15) Retrieved from <http://www.panoramio.com/photo/10337924>
- URL-7 (2016, August 10) Retrieved from http://www.world-architects.com/en/projects/52138_Earthquake_Memorial_in_Sichuan.
- URL-8 (2016, August 5) Retrieved from <http://evastalder.blogspot.com.tr/2012/06/garden-of-cosmic-speculation.html>.
- URL-9 (2016, August 5) Retrieved from <http://www.greenlabstudio.net/landscape-architecture/>
- URL-10 (2016, August 5) Retrieved from <http://www.landezine.com/index.php/2012/02/burj-khalifa-landscape-architecture/>
- URL-11 (2016, August 5) Retrieved from <http://www.landezine.com/index.php/2010/05/general-maister-memorial-park/>
- URL-12 (2016, August 5) Retrieved from <http://www.dezeen.com/2015/11/06/turenscape-yanweizhou-park-landscape-of-the-year-2015-award-world-architecture-festival/>
- Waterman, T. 2012. *Peyzaj Mimarlığının Temelleri. [Landscape architecture fundamentals]* Literatür Yayınları, 200 sf, İstanbul.

Yaşar, Y., & Düzgüneş, E. 2013. Peyzaj tasarımına sürdürülebilirlik kavramının entegrasyonu: bir stüdyo çalışması. [*The integration of sustainability concept into the landscape design: a case study of a design studio*] *İnönü Üniversitesi Sanat ve Tasarım Dergisi*, 3(7): 31-43.

A Comparison; Legibility and Integration Level of University Campus

Yelda Aydin-Turk, Beyza Karadeniz, Aysegul Ozyavuz

1. Introduction

The environmental quality and livability of the campus areas, where college students with diverse cultural, ethnic and social backgrounds live and study, are significant facts as they contribute to students academic and social activities. Thus, well designed and planned campus areas may raise awareness among faculty, student body and employees. Universities hold an important role for its surroundings. Environmental quality and livability factors of a place affect individual's level of perception of that place. Knowing the facts how people perceive physical environment, helps the designers to understand user habits and helps to create more perceptible and memorable places. Initial perception and image mapping studies are done by architect Kevin Lynch in 1960.

Lynch observed environment and the habitual properties of the user and defined five elements that people mainly observe. He outlines roads, nodes, edges, landmarks and district as the elements that people store in their minds, then created cognitive maps. Others, as Erickson and Moughtin, agreed that cognitive maps are powerful tools to understand the place through inhabitants' minds. By using various methods for generating cognitive maps, researchers studies perception and representations of places. For instance, Lynch explores the cities of Boston, New Jersey and Los Angles, asks residents (different age, gender...) to draw the city map, and generated cognitive maps of these cities.

Observers draw the paths based on their cognition of different roads, footpaths, railways and walkways. Paths can often be the strongest cognition elements in people's mental maps. Landmarks are usually defined as a simple physical object, such as a church spire, a tower, a dome or a hill (Lynch, 1960). Landmarks are generally point of references that are tall and visible. They can either be local or distant. The more familiar a journey is, the more frequent local landmarks are noticed and used.

Edges are linear elements not used or thought as of routes. They may either join two recognizable areas as a seam, or may act as a barrier between recognizable area. Edges may take the form of intensely busy roads, routes, cuttings and streams (Figure 1).

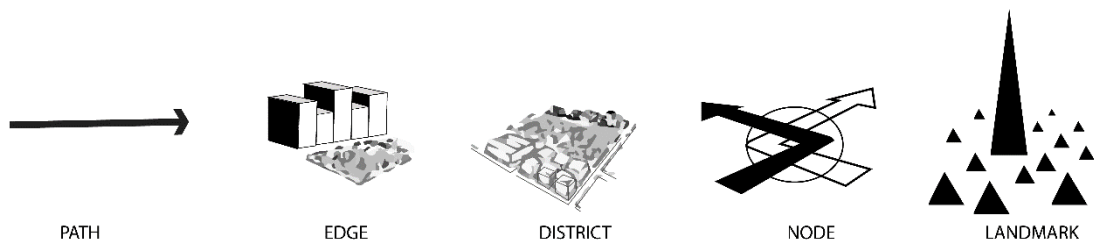


Figure 1. Elements of urban image (Lynch, 1960)

Districts are medium to large areas of a city which the observer walks into and have an identifiable set of characteristics. These might be related to use or architectural style. A district can be defined by its limits. Some people organize their mental maps around districts rather than nodes. A node is a point to or from which an observer might be travelling. Nodes are generally places of some type of activity. They can characteristically be a major junction or gathering places. In some districts a node can provides a concentration of activities, so that the node becomes the core of that district (Figure 1).

It is not easy to distinctly separate each of these defined elements. Districts accommodate nodes, defined with the edges, divided with the roads and attract with the landmarks. In order one to

locate himself in a place and develop a sense of belonging, he should identify the edge, the roads and connections, signs and nodes of the area. This method can be applied in different scales to various urban areas, such as University Campuses. In the recent years, use of computer aided applications become a common method. Space syntax, developed by Bill Hillier in 1970, presents a overall theory of how people relate to space in built environments. This method is also a powerful tool for studying use and legibility of spaces. In this study, legibility level of Karadeniz Technical University Campus is determined and the image of campus is produced by the students. In addition to image maps, space syntax analysis used in this study. The Connectivity analysis is produced to understand the accessibility level of the road system. As a result, the image maps, that created by students and the connectivity maps are compared and discussed.

2. Method

Mental and cognitive mapping is a widely used method by various disciplines. Cognitive map is defined as, true values that individuals observe and a series of stored hypothesis array in their surroundings (Lyoyd, 1997).

The study area is the Kanuni Campus of Karadeniz Technical University (KTU). 299 students from Architecture and City and Regional Planning Departments participated in the study. Fundamental legibility principles and elements established by Kevin Lynch (1960) are used to determine how the selected students generate cognitive maps of the campus. Students are asked to draw and mark the edges, districts, roads, nodes and landmarks on the plan, based on their personal perceptions. An overall image map of the campus is generated as the result of the analyses of students' cognitive maps. In addition, outcomes of space syntax analyses represents the accessibility level of the paths in the Campus. The result of connectivity analyses and the students interpretations are compared in terms of accordance and relations.

3. Findings

This part is a summary of the findings. Each of students results analyzed individually in terms of Lynchian legibility elements. Student's cognitive maps are collected and the outcomes combined into individual maps and graphs.

3.1. Edges

There are various number of edges defined by students. The results shows that some edges are more recognizable than other edges. As shown in Figure 2, four edges identified the most among students. The highest rated *Edge 6*, recognized by %39 (n=117) and consist of departments, dormitories and housing units (Figure 2, 3).

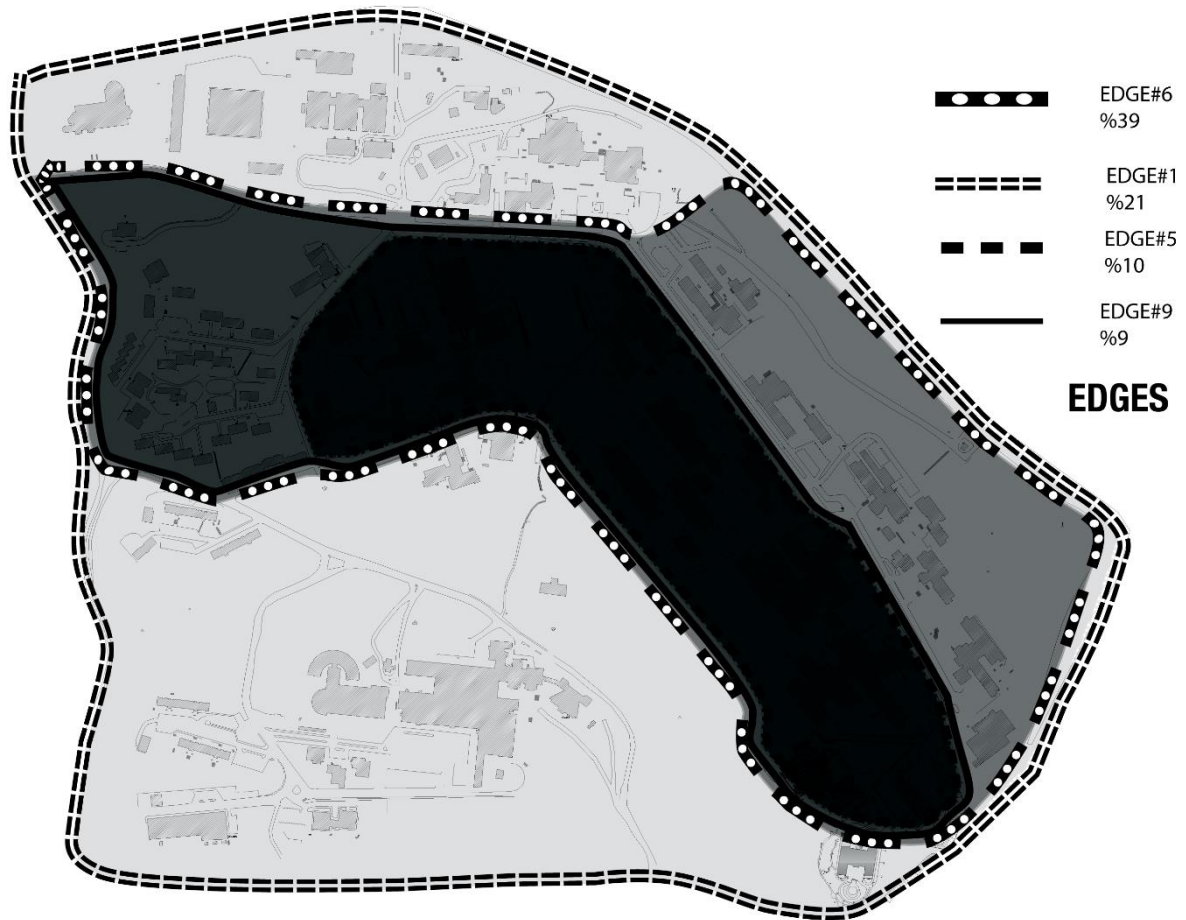


Figure 2. Map showing the edges defined by students

The second most recognized edge is the *Edge 1*, drawn by %21 (n=62) that overlaps the Campus property. Edge 5, is the south part of the campus that covers the engineering and architecture departments, the business school and the dormitories and recognized by %10 (n=30) of the students. Additionally, Edge 9 is drawn by the %9 (n=27) and includes the housing area, departments, and dormitories (Figure 2 ,3).

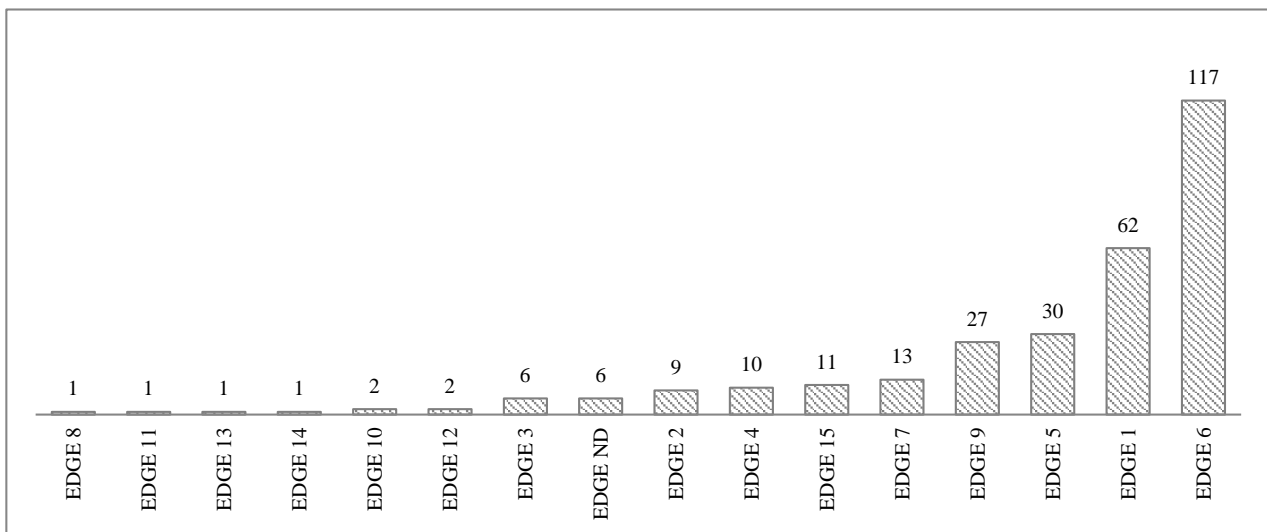


Figure 3. Frequency of edges

As it is shown in Figure 2 almost one fifth of students can define Edge 1, the true campus property. Accordingly, Edge 6, which includes schools, commercial areas, dormitories and housing for faculty is the most recognized edge. These are the busiest places of the campus, therefore, Edge 6 is highly perceived and used area in the campus. The areas outside of Edge 6 are either not easily accessible as medical campus due to harsh topography or areas serve no daily activity.

3.2. Districts

12 main districts are defined based on collected data. These districts are; trails & green areas, architecture & engineering departments, business school, medical school, housing areas, dormitories, sports and recreational areas, commercial areas, convention center, social areas, administrative and cultural amenities, college of geography, department of science and department of letters. The most recognized districts among given list of areas are; dormitories %51 (n=151), housing %43 (n=130) and, administrative and cultural amenities %39 (n=117) which are highly used by the student body (Figure 5).

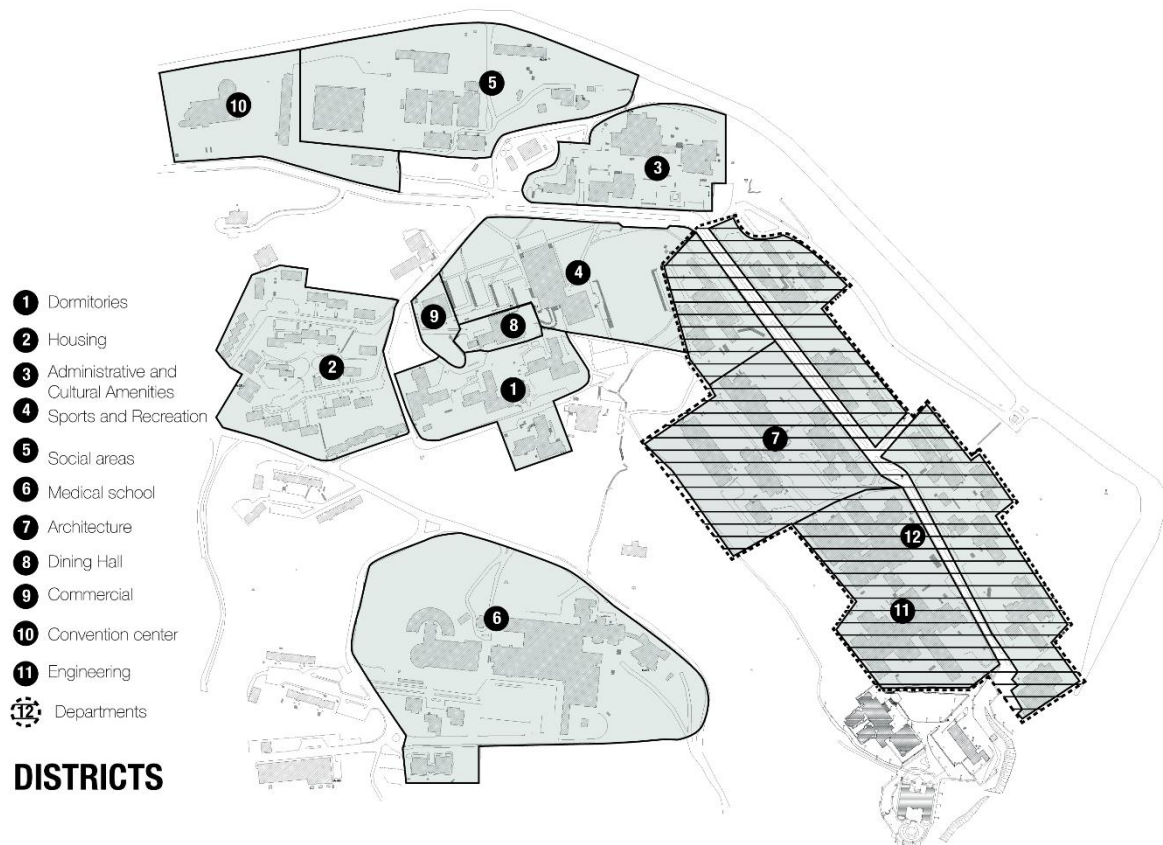


Figure 4. Map showing the districts

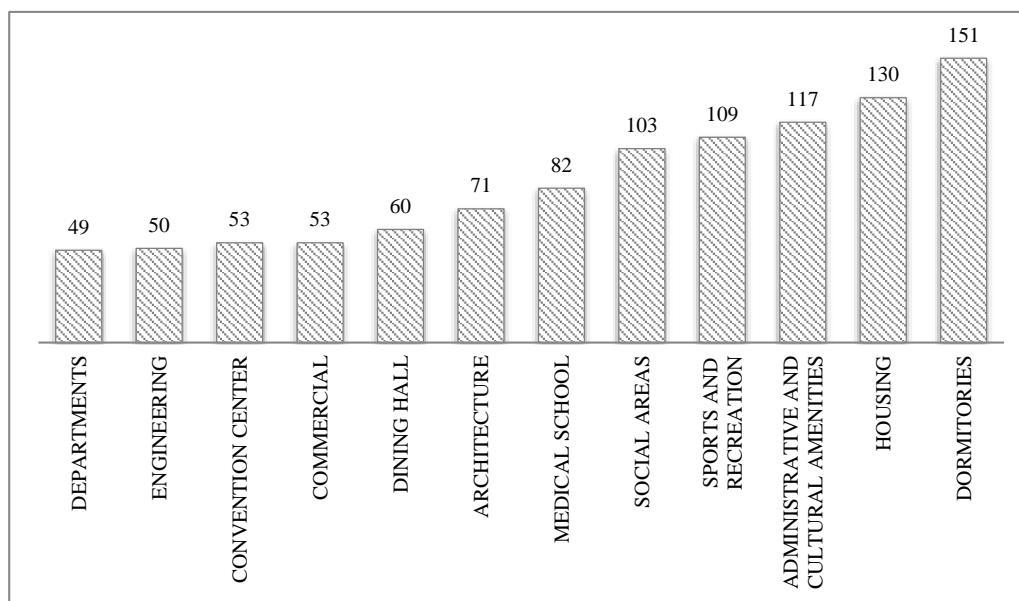


Figure 5. Frequency of districts defined by students

As it is shown in Figure 4, students defined various districts. However, the districts do not cover homogenous areas. Particularly, edge 12 is a good example to this situation. This district contains dissimilar departments such as architecture, engineering and school of social affairs. Accordingly, students define subareas within this districts. In contrary, the area where dormitories and other social and commercial units located, is defined as a well-defined district. As a result, small areas that contain various functions are better clarified by students (Figure 5).

3.3. Nodes

22 Nodes are identified by students. Results show that courtyards of significant buildings (library, school of architecture,) stops (shuttle and bus stops), gates (gate a and gate b) and social areas are defined as the most recognized nodes. Library courtyard %54 (n=161), architecture courtyard %40 (n=120) shuttle stop %40 (n=119), and social area %37 (n=111) are the highly defined by the students among the 22 nodes (Figure 6). Nodes are mainly located on the main arterials. There are also small nodes identified in front of the institutional buildings for public use such as mosque, stadium, (Figure 7, 12).

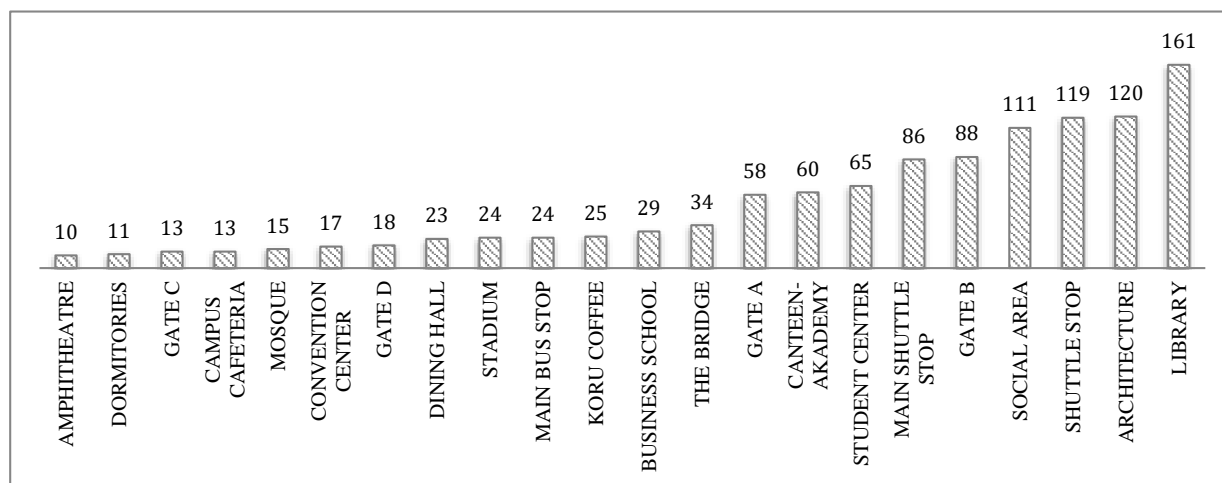
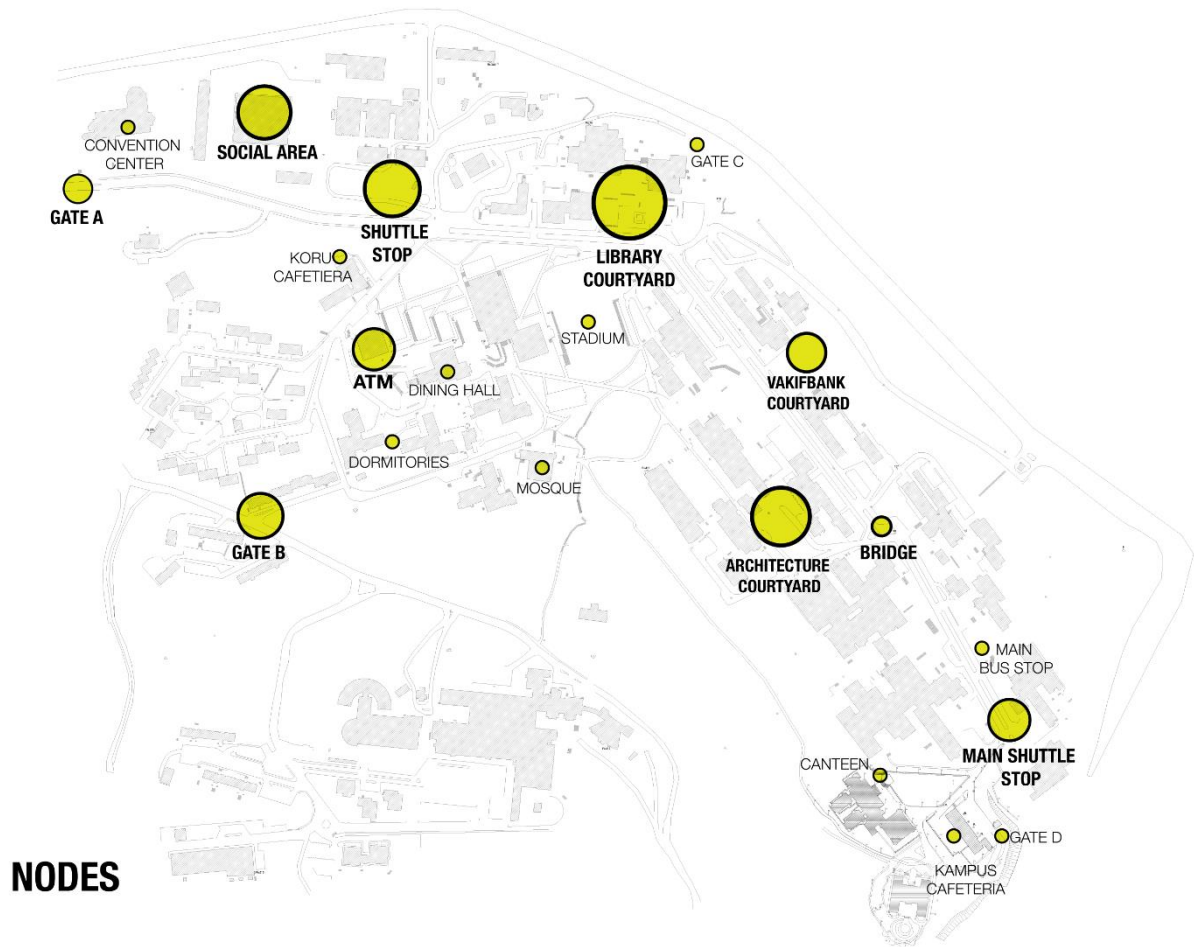


Figure 6. Frequency of Nodes**Figure 7.** Map showing the highly recognized nodes

3.4. Landmark

Based on the analysis 19 landmarks are defined. Most marked landmarks are significant buildings (library) monuments, social areas, gates and landscape features (Figure 8, 9). The most important landmarks are the monuments; monument at the library courtyard %58 (n=173) and monument by the shuttle stop %32 (n=96). Additionally, social area is recognized by 111 students (%37) as an important landmark and bridge on the main arterial %33 (n=99) (fig 8).

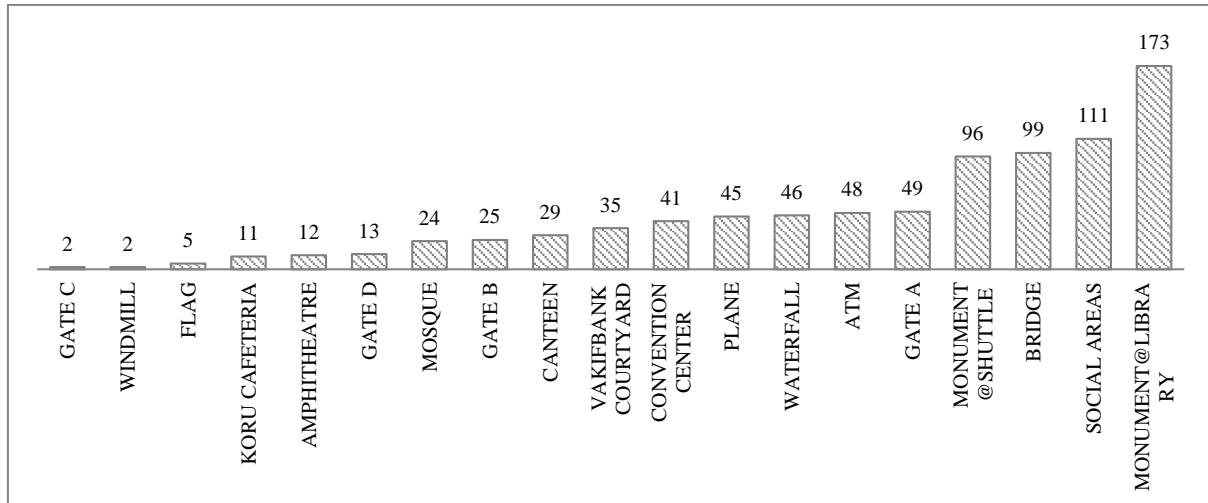


Figure 8. Frequency of Landmarks

As shown on the map below, majority of the landmarks are located on the main arterial (Figure 9). Similar to Nodes, landmarks are also located on the main arterials and overlap with the significant Nodes (Figure 7, 13).

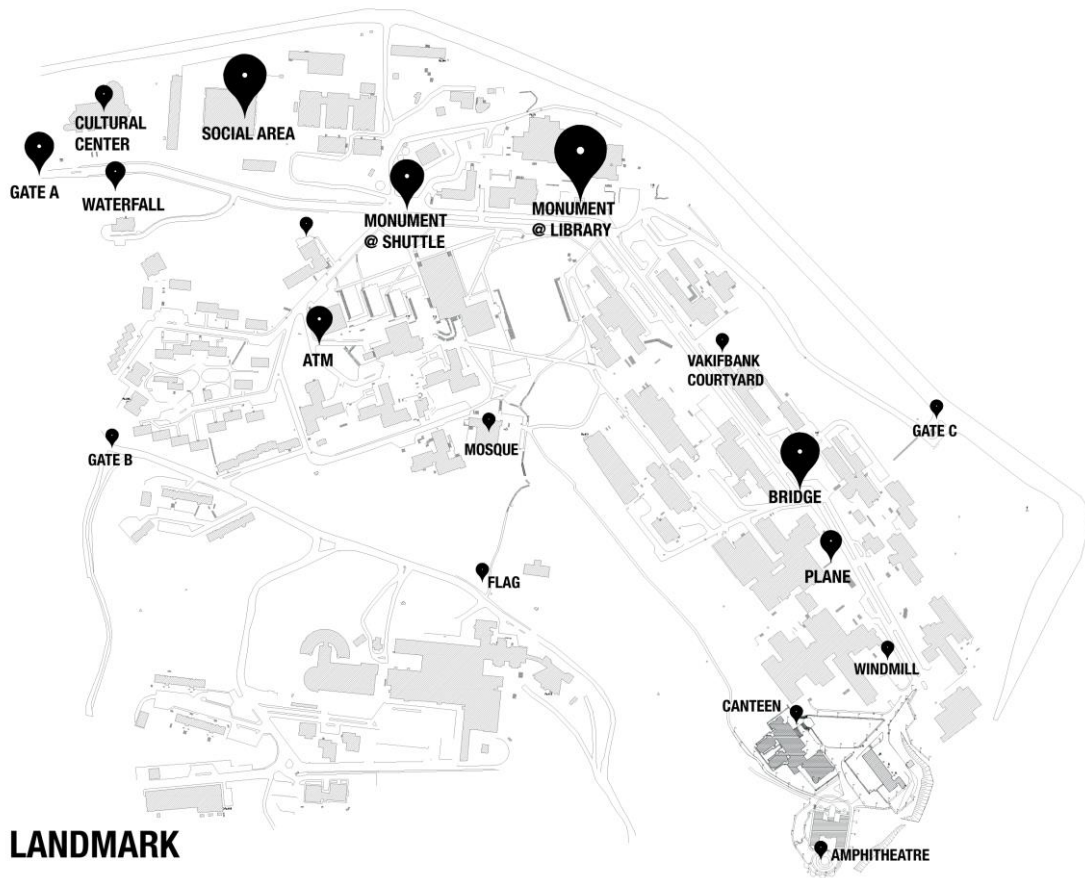


Figure 9. Map showing the locations of perceived Landmarks



Figure 10. Landmarks (URL 1-2, 2015)

3.5. Paths

The Figure 11 is a summary map of collected data from student cognitive maps, showing the important and less important roads and connections in KTU Campus. The map represents the primary roads with a thick continuous line. Gradually the secondary roads are drawn with thin and dashed lines. According to students, primary roads of the campus that carry the most vehicular and pedestrian traffic have the highest degree of perception (Figure 11). Additionally, some pedestrian streets are highly recognizable. Because they provide easy access and shortcuts to distribution points (gates, bus stops and exits).

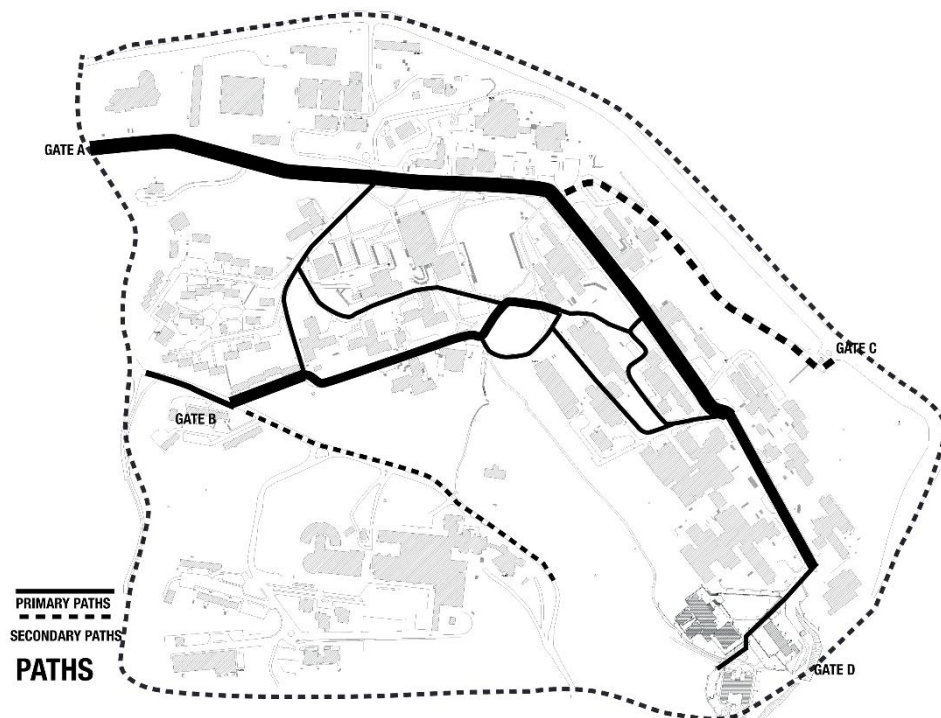


Figure 11. Map showing the perceived paths

The connectivity analyses processed in Space syntax also represents similar results as students cognitive maps. According to the analysis, main arterial, which carry the most vehicular and pedestrian traffic, is the primary path (Figure 12). Because main arterial is the widest road in the campus that has a linear geometry and multiple junctions.

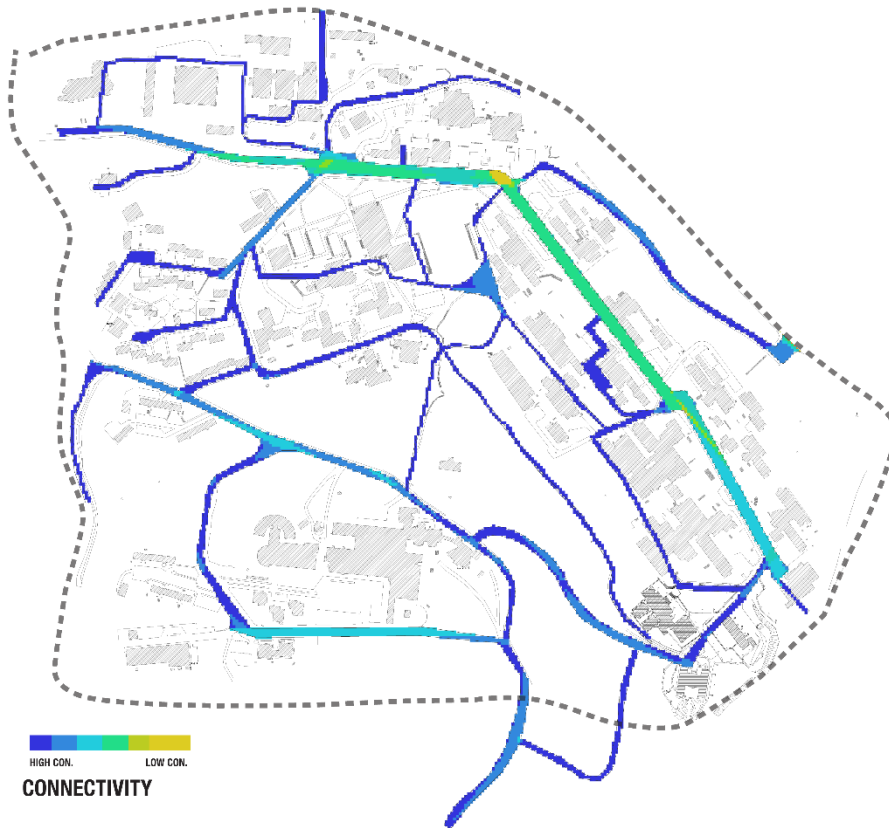


Figure 12. Connectivity Analysis of Campus

On the other hand, based on connectivity analysis produced in space syntax, pedestrian ways drawn by students that provide short cut access to departments and dormitories are not syntactically accessible. The software overlook these features since it bases analysis to the geometry and functional formulas. The user preferences and opinions should be considered, thus these paths are important in the sense of campus accessibility and pedestrian connections. It is important to improve the accessibility of the roads that has high level of perception. Thus, better access to departments and other facilities can be provided. The results support that, while designing and planning urban areas such as campuses, spatial analysis should be intensified with such studies.

4. Discussion and Conclusion

Figure 13 displays the produced campus image map as the study of student's drawings. Campus has a certain level of perception. Different students perceive edges, districts, important nodes and landmarks differently. Edges could not be defined clearly, therefore some unidentifiable areas left empty. The important landmarks and nodes are located on the main arterials where both students drawings and connectivity analysis reveal as primary paths. Additionally, it is clear that significant nodes accommodate highly perceived landmarks (Figure 13).

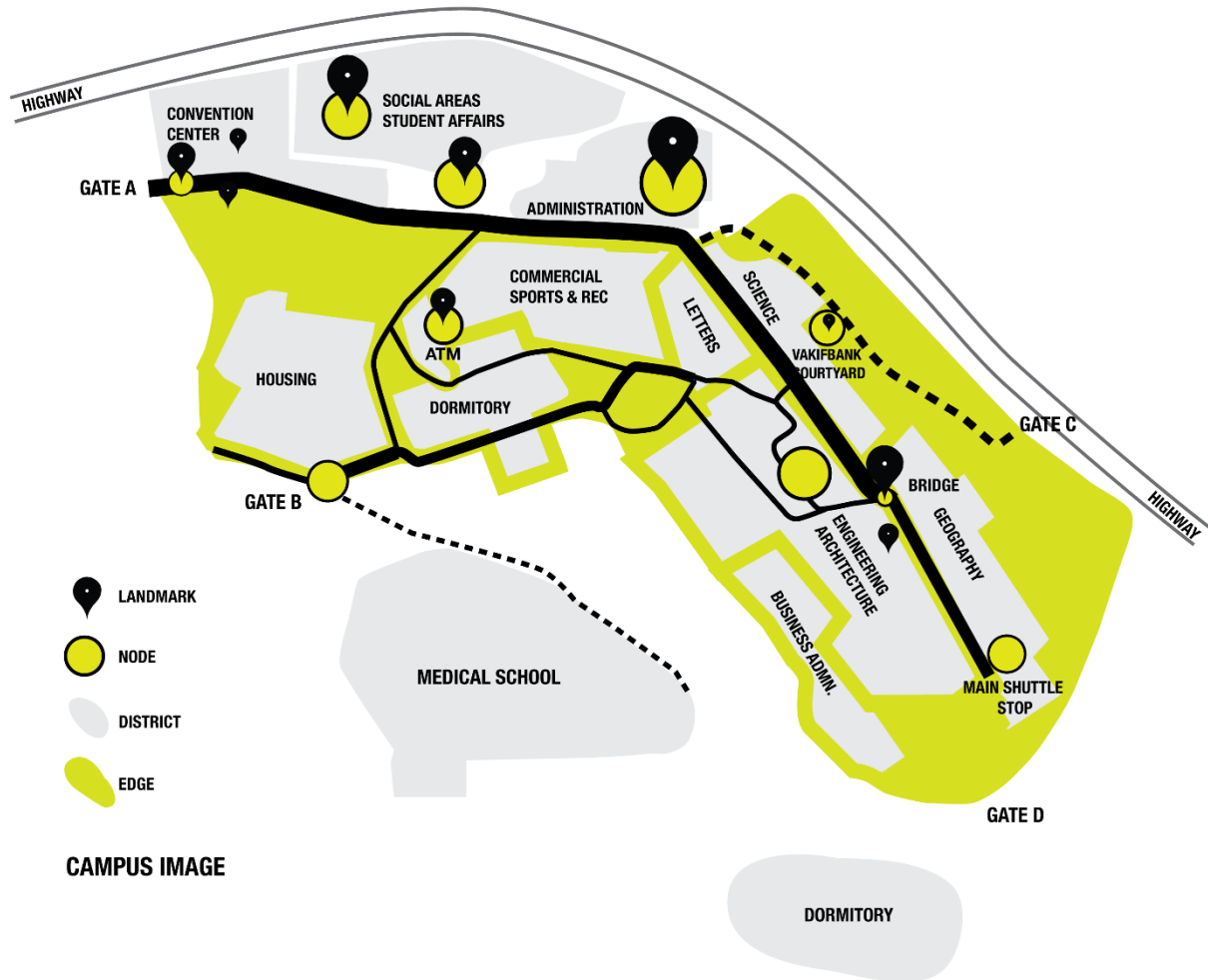


Figure 13. Final Image Map of Campus

It is vital to test the legibility level of the campuses periodically in order to understand the current potentials and limitations and the tendency for future expansions. So, important landmarks, paths and nodes that add value to campus legibility should be protected. Also, the districts with low perception level and the paths that ease the access should be strengthened. Because, these elements (roads, nodes, landmarks, districts) contribute to awareness level and improves student's sense of belonging and ownership. KTU will eventually expand into new areas and built new facilities and services. Accordingly, a master plan is being developed by the University. The outcomes of this study can be beneficial for master plan and design process of the campus.

5. References

- ERICSON, B. (2001), *The Armature and Fabric as A Model for Understanding Spatial Organisation, Aproaching Urban Desing The Design Process*, Edt: Roberts, M., Greed, C., Longman, England, pp. 21-38.
- GÖREGENLİ, M. (2013). *Çevre Psikolojisi İnsan-Mekan İlişkileri [Environmental Psychology, Human-Spaca Relations]*. İstanbul Bilgi Üniversitesi Yayınları (2rd ed.). İstanbul
- HILLIER, B., & Hanson, J. (1984). *The Social Logic of Space*:. Retrieved from <https://www.cambridge.org/core/books/the-social-logic-of-space/6B0A078C79A74F0CC615ACD8B250A985>
- LYNCH, K. (1960). *The Image of The City*. Cambridge MA: MIT Press.

- LLOYD, R. (1997). *Spatial Cognition: Geographic Environments*. Dordrecht: Kluwer Academic
- MOUGHTIN, C. (1999), *Urban Design Street and Square*. Butterworth Architecture, Oxford
- URL1: Probeklein, (2011) Ktu_Foto_2 .Retrieved June 15, 2016 from http://upload.wikimedia.org/wikipedia/en/3/3c/Ktu_foto_2.jpg
- URL2: Probeklein, (2011) Ktu_Foto_3 .Retrieved June 15, 2016 from http://upload.wikimedia.org/wikipedia/en/3/3c/Ktu_foto_3.jpg

Remarks On Stone Inlaid With Tile Decoration In The 13th-15th-Century Turkish Architecture

Gökben Ayhan

Introduction

Tile is formed both internal and external decoration element in Anatolian Turkish architecture. Tile decorations which are preferred in the internal areas are observed in mihrabs, sarcophagus, wall surfaces, pediments of window and door, arch spandrels, pendants, buttress piers and elephant feet. External usage of tile is limited with respect to internal usage and it is observed in the walls of the narthex, pediments of the backyard windows and minaret. In these places generally tile mosaic technique, besides under glaze or single color tiles are preferred. Tile which is used in addition to different material types such as brick (Aslanapa, 1965, p.11; Acun, 1999, p.38, Fig. 33; Mülâyim, 1982, p.51-52), plaster (Karaçağ, 2002, p.22, 122), stone, take part in the compositions composed of bricks with glazed or without glazed more prevalent than the others. Tile inlaying technique on stone is observed in the limited number of building in the Medieval Anatolian Turkish Architecture. Although there isn't an extensive study including all of the mentioned structure, either only the names of the structures or a limited number of assessments are published in the publications.

2. Method

Tile is one of the prevalent decoration elements in the Turkish-Islam architecture has taken place lot of quality publications with regard to period, technique, mode characteristics. But, first time with this study, tile inlaying technique on stone is investigated on the buildings like mosque, madrasah, tomb, imaret and inn between 13th and 15th centuries. In the context of the subject, 16 buildings are investigated chronologically and location, shape, color and composition of every tile inlaying is given separately with their characteristics. Besides, the similarities between the buildings towards each other are provided for assessment of the tile inlaying technique on stone as a whole.

3. Subject

Such as stone, wood and various materials are carved some parts within the composition, in these parts replacing properly the cut the different materials. It is called inlay technique created with this way (Arseven, 1947, p.905). Every mosaic tile pieces are prepared by specially by cutting (Aslanapa, 1965, p.11). This application whose first examples are performed in the Anatolian Seljuk period and continued under the Menteseoglu and Karamanid period and more developed examples of this technique in the Ottoman period is also provided. Between the 13th and 15th centuries placing of small tile pieces on to the stone surfaces by inlaying is exultingly preferred for big tile sheets covering the external surfaces.

Since the 13th century tile ornaments prepared by inlaying on stone are observed in the limited number of samples. **Konya Alaeddin Mosque** which is completed in this century and one of the foremost architectural artifacts of these century is a building in which the tile inlaying is applied. The building which is started to build in the period of Mesud I and continued under Kılıç Arslan II and İzzettin Keykavus and completed in the period of Alaeddin Keykubat. In the period of Alaeddin Keykubat a tile epitaph which produced with the under glaze technique and shaped as a round plate is placed in the pediment of the door which opens the west side of the north front of the building. Two curbs, one is thick and one is thin is found on the epitaph.

In external thick curb with white sulus “*es-sultân-ül-mu’azzam ‘Alâ-üd-dünyâ v’eddîn*” and in the internal thin curb over the white surface with dark blue sulus H. 616-617’de (M.1220) build by *Kerimeddin Erdişah* (Arık, 2007, p.55) is written (Figure 1).

In the second half of the 13th century decorations tile inlaying on stone are continued to be seen. In the portal of the **Tokat Gök Madrasah** which dated in the period of Anatolian Seljuq this decoration is observed. From the foundation books it is found that the building is constructed in the period of Seljuk statesmen Muinüddin Süleyman Pervâne (1257-1277) (Şimşirgil, 1992, p.233). Portal of the madrasah is walled with the red and yellowish stones in an alternating order. In the gussets of the depressed door arch the turquoise colored tiles are placed with inlaying in the hexagon shaped rosette (Menevşe, 2010, p.96, 187, Çiz.7; Koçyiğit, 2015, p.246, Fig.7-8) (Figure 2). Ş. Yetkin states that the name “Ali” is repeated three times in the turquoise colored rosettes (Yetkin, 1972, p.95-96). Tiles inside right rosette had fallen in current day.

In the 14th century Anatolian Turkish Architecture usage of tile inlaying technique on stone is continued. In this period mosaic tiles are used in front of the iwan of the mihrab side of **Aksaray Zincirli Madrasah’s** (1336-1337) which was built by Karamanid Yahsi Beg (Sözen, 1970, p.34-35, 37, 39; Kutlu, 2012, p.198, 200). But, only the traces of the tiles were inlaid between the motifs which are carved on stone with a geometrical motif (Sözen, 1970, p.37; Kutlu, 2012, p.200).

In the 15th century decorations formed from tile inlaying technique on stone was increased. **Balat İlyas Bey Mosque (1404)** which was constructed by **Balat İlyas Beg** in the Mentese Principality period was set an example for the subsequent buildings with its frontal decorations. The visual effects of the front is increased one more fold with decoration made from tiles on the stone working (Arık, 2007, p.178-180). The tiles inlaying on stone examples haven’t been observed before in the front and side fronts of the building. Two side wings of the present triple entrance front the tiles are padded with a part of a geometrical pattern and a predetermined order. Sixteen handed star on the pediment of relief arch of the west side, turquoise tiles inlaid (Figure 3). The star motifs composed of turquoise tiles are placed around the pentagons that surround these arms. In the center of the medallion of the bottom surface of the Bursa arch there are octagon patterns and turquoise pentagons around these patterns and in the outermost arrow heads and triangles are placed (Figure 4). In the bottom surface of the east side arch tile inlayings are observed just like the west side. The repetitions of the triangle polygonal motifs are placed in the center where the octagon is located. Even though the turquoise colored tiles are dominant in this composition, tiles with the eggplant purple are also used (Figure 5). Nowadays, both of the octagons which are located in the center of the arches are empty and it is understood that the tiles have fallen. The decorations performed on the bottom surface of the arch cannot be seen from the facade; their presence are only understood by standing over the door and looked upwards. It is understood that here the tile decorations were produced in a manner that is exposed to environment less. In the window pediments of the side fronts of the building more limited amount of tiles are placed than the facade. Tile in the shape of small triangles are padded between the geometrical patterns arranged according to the eternity principle (Gök, 2002, p.313-315) (Figure 6). Tile decorations of pediment of south lower window in the east facade there are alternately ordered twelve armed star which are turquoise or eggplant purple pentagons around these patterns and twelve armed star which is in the middle of panel, is larger than both sides of the others (Figure 7). Decorations of pediment of north lower window in the east facade turquoise tile are inlaid in the half octagon. And also in this decorations are used grey and claret red stone (Figure 8). Besides in the panel located in the ceiling of the window on the western wall of the building there is decoration developed from a twelve armed star, and it understood from the current traces that all of these included decorations made by tile inlaying technique (Gök, 2002, p.315) (Figure 9).

Bursa Yıldırım Mosque (late 14th century), is the major building of the complex which is constructed by Ottoman Sultan Bayezid I in Bursa (Özbek, 2002, p.184). Yıldırım Mosque which has a zawiya or tabhane plan scheme, the grey marbles are used in all of the body walls. In this building decorations built by tile inlaying in a limited area is placed. In the mihrab of the narthex of the building which has got seven rows of the muqarnas is located tile decoration. This decoration has tile star form with three arms tile in the ends and in the middle has rectangle shape. And also five armed stars inlaying in to the marble (Özbek, 2002, p.186, Fig.189) (Figure 10-12).

Bursa Green Mosque (1413-1421), is an inverse T planned building which constructed by Çelebi Mehmet in the Early Ottoman Period (Craswell, 1998, p.14; Özbek, 2002, p.325). It is observed that the tiles are padded in the west, east and south fronts of the buildings around the windows in the stone. In the windows on the western and eastern fronts a symmetrical decoration pattern is used (Özbek, 2002, p.338, Fig.368) (Figure 13). In this front, tiles are emphasized using around the four marble cover windows by turquoise colored stripe shaped. It is seen that the tile decorations formed by palmet motifs aligned side by side, surrounding from three sides the lower floor windows (Figure 14-15). Tile decoration found in the two windows in the south front, separated from others. Mihrab side is emphasized externally with these tiles (Özbek, 2002, p.343, Fig.378-379). Besides, Y. Demiriz states that tiles are padded in stone panels on the ceilings of windows in the Bursa Green Mosque (Demiriz, 1979, p.345, 363, 403, Fig.264, 293, 357).

In the **Bursa Green Madrasah (1421)** again built by Çelebi Mehmet, intensive decorations made by tile inlaying technique are placed in the pediment of the windows. The pediments made as lancet window is padded with turquoise colored tiles into the grey colored stones (Demiralp, 1999, p.71, Şek. 40). Tiles in the north front are triangle, square and lozenge shaped (Figure 16-20). The ones in the east, west and south fronts are all square shaped tiles (Figure 21-23). Because the entrance to the building is located in the north, this side is emphasized by differentiating the decorations here.

Decorations made by tile inlaying are also observed in the **Konya Ereğli Great Mosque (1426)** which was built by Karamanid İbrahim Beg. Curbs decorated with tiles are seen in the body of the minaret. There is also a decoration made by tile inlaying technique in a limited space. Under the balcony of the minaret, there are tiles which are made in turquoise surface with various geometric decorations black color placed in the muqarnas nests are present (Öney, 1976, p.51) (Figure 24).

Edirne Shah Melek Mosque (1429), is built by Shah Melek in the period of Murad II (Ünver, 1956, p.26). Except from the entrance of the building in the other fronts alternative masonry composed of stones and bricks are employed. Only the entrance is walled with cut stones. In this building the decorations made with tile inlaying is present in the portal. A decoration curb was surrounding three sides of the portal but only a very small part of this decoration remains today. In this decoration curb, repeated a cufic writing which is read as "*Allahu Ganiyyûn*" by S. Ünver and "*Allah gani*" by B. Ersoy is padded with turquoise colored tiles (Ünver, 1956, p.27; Ersoy, 1992, p.51, Fig.4, Plate.3) (Figure 25-27). Nowadays tiles have observed many of them falling.

Karaman İbrahim Beg Imaret (1432) which was built by Karamanid İbrahim Beg II is come to front by its mihrab which is produced by colored glaze technique and exhibited in the Tiled Pavillion currently. Besides both in the portal and the minaret limited tile usage is present. There is palmetted turquoise tiles were on the door and tiles with similar characteristics could be seen on the minarets side close to the balcony (Öney, 1976, p.51). Curb which is produced by placing side by side thin stripes shaped of a three sliced arch surrounded the minaret and decoration is enriched with a palmet erected from the middle part of the peak points. Besides this composition is bordered with turquoise colored striped from two sides (Figure 28-29).

In the epitaph of the **Bursa Seljuk Hatun Mosque (1450)**, it is written that the mosque is built by Seljuk Hatun who is the daughter of the Çelebi Sultan Mehmed. In the building which has a alternating wall pattern composed of stones and bricks, a decoration which was made by tile inlaying on the facade of the three unit narthex is present. In the pediment of the middle pointed arch a composition composed of six armed stars formed as a result of hexagon stones are surrounded by dark blue triangle tiles (Gök Gürhan, 2007, p.218) (Figure 30-31).

İstanbul Mahmud Pasha Tomb (1474) is grabbing attention as a building where most intensive and beautiful samples of tile inlaying technique on stone (Aslanapa, 1965, p.18). Tomb was built for Mahmud Pasha who was a grand viziership and chief admiral of Mehmet the Conqueror and executed in H.878/M.1473-1474 (Daş, 2007, p.221). Tomb was built with clean cut stone in an internal and external octagon plan. Upside-down two windows were placed in the external surfaces of the entrance facade. Fronts are padded with geometrical patterns composed of turquoise and eggplant purple tiles which continued to the starting from the top of the lower row of windows that continued until the eaves (Ayaşlıoğlu, 1947, p.157, Lev.1) (Figure 32-33). Apart from the entrance front the decorations on the other walls designed similarly apart from the alternating tile colors. Curbs that encircled every front three sides are formed by repetition of compositions composed of eight armed stars in the middle surrounded by five armed stars (Figure 34). Around of the upside windows are surrounded by guilloche sequence. Five armed star figures were also placed in the spandrels. In the rectangular panels between the two windows, a design composed of six armed stars at the center and hexadecagon that intersects with each other (Daş, 2007, p.220) (Figure 35). In fact with its decoration program, an effect of Anatolian Seljuk and Persian architecture was tried to be given.

A zawiya, a masjid and a tomb is built by Hamza Beg son of Karayuluk Osman Beg who was one of the Aqqoyunlu rulers in Mardin. Only the **Hamza-i Kebir Tomb (1438)** which is built for Hamza Beg and composed of square place covered by squinched dome and later arranged as cross like shape composed of barrel vaults remained today (Sözen, 1981, p.148, 149, Fig.111; Gündoğdu, 2002, p.162-163). The tomb built from clean cut stones. In the pediment of the lancet arch of the portal in the building has a decoration which is made by tile inlaying technique. There are eight armed star cut as an octagon over the monolithic solid and pentagon tiles surrounding the star in two lines. Here, it is observed that dark blue and turquoise colored pentagon tiles are placed alternately (Sözen, 1981, p.148, 149, Fig.111) (Figure 36-37).

Skopje Pasha Beg Tomb (early or middle 15th century) which is placed at the south east corner of the Skopje İshak Beg Mosque is accepted to build for small brother of the İshak Beg who was nicknamed Cray Pasha (Özer, 2006, p.113). Building which is constructed as a hexagon planned is covered by a dome which is carried by and polygon drum. Body wall of the building is walled with alternating two colored clean cut stones. On the corners of the blind pointed arches built on the second floor level, tile decorations are present. In this parts six armed stars and rosettes produced by inlaying turquoise and dark blue tiles are present (Özer, 2006, p.113-115, Fig.244-245, 247-250; Abaz, 2012, p.114) (Figure 38-40)

Safa (İparlı) Mosque (middle 15th century ?) (Sözen, 1981, p.51) is built by Long Hasan who was one of the Aqqoyunlu rulers in Diyarbakır (Baş, 2006, p.74). In pad part of the minaret, half octagon and arrow head shaped tiles are inlayed among the eight armed stars placed side by side in a shape of broken line (Yıldırım, 2001, p.34, 36, Fig. 45-48; Baş, 2006, p.77) (Figure 41).

The tile inlaying on stone decorations are present in the late 15th century. **Bursa Koza Inn (1491)** is designed by architect Abdul-Ula Pulah Shah and built by Sultan Bayezid II in the Ottoman Period (Baykal, 1946, p.6-7). Building which is located in the Inn's district in Bursa, has a rectangular plan and built as a two stored internal city inn. Facades of the inn established from stone and brick and the portal is walled from clean cut stones. Turquoise colored tiles are placed on externally carried arch gussets erecting all way among the facade of the building. The

geometrical decoration which is formed by suitable star patterns are limited with a thin stripe (Figure 42).

4. Assessment

It can be seen that the brick usage left its place to stone because stone become the major building material in Anatolian Turkish Architecture (Mülayim, 1982, p.80; Ödekan, 2008, p.348). Besides, in the early Ottoman architectures samples in Bursa there are structures which include brick and tile together and usage of stone and tile is also observed together (Özbek, 2002, p.384-386, Fig. 395-402).

Tile inlaying on stone method is employed in different building types such as mosque, madrasah, tomb, imaret and inn. Among the mosques which these decorations are observed in the *Konya Alaeddin Mosque* (first quarter of the 13th century), *Balat İlyas Beg Mosque* (1404), *Bursa Yıldırım Mosque* (late 14th century), *Bursa Green Mosque* (1421), *Konya Ereğli Great Mosque* (1426), *Edirne Shah Melek Mosque* (1429) and *Bursa Seljuk Hatun Mosque* (1450). In the Anatolian Turkish architecture first example of tile inlaying technique on stone has been seen in the beginning of the 12th century (Mülayim, 1982, p.51). But, *Divriği Kale Masjid* (1181) is not among our examples because it is an 12th century example. Decorations made by this technique are also seen in the *Divriği Kale Masjid* (1181) which is accepted as the first building and built by Seljuk Governor Melik Shehinsha Seyfeddin son of Mengucek. In the arch gussets of the portal of the building, tiles are used in the geometrical decorations shaped like brick and dark blue and turquoise colored tiles inlayed on the nests opened as a hexagon at the center of the designs composed of six armed stars (Arik, 2007, p.40-41; Mülayim, 1982, p.51). The building is also important with its decoration made by tile inlaying technique on stone.

Mosque is the most intense seen structure type of tile inlaying technique on stone. And also madrasah buildings come after the mosque. These are included *Tokat Gök Madrasah* (1257-1277), *Aksaray Zincirli Madrasah* (1336-1337) and *Bursa Green Madrasah* (1421). Decorations made with inlaid tile have been included in the tombs. The most intense instance of this is found in all side of the *İstanbul Mahmut Pasha Tomb* (1474). *Mardin Hamza-i Kebir Tomb* (1438) and *Skopje Pasha Bey Tomb* (beginning or middle of the 15th century) was applied to a certain extent. Decoration of tile inlaying on stone is located in the minaret of İmaret. *Karaman Ibrahim Bey Imaret* (1432) is remarkable with tile decorations. As well as in the *Bursa Koza Inn* (1491) inn architecture is found decorations made with this technique.

Decorations made by tile inlaying technique on stone are placed in principally curbs of the portal, arch gussets, pediments or internal surfaces; window edgings, pediments and ceilings; in front of iwan; minaret bodies or balconies muqarnas nests; muqarnas nests frontals mihrabs of narthex. Besides the most of the external facade surfaces this technique is observed. Decoration made by this technique is used more limitedly in the internal surfaces and can be seen only the window openings ceiling.

It is determined that turquoise and even rarely eggplant purple or dark blue one color glazed tiles are used. Making explicit of the decoration by forming strong color contrasts through padding of the tiles in some geometrical decorated compositions on stone surfaces. Together with turquoise colored tiles which are padded with these kinds of patterns, diversification has been achieved sometimes by eggplant purple. Most of the tiles made by this technique are composed of square, triangle, lozenge and star shaped designs. Besides, there are examples can be seen among palmets. Mostly these tile pieces are used in geometrical compositions. Tile being a weak material according to stone so the majority of the tile samples are came obligation to prepare as quite small-sized. Especially decorations created to the tiles inlaid on stone, geometric decoration are processed much more than plant ornamentation. With the effects of

traveler masters (Öney, 1992, p.10) unity of style is formed at this technique in various regions of Anatolia in the 13th and 15th century.

Decoration made by tile inlaying technique on stone is observed also in the building where the colored masonry is applied. For example, *Tokat Gök Madrasah (1257-1277)*, *Balat İlyas Beg Mosque (1404)* and *Skopje Pasha Beg Tomb (early or middle 15th century)* can be given. In some examples this decoration are used in building which contained alternative wall composition and composed of stone and brick. Among them *Bursa Green Madrasah (1421)* and *Bursa Seljuk Hatun Mosque (1450)* are present. In some buildings facades are walled with alternating walls composed of stone and brick and portal are built from clean cut stones. In the *Edirne Shah Melek Mosque (1429)* and *Bursa Koza Inn (1491)* decorations made by tile inlaying are placed in the portal.

When minarets built with glazed and unglazed bricks started to leave their places to ones built with stones also the decorations of the minarets started to differ. Black colored tiles over the turquoise surface among the low row of the balcony mukarnasses in *Konya Ereğli Greet Mosque (1426)* and tile curb produced by placing turquoise palmets in the body part of the minaret of the *Karaman İbrahim Beg Imaret (1432)* are eliminated monotony appearance of the minaret and wanted to give movement. And also the same decorations of tile inlaying on stone from in the minaret body of *Safa (İparlı) Mosque (middle 15th century?)* which are repeated in the *Melik Ahmet Pasha Mosque in the period of Ottoman* in the 16th century (Sözen, 1971, p.95, 97; Baş, 2006, p.261).

The compositions formed with tile inlaying technique on stone according to infinity principle created movement in the facades. The applications of this technique which we have seen the limited usage of it is used generally on the facade of the building and besides side and south fronts are preferred. It is used in *Bursa Green Madrasah (1421)* in the east, west and south fronts and since the same masters are worked both in the mosque and madrasah in *Bursa Green Mosque Complex*, the tile inlaying had a very broad application.

Decoration which is developed from the twelve armed star on the stone made panel on the window side of the west wall is placed in the *Balat İlyas Beg Mosque (1404)* and this decoration is fully padded with tiling is understood from the current traces (Gök, 2002, p.315). This same decoration is also placed in the window ceilings of the *Bursa Green Mosque* (Demiriz, 1979, p.345, 363, 403, Fig.264, 293, 357).

Tile inlaying technique on stone is continued in 16th century in the hexagon stars which is patterned with the colored glaze technique in entrance front of the *İstanbul Şehzadeler Tomb (1522)* (Yenişehirlioğlu, 1985, p.5, 23, Fig.11). In this building, the tiles placed on the stone were designed as big hexagon tile plates. The padding of different shaped and generally small amount of padding requires mastery. At the same time, these kinds of works that require labor was not preferred since they may represent time loss for the İznik workshops and left its place to multi colored tile plates (Aslanapa, 1965, p.11). Anatolian tile art, started to lose its quality from the middle 17th century; the İznik left its place as a production center to Kütahya (Aslanapa, 1965, p.24-25). In the second national architecture period of the Republic Period architecture (1940-1950) tile inlayings on stone was started to used as a decoration element again (Sözen 1973; Sözen 1984).

Anatolian Turkish Architecture especially in the portals and mihrabs have become widely used most of the geometric composition (Erdmann, 1961, 86-87, Fig. 133, 136; Schneider, 1980; Mülâyim, 1982; Özbek, 2002, p.559-564), preferred such as wooden (Eroğlu, 2014, p.901, 910, Fig. 9; Eroğlu, 2016, p.183-189), tile (Aslanapa, 1965, p.16-17; Öney, 1976), illuminated manuscript (Demiran Aksoy, 2012, p.151, Fig.3-5, 7-11; Demircan Aksoy, 2013, p.350, Fig. 3-4, 10, 15-18) are preferred in other fields and at the same time it is seen there is a pattern unity in these areas.

5. Conclusion

In the Turkish Architecture of 13th to 15th century, tile inlaying technique on stone is used in buildings such as mosque, madrasah, tomb, imaret and inn. Because of tile is not resistant to stone this technique is used in a frame of a decoration program, with the inlaying technique both internal and external areas, generally as a single colored glazed tiles limitedly. With respect to its limited appearance both in Anatolia and Balkans, decoration program containing tile inlaying on stone application were enriched and provide movement in the places where it is applied.

6. References

- Abaz, N. (2012). *15.-17. Yüzyıllar Arasında Osmanlı Dönemi Üsküp Şehrini Mimari Gelişimi [The Architectural Development of the Ottoman Skopje between the 15th and 17th Centuries]* (Unpublished master dissertation). Mimar Sinan University, İstanbul, Turkey.
- Acun, H. (1999). *Manisa'da Türk Devri Yapıları [Turkish Period Architecture in Manisa]*. Ankara: Turkish Historical Society Publications.
- Arık, O. (2007). Çininin Tarihçesine Kısa Bir Bakış. [A Brief Look at the History of Ceramics]. *Toprağın Hazinesi Çini: Selçuklu ve Beylikler Çağı Çinileri [Ceramic The Treasure of Soil: Ceramics from the period of Seljuks and Anatolian Principalities]*, R. Arık & O. Arık (Eds.) (pp. 25-190). İstanbul: Kale Group Publications.
- Arseven, C. E. (1947). "Kakma" maddesi ["Inlay" head]. *Sanat Ansiklopedisi [Art Encyclopedia]*. II. İstanbul: National Education Press.
- Aslanapa, O. (1965). *Anadolu'da Türk Çini ve Keramik Sanatı [Turkish Tile and Stoneware Art in Anatolia]*. İstanbul: Turkish Culture Research Institute Publications.
- Ayaşlıoğlu, M. (1947). İstanbulda Mahmut Paşa Türbesi [Tomb of Mahmut Pasha in Istanbul]. *Güzel Sanatlar [Fine Arts]*. 6. İstanbul: National Education Publication. 148-158.
- Baş, G. (2006). *Diyarbakır'daki İslami Dönem Yapılarında Süsleme [Decorations in the Islamic Period Architecture in Diyarbakir]*. I. (Unpublished doctorate dissertation). The Hundredth Year University, Van, Turkey.
- Baykal, K. (1946). *Bursa Koza Hanı Ve Mescidi [Bursa Koza Han and Masjid]*. Bursa.
- Craswell, J. (2012). *İznik Pottery*. London: British Museum Press. Reprinted.
- Daş, E. (2007). *Erken Dönem Osmanlı Türbeleri 1300-1500 [Early Period Ottoman Tombs 1300-1500]*. İstanbul: The Firmament Publications.
- Demiralp, Y. (1999). *Erken Dönem Osmanlı Medreseleri (1300-1500) [Early Period Ottoman Madrasas (1300-1500)]*. Ankara: Ministry of Culture Publications.
- Demircan Aksoy, Z. (2012). XIV. Yüzyıl Anadolu Türk Tezhip Tasarımlarının Dönemin Mimari Bezemelerine Yansıması [XIV. Century Anatolian Turkish Illumination Design Reflection to the Period of Architectural Decorations]. *Kuzey Anadolu Beylikler Dönemi Sempozyumu Bildiriler Çobanoğulları, Candaroğulları, Pervaneoğulları, 3-8 Ekim 2011 [Symposium of North Anatolian Emirates Period, Proceeding Çobanoğulları, Candaroğulları, Pervaneoğulları, 3-8 October 2011]*, Çankırı: Çankırı Karatekin University Press, 146-170.
- Demircan Aksoy, Z. (2013). XIV. Yüzyılda Aydınoğlu Beyliği Hamiliğinde Hazırlanmış Olması Muhtemel İki Kur'an-ı Kerim'in Tezhip Tasarımları [XIV. Century of Pregnancy of Aydinoglu Principality Possible to Being Prepared Two Koran Karim Illumination Designs], *Sanatsal Göstergeler [Artistic Indicators]*, Ankara: Ankara University Press, 345-362.
- Demiriz, Y. (1979). *Osmanlı Mimarisi'nde Süsleme (1300-1453) [Decoration in Ottoman Architecture (1300-1453)]*. İstanbul.

- Erdmann, K. (1961). *Das Anatolische Karavansaray des 13. Jahrhunderts*, II und III, Berlin: Verlag Gebr. Mann.
- Eroğlu, S. (2014). Gaziantep Ahmet Çelebi Camisi; Kadınlar Mahfili'nin Kalemîşi Süslemeleri [*Gaziantep Ahmet Çelebi Mosque, Kalemisi Decorations On Women's Mahfil*]. *Turkish Studies International Periodical For The Languages, Literature and History of Turkish or Turkic*. 9(5) Spring, 901-927, Ankara.
- Eroğlu, S. (2016). Gaziantep Camilerinin Ahşap Üzerine Kalemîşi Süslemeli Müezzin Mahfilleri [Kalemisi Ornamented Wooden Muezzin Loges of the Mosques in Gaziantep]. *SDÜ Fen Edebiyat Fakültesi Sosyal Bilimler Dergisi [SDU Journal of Social Sciences Faculty of Arts and Sciences]*. April, 37, 181-208.
- Ersoy, B. (1992). Edirne Şah Melek Camii'nin Tanıtımı Ve Mimari Özellikleri Hakkında Düşünceler [Considerations on the Promotion of Edirne Şah Melek Mosque and its Architectural Features]. *Sanat Tarihi Dergisi [Journal of Art History]*. 6, 47-61, Lev. XVI-Lev. XX.
- Gök, S. (2002). Balat İlyas Bey Camii'nin Taş Süslemeleri Hakkında Bir Araştırma [A Study on the Stone Decorations of Balat İlyas Bey Mosque]. *Gönül Öney'e Armağan Öney 10-13 Ekim 2001, Bildiriler [A Gift to Gönül Öney 10-13 October 2001, Proceedings]*, İzmir: Ege University Press, 309-320.
- Gök Gürhan, S. (2007). Bursa Ve Edirne Eserleri Işığında Çiniler [Ceramics in the Light of Artworks from Bursa and Edirne]. G. Öney & Z. Çobanlı (Eds.). *Anadolu'da Türk Devri Çini Ve Seramik Sanatı [Turkish Period Tile and Ceramic Art in Anatolia]* (pp. 215-229). İstanbul: Ministry of Culture and Tourism Publications.
- Gündoğdu, H. (2002). Akkoyunlu Devri Mimarisi. [Aqqoyunlu Era Architecture]. *Türkler [Turks]*, (pp.156-165). 8. Ankara: New Turkey Publications.
- Karaçağ, A. (2002). *Beylikler Devri Mimarisinde Alçı Süsleme [Plaster Decoration in the Period of Anatolian Principalities]*. I. (Unpublished doctorate dissertation). Seljuk University, Konya, Turkey.
- Koçyiğit, F. (2015). Üslupsal Özellikleri Temelinde Tokat Gök Medrese'ye Yeniden Bakış. [A Fresh Look at Tokat Gök Madrasa on the Basis of Stylistic Aspects]. *Zeitschrift Für Die Welt Der Türken Journal Of World Of Turks*, 7(2), 243-260.
- Kutlu, İ. (2012). Aksaray Zinciriye Medresesi [Aksaray Zinciriye Madrasah]. *Dini Araştırmalar [Religious Studies]*. July-December, 15/41, 197- 216.
- Menevşe, Ş. (2010). *13.-14. Yüzyıl Tokat Merkez Yapılarında Taş Süsleme [Stone Decorations on the 13th to 14th century Tokat Centre Buildings]*. (Unpublished master dissertation). Gazi University, Ankara, Turkey.
- Mülayim, S. (1982). *Anadolu Türk Mimarisinde Geometrik Süslemeler [Geometric Decorations in Anatolian Turkish Architecture]*. Ankara: Ministry of Culture and Tourism Publications.
- Ödekan, A. (2001). Mimari Bezeme Olarak Çini [Ceramics as Architectural Ornament]. D. Kuban (Ed). *Selçuklu Çağında Anadolu Sanatı [Anatolian Art in the Seljuk Era]* (pp.347-354), İstanbul: The Yapı Kredi Culture and Art Publishing.
- Öney, G. (1976). *Türk Çini Sanatı [Turkish Tile Art]*. İstanbul: The Yapı Kredi Culture and Art Publishing.
- Öney, G. (1992). *Anadolu Selçuklu Mimari Süslemesi Ve El Sanatları [Architectural Decoration and Minor Arts In Seljuk Anatolia]*. Ankara: Turkish Work Bank Culture Publishing.
- Özbek, Y. (2002). *Osmanlı Beyliği Mimarisinde Taş Süsleme [Stone Decoration in the Architecture of Ottoman Principality]*. Ankara: Ministry of Culture and Tourism Publications.
- Özer, M. (2006). *Üsküp'te Türk Mimarisi (XIV.-XIX. Yüzyıl) [Turkish Architecture in Skopje (XIV-XIX Centuries)]*. Ankara: Turkish Historical Society Publications.

- Schneider, G. (1980). Geometrische Bauornamente der Seldschuken in Kleinasien. Unter Mitarb. von Werner Brüggemann. Berlin, Deutschland: Verkäufer Speyer & Peters GmbH.
- Sözen, M. (1970). *Anadolu Medreseleri: Selçuklu ve Beylikler Devri [Anatolian Madrasahs: The Period of Seljuks and Anatolian Principalities]*. I. İstanbul: İstanbul Technical University Publications.
- Sözen, M. (1971). *Diyarbakır'da Türk Mimarisi [Turkish Architecture in Diyarbakır]*. İstanbul: Publications of Presentation and Tourism Association in Diyarbakır.
- Sözen, M. (1973). *50 Yılın Türk Mimarisi [Turkish Architecture of the 50 Year]*. Ankara: Turkish Work Bank Culture Publishing.
- Sözen, M. (1981). *Anadolu'da Akkoyunlu Mimarisi [Aqqoyunlu Architecture in Anatolia]*. İstanbul: Innovation Press.
- Sözen, M. (1984). *Cumhuriyet Dönemi Türk Mimarlığı [Republic Period Turkish Architecture]*. Ankara: Turkish Work Bank Culture Publishing.
- Şimşirgil, A. (1992). XVI. Yüzyılda Tokat Medreseleri [Madrasahs of Tokat in the XVI. Century]. *Tarih İncelemeleri Dergisi [Journal of History Examination]*. VII, 227-242.
- Ünver, S. (1956). Edirne'de Şah Melek Paşa Camii Nakışları Hakkında [On the Embroidery of the Şah Melek Mosque in Edirne]. *Vakıflar Dergisi [Journal of Foundations]*. III, 27-30.
- Yenişehirlioğlu, F. (1985). *Les Grandes Lignes De L'evolution Du Programme Decoratif En Ceramique Des Monuments Ottoman Au Cours Du XVI^{Eme} Siecle*. Ankara: Turkish Historical Society Press.
- Yetkin, Ş. (1972). *Anadolu'da Türk Çini Sanatının Gelişmesi [The Development of Turkish Tile Art in Anatolia]*. İstanbul: İstanbul University Literature Publishing.
- Yıldırım, Ş. (2001). *Diyarbakır Yapılarında Çini Süsleme [Tile Decorations on the Buildings in Diyarbakır]*. (Unpublished master dissertation). Ankara University, Ankara, Turkey.
[http://www.diyarbakirkulturturizm.org/Yapit/Details/CAMILER/16/Safa--Parli--Camii-/170-\(10.05.2016\)](http://www.diyarbakirkulturturizm.org/Yapit/Details/CAMILER/16/Safa--Parli--Camii-/170-(10.05.2016)).

7. Figures



Figure 1. Tile decoration in the pediment of door on the north front of atrium in the Konya Alaeddin Mosque (Arık, 2007, p.55) **Figure 2.** Decorations of tile inlaying on stone in the portal of the Tokat Gök Madrasah



Figure 3. Pediment of relief arch on the west side and decorations of tile inlaying on stone

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Figure 4-5. Tile decorations of on the middle of the bottom surface of the Bursa arch



Figure 6. Tile decorations of pediment of south lower window in the west facade (From S. Eroğlu)

Figure 7. Tile decorations of pediment of south lower window in the east facade



Figure 8. Tile decorations of pediment of north lower window in the east facade (From S. Eroğlu)

Figure 9. Decorations in the ceiling of the window in the south part of the western wall

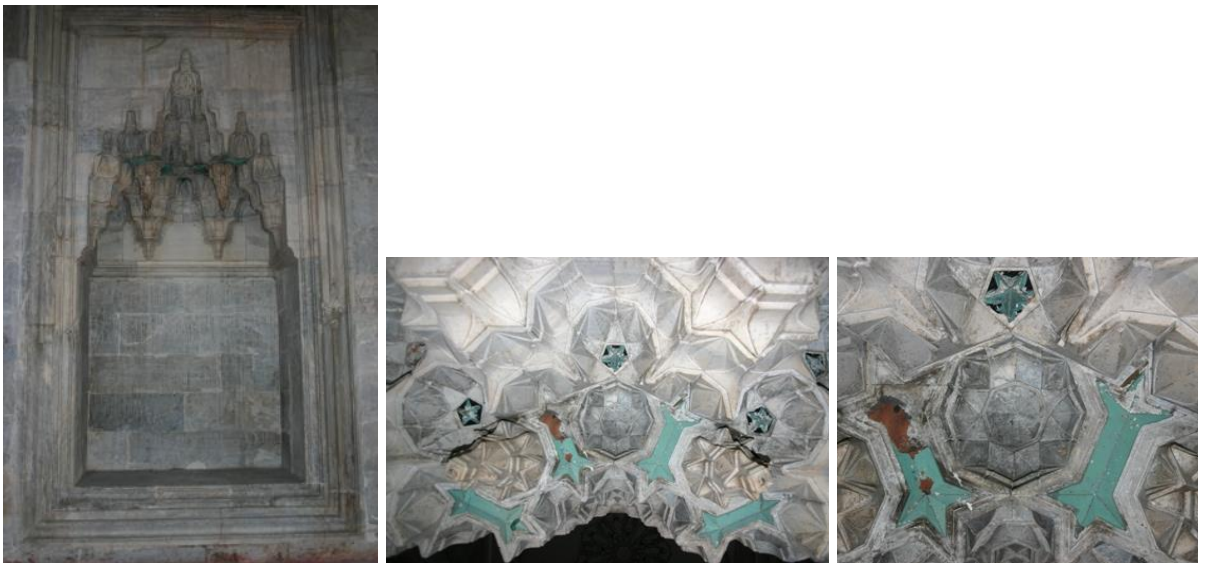


Figure 10-11-12. One of mihrabiye in narthex in the Bursa Yıldırım Mosque and tile inlaying on stone at muqarnases of mihrabiye and detail of decorations (From S. Eroğlu)

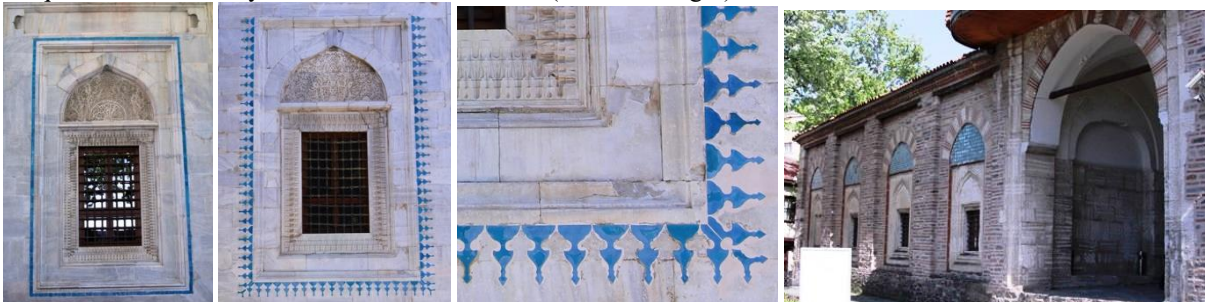


Figure 13. One of window from west front with decorations of tile inlaying on stone

Figure 14-15. One of window from south front with decorations of tile inlaying and detail of decorations

Figure 16. Aspect from north front of the Bursa Green Madrasah



Figure 17-18-19-20. Tile inlaying decorations in the pediment of windows on the north front (From S. Eroğlu)



Figure 21-22-23. South-east and west front of the Bursa Green Madrasah, one of window with tile decorations



Figure 24. Tile inlaying decorations under the balcony of the minaret

Figure 25-26. Portal of the mosque, detail from turquoise colored tile inlaying (Y. Özbek, 2002, Fig. 418, 420)

Figure 27. Figure from detail of the decoration of portal (B. Ersoy, 1992, Fig. 3)



Figure 28-29. Turquoise tiles decorations in the minaret of the Karaman İbrahim Beg Imaret

Figure 30-31. In the pediment of the middle pointed arch of the Bursa Seljuk Hatun Mosque and tile decorations

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Figure 32-33: Drawing of front and decoration (M. Ayaşoğlu, 1947, p.154, plate.1)

Figure 34-35: Detail of decorations of tile inlaying on stone



Figure 36-37. Portal of the Hamza-i Kebir Tomb and tile decorations in the pediment



Figure 38. Front facade of the Skopje Pasha Beg Tomb

Figure 39-40. Decorations of stars and rosettes inlaying turquoise and dark blue tiles in the pediment of arch



Figure 41. Decorations of tile inlaying on stone in pad part of the minaret in the Safa (İparlı) Mosque
([http://www.diyarbakirkulturturizm.org/Yapit/Details/CAMILER/16/Safa--Parli--Camii-/170-\(10.05.2016\)](http://www.diyarbakirkulturturizm.org/Yapit/Details/CAMILER/16/Safa--Parli--Camii-/170-(10.05.2016)))



Figure 42. Decorations of turquoise colored tiles in spandrels of arch in the portal of Bursa Koza Inn

Importance of Health Tourism

Makbulenur Bekar

1. Introduction

The meaning of the word tourism is expressed as “the trips made for the purposes of recreation, entertainment, sightseeing, recognition etc. and the totality of economic, cultural work conducted to attract tourists to a country or a region” (TLS, 2016). Tourism is one of several areas that provide activities for the progress of the country and that provide income in terms of economy (Çiçek and Avder, 2013). In fact, tourism is a social, cultural and humane service that meets the requirements for resting in terms of physical and mental health and for self-revitalization and enrichment as a result of the rapidly developing industrialization and urbanization (Aydın, 2012). For this service, social and demographic noticeable changes such as increasing levels of education, aging population, increase in the population of dual income families caused significant differences in the desire of tourism structure and travel market (Sung, 2004). In addition to this, increasing the level of education, environmental affection and awareness oriented people to wildlife. This orientation became a part of the tourism industry in time. In the world there are targets such as saving tourism from the concept of holiday tourism and shift the focus from the seashores to the inner land, expands it to every season and utilizes nature as the main material and seeks a type of tourism to carry into effect without deteriorating the nature. Tourism, with types such as cultural tourism, golf tourism, farm tourism, special interest tourism, aims to progress time-wise and space-wise (Aksoy, 2015).

Tourism industry progressing since the 20th receives more demand every day. As tourism became an important industry as of 1970s in the world, it attracted attention after the 1980s in Turkey (Çiçek and Avderen, 2013). Today the importance attributed to tourism increases every day. Health tourism has adapted to this process and taken its place in the industry.

As in other branches of tourism, the main subject health tourism is humans. In this human-oriented tourism, people want to be treated in the areas they went to and tourism demand is as well essential at this stage.

This study consists of three main sections. In the first section the concept of tourism and current importance of tourism were investigated, in the second section benefits and goals of the health tourism were determined in order to define the scope of this work. Tourism, recreation, tourism types were studied. In the third section the relationship between landscape architecture and health tourism was identified and descriptions were made. In the last section results were presented and recommendations were made.

2. Health Tourism

Those, who are in need of health services, could go on a trip to various countries for medical purposes (Ministry of Health; 2014).

Although there are various definitions on what health tourism is, it is possible to assert that these definitions stated common elements such as the purpose of travel and travel time. Simultaneous to these common elements that are taking place, receiving treatment is essential. “Health tourism could be defined as, to travel to a location other than the place of residence with the purpose of protection and development of health and treatment of illnesses, and staying in the travelled place at least for 24 hours and benefiting the tourism opportunities”. The person who travels for the defined purposes is called the “health tourist” (Özer, 2013). As the health tourists arriving in such scope are evaluated, it becomes evident that a person receiving health service from another country is beneficial for both the country and the individuals.

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Health tourism is a different type of tourism. Developing countries consider medical tourism as a tool in order to increase the country's income and employment opportunities (Yiğit, 2016). The main populace in this type of tourism are the people whose health is in poor condition and the people who are sensitive to protect their health. Today, in this system, people aim to protect and improve their health while desiring to fulfil their needs for a vacation. Due to this desire, domestic/foreign tourists, whose needs are met, provide economic support to the country. While the resulting transformation input increases its market share in the health industry, employment would increase due to new job opportunities (İrban, 2012). Possible types of health tourism, which could be included in a definition with respect to the mention of health tourism in the world, are classified in Table 1 (Altın, Bektaş, Antep, İrban, 2012).

Table 1. Types of health tourism

Health-Wellness	Treatment	Rehabilitation
SPA	Elective surgery	Dialysis
Nature tourism	Plastic surgery	Additional programs
Eco-tourism	Joint resuscitation	Elderly care programs
Mass tourism	Cardiothoracic services	Addiction treatment
Herbal remedies	Diagnostic services	
After care	Cancer treatment	
	Infertility treatment	

Turkey, constituting strong aspects in health tourism, creates the opportunity to become a center of attraction for local and foreign tourists. These reasons are as follows (Association of Turkish Travel Agencies Health Tourism Report):

- Turkey being considered among the leading countries in healthcare field.
- High tourism potentials in almost every region of Turkey (Figure 1).



Figure 1. Turkey's tourism map.

- Having a great variety of tourism opportunities in Turkey such as cultural tourism (Figure 2), religious tourism (Figure 3), marine tourism (Figure 4) (Figure 4b), nature tourism (Figure 5), health-spa tourism (Figure 6) etc. that could have a very positive impact on health services.



Figure 2. 99 Windows Sürmene house culture tourism



Figure 3. Şalpazarı Mosque cultural tourism



Figure 4. a. Istanbul marine tourism b. Marmaris marine tourism



Figure 5. Trabzon fog mountain nature tourism (By Elif KAYA ŞAHİN, 2015)



Figure 6. Pamukkale health-spa tourism (By Elif KAYA ŞAHİN, 2015)

- Turkey generally holding a good position in the service industry and the high positive impact of the service industry on the health tourism.
- Turkey being among the first countries that offered health tourism service and became experienced in this regard.
- Health care is cheaper as compared to the developed countries that sell health services.
- Abundance of medical herbs in Turkey.
- Having a variety of regulatory and government support related to health tourism.
- Lack of health services received in own country.
- The curiosity about the natural and cultural inventory of Turkey.

As the types of health tourism are investigated, a four-way classification is observed, namely; medical tourism, thermal/SPA/wellness tourism, elderly tourism and disabled tourism (Kaya, Yıldırım, Karasavuran, Özer, 2013).

Medical tourism: Medical tourism covers the medical practices or activities conducted with the demand to improve the good condition of the health tourist towards better. The condition of recovery includes medical check-up, health screening, dental therapy, heart surgery, prosthesis implantation, cancer treatment, neurosurgery, and the other operations that require qualified medical procedures (Kaya, Yıldırım, Karasavuran, Özer, 2013).

Thermal/SPA/wellness tourism: While currently tourism becomes increasingly richer by exhibiting diversity with respect to the destination, demands, people's tastes and hobbies, health tourism is transformed into a life style and designed to service to people who consider spiritual and physical beauty as well. Types of thermal tourism, which developed due to this significance of spiritual and physical beauty could be classified in three main headings. These are; climatism (benefiting fresh air) (Figure 7), thermalism (SPA) (Figure 9) and uvalism (fruit-vegetable cure treatment) (Kaya, Yıldırım, Karasavuran, Özer, 2013). An of the example of climatism could be found in Eastern Black Sea plateaus, and several examples of thermal tourism could be travertines of Pamukkale, spas of Haymana and Pool of Abraham in Sivas. These and abundance of natural beauty similar to these have the potential to support health tourism. The geopolitical situation and the effects of climate on all sides of the country are such that they can cure many diseases. The rich vegetation is of a supportive nature in this respect. Natural lands combined with the greenery and away from the city noise are the ideal spaces for thermal/spa/wellness tourism. The positive effect of the green color could speak to the spirit of the people and will allow them to feel peaceful.



Figure 7. Climatism tourism, Rize Pokut Plateau (By Gamze ÇAPKINOĞLU, 2016)



Figure 8. Thermal tourism, Pamukkale (By Elif KAYA ŞAHİN, 2015)

Elderly tourism: In recent years in health tourism, the facilities established for the care of the elderly and the trips made due to this purpose began to take place as a new kind of health tourism in the tourism activities (Kaya, Yıldırım, Karasavuran, Özer, 2013). Elderly tourism should not only be supportive in terms of medical procedures but also through various recreational activities. It is necessary to provide the elderly to be alone with the nature in special areas. The therapeutic role of nature constitutes one of the most active roles in the elderly tourism treatment.

Disabled tourism: Looking at the figures for the total number of disabled people in the world, it is possible to observe that it is over 600 million. This constitutes about 10% of the world population. The disabled, the world's largest minority, also constitute the largest private market in the world. One of the most important objectives of this market is disabled tourism (Rich & Eryılmaz, 2013). Special care clinics for people with disabilities are provided in hotels and rehabilitation centers. Centers that include different activities such as special sports for the disabled should be considered. Specifically designed travel agencies, specially designed transport vehicles, specially trained staff could provide number of services for the disabled with numerous resort and recreation options and hence provide a major contribution to their treatment

2.1. Benefits of Health Tourism

Sağlık turizmi öncelik kendi ülkesine olmak üzere yerel/yabancı tüm bireylere fayda sağlamaktadır. Bu faydalar şöyle sıralabilir;

Presence of a different tourism concept facilitates a different option for the tourists arriving to our country.

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The income from domestic and international tourists contribute to the economic wellbeing of the countries.

The facilities provided for international tourists ensure that domestic patients receive a better service.

Enables medical commerce.

Increases employment through creating new job opportunities.

Plants that could come forward in health tourism could be sold in domestic and international markets.

The countries obtain the outlook that they provide worldclass health care service. It ensures that the country has a positive image in the world.

Provides public and private sector partnership.

Increases patient satisfaction due to the services provided.

Tourism opportunities and potentials are advertised concurrently.

When planned accurately ensures the intertwining of humans and nature.

Publicity of potential areas that needs to be discovered is made. Potential areas are discovered and are offered to the tourism market.

The patients would economically contribute the country while being treated.

Employment would take place due to new business and there will be a contribution to decrease unemployment.

3. Landscape Architecture and Health Tourism

Humans are social beings. The natural resources offered by the nature are indispensable in meeting the needs. The areas that could procure tourism income and recreation facilities are the natural or cultural sites that have the necessary properties for recreation and tourism activities. In this regard, once the natural resources are viewed in terms of tourism, the extent of their additive value on tourism is obvious. The most important resources that promote tourism in a city or country are the natural resources. Tourist rate is as well dependent on natural sources. For the activities such as fishing, hunting, hiking, picnic, water sports, photo safari there is a need for the natural environment. The relationship between recreation and health tourism reinforces the relationship between human and the nature. It is therapeutical in terms of spirituality and has psychological benefits. Looking at these benefits, it is possible to assert that the landscape architects who plan the nature are directly linked with this relationship. Healing gardens, which came forward with the health tourism, are indispensable in this context since patients are even able to harvest themselves. Because being occupied with nature heals people and especially harvesting the crops they grew motivate people (Table 2).

Table 2. Plant types that could be used in the health tourism (Saraç, 2005; Acar, 2013, Tanker Koyuncu Coşkun 1998)

Name in Latin	Name in Turkish	Name in Latin	Name in Turkish
<i>Abies cilicica</i>	<i>Toros göknarı</i>	<i>Laurocerasus officinalis</i>	Karayemiş
<i>Achilla millefolium</i>	Civanperçemi	<i>Liquidambar orientalis</i>	Anadolu sığla ağ.
<i>Aconitum napellus</i>	-	<i>Linum usitatissimum</i>	Keten
<i>Allium schoenoprasum</i>	Yaprak soğanı	<i>Nerium oleander</i>	Zakkum
<i>Anethum graveolens</i>	Dere otu	<i>Ocimum basilicum</i>	Fesleğen
<i>Anthemis sp.</i>	Papatya	<i>Orchis anatolica</i>	-
<i>Artemisia dracunculus</i>	Tarhun	<i>Origanum majorana</i>	Mercanköşk
<i>Asparagus officinalis</i>	-	<i>Panax ginseng</i>	Ginseng

<i>Astragalus microcephalus</i>	-	<i>Papaver somniferum</i>	Haşhaş
<i>Atropa belladonna</i>	Güzelavrat otu	<i>Passiflora edulis</i>	Çarkifelek meyv.
<i>Calendula officinalis</i>	Aynısefa	<i>Phyllitis scolopendrium</i>	-
<i>Cannabis sativa</i>	Hint keneviri	<i>Pimpinella anisum</i>	Anason
<i>Citrus limon</i>	Limon	<i>Menthe sp.</i>	Nane
<i>Ceratonia siliqua</i>	Keçiboynuzu	<i>Pinus brutia</i>	Kızılçam
<i>Colchicum speciosum</i>	-	<i>Pinus pinea</i>	Fıstık çamı
<i>Crataegus monogyna</i>	Alıç	<i>Rhus coriaria</i>	Derici sumacı
<i>Crocus sativus</i>	Safran	<i>Rubus idaeus</i>	Ahududu
<i>Cupressus sempervirens</i>	Akdeniz servisi	<i>Ricinus communis</i>	Hintyağı bitkisi
<i>Datura stramonium</i>	Boru çiçeği	<i>Peganum harmala</i>	Üzerklik
<i>Dianthus sp.</i>	Karanfil	<i>Pisium sativum</i>	Bezelye
<i>Digitalis lanata</i>	-	<i>Punica granatum</i>	Nar
<i>Digitalis purpurea</i>	-	<i>Rosa canina</i>	Kuşburnu
<i>Delphinium taphysagria</i>		<i>Rosmarinus officinalis</i>	Biberiye
<i>Dryopteris abbreviata</i>		<i>Rubia tinctorum</i>	Kök boya bitkisi
<i>Ecballium elaterium</i>	-	<i>Rubus idaeus</i>	Ahududu
<i>Eucalyptus globulus</i>	Okalıptüs	<i>Ruscus aculeatus</i>	Tavşanmemesi
<i>Ephedra major</i>	-	<i>Salvia officinalis</i>	Adaçayı
<i>Fagus sp.</i>	Kayın	<i>Satureja hortensis</i>	Cibreska
<i>Foeniculum vulgare</i>	Rezene	<i>Sideritis congesta</i>	-
<i>Frangula alnus</i>	Barut ağacı	<i>Sorbus aucuparia</i>	Kuş üvezi
<i>Gentiana lutea</i>	Sarı centiyan	<i>Tanacetum coccineum</i>	-
<i>Ginkgo biloba</i>	Mabet ağacı	<i>Taxus baccata</i>	Adi pırsuk
<i>Glycyrrhiza glabra</i>	Meyan kökü	<i>Thymus vulgaris</i>	Bahçe kekiği
<i>Gossypium hirsutum</i>	-	<i>Tilia argentea</i>	İhlamur
<i>Glycyrrhiza glabra</i>	Meyan	<i>Tussilago farfara</i>	Öksürük otu
<i>Helichrysum plicatum</i>	-	<i>Urtica dioica</i>	Isırgan otu
<i>Hyoscyamus niger</i>	Kara banotu	<i>Urginea maritima</i>	Ada soğanı
<i>Hypericum perforatum</i>	Sarı kantaron	<i>Valeriana alliariaefolia</i>	-
<i>Juniperus drupacea</i>	Ardıç	<i>Vaccinium myrtillus</i>	-
<i>Juniperus nana</i>	Bodur ardı	<i>Verbascum sp.</i>	-
<i>Jasminum sambac</i>	Arap yasemini	<i>Vinca herbacea</i>	-
<i>Laurus nobilis</i>	Defne	<i>Viscum album</i>	Ökse otu
<i>Lavandula</i>	Lavanta	<i>Veratrum album</i>	Beyaz çöpleme
<i>Lavandula angustifolia</i>	Lavanta	<i>Quercus infectoria</i>	Mazı meşesi
<i>Matricaria chamomilla</i>	Papatya	<i>Quercus macrolepis</i>	-
<i>Melissa officinalis</i>	Limon otu		
<i>Myrtus communis</i>	Mersin		

4. Conclusion and Recommendations

Our country has an important status in terms of natural, cultural and historical resource values. Instead of leaving these features our country offer all by themselves, to render them beneficial and offer them to citizens is one of the most important opportunities. To transform these values into a universal benefit rather than keeping them local would contribute to the value of the

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country. Health tourism mentioned in this study will be supported by problems and suggestions. While people treated their health, the green texture would speak to their souls. Health tourism discussed in this study of the tourism, will be supported with problems and suggestions. These problems are the problems that descent from the general scale of the country to the specific scales. Several suggestions that could be made are as follows;

- It should be determined what health tourism is and what are its targets and primarily awareness of the local community should be raised.
- The current situation of the industry in the world should be monitored.
- Publicity regarding how the country's potentials could provide healing for the people should be conducted and the level of awareness and education should be elevated.
- As conducted for other tourism types in Turkey, the potentials inventory in health tourism area should be prepared.
- It should be revealed which features 81 provinces of Turkey have in terms of health tourism.
- The advertisement of potential health tourism determined for the regions should be communicated domestically and internationally.
- The professional education levels should be improved in health tourism industry. It should be supported with courses and seminars if necessary.
- In the projects, in which health tourism is realized, tourism should not only be considered through building but also through the green texture. While aiming to serve this industry we have to serve the nature and be constructive.
- Opportunities that facilitate the unity of the individuals that are interested in health tourism should be provided.
- Healing gardens should be developed in order to improve the health tourism.
- Plant (herb) inventory that could be helpful for the health tourism of Turkey should be prepared. Gardens with the opportunity to grow and harvest these plants in this inventory should be established.
- Along the 81 provinces and 7 regions, communication and cooperation between the associations and administrations in order to improve the health tourism awareness and level of education.
- National and international investment in the health tourism industry should be increased and various measures for this situation should be taken, the problems should be removed and better solutions should be proposed.
- Healing gardens should not be established at locations far from the city center or at locations with a problematic transportation.
- Health tourism facilities should be located to places where they could provide benefit to people and where the city's prominence increases. Alternative tourism destinations should be revealed.
- Health tourism procedures to be conducted should not address a single season for domestic utilizers. The included activities should be distributed among seasons and different features should be offered to people for four seasons.
- Different recreation opportunities should be provided in the establishments for health tourism. Opportunities for various activities such as healthy living tracks, healing gardens that facilitate self-harvesting, advanced life villas, areas for various sports, cycling tracks, nature walks should be facilitated.
- Support of landscape architects and other various disciplines should be retrieved in the attempts for health tourism by the related authorities.
- Transportation to health tourism centers should be easy, safe and affordable. In addition precautions should be taken for a safe trip for the domestic/international tourists.
- Support of recreation should be considered in the procedures to be conducted. While being away from the city noise, shoreline areas, plateau centers and regions with high historical and cultural value should be considered.

- Health tourism investments should be realized by the cooperation of public and private sectors. Thus, increase in employment and economic development would be achieved.
- Transportation from city center to natural and cultural beauties should be easy.
- Safety of life and property should be ensured through several measures both for the domestic and the international tourists.
- The main goals of our country in health tourism should be transforming the opportunities prepared for own citizens into a universal asset, and to make those who came with the purpose of health meet their demand.
- While environmental design project is prepared through landscape organization, all details regarding the disabled should be investigated and should be considered as a part of design.
- Silence and calm are very important for further age and elderly care homes. It is necessary to take the related precautions.
- It is important to keep in mind that while making people happy through conducted procedures, it is also important to recognize that each patient coming for the service contributes to the promotion of the country and to the return both morally and materially.

5. References

- Acar, C. (2011). Bitkilerndirme Tasarımı Lisans Ders Notları, [Undergraduate Lecture Notes on Planting Design], Karadeniz Technical University, Faculty of Forestry, Department Of Landscape Architecture, Turkey, Trabzon.
- Aksoy, Ö. K. (2015). *Perşembe-Fatsa Arası Kıyı Kesimi Doğal ve Kültürel Peyzaj Kaynaklarının Turizm Açısından İncelenmesi [Analysis Of Natural And Cultural Landscape Sources In Coastal Area Between Perşembe-Fatsa In Terms of Tourism]*, Doktora Tezi, Blacksea Technical University, Trabzon, Turkey.
- Altın, U., Bektaş, G., Antep, Z., İrban, A. (2012). Sağlık Turizmi ve Uluslar arası Hastalar için Türkiye Pazarı [Medical Tourism and Turkish Marketing for International Patients]. *Acıbadem Üniversitesi Sağlık Bilimleri Dergisi [Journal of Health Sciences, Acıbadem University]*, 3 (3), 157-163.
- Aydın, O. (2012). **Türkiye’de Alternatif Bir Turizm; Sağlık Turizmi** [An Alternative Tourism in Turkey; Health Tourism]. *KMÜ Sosyal ve Ekonomik Araştırmalar Dergisi [KMU Journal Of Social And Economic Research]*, 14 (23), 91-96, ISSN: 1309-9132.
- Chynoweth, P. (2009). *The built environment inter-discipline: A theoretical model for decision makers in research and teaching. Structural Survey*, 27(4), 301-310. doi:10.1108/02630800910985090
- Cohan, W. D. (2011). *Friends with benefits*. Retrieved at January 04, 2011, from <http://opinionator.blogs.nytimes.com/2011/01/04/friends-with-benefits/>
- Çapkınoğlu, G. (2016). Resim arşivi [picture archive]
- Çiçek, R., & Avderen, S. (2013). Sağlık Turizmi Açısından İç Anadolu Bölgesi’ndeki Kaplıca ve Termal Tesislerin Mevcut Yapısının ve Potansiyelinin Belirlenmesine Yönelik Bir Araştırma [Healthy Tourism and Spa and Thermal Facilities in Central Anatolia: A Research on Determining the Current Structure and Potentials], *KMÜ Sosyal ve Ekonomik Araştırmalar Dergisi [KMU Journal Of Social And Economic Research]*, 15 (25), 25-35. ISSN: 1309-9132
- Gonzales A., Brenzel L., Sancho J. (2001). Health Tourism and Related Services, *Caribbean Development and International Trade*. Final Report.
- TDK (Türk Dil Kurumu, Türkiye). (2016). Turizm [Tourism]. Retrieved at September 20, 2016, from http://www.tdk.gov.tr/index.php?option=com_bts&arama=kelime&guid=TDK.GT.S.57e179e32d2a63.69663988.
- TÜRSAB (Sağlık Turizm Raporu). Retrieved at September 21, 2016, from http://www.tursab.org.tr/dosya/12186/saglikturizmiraporu_12186_5485299.

- Sağlık Bakanlığı, Sağlık Bakanlığı Sağlık Hizmetleri Genel Müdürlüğü [Directorate General Of Health Services Ministry of Health], Retrieved at March 1, 2016, from <http://www.saglikturizmi.gov.tr/168-genel-bilgi.html>
- Sung, H. H., (2004). Classification of Adventure Travelers: Behavior, Decision Making and Target Markets, *Journal of Travel Research*, 42, 4, 343-356.
- Kaya, S., Yıldırım., H. H., Karasavuran, S., Özer, O., (2013). *Sağlık Bakanlığı Türkiye Medikal Turizm Değerlendirme Raporu [Medical Tourism in Turkey The Ministry Of Health Assessment Report]*. Retrieved at August 25, 2016, from <http://www.saglik.gov.tr/SaglikTurizmi/dosya/1-91778/h/turkiye-medikal-turizm-degerlendirme-raporu-2013.pdf>
- Lunt N. T., Mannion, R., Exworthy, A. R. (2012). Framework for Exploring the Policy Implications of UK Medical Tourism and International Patient Flows. Online Published: 18 January, DOI: 10.1111/j.1467-9515.2011.00833.x
- Saraç, E. (2009). Doğanın Şifalı Eli [The Healing Hands Of Nature], Doğan Kitap Yayınevi, 3. Baskı
- Şahin, E. K. (2015). Resim arşivi [picture archive]
- Tanker, N., Koyuncu, M., Maksut C. (1998). *Farmasötik Botanik [Pharmaceutical Botany]*. Ankara Üniversitesi Eczacılık Fakültesi Yayınları [Ankara University Faculty Of Pharmacy Publications].
- Yiğit, V. (2016). Kamu Hastanelerinde Medikal Turizminin Gelişimini Etkileyen Faktörler [Factors Affecting The Development Of Medical Tourism In Public Hospitals], Süleyman Demirel Üniversitesi Vizyoner Dergisi [SDU Visionary Journal], 7(15), 107-119.
- Zengin, B., & Eryılmaz B. (2013). Bodrum Destinasyonunda Engelli Turizm Pazarının Değerlendirilmesi [The Evaluation of Tourism Market for Disabled People in Bodrum Destination], *International Journal of Economic and Administrative Studies*, 6(11), 51-74. ISSN 1307-9832.

University Students' Satisfaction Regarding the Campus' Living Environment

Dilek Beyazlı

1. Introduction

Overall physical quality of higher education institutions denotes the campus concept (Bowman, 2011). Actually, as a totality with its open spaces, the campus should be considered as a complete learning environment, which ensures a complete learning experience (Gumprecht, 2003; Gutierrez, 2013; Kenney, Dumont, & Kenney, 2005; Scholl & Gulwadi, 2015).

Given the literature review on the history of campus planning and design, it is evident that commonly the design principles do not concentrate on providing learning outcomes. Relatively, issues such as safety, security, walkability, or the aspiration of inspiring or forming a community are concentrated more in terms of the physical layout of the campus and the first three issues are mandatory for achieving the latter (Strange & Banning, 2001). Based on these all-encompassing targets for campus plans, remaining parts of this section studies research on campus design and (a) student recruitment and engagement, (b) the effects of walkability and landscaping on campus aesthetics and health, and (c) consideration of sustainability as a learning tool in the design of campuses (Painter et al., 2012; Yıldırım, Güneri & Aydın, 2015). Student satisfaction is one of the most important issues emphasized by higher education institutions, in current competitive education environment (Elliott & Shin, 2002). The phrase student satisfaction addresses students' personal and optimistic assessment of numerous involvements and results linked to the university (Oliver & DeSarbo, 1989; Yıldırım, Güneri & Aydın, 2015).

Apart from the individual differences and needs of the students, various problems and expectations occurring due to the university life or the pleasure offered by a campus life could negatively or positively affect their university life quality (Argon & Kösterelioğlu, 2009).

Griffith (1994) urges higher education communities in the importance of treating open spaces as a scarce resource, since they are the vital part of the image, mission and objectives of the university and emphasizes that they are functional and unifying campus planning components along with the others, such as campus buildings, services, traffic, parking, and pedestrian circulation. Through the preservation and appropriate integration of open spaces into the green framework, it is possible to elevate the value and quality of the campus environment by creating an identity and a sense of community, assisting social and recreational requirements, providing environmental benefits, reducing the growing campus density, and aiding fundraising and recruitment of both faculty and students.

2. The Methodological Context

2.1. Study Area

The first universities opened in Turkey out of İstanbul and Ankara were Karadeniz Technical University of Trabzon, and Ege University of İzmir, having been opened on May 27th, 1955, by virtue of the Laws No.6594 and 6595. They were followed a year later by Middle East Technical University (ODTÜ) of Ankara, and by Atatürk University of Erzurum as of 1957. The most important feature of this period was that, all four universities were built in the form of campus. Campus of Karadeniz Technical University (KTÜ), which was attained by way of competition, and thereupon designed as campus, is an educational and living environment for 35,000 students, and 3,500 academic and administrative personnel extending over 188 hectares of land. With its design in campus layout bringing along significant advantages in terms of spatial

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quality, it is an integrated and attractive living environment thanks to its educational, socio-cultural, accommodation, and green areas (Figure 1).



Figure 1. Karadeniz Technical University campus and location in the city (KTU, 2016)

In the 2016 University Satisfaction Survey in Turkey, Karadeniz Technical University was ranked 13th among public universities and 26th in both public and private universities. The level of satisfaction was evaluated using the scale on the basis of student satisfaction with respect to the components such as satisfaction of the learning experience, personal development and career support, academic support and interest, satisfaction with the institution's management and operations, wealth of learning opportunities and resources, and finally the fulfilment of university campus and life. In the cluster formed by the overall satisfaction level Karadeniz Technical University was ranked in the "Learning Center" set (level A) which comes after the "Adhocratic Incubators" (level A+). The definition of this set is put forward as "increasing the functionality of the existing space, pursuing social life and improving the administration, expecting academic interest and support, high level of authority distance between the administration and the student". Besides the overall satisfaction, the component, fulfilment of

university campus and life, is the most important satisfaction component that encompasses spatial assessment. For this satisfaction component, Karadeniz Technical University was ranked 17th among public universities and in the first cluster (A+ level) (Karadağ & Yücel, 2016).

2.2. Purpose

In this study, the aim is to evaluate the students' satisfaction level and scrutinize the function of grade, grade point average (GPA), gender, fulfilment via campus facilities and services in forecasting the general satisfaction. In addition, it was aimed to evaluate the effect of time-dependently changing opportunities and drawbacks of the campus space, which is a living environment for the students throughout their education, on the determination of satisfaction level, with respect to knowing its importance in terms of social interaction.

2.3. Materials and Methods

KTÜ campus' living environment has been assessed in view of its physical environmental quality and social facilities by means of the periodical surveys organized thereat in the years 2012, 2014, and 2016. Students were undergone survey with 95% safety/5% error margin, and random sample method. In the survey consisting of all types of questions, visual materials and maps were also made use of; Total of 2250 survey findings (750 per each period) have been interpreted.

While the data attained from the field surveys have been assessed via statistical analysis method, such issues as recreational, social, and cultural utilities/facilities, levels of their utilization, urban utilization, accessibility, security, etc. have been assessed by way of linking with user profiles.

3. Findings

In recognition of the campus' importance in terms of social interaction for serving the students as their living environment throughout their educational periods, the facilities and negativities it currently possesses, and those getting changed in the course of time have been assessed for the purpose of determining the level of satisfaction.

According to Erkman (1990), a campus consists of four main areas based on the functions accommodated (studying, resting and recreation, housing, and transport), namely, academic area, administrative area, resting and recreation area, housing is the area. Education-academic satisfaction and spatial adequacy of the education units, which are important components of student satisfaction, are also excluded from the study. Remaining main campus functions and utilizations were determined as the main axis of the evaluation. In the scope of this study, campus space, which is the living environment during the training process of the students, was evaluated for satisfaction level in the context of opportunities and drawbacks, with respect to knowing its importance in terms of social interaction.

3.1. Housing Opportunities

25% of the students participated in the study stay/live in public student residences, 31% in private student residences, and 43% live at home (with relatives, family or friends). 50% of those who live in a public student residence is satisfied with the facilities, and 42% is partly satisfied. 58% of the students evaluated the capacity of the public student residence as

insufficient. In the assessment of the facilities-comfort of the student residence, 39% of the students submitted evaluation as good and very good, neutral was 32% and 18% of the students' submitted evaluation as bad and very bad.

3.2. Urban utilization-interaction

67% of the students living in apartments or shared apartments prefer neighboring areas to the university (Kalkınma, Konaklar neighborhoods), while 33% preferred other neighborhoods of the city. The preferred neighborhoods by the students for housing are of vital importance in terms of evaluating the frequently used entry points of the campus.

The most frequently used entry points in accessing the campus are, respectively, Gate A (%38), Gate B (%29), Gate D (%19), Gate E (%9) and finally Gate C (%5). Gate A is the main entry of the campus and it is the entry from which the public transportation access is ensured. Gate B is as well open to vehicle entry and services on the hospital access, thus provides a connection between the campus and Kalkınma neighborhood, where students especially prefer to reside. Gate D allows only pedestrian access and is located at the boundary of the Konaklar neighborhood, which appeared as a highly preferred spot for student houses (Figure 2).

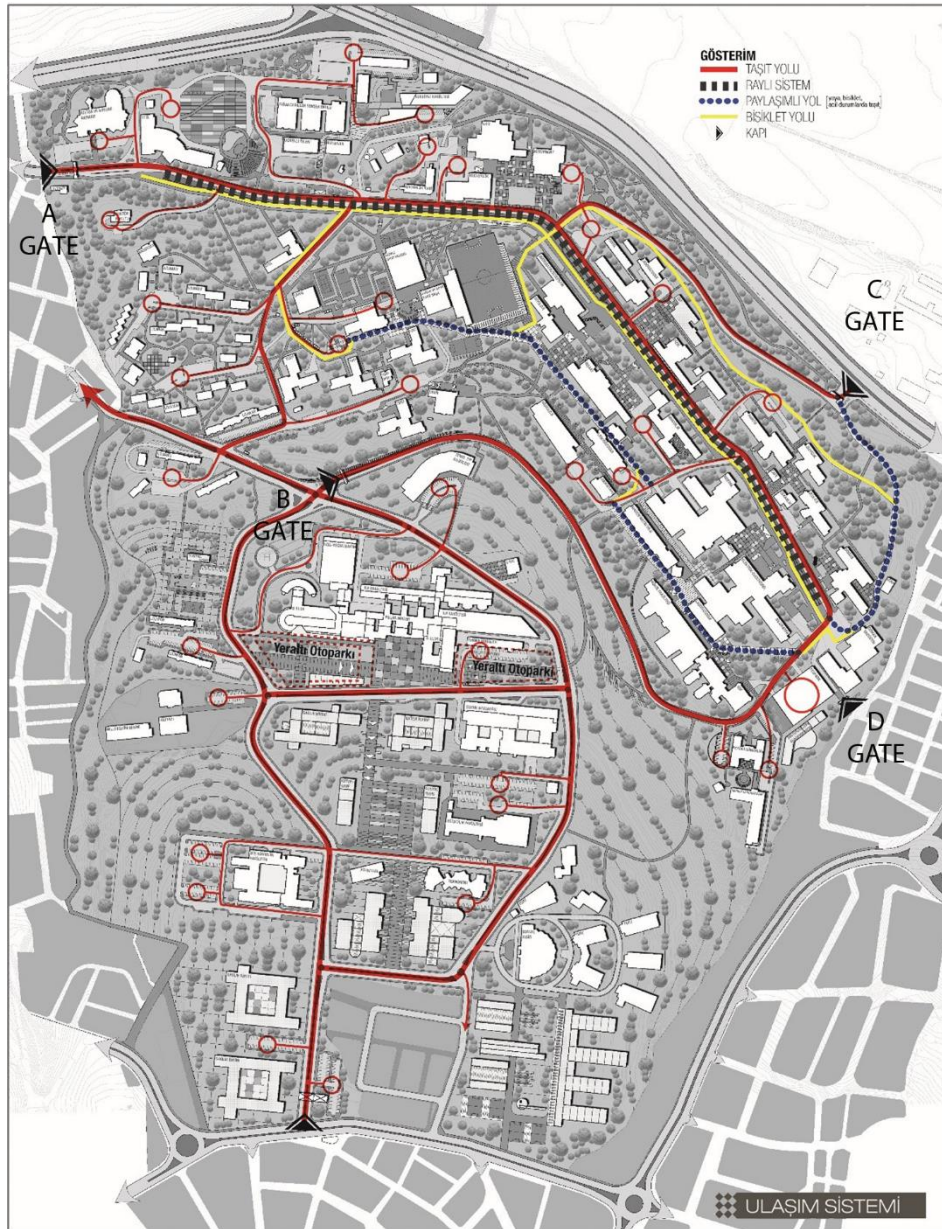


Figure 2. KTU campus accessibility potentials (Beyazlı et al., 2016)

Due to the initiation of service of Gate D in December 2009, particularly the utilization of Gate C decreased significantly. Based on the information obtained from pedestrian counts it is possible to assert that, while Gate D became a more important entry point due to safety when accessing as a pedestrian, majority of the pedestrian entry was recorded at Gate B although Gate A is the main vehicular entry point.

3.3. Access by transportation

In the inquiry addressing which type of transportation is utilized in accessing the campus revealed that pedestrian access comes forward with 58%. It is followed by bus access with 17% rate and minibuses with 15% rate. Although the distance between the city center and the campus is approximately 4 kilometers and is convenient to have access with a single transportation line, the access to the university is affected by the insufficiencies in the public transportation facilities provided in the city in general.

With regard to pedestrian access, 48% of the students consider that the pedestrian roads and sidewalks in the campus settlement are partly sufficient, 29% consider them sufficient and 23% consider the pedestrian roads and sidewalks insufficient. While 69% of the pedestrians prefer to walk from the main artery, 24% prefers to use the secondary accesses.

Approximately in a length of 1-1,5 kilometers, the main pedestrian artery defined parallel to the vehicular access and surrounded with educational buildings and recreational facilities on both sides, is the most important element that increases the accessibility of the campus. In this regard, a shuttle bus system is demanded by the students with a rate of 82%.

Yet another environmentally friendly mode of transportation as well as pedestrian access, use of bicycles are requested by the students. Parking and path regulation for cycling in the campus is requested by a 90%.

As the relationship between the type of transportation and bicycle use and other variables is questioned, the most significant variable appeared was gender. Chi-square analysis revealed that there is a significant relationship between gender and the type of transportation ($X^2=11.458$, $p>.022$) and gender and use of bicycles ($X^2=11.458$, $p>.058$).

Another important issue regarding accessibility is the adjustments related to the physically disabled. Students, who evaluated the accessibility of the physically disabled to the education facilities designed at different levels except the main pedestrian artery, submitted their views as appropriate by a rate of 61%, as partly appropriate by a rate of 31%, and as inappropriate by a rate of 8%. Finally, the response to the question "would you like the prevention of vehicle entry to the campus area?" was yes by 52% and no by 48%, regarding that there is no strong initiative/decision yet in this respect.

3.4. Security

With respect to the security of the campus area, those who find the campus absolutely secure are 25%, those who find it partly secure is 43%, and insecure is %32. When they are questioned about what the security problems are the answers in respective order are, insufficiency in the number of security personnel by 32%, insufficiency in lighting equipment 26%, intensity of vehicles by 18% and existence of coppice forests by 16% etc. Besides, 48% of the students are partly satisfied with lighting and 27% are dissatisfied.

3.5. Services

While 36% of the students meet their needs of eating and drinking in the department canteen, 26% go places outside the campus, 21% go to the dining hall, and 15% go to the cafes in the campus. The location of the dining hall is approved by 56% of students.

While 40% of the students find the stationery and photocopying services at the campus sufficient yet pricy, 34% indicate that these service areas should be distributed to different points of the campus.

3.6. Library

42% of the students declare that they find the library spatially sufficient, 20% find it partly sufficient, 33% find the library spatially insufficient and as a reason 66% indicate the insufficiencies in working areas.

"User satisfaction" is the reference value in calculating performance indicators for libraries, in assessing amounts of input and output, or in measuring the quality of library services (Stephens

& Russell, 2004). Changes in users' demands and expectations necessitates a change in the service concept of the library as a service management and requires restructuring (Yıldız, 2013). Once the students' frequency of library use was evaluated it was observed that 38% of students use the library once or twice a week and 30% once a month. Based on the status of satisfaction, the libraries should be used by user groups with different requirements or characteristics and it is important that the services are regulated accordingly.

3.7. Social Opportunities

For the questions regarding the sufficiency of the social areas in the campus, 69% of the students revealed that they find the campus are insufficient on this subject.

Among the suggestions for social opportunities, highest ranking is the expectation of open space activities with a rate of 43%. Subsequently follow, spatial demands by 11% and adjustments that aim to increase the comfort level by 5%. As perceived from this result, the priority in the evaluations made by the students is towards the more active use of the existing spaces, and spatial adjustments are of a secondary expectation.

An open air cinema is the first ranking among the social spaces required in the campus, by 45%.

The most intensively used areas in the campus are; the areas in front of the departments by 30%, canteens and cafes by 26%, parks and green areas by 18%, and sports areas by 9%. Here it is a thought-provoking result that park areas hold a small percentage. Between classes, canteen and cafes are used with a rate of 72% and areas in front of the departments with a rate of 16%.

Among the sports facilities in the campus most preferred are football fields (29%), indoor sports halls (19%) and tennis courts (11%). The preceding responses given to the question "which other sports areas should exist in the campus?" are bicycle path, running, paintball, archery and go-kart.

4. Discussion

In evaluating the campus utilization and opportunities by the students, they were asked to score between 1 and 10 (1 being lowest and 10 being highest). Level of satisfaction for the quality of education, commercial areas, sports, activity, recreation, security, transportation, and housing services were questioned and scored. While the highest level of satisfaction was found for the recreation areas, the utilizations that rank the lowest level of satisfaction are stated as the commercial areas and activity opportunities. Other topics hold mid-level of satisfaction (Table 1).

The level of satisfaction for the recreation areas has an average of 7.25 points and 9 mode value. Recreation areas are mainly natural areas that are in the form a green belt that defines the campus boundaries and are one of the most important factors that affect the legibleness of the campus.

Table 1. Satisfaction levels with regard to campus utilization and opportunities

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	academic units	commercial units	sports facilities	activity areas	rest areas	security	transportation facilities	accommodation facilities
Sum	6,41	5,88	6,36	5,43	7,27	6,25	6,02	5,94
Median	6,00	4,00	5,00	4,00	7,00	5,00	5,00	5,00
Mod	5	3	5	3	9	8	7	3
Std Dev.	9,95 3	11,443	9,846	10,021	9,880	9,934	9,927	10,008

Various studies that define the variables in relation to student satisfaction exist in the literature. Academic performance, gender, services and facilities, grade level, attendance, social relations, academic programs, students' characteristics and the characteristics of the institution (Burbach, Cnaan & Babbitt, 2010; Elliott & Healy, 2001; Kane, Williams & Cappuccini-Ansfield, 2008; Mavondo, Tsarenko, & Gabbott, 2004; Şahin, 2009; Thomas & Galambos, 2004; Denson, Loveday & Dalton, 2010; Mooney, 2010; Mavondo, Tsarenko & Gabbott, 2004; Yıldırım, Güneri & Aydın, 2015).

As the personal characteristics of the students who constitute those with the highest level of campus satisfaction are scrutinized, it is observed that 70% of the students are female and are studying in the daytime education (Table 2). According to the study of Wiers-Jenssen, Stensaker and Grøgaard (2002), female students exhibit higher level with respect to the male students in student satisfaction. This situation is revealed in the findings of this study as well (Yıldırım, Güneri & Aydın, 2015). As the grade point average of the students are investigated, it is noticeable that 50% of those with the highest level of campus satisfaction have an average between 2.00 and 3.00, and are mainly 4th year students.

Table 2. Personal characteristics of the students who have a high level of satisfaction

	female	69,2%	1 st class	15,4%	grade	0,01-1,00	7,7%
sex	male	30,8%	2 st class	23,1%	point	1,01-2,00	23,1%
	1 st tuition	69,2%	3 st class	23,1%	average	2,01-3,00	46,2%
program	2 st tuition	30,8%	4 st class	38,5%	(GPA)	3,01-4,00	23,1%

Academic performance was related with student satisfaction (Pike, 1991). Bean and Bradley's (1986) conclusion that grade point average is influential on the general satisfaction of the student is another finding that is supported with the outcomes of this study (Yıldırım, Güneri & Aydın, 2015).

The findings of this study contradicts with the effect of year of education on the student satisfaction which studied by Erçevik and Önal (2011) and was concluded that 1st year students are more satisfied when compared to 4th year students. In the study for Karadeniz Technical University, it was found that especially in the latter years of education student satisfaction increased.

Again, denoted in the same study, "service and opportunities provided in the university explain satisfaction better than the variables of gender, GPA, year of education, and service and opportunities that predict student satisfaction with a significant level are more important (Erçevik & Önal, 2011)", the statement emphasizes the result that how important campus planning and administration are.

The level of satisfaction from campus opportunities varies in direct relationship with the participation to the activities in the campus area. Utilizing the campus intensively affects the campus satisfaction level, through the facility to use the campus more efficiently (Table 3).

Table 3. The relationship between the level of satisfaction and participation to the activities in the campus area

		participate in activities: often	participate in activities: partially	participate in activities: rare	Total
The satisfaction level: 1-3	% within satisfaction level	14,3%	28,6%	57,1%	100,0%
	% within satisfaction level	0,9%	0,7%	3,6%	1,3%
The satisfaction level: 4-7	% within satisfaction level	20,2%	58,4%	20,8%	100,0%
	% within satisfaction level	96,3%	99,0%	95,5%	97,7%
The satisfaction level: 8-10	% within satisfaction level	60,0%	20,0%	20,0%	100,0%
	% within satisfaction level	2,8%	0,3%	0,9%	1,0%
Total	% within satisfaction level	20,5%	57,6%	21,3%	100,0%
	% within satisfaction level	100,0%	100,0%	100,0%	100,0%

Elliott and Shin (2002) states that universities should account for the needs and expectations of the students. It should be considered that drawbacks could as well be guiding besides the needs and expectations. In this regard, the question, “what would you change in the campus if it was possible?” gains importance. The first ranking response is new-buildings and maintenance by 22% and subsequently follows improvements to transportation by 19%. This situation particularly points out the need to investigate the planning and design experiences after the plan is obtained by contest in campus planning.

5. Conclusion

Design decisions and successful spatial organization at human scale are the primary conditions for the targeted quality of campus living environment. In this context, through a master plan study (Beyazlı et al., 2015) future spatial decisions and development potentials are considered. Part of these decisions are made through the evaluation of findings related to campus living environment satisfaction. Especially, transportation socio-cultural use, services and security expectations provided a valuable guidance. In this regard;

To ensure the utilization of the opportunities provided by the natural structure and the preservation of unique spaces; to determine the social focus points in the campus with respect to the number of users; to support the increase of legibility of the campus.

To increase inter-campus transportation options; to evaluate pedestrian friendly, environmentalist energy efficient modes of transportation; to define secure and comfortable pedestrian access and secure paths for bicycle use; to make necessary adjustments related to the disabled.

In the first plan scheme of the KTÜ campus settlement, which was obtained through a contest, open areas between the academic units that are of important denominators, should be rendered effective via associating them with strong pedestrian and bicycle accesses.

Regulating/improving measures that do not push the carrying capacity of the campus settlement far and important transportation decisions could contribute to the livelihood of the campus, both in terms of spatial and social qualities.

6. References

- Argon, T., & Kösterelioğlu, M. A. (2009). Üniversite öğrencilerinin üniversite yaşam kalitesi ve fakülte kültürüne ilişkin algıları [The university students' perception of faculty culture and the quality of life]. *Elektronik Sosyal Bilimler Dergisi [Electronic Journal of Social Sciences]*, 8 (30), 43-61.
- Bean, J. P., & Bradley, R. K. (1986). Untangling the satisfaction-performance relationship for college students. *Journal of Higher Education*, 57, 393-412.
- Beyazlı, D., Sancar, C., Öksüz, A. M., Turan, S. Ö., Erdoğan, S., Türk, E., Kiper, N., & Erkan, G. H. (2015). *Karadeniz Teknik Üniversitesi Kanuni yerleşkesi stratejik master planı [Karadeniz Technical University Kanuni campus strategic master plan]*. KTÜ Yayınları, Trabzon.
- Bowman, A. (2011). *Beyond the ivory tower: In search of a new form for campus-community relationships* (Unpublished Master's Thesis). Massachusetts Institute of Technology.
- Burbach, H. C., Cnaan, R. A., & Babbitt, C. E. (2010). Organizational predictors of college satisfaction and academic achievement among females. *Sociological Viewpoints*, 26, 67-72.
- Denson, N., Loveday, T., & Dalton, H. (2010). Student evaluation of courses: what predicts satisfaction? *Higher Education Research and Development*, 29, 339-356.
- Elliott, K. M., & Healy, M. A. (2001). Key factors influencing student satisfaction related to recruitment and retention. *Journal of Marketing for Higher Education*, 10, 1-10.
- Elliott, K. M., & Shin, D. (2002). Student satisfaction: An alternative approach to assessing this important concept. *Journal of Higher Education Policy and Management*, 24, 197-209.
- Erçevik, B., & Önal, F. (2011). Üniversite kampüs sistemlerinde sosyal mekân kullanımları [The usage of social areas in university campus systems]. *Megaron*, 6(3), 151-161.
- Erkman, U., (1990), *Büyüme ve gelişme açısından üniversite kampüslerinde planlama ve tasarım sorunları [Planning and design problems in terms of growth and development of the university campus]*. İ.T.Ü. Mimarlık Fakültesi Yayını. İstanbul.
- Griffith, J. (1994). Open space preservation: An imperative for quality campus environments. *Journal of Higher Education*, 65(6), 645-669.
- Gumprecht, B. (2003). The American college town. *Geographical Review*, 93(1), 51-80.
- Gutierrez, J. (2013). *Restorative campus landscapes: fostering education through restoration. master's thesis in landscape architecture*. Kansas State University. Manhattan, Kansas.
- Kane, D., Williams, J., & Cappuccini-Ansfield, G. (2008). Student satisfaction surveys: The value in taking and historical perspective. *Quality in Higher Education*, 14, 135-155.
- Karadağ, E., & Yücel, C. (2016). Türkiye üniversite memnuniyet araştırması-2016 [University satisfaction survey in Turkey]. Retrieved from <http://enginkaradag.net>
- KTÜ (2016). Karadeniz Technical University Institutional web page, Retrieved at October 1, 2016, from <https://www.ktu.edu.tr>
- Kenney, D.R., Dumont, R., & Kenny, G. (2005). *Mission and place: Strengthening learning and community through campus design*. Westport, Ct: Praeger Publishers.,
- Mavondo, F. T., Tsarenko, Y., & Gabbott, M. (2004). International and local student satisfaction: resources and capabilities perspective. *Journal of Marketing for Higher Education*, 14, 41-60.
- Mooney, M. (2010). Religion, college grades, and satisfaction among students at elite colleges and universities. *Sociology of Religion*, 71, 197-215.

- Oliver, R. L., & Desarbo, W. S. (1989). Processing satisfaction response in consumption: a suggested framework and research proposition. *Journal of Consumer Satisfaction, Dissatisfaction, and Complaining Behavior*, 2, 1-16.
- Painter, S., Fournier, J., Grape C., Grummon, P., Morelli, J., Whitmer, S., and Cevetello, J., (2012). *Research on Learning Space Design: Present State, Future Directions, Society For College and University Planning*. Hideo Sasaki Foundation.
- Pike, G. R. (1991). The effects of background, coursework, and involvement on students' grades and satisfaction. *Research in Higher Education*, 32, 15.
- Şahin, A. E. (2009). Eğitim fakültesinde hizmet kalitesinin eğitim fakültesi memnuniyeti ölçeği (EF-ÖMÖ) ile değerlendirilmesi [Evaluation of the faculty of education with quality of service satisfaction scale]. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi [University Faculty of Education Journal]*, 37, 106-122.
- Stephens, D.ve Russell, K. (2004). Organizational development and leadership, library trends, 53 (1) : 238-257.
- Strange, C. C., & Banning, J. H. (2001). *Education by design: creating campus learning environments that work. The jossey-bass higher and adult education series*. Jossey-Bass, Inc.: San Francisco.
- Thomas, E. H., & Galambos, N. (2004). What satisfied students? Mining student-opinion data with regression and decision tree analysis. *Research in Higher Education*, 45, 251-269.
- Wiers-Jenssen, J., Stensaker, B., & Grøgaard, J. B. (2002). Student satisfaction: Towards and empirical construction of the concept. *Quality in Higher Education*, 8, 183-195. 521-533.
- Yıldız, A. K. (2013). Üniversite öğrencilerinin eğitiminde üniversite kütüphanelerinin rolü ve öğrencilerin beklentileri [The role of university libraries in education of university students and their expectations]. *Eğitim ve Öğretim Araştırmaları Dergisi [Journal of Research in Education and Teaching]*, 2 (1), 176-184.

Revisiting Design Approaches in Historical Environment on Two Practices: Caixa Forum & Museum Der Kulturen

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1. Introduction

This study is a product of the graduate course so-called “historic environment design and the design process” that aims to learn by interrogating and thinking. Within the course, it is trying to explain the design method for historic environment by deeply reading two selected practices instead of discussing how to do the design of historic environment through examples. The reading method is the deconstruction method / deconstruction theory, which was first proposed by Derrida (Derrida, 2011; Kolektif, 2015). Considering two buildings, which is deeply read by the method selected, their behavior of contrast and harmony, two design approaches for historic environment (Velioglu, 1992), is discussed. By doing so, it is resulted in these two design approaches, that put forward as two sharp behaviors, cannot be described with clear distinctions as well-known.

Derrida’s deconstruction is based on “meaning and time”. The meaning of a whole could have infinite number of meanings when the meanings of its sub-parts come together in infinite number times. The diversity occurred here increases by changing the parameters as the location and the values of the parts, and time. And the most important thing here that the meaning given the whole cannot be fully expressed over the whole, or the whole cannot fully have the meaning of its sub-parts or itself as a whole. That is, whatever the tools are used, the meaning cannot be fully expressed.

In fact, deconstruction theory was introduced by Derrida as a way of thinking/interpretation, we understood that it is a technique/research area that was used in the past. Namely, considering a whole as a composition of sub-parts to understand it, trying to understand each part separately, and trying a new fiction for rebuilding a new whole.

As is well-known, the problem of historic design is solved through understanding the historic environment. Thus, it is most important to examine the data related to historic environment. Evaluating Caixa Forum and Museum Der Kulturen as two design examples for historic environment, we encounter the problem of understanding and meaning the dynamics that made it. Therefore, it should be determined “a reading method of deconstruction” by examining these two examples for the design in historic environment, and design approaches in historic environment should be re-built again.

2. Aim, Scope & Methodology

It is seen that there are two basic ways to put out a new product in historical environment by approaching in harmony with (!) and/or contrast to (!) historical environment. The aim of this study is to answer the questions such as: How to put out a new product by approaching in harmony with historical environment? How to put out a new product by approaching contrast to historical environment? Is the former to adopt the data from historical environment, while the latter rejects them? Are these two approaches completely opposite? If one exists, the other does not? Could they exist together? If possible, how? In what rate? When two approaches exist together, how the final status should be named?

In the study, two selected examples are tried to read in the deconstructive perspective. These are Caixa Forum and Museum Der Kulturen. Through deep readings of these buildings, design approaches in historic environment are discussed. Since it is necessary to separate sub-parts of

a whole to understand it according to deconstructive thought, the selected buildings are separated into their sub-parts. Then, relationships between these sub-parts are examined, and the whole constituted by these sub-parts are discussed in historic environment.

3. Design approaches in historical area

Design approaches in historic environment are essentially based on harmony and/or contrast.

3.1. Integrity/unity by harmony

Harmony, in general, means the elements, that constitute a whole, have common or similar features. It is not necessary these elements are completely the same to be in harmony. The connection between the relationships between these elements increases the compatibility opportunities of a whole in terms of visual perception, and creates a sense of harmony. The harmony between the parts of a whole is possible by any of shape, dimension, color, ton, and texture of the parts, or more. For harmony, relationship between the parts must have a perceptible closeness. In the context of historic environment, it should exhibit integrity with its past and newly added items. In the whole, parts coming the past should be understood well. This makes that the newly added item is to be a perfect part of the whole. When reaching an integrity/unity by harmony, the data of historic environment (volume, space, surface, duty cycle, material, color-texture) should be examined carefully, and try to obtain a new integrity by making appropriate choices for the existing situation.

3.2. Integrity/unity by contrast

Generally, contrast is to bring to the fore contradictions in the assessment of something, in other words, to create a balance in contrast. The contrast may become in view of color, texture, direction, distance etc. When the relationship between the parts constituted the whole is not established well, discrepancy and conflicts will arise. The reason of the disorder is contrast. Contrast is harmony of contradictions. In the context of historic environment, contrast is the way of reaching a new integrity with the elements of historic environment (volume, space, surface, fullness/emptiness, material, color-texture) by making choices to obtain a contrast after they are examined carefully.

4. Two buildings in historical area

Both buildings constructed in historic environment were designed by Herzog and De Meuron. These are intentionally selected. Because, they are intricate examples for trying to find the unity in historic environment by harmony and contrast.

4.1. Caixa Forum

The building is located in Madrid, a few blocks away Prado Museum and Reina Sofia Museum for which Jean Nouvel designed a new unit. The historic power plant built in 1899, and the gas station situated in front of this plant was transformed Caixa Forum with a function of art and education center by Herzog and De Meuron. The most characteristic feature of the structure, that acts as a magnet for all the people of Madrid, is “rupture” effect occurring by dismantling the power plant’s ground and foundation, and by dividing the building. Building has remarkable features with volume, material, location and space organization (Figure 1).

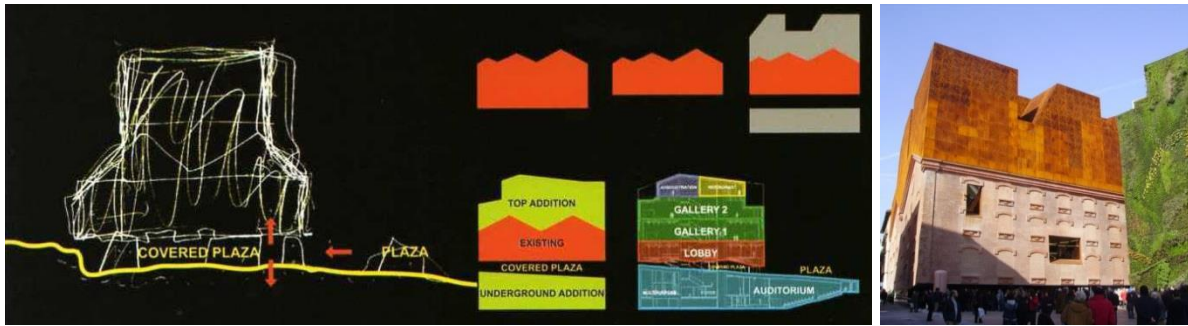


Figure 1. Views of the Caxia Forum

4.2. Museum der Kulturen

The history of Museum der Kulturen (Basel) goes back to the middle of the nineteenth century. It is a classical building with a modern name “Universal Museum” was designed by architect Melchior Berri in Münsterhügel in 1849. This is the first museum of Basel city. It was designed for science and art. Today, it has one of the most important ethnographic collections of Europe thanks to the gifts and donations, that still continue largely. Another characteristic feature is the roof of the museum. The roof was covered with hexagonal ceramic material. The designed ceramics are in 3D, and types created are placed irregularly. Some shines even on cloudy days. This lighting game is similar to the complex tiled roofs of the old town (Figure 2).

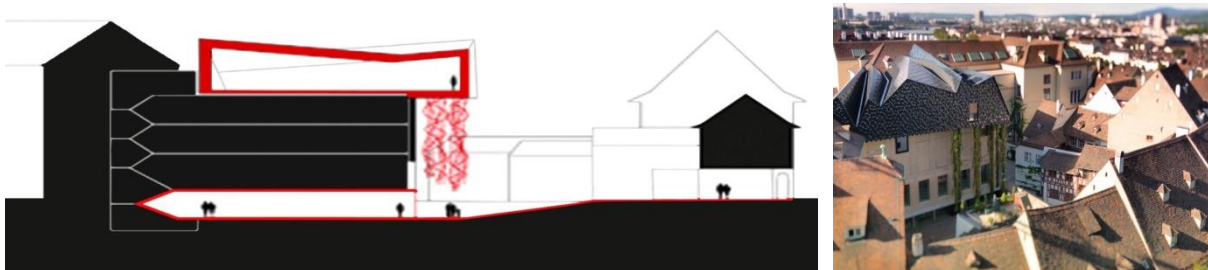


Figure 2. Views of the Museum der Kulturen

5.1.1. Discussion of the Method proposed by Melis Yazici

Deconstruction theory reveals distance of layers and differences within dilemmas rather than understanding of dilemmas. There is eternal meaning, and every design that has the value of art has one aim in de-constructivism. Designer has formed the design for the purpose of "A", but one may say the design has been formed for the purpose of "B" while he/she is evaluating it. Which meaning is true for whom and for what? The strategy of deconstruction is to reveal the existing contrast by reversing the hidden. In this method, it is necessary to separate parts of the whole to understand the work. With the deconstructive reading method in historic environment, we try to understand the designer has rules and boundaries. Historical environment consists of overlapping layers of time. With discussing the layers of the product constituted by supplements from today and the past, it will leave open to debate that layers and sub-layers are in harmony or in contrast. These layers are described as *layers of volume, surface, and material*.

Layer of Volume: Volume occurs as a result of stylistic features and relationships of planes forming the volume. Well, how are the shapes, sizes, proportions of the volumes created in different times similar to or different from the existing environment?

Layer of Surface: Surface characterizes the volume. When we look at the historic environment, we can understand many experiences from surfaces, and they are the information source of history. When designing in the historic environment, whether the new surface layer is compatible with the historic environment in terms of its form, texture, dimensions, color and fullness/emptiness, or not?

Layer of Material: Material affects the architecture style with its behavior, forms, surface textures, and structural properties as well as its performance. Sub-layers will be examined in this layer. From which color, texture, and construction technique, that are sub-layers, does make the existing material layer and the newly added in contrast or harmony?

Discussing the layer of volume in Caixa Forum, we find answer to the question that which volume belongs to which period, since new and old volume layers are separated from each other visibly. When viewed from a wider perspective, Caixa Forum evokes the feeling of hanging up in the air. The whole building, which challenges the gravity, and say “I am here”, is like a flying statue. Two volume layers differ from each other in style. The existing volume layer ends with triangle pediment, while the new volume layer is locally emptied, and the ends are left with a slight slope.

Discussing the layer of surface in Caixa Forum, old and new surface layers are composed of a combination of repetitive elements. New surface layer is divided into equal squares based on the dimensions of existing surface layer. Thus, the new layer is composed of full and partially full sub-layers. Considering all surface layers created in the historic environment, we can see only full and empty layers, however, when the scale increasing, the sub-layers which derive from each other becomes most apparent.

Discussing the layer of material in Caixa Forum, existing material layer is brick. New material layer is the corten steel frequently used today. Both material layers have similar colors, and are textured. While existing material layer is manufactured with traditional construction technique, new material layer is manufactured with modern production techniques.

Discussing the layer of volume in Museum Der Kulturen, the new material layer has a fractured form consisting of many different angular surface while the existing volume layer is rectangular. Color harmony does not exist between the new and the existing volume layer. Although there are many differences between these volume layers, it is possible to catch the harmony within the similarities when we examine two volume layers as a whole in the historic environment. New volume layer is designed based on roof slopes of surrounding buildings, and it is an interpretation of the surrounding historic structures.

Discussing the layer of surface in Museum Der Kulturen, surface layers forming the structure differ from one another. While the existing surface layer is not textured, the new surface layer is a textured whole consisting of three different types of hexagonal elements. With its differences, Museum Der Kulturen has attracted attention in the historic environment. When the play of light of the new surface layer is evaluated in the historic environment, it is similar to tiled roof of the old city. The opening within the new surface layer refers to both the existing surface layer and the historic environment in terms of dimensions.

Discussing the layer of material in Museum Der Kulturen, the new and the existing material layers are different in terms of color, construction technique, and use of traditional and modern materials. While the new layer is green, the existing layer is cream. In the new layer, the steel structure is covered by ceramic, and it is manufactured by modern construction technique. In historic Basel city, brick is used on the roofs, and continues to use traditional construction technique. Can we say that the contrast approach is exhibited by the layer of material?

As a result, it should not be forgotten that the layers added to the historic environment from past to present will be a source of information for future generations. To understand the design approach in the historic environment, the historic environment itself must be understood well. Here, the volume, surface and material layers are addressed in the historic environment. When discussing these layers, it is found they have some sub-layers. These sub-layers are re-evaluated in terms of dimension, ratio, color, form, and construction technique, and the effect of the whole on the historic environment is discussed. While sub-layers are in contrast to the historic building in some perspectives, it is in harmony with many similarities of the whole with its surrounding. Thus, there is contrast in harmony like as there is harmony in contrast.

5.1.2. Discussion of the Method Proposed by Oğuz Kirci

The human mind tries to understand and to interpret everything in life. Different methods and practices have been seen for the conscious interpretations. Derrida's deconstructive reading approach is one of these conscious readings. Deconstructive reading requires examining sub-parts of an object.

What are the limits of all readings to understand the object? If the object to be read is a building and it is a part of a historic environment, how is the limit determined? The concept of the limit will provide to better understand sub-parts of the historic environment.

Limit: Every problem in life has a limit. In view of architecture, we can see that there are many problems, and they not only limit the designer but also open new horizons to him/her. Problems and limits of architectural design are: history, volume, space, surface and material.

History and Limit: Environment and place is important for architectural designs. For any location, there are before and after the building to be built there. New structure is expected to have good relations with the historic environment and its place. Considering the limits and relationships, we encounter a variety questions such that "How much time should we stay in the past? How much time should we look at the present? and Do we need to emphasize the sanctity of history?"

Volume and Limit: Volumes, that are generated by the historic environment, are evaluated carefully. While a new volume is created, should the volumes generated by the historic environment be used? or should new volumes be generated? Who and how does decide it? How the limits are determined?

Space and Limit: While a new structure is built in a historic environment, spatial organization, which is an accumulation of the historic environment, should be better understood. Should the new structure be generated by considering the old place arrangement? or should different approaches be tried? While we have harmony when the spatial integrity of the historic environment is considered partially or completely, new arrangements would cause contrast?

Surface and Limit: Similarly, repeating surfaces in the historic environment exhibits harmony, while a design created by experiencing new surfaces is an example of contrast behavior?

Material and Limit: When a new structure is built in the historic environment, how should be the material decided? Is harmony to use traditional material, while use of modern material is contrast? When two behaviors are together, what will be the name of the new behavior?

History and Limit; Local committee allowed for limited architectural interventions to the power plant by emphasizing Caixa Forum's importance in terms of history of city. Thus, only the brick wall of Caixa Forum is protected.

Volume and Limit; with the new mass founded on the historic brick wall, the volume of existing mass is expanded.

Space and Limit; old floors of the structure are removed. New floors are created instead of them. With these arrangements, spatial organization of existing structure is completely changed. Besides these changes, a new urban square is designed by destroying the old gas station located in front of the building.

Surface and Limit; face angles of new mass founded on the historic brick are designed based on roof forms of the surrounding structures. Thus, the new mass is placed on the moldings installed on the historic wall to provide a whole from the old and the new surfaces.

Material and Limit; wood, oxidized steel (corten), etc. are used in addition to brick, glass and steel material existing in the old building.

Deconstructive Reading of Museum Der Kulturen:

History and Limit; Museum Der Kulturen was designed in 1849. Some supplements have been added to the building between 1917 and 2001. Herzog and de Meuron suggested a new additional design for the building by respecting to the history of the building.

Volume and Limit; the new volume added to the old building shows that the old volume is not enough.

Space and Limit; the existing spatial organization of Museum Der Kulturen is preserved in the new design. In the newly added form, new places are generated.

Surface and Limit; the new surface consists of hexagonal faces. Museum Der Kulturen's roof pitch is inspired by the historic environment.

Material and Limit; the new mass consists of hexagonal green tiles.

As a conclusion; the structures are evaluated within the limit perspective in by the deconstructive reading technique of Derrida. We concluded that Caixa Forum shows contrast behavior in terms of interior while harmony in terms of outdoor. However, the approach followed for Museum der Kulturen is exactly opposite to that of Caixa Forum.

5.1.3. Discussion of the Method Proposed by Evsen Yetim

The word 'Space' is a dynamic, variable, virtual term that is constantly re-produced, re-interpreted, and re-called in the discipline of architecture. Text aims to analyze architectural design with a deconstructive reading method by considering the space concept in the historical environment as a dynamic movement, not a living, constantly alive, fixed-invariant object.

Derrida performs the first deconstruction over the grammar. A deconstructive reading of a building in the historic architectural environment can be considered just like Derrida's concept in which the word is separated into its meaningful roots. So, how is a building divided into its attachments and roots? How a methodology should be applied while doing this so that it would have been a practicable, working, systematic analysis method for all structures within the historical environment?

Steps of the deconstructive reading method can be listed as follows:

Formal analysis; everywhere makes the formation of its structure to be defined. In the historical environment; it is recommended to analyze the design in terms of an "intersection set" by superimposing the historical layers existing in context of tradition, elements of traditional forms, culture, patterns, motifs, colors, materials, climate and society

Semantic-conceptual analysis; the words are premise of semantic-conceptual abstraction. With these words, the building in the historical environment is placed onto

“supported word diagram”. The aim here is to find out meaningful concepts from the building defined as “sentence” through abstracted concepts by the deconstructive method.

Time analysis; the purpose of time analysis is to make possible to recognize the historical environment and its layers. It leads to the architect in designing a new one onto an aged place about which is suitable for there: harmony, contrast or both.

On Caixa Forum: when the building is evaluated according to *formal analysis method*; the historical building which is a disused power station is remarkable with its pitched roof, window openings, doorways and stone material on the facade. The roof is formed as a "lego" based on the similar roof shapes in the historical environment. The volume is created by interpreting the traditional roof form, and is related with traditional window's sizes. When the building is evaluated by *semantic-conceptual analysis*; a new meeting and transit area is designed by elevating the building. The new building gathers conceptual idea words which are: to fly, to challenge the gravity, nodes, lightness, heterogeneity, etc. In addition, the method provides to reach new concepts as "resurrection, shell renovation, waking up" with the idea of reusing an industrial building, and "variations, similarity, movement" words with its roof form. *With time analysis*; in context of construction-time, the building is either the oldest form of the old or the latest form of the new. Moreover, this is a success of two different periods to live together while maintaining their own identity. This relationship is nested that of harmony and contrast.

On Museum Der Kulturen: when the building is evaluated by *formal analysis method*; the structure built as a museum building in the middle of nineteenth century is supported by a new form. It is seen that the roof carried by a steel structure is coated with black and green ceramic form, and its form is referenced by roofs in surrounding environment. This design in the historical environment exhibits textural and color contrast, but also exhibits harmony since it includes the shapes similar with that of the environment. According to *semantic-conceptual analysis*; steep pitched roofs, dormer windows, wooden struts, and traditional tissues are exhibited here as a new form re-interpreted. The structure gained a new meaning gathers all concepts as "completion, black hat, modern-tradition, similarity" etc. Evaluations by *time analysis*; the elements such as traditional pitched roofs, dormer windows, overhangs and struts were used onto the new form symbolically or functionally. Time will continue to accumulate on the coexistence of two forms that represent their age.

As a result; historical environment consists of accumulating layer, and each layer is vital for the structure to be designed in the environment. As a deconstructive method, this method aims to read through the parts of a structure designed in historical environment separating it into meaningful parts in view of formal, semantic-conceptual and time perspectives. The design created by harmony, contrast or both is a new layer of the historic environment.

5.1.4. Discussion of the Method Proposed by Tayfur Emre Yavru

Throughout his/her life, mankind analyzes what they saw, felt, and thought, or partially interprets. The analysis is directly proportional to their knowledge and experience acquired throughout their life. As architects, we analyze all architectural structures around us or not, imaginary or not, in view of our architectural knowledge, too. Although these analyses are superficial at the first glance, they deepen with analysis methods developed by many thinkers whether they are architect or not. ‘Deconstructive Reading Method’ is one of these analysis methods. When deconstruction is said, Jacques Derrida comes to mind first. Reading historical environment by using the reading method which is defined as Derrida’s “Clear Search” is directly related to how the designer approaches the environment. These approaches can be

grouped under several headers. Some of those are *functional, positional, formal and volumetric, and textural and material* approaches.

Functional Approach: New structures and arrangements made in the remaining historical tissues may not fulfill the former function. In this case, texture and structure may need to be given a new function. It is necessary to ensure the continuity of the new function or security of the protected functions.

Positional Approach: Given the link between the built environment, location and geographical, topographical features of the structure; the previous and the current visual importance of the structure within the texture of the city is the primary effect on the decision of conversion.

Formal and Volumetric Approach: When determining new usages of internal and external spaces in a historical structure, characteristics of horizontal connections, volumetric-spatial feature, vertical cross section are the important morphological restrictive. In this context, the new arrangements should be made considering the form, proportions and volumes of the original structure and their relationship with the environment.

Textural and Material Approach: It can be possible to read the time layers of structures within historic environments, if reuse of the structure is done with correct decisions. We may say the most common design method in reuse of a structure by preserving the layers is to create a contrast between the structure and the newly added parts.

When “*Caixa Forum / Madrid*” example is analyzed, we see that the building, which exhibits the industrial architecture of Madrid, and was used as a power plant in the past, has refunctioned by different approaches of Herzog and de Meuron. The main two changes to the structure are the addition on the main roof, and separating the structure from the ground. With functional and positional approaches, the building becomes remarkable in the environment as well as creating new function area. Although the modern addition may seem contrast with the structure at first, it is ensured that the addition is provided to be in harmony with the structure and the surrounding buildings in perspective of formal and volumetric approaches. The uniqueness caused by brick exterior walls of the industrial architecture are preserved by using textural and material approaches and paying attention to the material selection.

“When *Museum Der Kulturen / Basel*” example is analyzed; Herzog and de Meuron added to the building, which was firstly used as a monastery and its history goes back in the middle of nineteenth century, a new roof along with new fields by utilizing deconstructive reading techniques. With the functional approach, attaching a new roof to the museum units already existing due to its original function results in new exhibition and storage rooms. As a result of spatial approach, the entry from the historical courtyard and the arrangement on this entry becomes more available both this courtyard and the entry for users. The designed form based on the heights and roofs of the surrounding historic buildings provides new functional areas and an aesthetic appearance with considering the formal approach. As a result of textural and material approach, the surface coating is designed with using the nineteenth century embellishments and modern building materials referenced to the floor and windows of the structure while the roof material has a completely unique structure.

Result: It is important and necessary that some changes should be done in historic environments in the growing cities. In this study, original structure’s “approach” to the surrounding environment, which is one of the most important factors in historic environment design, has been examined through the contrast and harmony from the Functional, Spatial, Formal, Volumetric and Textural Approaches. Analyses show that context in designs between the environment and the structures can be provided by contrast or by harmony. However, as shown in the selected examples, it is not clearly understood that the design is in harmony or in contrast with the environment and the structure. While the structure may be seen contrast

formally, it may be seen in harmony functionally or material/textural context. Contrast and harmony could be read clearly sometimes, while sometimes they may be nested.

5.1.5. Discussion of the Method Proposed by Mehmet Ali Odyakmaz

Urban areas are mostly the results of historical sustainability, and they are shaped by changes and evolution. Historical urban areas consist of many historical ages. To design something is already complicated problem, and it requires to view from many aspects. However, the design problem gets more complicated concerned with historical urban areas.

Derrida specified any text or word in a structure could not be new. During the history, like every text has been written again and again, every design is, in fact, architecture of the architecture (Derrida, J., 1994).

To make analyses and synthesis on design approaches in historical urban areas by deconstructive approach, we can use the existing arguments that history gives us for the guidance on our work. The objects that consist of the existing structure in small or large scale are determined by deconstructive perspective, and they are used as the guidance for this reading. In this context, steps of the deconstructive reading method can be listed as follows:

Urban fabric grading analysis: When we consider the urban areas as living organisms in small scale, we can see that any change in a small unit of this organism will trigger huge transformations in entire organism to ensure viability. If we examine these changes by the deconstructive view, we will see that this is not obtaining different artificial meanings by separating the text into its sub-parts, unlike this is a proof of giving new meanings to the text by separating the city itself into sub-parts.

Eclectical approach analysis: Eclecticism is to use new items that are derived from art and architectural works in new systems. Even if we could mention about different eclecticism tones, eclecticism itself is not a tone but a way of behavior. Within this context, any intervention made on the historical building can be considered as eclectic. These kind of eclectic changes, that are sometimes obligatory, are efforts of giving new meanings to whole by interpreting them with deconstructive reading.

By the urban fabric grading analysis on Caixa Forum example, it is understood that the building, which was used as power plant in early industrial age of Madrid City, cannot respond modern needs of the city. The historical building is, then, refunctioned as an art center to make the building get its own place in this urban transformation.

By eclectic approach analysis on the example of Caixa Forum, the historical building almost had a surgery while being refunctioned. Materials and functions which will not be used in the art center were taken out. In accordance with functions and requirements, it is tried to give the readability and the language with new modern materials. The only material that is used in the new function coming from the old building, is brick material.

According to urban fabric grading analysis on the example of 'Museum der Kulturen', the history of the cultural museum in Basel city goes back in the middle of nineteenth century. It can be seen that urbanization in historical areas grow around religious buildings. From this reason, we can read clearly architectural style of that period's existing culture and architectural knowledge around this building opened to use as monastery in 1849. Upon the needs for new function, a new gallery space is added to the existing building. But it is avoided any addition to the structure in horizontal plane, and modern technology is utilized to give minimum damage to the existing historical landscape.

By eclectic approach analysis on the example of 'Museum der Kulturen', a gallery floor is added to the historical building staying in the style of medieval architecture. By deconstructive approach, this intervention is an effort to find out the meaning of the whole

separated into sub-parts. In view of harmony with the existing environment, this addition is made not to being competitive with the historical texture and building. It is observed that an aesthetic harmony and continuity sought utilizing from the roof axles of the existing historic structure.

Result: The first step of the design in historical environment is to examine the original texture characteristics of the environment. Natural (topography, climate), social (living style) and socio-cultural (traditions, culture) structures are decisive in creating of the historical environments. The mutual interaction between public relations and physical environment cause redefining this identity. The analyses before design are reflections of the historical and cultural savings. Thus, we must use these cultural and historical values as guidance on our design progress. The relationship between the existing historical environment and our design is the main factor that leads us to the result. As a designer, our duty is to determine thinking and interpretation ranges, layers and routes, and to make inferences through these data instead of becoming the historical texture as a taboo or completely indifferent.

6. Results

This study and the course inspired to the work is aimed at the participants' understanding of the historic environment. Therefore, he/she will suggest which parameters could be guided for a design problem in the historic environment.

In the end of study, it can be seen that the participants have been in the way of understanding the historic environment. They have gained enough that the historic environment contains many meanings accumulated over time, and each new meaning to be added there must be in harmony with the whole. It does not matter this integrity is satisfied by either harmony or contrast, or a behavior including both. The important thing is to reconcile the layers of history.

Within this context, it is concluded that the harmony and contrast behaviors, as the design approaches in historic environment, could not be decisive alone for the problem of design in historic environment, and sometimes it is possible two approaches may have been nested with each other.

In addition, the deconstruction thought by Derrida for reading the text was experienced in good understanding the design problem in the historic environment. This has been a good thinking experiment for the graduate students participated.

7. References

- Velioğlu, A. (1992). *Tarihi Çevre İçinde Mimari Tasarım ve Süreci Üzerine Bir Araştırma*, Karadeniz Teknik Üniversitesi Fen Bilimleri Enstitüsü, Doktora Tezi, Trabzon, Türkiye.
- Derrida, J. (2011). *Gramatoloji*, Çev.; İsmet Birkan, Bilgesu Yayıncılık. (eserin orijinali De la Grammatologie, 1967dir.)
- Kolektif, (2015). *Toplumbilim Sayı: 10*, Jacques Derrida Özel Sayısı, Bağlam Yayıncılık

Vernacular Settlement Fabric As A Cultural Landscape Component: The Case Of Artvin-Savsat, Turkey

Aslıhan Erdoğan

1. Introduction

Humans have always been inclined to adapt to the environment in which they live and/or customize it according to their needs from the very first day they existed on earth. As a result of this interaction, it is possible to see the influences of human activities in every landscape where there is human life. Humans adapt different lifestyles depending on the conditions of the environment in which they live, and this situation reveals the influence of landscape on humans. The areas that are formed with social, economic and cultural influences shaped by the interaction between the humans and their environments on earth are called as cultural landscape (Ozsule, 2005).

Cultural landscape is in fact a mosaic that includes the natural characteristics and the physical elements that have appeared as a result of human activities throughout the history and also includes the components that occur on the landscape in time (Lennon and Mathews, 2006). Cultural landscape has a very wide variety on earth, and is the mirror of the social development of human beings, their creativity and spiritual wealth; and also forms the elements of our common identity on earth. In addition, cultural landscape is also important in that it reveals the roots of a country and a nation, and shows its developmental stages. Cultural landscape reveals the relations between the humans and their natural environment with their shapes, properties and usage styles (Anonymous, 2008).

According to Rapoport (2004), the more a landscape is changed by humans, the more it has the quality of being a cultural landscape. Cultural landscapes are the complex elements that show a variety from agricultural fields that cover thousands of hectares to small formal gardens that are smaller than one decare. Natural elements like the field forms, the structure of the soil and the vegetation are not only the part of cultural landscape but also constitute the skeleton of its development. With the broadest definition, cultural landscape reflects the use and adaptation of natural sources by the humans and is expressed with the residential tissue, area usage, transportation system, and construction types etc. that are formed with the organization and sharing of the nature. The character of a cultural landscape consists of physical materials such as roads, buildings, walls, and vegetation as well as the area usage types, the tissue where the traditional life is lived, and field usage forms that reflect the cultural values and traditions (Vos and Meeks, 1999).

Rural residential areas, which still keep their natural and traditional sides, are one of the most important components of cultural landscape. The majority of the rural residential areas, which are different from the urban areas both in terms of population density and socio-cultural properties and environmental relations, have authentic landscape characteristics. After the industrial revolution, humans used the natural environment as they wanted, and gave irreversible damage to it. In time, residential tissues are losing their authentic values with technological developments and due to the differentiation in human needs. The spread of popular culture, which influences the whole world, causes that the elements that are specific to an area and other cultural factors are replaced with the scenery and elements that are easily observed everywhere (Ozsule, 2005). For this reason, it is necessary that the traditional field usage styles that constitute the identity of traditional rural residential areas, the related activities, place organizations, traditional building types and traditions must be protected against changing conditions, and must be transferred to future generations in a healthy manner.

The rural residential areas are one of the important attractions of our country with their natural and cultural landscape wealth. The harsh geographical conditions and residential tissue, which are specific to the area, sped up the migration from rural areas to urban areas. In this way, the human pressure on rural areas decreased, and the natural and cultural landscape values have reached our present day. However, the desire of human beings to flee away from urban areas caused that the interest in the nature increased day by day, and the rural residential areas of the Eastern Black Sea Region gained importance. In this context, Savsat with its natural and cultural landscape values neighboring three different cultures, which are the Black Sea Region, Eastern Anatolia and Georgia, has been chosen as the study area in order to examine the traditional rural residential tissue, which is itself an important component of cultural landscape. In the scope of the study, the traditional rural residential tissue of Savsat has been examined in terms of the natural environment, economic structure and user-place relations.

2. Materials and Methods

The county of Savsat of the city of Artvin has been chosen as the study area. In addition, the domestic and foreign studies published in the literature on this topic, the data obtained from field work, and photographs constitute the main and auxiliary materials of the study.

Savsat is located in the Eastern Black Sea Region of Turkey, and is one of the 8 counties of the city of Artvin (Figure 1). The area is neighboring the city of Ardahan in the East, the county of Ardanuc in the south and southeast, the centrum of Artvin and the county of Borcka in the west, and the state of Georgia in the north.

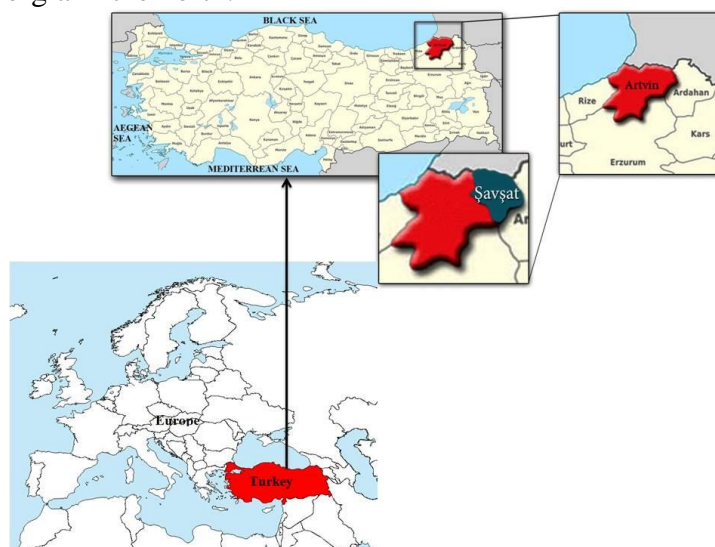


Figure 1. General Location of the Study Area

Savsat has a different field structure that varies between 590 and 3160 meters. General conditions of the Eastern Black Sea Region are dominant in the county, which is located in the transition area of the humid climate of Eastern Black Sea Region and the continental climate of the Eastern Anatolia Regions. However, the climatic conditions of the county, which has different physiological characteristics, are different from the coastal areas; and in general, the county is influenced by the humid and mild-cold climate of the Black Sea Region.

The city of Artvin, to which the county is connected in administrative terms, is the habitat to many different flora and fauna due to its geological-geomorphological varieties and with its active topographic structure, its wealthy water sources, and because of the influence of 3 different climates. In this context, the city of Artvin is in the forefront in the national and international platforms with the variety in vegetation and the variety of endemic species. The study area is a part of Caucasian Ecological Area, and hosts Karagol-Sahara National Park,

Papart Stream Valley Natural Protected Area, Balikli-Maden Wild Life Protection Area, and Karcil Mountains Gene Protected Area, which are rich in biodiversity. The area also has a rich flora, fauna and rural architecture together with natural and cultural landscapes that are specific to the area.

The County of Savsat has been an important residential area since IX. Century. It is possible to observe the traces of Urartus, Cimmerians, Saka Turks, Romans, Sassanids, Byzantines, Arabs, Georgians, Ottomans and the Republican Period starting from the prehistoric periods in the area (Anonymous, 2016). There are registered historical works and civil engineering examples belonging to these different periods within the borders of study area. The study area has rich cultural landscape values with its active and changing topography, rich flora, historical tissue, and with the rural residential areas, which are the outcome of cultural and traditional area usage. This wealth has created a great specificity in the traditional rural residential tissue. Traditional area usage, and the forests, pastures, agricultural and residential areas constitute the main area usage types in the area.

The study method consists of data collection, observing, analyses and evaluations. Firstly, the traditional rural residential tissue was examined in terms of the natural environment, the user-area relation, and traditional field usage styles. Then, the basic characteristics of the villages, which constitute the traditional rural residential areas, the winter quarters and the highlands, were determined. As the last item, the elements that threatened the traditional residential tissue were determined, and recommendations were made to sustain the traditional rural residential tissue characteristics.

3. Findings

The traditional houses, and the haylofts that are attached to the houses, which constitute the traditional houses that have integrity with the natural landscape, constitute the specific characteristics and the basic elements of the traditional architecture. The natural structures, and depending on this, the difficulties in transportation, have been influential in the formation of these elements. The attachments of the houses were built near the houses for the purpose of storing and keeping the agricultural products for longer terms, and this building style of the attachments depended on the production styles of the population. These structures were built in accordance with the topography; and the agricultural areas that were formed according to this topography had important influences on the visual landscape characteristics of the area (Figure 2).



Figure 2. The Structures Built in accordance with the Topography

The traditional housing tissue is the reflection of the structure of the society and the production styles to the physical areas. When the residential tissue of the study was examined, it is generally observed that the physical environment was shaped according to the natural landscape elements. The traditional housing tissue in the area today is in a diffused form in rural residential

areas, while it shows a collective residential design in winter quarters and in highlands (Figure 3).



a



b

Figure 3.a) The Village Residence that Developed in a Diffused Manner, **b)** The Rural Residence that Developed in a Collective Residence Design

Since the general structure of the area is active, the slopes, the banks of the streams and the skirts of the mountains were chosen as the residential areas, and villages developed up to 1500-1600 meters elevation, which is the upper limit of residence. The forests were the natural boundaries for residential areas, and the traditional houses were spread in the area in a diffused manner (Figure 4).



Figure 4. The Residential Areas Shaped in the Slopes and Mountain Skirts according to the Natural Structure in the Area

The most basic factor in domestic place design and in general inclination of the traditional houses is the topography. The buildings placed in parallel design to the Contour Levels were adjusted to the structure of the field with the least intervention to the topography. No houses were built in the areas that had quality soil and suitable inclination, and these areas were used

for agricultural purposes. Due to both economic and transportation difficulties, the houses were positioned close to the agricultural areas (Figure 5).



Figure 5. The Traditional Housing Tissue that was positioned Close to the Agricultural Areas The houses that were built in parallel design to the Contour Levels seemed to be two-storey houses in the rear front; and for this reason, many houses were given grade entries in both storeys. The pavilions were attached to the balconies, which were built for the purpose of relaxing and sightseeing in the front side of the buildings, and are among the most prominent characteristics of the traditional houses (Figure 6).



Figure 6. Traditional Savsat Houses

The primary building material of the houses in the area is the wood, which abound in the area. The buildings were built in frame house style or wooden compilation system, which is the traditional building technique of the area. With the help of this technique, the house may be detached and re-built in another place. Each house and its surroundings are limited with wooden fence or dry rubble masonry. In the roofs of the buildings, the pedavra, which is the traditional roof cover in the area, or grooved pipe zinc, is used. The secondary building material is stone. It is used in the underground parts of the houses, which are built due to the inclination of the area, and in ground floor walls. This part of the houses is used as the stable (Figure 7). In the upper floor, the courtyard, which is the common living environment, the depot and the bedrooms are located.



Figure 7. Traditional Houses Built with Wood and Stone Building Materials

The haylofts, which are the basic structures of the rural architecture in the area, were built in the courtyard of the houses depending on the agricultural activities, or were built in agricultural areas according to the needs. The haylofts were built according to the traditional neck-to-neck technique by placing thick wood logs on top of one another. These haylofts were used for the purpose of drying the wet hays and storing them on top of one another to store (Figure 8).

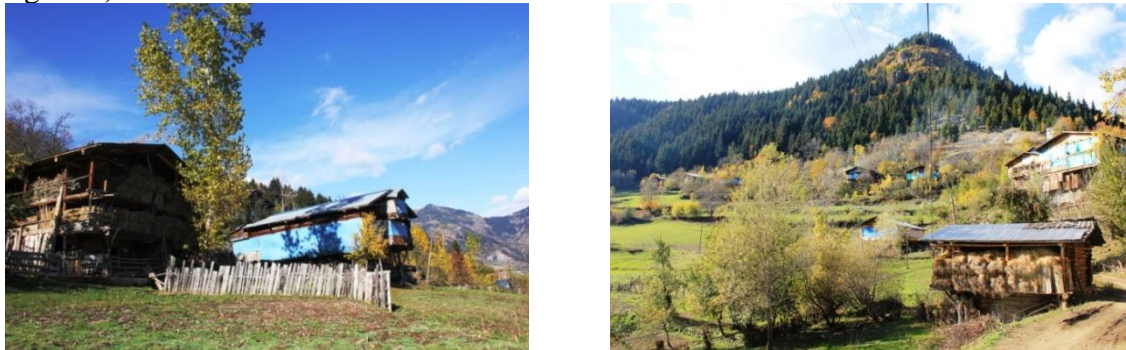


Figure 8. The Traditional House and the Hayloft, which is an Attachment

The winter quarters and highland residences, which are dependent on villages in economic terms, are sub-village residential areas, and the winter quarters are temporary residential areas that pose a connection between the villages and the highlands. There are winter quarters located between 1500-2000 meters, and highland residences located between 1800-2800 meters. The winter quarters are the temporary residences where the villagers live for 1-1,5 months before they go to the highlands or before they go back to their villages. The highlands, on the other hand, are the residential areas located in the borders of the forests and where animals are sent to graze between June-September. There is no agricultural production in winter quarters and in highlands, and this situation eliminated the being close to the agricultural area factor; and the residential areas showed a collective housing characteristic, and there are no attachments near the houses. The houses in the highlands have simpler details than the village houses. The buildings were built as two-storey and with the traditional block-compiling system in winter quarters and in highlands. The ground floor is used as stable, which is the case in villages as well, and the upper floor is used as soup-kitchen and for accommodation. The outdoor usage of the buildings is not separated with separators (Figure 9).



Figure 9. Traditional Highland Settlements and the Highland House Built with Traditional Wood Block Compilation System

When migration started from urban areas to villages in recent years, the wooden houses in the area are being replaced with new reinforced-concrete buildings, which are not suitable for the traditional tissue. No matter how much the people of the area want to build buildings that

are suitable for the traditional identity, some factors like the scarcity of the skilled employees, the availability problems for the building materials, and the risk of fire force people to use reinforced-concrete as building material. The attachments that were built according to the modern demands in traditional houses disrupt the characters of the traditional houses. Traditional houses, which are left unattended, the buildings that are not built in an integrated manner with nature in the winter quarters and highlands influence the current natural and cultural landscape character of the area. The opening of the natural sources for construction in an unplanned manner is threatening the natural structure and cultural landscape of the area. The most important elements that threaten the natural and cultural landscape character in the area today are the dam and Hydro Electric Power Plant, which are still under construction. The earth works that appear as a result of the construction of new roads and tunnels are thrown to the stream bed or left in the forests, which pollute the water sources and damage the flora and fauna that exist in the area, harm the ecosystem, and disrupt the environment in physical terms. In addition, building-sites and central buildings are being constructed in a way that does not suit the visual characteristics of the area, and pose a visual pollution (Figure 10).



Figure 10. The Basic Problems that cause Disruptions in the Natural and Landscape Character of the Area: **a)** Sand Quarry, **b)** NT-HEPP, **c)** Reinforced-Concrete Buildings Built in the Traditional Housing Tissue

4. Results

Urban residential areas develop as a part of the urban landscape in which they are located, and have specific characteristics with the production styles, architecture and traditional lifestyles. The Sivas County, which is the intersection point of three different cultures in the northeastern part of Turkey, has a specific identity together with the traditional residential tissue, which still exists today, and with characteristic cultural landscape values integrated with the natural landscape elements in the area. Natural landscape elements have influenced the development of the area, and a residential tissue that is integrated with the nature has emerged. However, the increasing migration movements from the urban areas to villages, the urbanization, and the pressures like using the tourism and natural sources in an unconscious manner causes that images and buildings that do not fit the rural landscape identity of the area and the traditional residential tissue appear in the area. Especially the county center and the new reinforced-concrete buildings in urban residential areas and infrastructure works (roads, NT-HEPP, dams) influence the traditional residential tissue of the area in a negative manner, and disrupt the traditional, natural and cultural landscape character of the area. In other words, the misuse of the land, and the practices that are not sustainable in the area damage the natural areas in the region, and the natural sources are consumed in an unplanned manner (Reis *et al.*, 2006). In order to protect the traditional residential tissue and architectural identity of the area, the architectural typology of the area must be obtained, and new constructions must be encouraged

to be built in accordance with this typology. It must also be made compulsory to use building materials that are in accordance with the traditional tissue.

A rural tourism that is planned and applied in a correct manner is an influential tool in protecting the traditional cultural landscape. Savsat has an important potential with its natural and cultural landscape source values. The people living in the area should be directed to alternative tourism activities like highland tourism that is in agreement with the nature, mountaineering, bird-watching, and trekking; and should be trained for this purpose. However, it must be kept in mind that the number or the visitors coming for touristic purposes may increase with each passing day, and will pose a pressure on the sources.

The problems faced by the area and the pressures are the common problems faced by all traditional rural residential areas that try to protect their integrity. For this reason, ensuring the sustaining of the cultural landscape character of an area is important both in national and international level.

Natural and cultural data should be evaluated together with the structures built by humans and the environment (Feilden and Jokilehto, 1993). In this context, instead of producing plans and solutions in an upper scale within a balance of protection and usage; landscape plans that handle the problems in a regional scale and produce solutions must be developed. In addition, these landscape plans will ensure that the traditional cultural landscape components are defined, protected developed and are transferred to future generations in an accurate manner. For this reason, the preparation of cultural landscape management plan for the area should be among the future targets. In addition, Savsat received the Cittaslow Certificate in 2015, and became the 10th Cittaslow County of Turkey, which shows that the traditional life and cultural landscape components still exist in the area. This status will contribute to the introduction of the area in international level and to the protection of landscapes.

5. References

- Anonymous, (2008). Unesco Cultural Diversity, 2008. Retrieved from http://portal.unesco.org/culture/en/ev.phpURL_ID=34321&URL_DO=DO_TOPIC&URL_SECTION=201.html
- Anonymus, (2008). Savsat. from <https://tr.wikipedia.org/wiki/%C5%9Eav%C5%9Fat>
- Feilden, B.M. and Jokilehto, J. (1993). Management Guidelines for World Cultural Heritage Sites; ICCROM. Rome
- Lennon, J. and Mathews, S. (2006). Cultural Landscapes Management: Guidelines for identifying, assessing and managing cultural landscapes Australian Alps National Parks 1996. Retrieved from <http://www.australianalps.environment.gov.au/publications/researchreports/pubs/cultural-landscape-management-guidelines.pdf>
- Özsüle, Z. (2005). Geleneksel Yerleşimlerin Korunması Açısından Kültürel Peyzaj Değerlendirmesi: Mudanya Örneği. [An assessment of cultural landscape for the conservation of traditional settlements: A case study of Mudanya]. İstanbul Üniversitesi Fen Bilimleri Enstitüsü. Peyzaj Mimarlığı Anabilim Dalı. Doktora Tezi (Istanbul University Graduate School of Natural And Applied Sciences. Department of Landscape Architecture. Doctoral dissertation), Istanbul.
- Rapoport, Amos (2004). Local Environments in a Global Context, EBRA International Symposium.
- Reis, S., Bayrak, T., Yalçın, A., Sancar, C., Erduran, M., Atasoy, M., Nişancı, R., Ekerin, S. (2009). Rize İline (TR904) Ait Heyelan Risk Bölgeleri ve Uygun Yerleşim Alanlarının CBS ile Belirlenmesi. [Identification of [Landslide Risk Areas and Suitable](#)

[Settlement Areas Using](#) GIS Techniques in Rize]TÜBİTAK Projesi Raporu (TUBITAK Project Report).

Vos and Meeks (1999). Trends in European cultural landscape develeopment. Retrieved from http://www.sciencedirect.com/science?_ob=ArticleURL&_udi=B6V913Y21V4P2&_user=10&_coverDate=12%2F15%2F1999&_rdoc=1&_fmt=high&_orig=search&_origin=search&_sort=d&_docanchor=&view=c&_searchStrId=1501542708&_rerunOrigin=google&_acct=C000050221&_version=1&_urlVersion=0&_userid=10&md5=fd10a462b891f7254d75a8af433a630a&searchtype=a

How site-specific artworks become a part of citizens' visual memory? The most beautiful of all mothers

Tülay Erenoğlu

1. Introduction

Everyday around the world, lots of artworks are being produced and very important amount of them are being designed for a specific site and more for a specific time period. In the literature, these kinds of artworks generally are called as site-specific, site-determined, site-oriented, site-referenced, site-conscious, site responsive or site-related. (Kwon, 2002)

Looking from Turkey, the art scene of Istanbul is constructed on the works of International Istanbul Biennial more than the other festivals that make the Biennial a specific issue. Biennials' artworks have been discussed from the very different point of views related to the culture, economy, society and politics or related to the art, architecture and urbanism in the global, national or regional level. In the scope of this study, the Most Beautiful of All Mother work which was a site-specific installation produced for the 14th International Istanbul Biennial and located in an urban environment, will be discussed related to the citizen's visual memory within the theory of spatial processing during mental imagery projected by Kosslyn, Shephard and Thomson. (Kosslyn, Thompson, & Ganis, 2006)

The Biennial artworks are finding locations both in indoor spaces like museums, exhibition halls and outdoor spaces like urban environment. The artworks located in the urban environment have a potential to become the part of urban scene and they have a role in psychological and sociological atmosphere of urban environment effecting on the people. This kind of an approach to exhibit an artwork within an urban environment keeps the work active in citizen's visual memory. Furthermore, designing an artwork in the scope of Biennial in the context of an urban identity requires considering the people's experiences to understand the effects of a site-specific artworks. It creates a new cultural knowledge to citizen's daily lives and it is still a question that the conceptually designed site-specific artworks can become permanent for the city and citizen's visual memory.

In the scope of the study, an artwork was chosen to create a survey constructed on it within the theory of spatial processing during mental imagery. The theory is dealing with the information processing in the brain with respect to the object and spatial properties of an object. The Most Beautiful of All Mothers work is one of the most important examples of 14th International Istanbul Biennial which is designed by Adrián Villar Rojas, in Büyükdada in front of the Trotsky's House¹. The general appearance of the artwork is shown in

Figure 1.

The House and Büyükdada have their own historical traces and the House looks like a ruin standing in wild green garden that makes the work in need of considering within the spatial relations and the object properties. Considering an object within object and spatial properties affects both the ventral and dorsal systems, which are a set of brain regions, to be processed in peoples' mental imagery but at this point it is a distinction between encoding within ventral and dorsal systems. Ventral systems help to become familiar within the object that means recognition while dorsal systems supply information for the identification of the object which occurs in long term associative memory. For the sake of the study, it is important to understand how an artwork becomes the part of the citizen's visual memory.

¹ The Yanaros Mansion, gardens and pier were built in the 1850s by Nikola Demades on the Western side of Büyükdada. Leon Trotsky lived here between 1932 and 1933 at the end of his four-year exile on the island. (Christov-Bakargiev, 2015)



Figure 1. The general appearance of the artwork (Istanbul Foundation for Culture and Arts, 2016)

The study conducted as a survey research. For the data collection, five participants, who are currently residents of Büyükada and experienced the artwork, were chosen. The way of data collection was one-on-one interviews. Each person completed three questionnaires; first one questioning their own experiences within the artwork, second one is a recall task and the third one is a spatial location task.

In the end of the study, based on the collected data from the individuals, the aim of the study is creating an understanding on the effects of artworks' object properties and spatial properties, which are directly related to the historical, cultural and sociological traces of site, on to the citizen's visual perception and memory with respect to becoming the part of citizen's visual memory.

2. The theory of spatial processing during mental imagery

The theory of spatial processing during mental imagery is basically based on the neuroscience of the human visual system and called as a neurofunctional theory. Visual mental imagery is a complex phenomenon that can be considered from very different points of view. 'Mental images are representations that arise during perception, but they arise from mental stored information rather than from immediate sensory input. Visual mental images give rise to the experience of "seeing with mind's eye", an experience you probably will have if someone asks you.' (Kosslyn & Rosenberg, 2006, 348) According to Kosslyn, Segar, Hillger and Pan, visual mental imagery is used to help to recall information about previously perceived objects and events, to reason about visual and spatial properties of objects, and to learn new information. (Kosslyn S. M., 1991, 2) In addition to this, Kosslyn, Flynn, Amsterdam, and Wang described the imagery processing as the theory posits a set of processing subsystems that work together to identify shapes and specify their locations. (Kosslyn S. M., 1991, 3)

Visual imagery and imagery processing are used phenomenon to understand urban environment in relation with the urban memory and it can be said that those are seminal ways of understanding an artwork designed in an urban environment in the creation of memory in

citizens' mind by recalling the information on the artwork related to object and spatial properties.

In the scope of this study, the whole theory was not considered however the visual mental imagery was analyzed as an output from ventral and dorsal systems' pathways which is converged in long-term associative memory and discussed with respect to the idea of the recognition and the identification of the objects. Kosslyn defined the difference between recognition and identification as "If visual input matches a representation in visual memory, one will know that the object is familiar, that is, will recognize it. However, identification occurs only when the input goes on to access multimodal, conceptual information about the object; one identifies an object when one can access a full range of stored explicit information about it, such as its name, its preferred environment, its sounds, smells, and so on. Identification involves knowing more about the object than can be discovered from immediate input from the senses" (Kosslyn, Shephard, & Thompson, 2007, 6) According to the theory, a person can recognize an object by seeing or hearing its voices but can identify only using longterm associative memory.

Figurative aspects of both mental images and visual percepts are processed along the ventral occipitotemporal route while the dorsal occipitoparietal route processes the spatial features. (Mazard, Tzourio-Mazoyer, Crivello, Mazoyer, & Mellet, 2004, 674) In order to create a visual perception, verbal and dorsal systems are used in such a way that verbal systems make the person get the object properties such as shape, color, texture while dorsal systems make the person get spatial properties such as location, size and etc.

The created visual perception meets with data that recorded in the longterm associative memory and if the art object is not a freely standing object without any related spatial organization, like the art work chosen in the scope of this study, it has to be created both via verbal and dorsal systems. In the literature, a similar study was done by Evans, Brennan, Skorpanich and Held in 1984. The study was on a real-world memory task that aimed to recall of urban landmarks regarding to object properties and the spatial properties but it compares the elderly adults and younger adults in terms of the longterm associative memory usage. The downtown area in Orange, California used in the study. The participant were completed a background questionnaire and a recall task and spatial location task to measure the remembered buildings in the downtown Orange. The participants asked to briefly describe the building and its location and within the research, recall, location memory, spatial location accuracy, the organization of building recall and the influence of physical characteristics of the settings were measured which are related to the ventral and dorsal systems. (Evans, Brennan, Skorpanich, & Held, 1984, 453-54) The study is strongly related with the effects of object and spatial properties for memorizing an object in addition to this, within background questionnaire, the effects of cultural, historical, sociological features were considered.

Every city has its own traces to orientate or navigate the people and the physical environment. Additionally, every citizen has had long associations with some part of his city, and his image is soaked in memories and meanings and there seems to be a public image of any given city which is the overlap of many individual images (Lynch, *The Image of the City*, 1960). From the points of urban environment, Kosslyn describes the effects of the 'things' in urban life as "whenever we use landmarks to navigate, we are associating shape information with location information, and learning the layout of a building or the route to work requires storing such associations" (Kosslyn, Shephard, & Thompson, 2007, 7). In order to understand the effects of the artwork to become the part of the citizens' visual memory, it should have been analyzed considering the spatial properties regarding to characteristic of the city or the design area of the artwork.

3. General method of the study

In this study, the general layout of the survey and the method are conducted to adapt a neuroscientific theory into a qualitative survey method considering an urban environment, an artwork and citizens. The Most Beautiful of All Mothers was chosen to study on which was one of the most important examples of the 14th International Istanbul Biennial. The artwork, designed by Adrian Villar Rojas, was a conceptually designed site-specific installation. The work was located in Büyükdada, in front of the Trotsky's House. After the end of the Biennial, the work was collected to deliver their owner that means the artwork was designed for a specific site and for a specific time period. The main reason for the selection of the work is that Büyükdada and especially Trotsky House have a specific memory regarding to the historical, architectural and urban traces. The local people have an image of Büyükdada in their minds without any newly designed artwork and so that makes more important to investigate becoming a part of a memory. Additionally the artwork is so influential both in size, color, material and location.

For the data collection, five participants were chosen. To participate in this study, individuals should meet the following criteria: being currently residents of Büyükdada and experienced the artwork. The way of data collection was one-on-one interviews. Participants were informed that the aim of the study is to understand their own experiences related to the effects of artworks' object properties and spatial properties on to the citizens' visual perception to become the part of the visual memory. Each person completed three questionnaires which investigated their own experiences within the artwork, a recall task and a spatial location task.

In the first questionnaire part, the participants were asked to tell their own stories on the first tie of meeting with the artwork to understand the real experience. This aimed to create knowledge on effects of the artwork on the citizens' visual memory and visual perception in addition to this to create knowledge on the created relationship between the citizens and the artwork. The first part of the questionnaire was analyzed within the qualitative research methods. The data analyzed deeply to understand the sense of the data in terms of identifying the shared experiences, finding the general nature and the essence of the experience. It is expected from the study to create some categorizations and to find emerging themes. Within the emerging themes, it was tried to be found patterns to produce a structure for understanding the relations between the local and the artwork.

For the recall task, the questionnaire was conducted according to the 'what' questions to make their answers descriptive and target-oriented. The aim of the recall task was to get the data based on the object properties as color, texture, material that helps to understand the physical influences of the work. The recall task including what questions was analyzed comparing the correct answers and individual's answers. The correct answers were counted as correct recalls. It was done for each question.

For the spatial task, the interviewees were asked to draw sketches related to the required information including the location and size of the artwork on to the given partial Büyükdada map. The map was organized in grid system in terms of the location of the Trotsky House to make easier for the participants signing the correct location and size according to the grids and writing the correct name of the animals. The importance of the drawing sketches was to reach the spatial properties of the artwork that memorized by the interviewees. No time limit was imposed to re-arrange the locations of the animals on the map. It gives us a specific knowledge on the identification of the artwork within the spatial properties. The spatial location and size accuracy determined by counting the number of animals and their size located on the grid by the participants. The answers will be evaluated relatively.

4. Discussion and Conclusion

The results of the survey are examined on its own merit for each questionnaires and a general conclusion was conducted in the end of the discussions.

For the first part, the range of being resident of Büyükada changes between 3 and 72. The common emerging categorizations, which were arisen from the interviews, were identified individually for each question. For the second question, considering the first meeting with the artwork, the emerging situations were; 1) during the Biennial from short distance, 2) during the ship trip to Büyükada from long distance. For the third question the emerging themes regarding their feelings on the experiment were; 1) Reaching the artwork after walking through the greenery garden of ruined Trotsky House was fascinating and exciting, 2) from long distance, it was so eye-catching and the entirety of the Trotsky House, greenery garden and sea were increasing the effects of the artwork. For the fourth question the common themes were; 1) the placement-location-wholeness of the site and artwork, 2) scale of the design. For the fifth question emerging themes regarding their experience within the relations of Büyükada and Trotsky House were; 1) in harmony with Büyükada, physical environment and the silhouette, 2) an opportunity for the local to visit Trotsky House, the desolated, closed villa, 3) changed the visitors' profile of Büyükada and gained a cultural favor to Büyükada. The general result of the first questionnaire part can be summarized as the artwork was so influential and recognizable both from short and long distance that was directly related to the entirety of the site and artwork. In addition to this, it was clearly seen that the artwork was memorized not only with the physical effects on the citizens' visual memory but also within the cultural, historical and sociological effects on Büyükada.

For the second part, a recall task, including 'what' questions was analyzed with the categorization of emerging themes but different from the first questionnaire part, the answers analyzed in comparison with the correct answers to create knowledge on the recalling of object properties of artwork. For the first question considering the general appearance of the artwork, the common answer was "big scaled animal sculptures standing on the sea" which was preciously same as the definition of the artwork as "Villar Rojas' artwork is comprised of over twenty-nine sculptures of animals placed, alone or in groups, on twenty cement plinths in the sea just a few meters off the shore." (Christov-Bakargiev, 2015) For the second question, questionnairing the elements of artwork, only one of the participant remembered four of the elements, one of them three and the others remembered one of the elements. The common answer was elephant which was not surprising that elephant was the biggest one and standing on the front side. For the third question, all the participant managed to remember the white color of the artwork while only two of them remembered the work as white and brown which was the correct answer of the question. For the fourth question, the result was similar with the third one. Although the material of the work various, 'White fiberglass material and combination of organic waste found in Istanbul area and also brought from other countries –from seashells to vegetables, fishing nets, bones, shards of glass, vegetables and even flesh – with a mixture of soil, sand, salt, asphalt, cement, natural pigments, compost and resin' (Christov-Bakargiev, 2015), only the general nature of the materials as organic and inorganic materials, recognized by the participants. The analysis of the questions showed that the participant could only manage to memorize the most specific characteristics and dominant features of the artwork while the details were completely eliminated.

For the third part, the spatial task was analyzed according to the number of the correctly located and sized elements of design. The drawn sketches showed that most of the participant only located the elephant while only one participant located elephant, giraffe, hippopotamus and sheep with the sizes. The correct drawing should include the twenty nine elements on twenty cement plinths in various sizes. The general results of the spatial task can be summarized as the

common characteristics of the memorized elements were related to their sizes and locations because the elephant was located on the front size directly facing the garden door and the most biggest element of the artwork that means the participants memorized the objects not in relation with the each other but in relation with the location and size.

In the end of the study, the collected data from the individuals and the analysis reported that the *recognition* was somehow occurred while the *identification* could not be completed. The artwork, a site and time specific installation can become the part of the citizens' visual memory within its cultural, historic and sociological characteristics of the site. All the participant were feel comfortable and confident while answering the first part and they all remembered their experiences with all the details and respectively as experiencing the ruined Trotsky House, the greenery garden, the garden door and the moment of meeting with the artwork floating on the sea. In addition to this, most of the participants were mentioned the importance of having a chance to visit Trotsky House, which was closed and inaccessible till that time and, last but not least, all the participants expressed their appreciation for the resurgence of the cultural roots of Büyükkada.

In conclusion, an understanding on the effects of object and spatial properties on becoming the part of citizens' visual memory was created but it was clearly seen that discarding the historical, cultural and sociological characteristics of the site only could be a reductive approach to understand the effects of the artworks on the citizens' visual memory. The study contributes to the field as a stimulating for searching for an understanding on the potentials of an artwork produced in a specific site.

5. References

- Barsalou, L. W. (1999). Perceptual Symbol Systems. *Behavioral and Brain Sciences*, 577-660.
- Christov-Bakargiev, C. (2015). *14th Istanbul Biennial, Salt Water; A Theory of Thought Forms, Catalogue*. İstanbul: İstanbul Foundation for Culture and Arts and Yapı Kredi Publications.
- Hall, T. (2004). Opening up Public Art's Space: Art, Regeneration and Audience. M. Miles, T. Hall, & I. Borden içinde, *The City Cultures Reader* (s. 110-118). New York: Routledge.
- İstanbul Foundation for Culture and Arts. (2016). Retrieved from İstanbul Foundation for Culture and Arts Photo: <http://www.iksvphoto.com/#/album/25cd8i>
- Kosslyn, S. M. (1991). *Neuropsychological Components of Imagery Processing, Final Technical Report*. Washington: Air Force Office of Imagery Processing.
- Kosslyn, S. M., & Rosenberg, R. S. (2006). *Psychology in Context*. Boston: Pearson.
- Kosslyn, S. M., Thompson, W. L., & Ganis, G. (2006). *The Case For Mental Imagery*. New York: Oxford University Press.
- Kosslyn, S. M., Thompson, W., & Ganis, G. (2006). Spatial Processing During Mental Imagery: A Neurofunctional Theory. In F. W. Mast, & L. Jancke, *Spatial Processing in Navigation, Imagery and Perception* (pp. 1-17). New York: Springer.
- Kwon, M. (2002). *One Place After Another : Site-specific Art and Locational Identity*. Cambridge: MIT Press.
- Lynch, K. (1960). *The Image of the City*. Cambridge Massachussettes: MIT Press.
- Mazard, A. (2004). A PET Analysis of Object and Spatial Mental Imagery. S. M. Kosslyn, M. Denis, & E. Mellet içinde, *Neuroimaging of Mental Imagery* (s. 673-696). New York: Taylor & Francis Group.
- Mazard, A., Tzourio-Mazoyer, N., Crivello, F., Mazoyer, B., & Mellet, E. (2004). A PET Meta-Analysis of Object and Spatial Mental Imagery. M. Denis, E. Mellet, & S. M. Kosslyn içinde, *Neuroimaging of Mental Imagery* (s. 673-696). New York: Taylor & Francis Group.

Rugg, J. (2010). *Exploring Site-specific Art : Issues of Space and Internationalism*. London: I.B. Tauris.

Thompson, W. (2008). Inspecting Visual Mental Images: Can people 'see' Implicit Properties as Easily in Imagery and Perception? *Memory & Cognition*, 1024-32.

Appendix

QUESTIONNAIRE on The Most Beautiful of all Mothers; 14th Istanbul Biennial, Adrian Villar Rojas, Büyükada

First Part

Name & Surname:

1. How long have you been living in Büyükada?
2. What is the first time you come across the art work? In what contexts or situations did your experience occur and how did they affect your experience?
3. What have you experienced? Could you please explain your feelings when you see the art work?
4. What is the most specific property of the art work?
5. How do you describe your experience considering the location of the artwork in Büyükada, in front of the Trotsky House?

Second Part / Recall Task

1. What is the general appearance of the art work? What is about? Could you please explain?
2. What are the elements of the art work? Could you please tell me the names of the elements one by one?
3. What are the colors of the art work? Could you please describe it?
4. What are the used materials of the art work? Could you please describe it?

Third Part / Spatial Task

Please draw sketches to sign the locations and the sizes of the elements of the artwork along the waterfront within the physical environment on to the given partial Büyükada map. Yellow color indicates the Trotsky House. Please write the name of the animals on the signs. The map was organized in grid system in terms of the location of Trotsky House.



Figure 2 Partial Büyükada map

Landscape Value of Urban Coastal Zones

Nilgun Guneroglu

1. Introduction

Cities are settlement types that evolved since the first settlement of human groups until today as a result of a specific process. The term city was used synonymous to the concept of civilization in the historical perspective. During this process, cities demonstrated differences since they included certain cultural and social structures. These differences are significant in forming the particular character of cities. The most important elements that affect the identity of the cities are the geographical structure, architecture, culture, way of life, presence of water and coastlines. Especially the presence of water was determined as the foundation location of several cities and the cities were shaped around water (Oktay, Erdoğan, & Oktay, 2016). Venice, Amsterdam, London and Florence are among the cities with an identity shaped by the water (Figure 1).



Figure 1. Examples of cities shaped by water (A-Amsterdam, B-Venice)

For humankind, being near water was always a need. Thus, coastal areas, which are the intersections of water with land, always were valuable. Coastal areas are extremely important habitats for they host different plant and animal species (Tülek & Barış, 2014). Coastline is a concept that includes not only the seas, but also lakeshores, and the shores of reservoirs and rivers (Cengiz, Çavuş, & Kelkit, 2012). Since the past, they became the habitat of various civilizations and became areas where humankind built large cities. Although coastal areas were initially selected for easy drinking water procurement, cleaning and irrigation, these areas provide facilities for agriculture, husbandry, mining, energy generation, transportation, recreation, tourism and many aesthetical uses.

Coastlines, which are an important element of character that makes the cities to achieve identity, have changed in time by blending with the history, socio-cultural structure and economies of the cities. Thus, the significance of these areas both in their contributions to urban ecology and possibilities they present for the recreational needs of the urbanites could not be neglected. Since they are important natural, cultural, aesthetic and economic landscapes, two thirds of the human population lives in coastal areas. Increase in coastal population resulted in several environmental problems such as rapid urbanization, industrialization, and unregulated human activities.

An analysis of coastal nations would demonstrate that various countries had significant economic contributions due to their coastal resources. These countries, in addition to the

utilization of coastal areas, are engaged in planning to prevent future environmental problems in coastal areas and to utilize their coasts in a productive manner.

The coastal areas in Turkey are under the pressure of various uses, similar to other global locations. Especially the coastlines in urban areas develop and change very rapidly. Unregulated urbanization, unplanned recreational areas, land filling the coastal areas, fortifications, agricultural activities, sand mining, building highways next to the coasts and industrialization are among the leading coastal problems in Turkey. Insensible use of coastal areas disrupts the ecological balance and causes irreversible damages (Cengiz, 2009).

To minimize environmental pressures that occur in coastal areas, it is necessary to develop protection – utilization based ecological planning approaches. Thus, sustainability of these sensitive areas that have extreme landscape value would be possible. For this reason, planning studies that would be conducted on coastal areas should take protection –utilization balance into account.

The present study addressed aesthetic, ecologic and recreational opportunities provided by coastal areas that affect natural and cultural urban environment positively. Ecological benefits provided by urban and neighboring coastal areas for the environment and living organisms were identified. The pressures and losses that occur in coastal areas as a result of increasing population and urbanization were scrutinized and sustainable planning examples were proposed to recover these areas for urban use.

1.1. Opportunities Provided by Coastal Areas for the Cities

The fact that cities on a coastal area have quite high landscape value could not be ignored. It could be observed that coastlines affect ecological, aesthetic, functional and recreational landscape value of the cities.

Coastal areas have an ecological significance since they provide a habitat for several living organisms for shelter, reproduction and nourishment. Furthermore, coastal areas are one of the most important resources that provide ecological benefits for urban areas (Tülek & Barış, 2014). Ecological opportunities that coastal areas provide for cities could be listed as

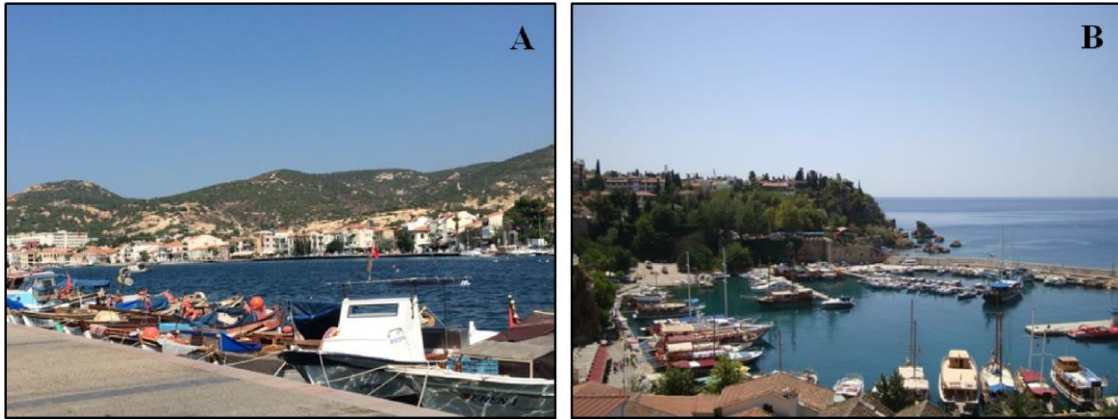
- Crating a habitat for flora and fauna,
- Increasing green areas,
- Protection of the coastline,
- Erosion control,
- Preventing water and environmental pollution,
- Protection against wind and storms,
- Formation of a micro-climate and
- Reduction of the urban heat island effect (Figure 2).



Figure 2. Examples of ecological opportunities (A-Sinop, B-Scotland)

In addition to their ecological significance, coastal areas also provide various functional opportunities for the cities. Functional opportunities provided by coastal areas are -
Transportation,

- Energy generation,
- Agriculture,
- Fishing,
- Freshwater,
- Irrigation,
- Mining,
- Husbandry (Figure 3).

**Figure 3.** Examples of functional opportunities (A-Izmir, B-Antalya)

Coastal areas are quite valuable aesthetically with their unique landscape properties. Aesthetic benefits that coastal areas provide for the cities are

- Creating beautiful scenes,
- Providing continuity for urban views,
- Color and texture for urban views,
- Providing vitality and liveliness for urbanites,
- Increasing the quality of life with aesthetic spaces,
- Creating recreation opportunities
- Exciting emotions for the urban dwellers with motile water and water sounds (Figure

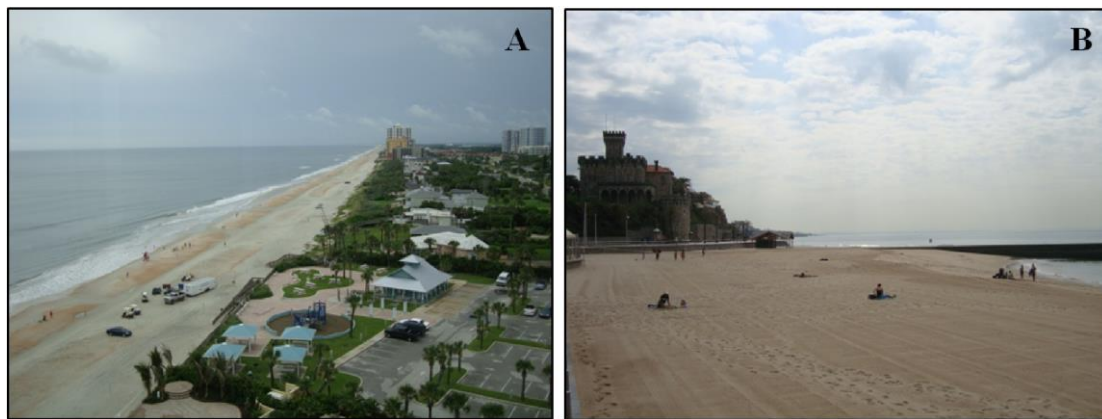
4).



Figure 4. Examples of aesthetic opportunities (A-Istanbul, B, England)

Coastal areas have always been points with a high potential of open and green fields for the urbanites to relax at. Coastlines are preferred for recreation because they provide opportunities for several activities as a result of advantages provided by the water. Recreational possibilities provided by coastal areas are

- Picnicking,
- Water (swimming, snorkeling, canoeing, etc.) and land sports (jogging, bicycling, skating, etc.),
- Fishing,
- Viewing,
- Photographing,
- Camping,
- Bird watching,
- Recreation (book reading, painting, walking, etc.),
- Entertainment (concerts, dance, festivals, etc.),
- Learning (ecological parks, exhibition areas, outdoor museums, etc.),
- Socialization (Figure 5).

**Figure 5.** Examples of recreational opportunities (A-USA/Florida, B-Portugal)

1.2. Problems Due to Utilization of Coastal Areas

Coastlines are among the formations that face a very high demand and as a result change rapidly. Coastal areas were used for daily needs such as water resources, irrigation, and fishing in the past, but today, use of coastal areas was intensified as a result of rapid advances in urbanization and industrialization. Recreation and tourism needs of people with the increase in population result in intense damages on coastal areas. Demand of individuals to be close to the sea, aesthetic and psychological properties that coastal areas present increase the demand for coastal areas and their value. Creation of filling areas to create more coastal areas and to meet this demand, highways built to resolve transportation problems are among the leading problems faced in coastal areas (Kaynaroglu, 2009). These damages destroy the structural character of coastal areas and harm their ecological character (Cengiz, 2009).

The most important characteristics of coastal areas are plenty of oxygen, sunlight and nutrition content and their rich flora and fauna. Coastal damage destroys fish shelters, change the direction of sea currents, resulting in migration of fish (Yüksek, Önsoy, Kömürcü, Kankal, & Akpınar, 2007). Damages that coastal areas face also result in water pollution as well, due to

industrial use. Especially the chemicals used in agricultural activities conducted in coastal areas are the primary factors of water pollution. This pollution has significant effects on both humans and all other living organisms. Furthermore, green area losses in coastal areas decrease the diversity in vegetation species. Endemic plants are harmed and become extinct.

Highways built near coastlines both affect the coastal skyline and destroy beaches (Figure 6A). In addition, traditional texture also lost its character and cultural losses have emerged. The highways to the coast made leads to the fragmentation and destruction of green areas. This fragmentation is destroying also the ecological balance in urban areas (Güneroğlu, 2015). Moreover, quality agricultural lands have also disappeared, decreasing the recreational use value of the coastal areas. As a result of all these developments, visual pollution also emerged in coastal areas (Figure 6B).



Figure 6. Examples of coastal problems (A-Balıkesir, B-Trabzon)

Air pollution is commonly observed in coastal areas due to industrial structures and highways (Figure 7A). Increasing demand in tourism and resulting urbanization are quite effective on the change observed in coastal areas (Figure 7B). In the current situation, these effects are beyond control.



Figure 7. Examples of coastal problems (A- Trabzon [Photo: Cengiz ACAR], B- Muğla)

Similar problems to seashores are observed in coastal areas around lakes and rivers in urban settings. Especially urbanization, industrial and agricultural use cause floods in riverbeds. As a result, lives and properties are lost in regions that receive excessive precipitation. River coastlines are areas used to deposit urban waste (Figure 8A). As a result of discharging

wastewater into streams, it is observed that the fish were harmed and coastal areas were polluted (Lee & Jung, 2016). Furthermore, urban coastal areas are used for waste dumps and this causes smell and visual pollution in the environment. Thus, natural structure of coastal areas is damaged and their values as a resource diminish (Güneroğlu, Acar, & Ömeroğlu, 2010). Lately, rehabilitation studies are conducted to recover river coastlines for urban use (Özgüner, Eraslan, & Yılmaz, 2012; Zülkadiroğlu & Doygun, 2016). In these studies, it was observed that river coastlines were planned as light green and recreational opportunities were presented for urbanites (Önen, 2007) (Figure 8B).



Figure 8. River coastlines (A-Trabzon, B-Trabzon)

The greatest source for these problems created in coastal areas by the human factor is the mismanagement of coastal areas. There are no organizations that could manage coastal areas and implement and monitor related decisions. The databases that contain geographical structure of coastal areas and their natural and cultural values are insufficient.

2. Results and Recommendations

Coastal areas are the most utilized areas since historical times due to their resource values. Especially in urban coastal areas are the most valuable landscapes for urban dwellers. These areas satisfy the open field needs of the urban dwellers as well as provide a venue for several recreational activities. They are areas where urbanites take a breather and relax psychologically and socially. Furthermore, they are the most important areas in cities ecologically. However, although they bear such a great importance for urban dwellers, they have not been protected adequately. As a result of population increase, urbanization and industrialization, coastal areas are being destroyed beyond the limit of recuperation and change rapidly. Lack of proportionate use of coastal areas to their capabilities and lack of the awareness of individuals about the protection of coastal areas disrupt the ecological balance in coastlines. For removal of these pressures and enabling protection and sustainability of the coastal areas, the following recommendations could be made (Akyarlı, Yüksel, Çevik, Yalçınar, & Güler, 2002);

- Detailed databases should be created about the geographical structure of coastal areas and landscape maps and reports on coastal areas and master plans should be tested with simulation techniques in related databases to for future project projections.
- Natural and cultural resource values and land ownership status of coastal areas should be identified.
- Flora and fauna resources in coastal areas should be determined.

- An expert organization that would be the sole authority on coastal works should be established. The confusion of authority and responsibility on coastal matters should be eliminated.
- Plans that were constructed or that will be constructed should be under the supervision of this organization. Furthermore, international environmental organizations should participate in the supervision or at least the opinion of these organizations should be obtained.
- Planning, implementation and supervision stages should be coordinated and follow an integral procedure.
- Laws and regulations on coastal areas should be revised and contradictory principles should be amended.
- Existing laws should be enforced and pressures against enforcement of the laws should be minimized.
- Unplanned building should be prevented in coastal areas; protection and development of natural texture of coastal areas should be the objective.
- Highways that occupy the coastline should be prevented and the connection between the buildings and the water should be protected.
- Coastal ecosystems (forests, aqueous and sandy areas, etc.) should be protected.
- Sustainability of the coastal resources should be maintained before extinction.
- Holding capacities of the coastal areas should be identified and urban planning should be conducted based on these capacities.
- Awareness of the people for protection of coastal areas should be improved. The necessity of use with caution should be adapted by individuals.
- Awareness of the cities for their coastal areas and the importance of these areas should be ensured.
- Ecological approaches should be taken into account in coastal plans.
- Transportation should be available to coastal areas to facilitate people's access and to benefit from the coastal opportunities.
- Recreational opportunities of coastal areas should be identified and social and economic diversity of these opportunities should be ensured.

3. References

- Acar, C. (2012). Photo archive.
- Akyarlı, A., Yüksel, Y., Çevik, E., Yalçın, A. C., & Güler, I. (2002). Kıyı Bölgesi Yönetimi ve Sorunları [Coastal Zone Management and Problems], *Türkiye Mühendislik Haberleri [Turkey Engineering News]*, 420-421-422/4-5-6, 65-68.
- Cengiz, C. (2009). *Kıyı Alanlarında Ekolojik Planlama: Yalova-Armutlu Örneği [Ecological Planning in Coastal Areas: Yalova-Armutlu Case Study]*. (Unpublished doctoral dissertation). Ankara University, Turkey.
- Cengiz, A. E., Çavuş, C. Z., & Kelkit, A. (2012). Çanakkale Kenti (Kordonboyu) Kıyı Dolgu Alanı Kentsel Tasarım Projesinin İrdelenmesi [Investigation on the Urban Design Project of Coastal-Filling Area in Çanakkale City (Kordonboyu)]. *İnönü Üniversitesi Sanat ve Tasarım Dergisi [Inönü University Journal of Art and Design]*, 2(6), 291-304.
- Güneroglu, N., Acar, C., & Ömeroğlu, A. G. (2010). Evaluation of Riparian Landscape Designs in Urbanized Areas: A Turkish-Japanese Perspective, *In Proceedings of the 1 st International Symposium on Environment and Forestry, Trabzon-Turkey, 4-6 November 2010 (Vol.3, pp.1354-1361)*. Karadeniz Technical University.
- Güneroglu, N., Acar, C., Güneroglu, A., Dihkan, M., & Karsli, F. (2015). Coastal Land Degradation and Character Assessment of Southern Black Sea Landscape. *Ocean and Coastal Management*, 118, 282-289.

- Kaynaroğlu, B. (2009). *Ordu Atatürk Parkı ve Kıyı Bandının Kentsel Tasarım Özelliklerinin Saptanması ve Değerlendirilmesi Üzerine Bir Araştırma [An Evaluation on the Concept of Properties for Ordu Atatürk Park and Coast Band]*. (Unpublished master dissertation). Ankara University, Turkey.
- Kline, J. & Swallow, S. K. (1998). The demand for local access to coastal recreation in southern New England, *Coastal Management*, 26, 177-190.
- Lee, M. & Jung, I. (2016). Assessment of an Urban Stream Restoration Project by Cost-Benefit Analysis: The Case of Cheonggyecheon Stream in Seoul, South Korea. *KSCE Journal of Civil Engineering*, 20(1), 152-162.
- Oktay, H. E., Erdoğan, R., & Oktay, F.B. (2016). Akarsular ve Akarsularda Rekreasyon Olanakları [Rivers and Recreation Facilities of Rivers]. *İnönü Üniversitesi Sanat ve Tasarım Dergisi [Inönü University Journal of Art and Design]*, 6(1), 1-11.
- Önen, M. (2007). *Kentsel Kıyı Mekanı Olarak Akarsuların Rekreasyonel Kullanım Potansiyelinin İrdelenmesi: Eskişehir Porsuk Çayı ve İstanbul Kurbağalıdere Örneği [Examination Rivers' Recreational Potential as an Urban Coastal Space: Case Study, Eskişehir Porsuk Creek and Istanbul Kurbağalıdere]*. (Unpublished master dissertation). Istanbul Technical University, Turkey.
- Özgüner, H., Eraslan, Ş., & Yılmaz, S. (2012). Public Perception of Landscape Restoration Along A Degraded Urban Streamside. *Land Degradation Development*, 23, 24-33.
- Tülek, B., & Barış, M. E. (2014). Kent içi ve Yakın Çevresindeki Su Kıyısı Rekreasyon Alanlarının Ekolojik Kriterler Açısından Değerlendirilmesi: Mavi Göl Örneği [Evaluation of Waterfront Recreational Areas in and near the City in terms of Ecological Criteria: An Example of Blue Lake]. *Uludağ Üniversitesi Ziraat Fakültesi Dergisi [Journal of Agricultural Faculty of Uludag University]*, 28(2), 13-26.
- Yüksek, Ö., Önsoy, H., Kömürcü, M. İ., Kankal, M., & Akpınar, A. (2007). Karadeniz Sahil Yolu'nun Kıyı Açısından Değerlendirilmesi [Evaluation of the Black Sea Coast Coastal Road], 6. *Ulusal Kıyı Mühendisliği Sempozyumu, İzmir, Türkiye, 25-28 Ekim 2007 (pp. 9-16) [In Proceedings of the 6 th National Coastal Engineering Symposium, Izmir, Turkey]*. TMMOB İnşaat Mühendisleri Odası.
- Zülkadiroğlu, D., & Doygun, H. (2016). Kentsel Akarsuların Korunmasına Yönelik Peyzaj Planlama ve Tasarım İlkeleri Geliştirilmesi: Kahramanmaraş Kenti Örneği [Developing Landscape Planning and Design Principles for the Protection of Urban Streams: A Case Study in The City of Kahramanmaraş]. *İnönü Üniversitesi Sanat ve Tasarım Dergisi [Inönü University Journal of Art and Design]*, 6(1), 11-24.

Way-finding Strategies of Blinds in Urban Scale

Didem Kan-Kilic, Fehmi Dogan

1. Introduction

We -as sighted people- have very little knowledge about how blind people perceive large-scale urban environments and how they acquire spatial information of such complex urban environments. Studies in the literature have mainly concentrated on small-scale spaces (Dodds et al., 1982; Gaunet & Briffault, 2005; Herman et al., 1983; Leonard & Newman, 1967; Passini & Proulx, 1988; Saerberg, 2010). In this study, we focus on how blind people collect spatial information during way-finding process in a complex urban environment. The aim of this study is to question if different urban environments have different impact on way-finding strategies of blind participants and if there is any what these impacts are. It also investigates how blind people use their senses in two different urban environments and how the priority of senses changes according to the urban context. The research question of this study is: "while in a familiar urban context, which specific aspects of the environment blind people focus on and use as cues in their way-finding process".

Gaunet and Briffault (2005) explain simple environments as "structured urban environments, i.e., streets bordered by narrow sidewalks, walls or fences, with cross- and T-intersections, crosswalks perpendicular to sidewalks, one-step crossing, and a less than 15-m-wide road. Most blind people live and travel in such environments. Complex environments are unstructured areas such as open areas, campuses or major roundabouts, which are usually avoided by blind pedestrians" (397). Gaunet and Briffault (2005) found that the more complex and unstructured an environment is the more difficult way-finding is.

Passini and Proulx (1988) state that "to move freely in the large scale architectural and urban environment can be a difficult task for any person; but it can be an exasperating one for the visually impaired" (228). Blind people require extensive storage of information regarding their environment because they cannot use visual sensory inputs to understand the spatial organization of their environment. In this study, one of the main hypotheses is that spatial perception is not merely about vision. Millar (1994) made significant contributions in the way other senses are used in perceiving environment and claims that each of the different senses is specialized, however, these senses are complementary and overlapping. Therefore, providing information from spatial environment is not based on only one sensory modality.

In an unfamiliar environment, a blind person has many difficulties to collect spatial information and to locate landmarks which make their way-finding process easier (Coughlan & Manduchi, 2009). Gaunet (2006) showed that blind individuals' difficulties in accessing information in unfamiliar environments consist of not knowing "which way to walk to the destination, keeping track of the direction to the destination, knowing which way is faced, which street corner the pedestrian is on, when and where to turn, finding a new store or office destination, learning about new bus stop locations, and learning about new locations the pedestrian is passing" (341). In this study, the results are discussed according to Gaunet's insights on these difficulties.

Senses of blind individuals are very important during way-finding, however, personal memory also has a very significant role during way-finding process, especially in familiar environments. For example, Thinus-Blanc and Gaunet (1997) suggest that reaching a target, distance and direction information are related to the information in the memory of individuals. In absence of vision, other sensory modalities such as audition, touch and olfaction in the environment are heightened during way-finding process of blind individuals. However, do all these modalities have the same significance during way-finding process of blind individuals? We inquired this question in comparing blind individuals way-finding strategies in two different urban contexts.

2. Method

The study took place in two different urban environments. One of them is in a complex urban fabric, namely Kemeralti District in İzmir, and the other is an urban park, namely the İzmir Fair Park. The initial visit to the area was made by one of the researchers alone to identify the turning points with strong reference points with regards to the sensory information they provide. The route determined in these two urban environments are similar to each other considering length and number of turning points but differ from each other significantly in terms of sensory clues they provide given the differences in the physical environment. The selected route length in Kemeralti is 700 meters and in the Fair Park 710 meters. Three turning points which have different sensory cues for the participants were defined in each route. The time travelled in each route is around seven minutes for a sighted subject. However, the speed would change according to the participants' speed of walking.

As an urban environment, Kemeralti has a complex urban fabric with streets of different lengths, orientation, and lacks a clearly intelligible street pattern. It is separate from the rest of the city with clear borders and is linked to the rest of the city with specific entry points. Altogether these urban characteristics of the area make wayfinding a complex task not only for blind people but also for sighted people. The important criteria to determine the route were to include turning points which have strong reference points for the blind participants. The second selected route is in the most important recreation area of the city called İzmir Fair Park with many giant trees and considered to be the lungs of İzmir. It does not include many buildings, except few, such as the Parachute Tower, Open Air Theatre, and culture and art centers which create a feeling of enclosure for the blind participants. The buildings are located within a large green urban void. The selection criterion of the route in the park is primarily related to locations of the buildings in the park. The park was selected for the way-finding task of blind individuals, because it does not provide as much sensory information as Kemeralti. It has a clearly different urban identity with an intelligible street pattern within an urban park. Furthermore, Kemeralti heightens the sense of enclosure with narrow streets bordered by adjacent buildings while the park gives a feeling of openness. We expected that the way-finding task in this urban context would be easier than the way-finding task in Kemeralti district.

2.1. Participants

This study consists of 9 congenitally blind participants (7 men, 2 women). Mean age of the participants is 33. At the time of the study, all participants were employed or were university students. Half of them had no perception of light and shadow, the rest had a negligible perception of light. All participants could walk alone in the city and used long canes during their way-finding process. All participants were familiar with the study environment and at least once in a month they walked alone in Kemeralti and İzmir Fair District. The participants' selection criteria were set according to degree of blindness, state of job, the ability of independent mobility, and familiarity with the environment.

2.2. Design of the Study

All the participants were informed about the study's scope and were tested individually at the same time of a different week day between 13.00 p.m. to 16.00 p.m. and in similar weather conditions. The research was conducted first in Kemeralti District and second in the park in a pre-scheduled day. The trials took around two hours including the structured interview in both

urban environments. Weekdays were chosen to conduct the study, especially in Kemeralti, because this place has a different identity and crowding level during the weekends

2.3. Materials (Experimental Settings)

The participants signed a consent form which was prepared by the researchers. The form includes information about researchers, the content of the study, and where the collected information will be used after the study. A structured interview with 36 questions was conducted before each trial. A video recorder was used to record the participants' experiences and their verbal reports during the walking tour. We also recorded their answers to the structured interview which was conducted before the walking tour. The videos were later used to analyze the verbal reports of the participants.

2.4. Procedure

Preparation Phase: In this phase, each participant's consent was taken prior to the study. The researcher gave the participants initial instructions about each urban environment before the walking tour and the duration of the research. In addition, structured interview was conducted with each participant to assess their independent way-finding abilities and understand their familiarity with the study environment.

Learning Phase: This step is the trial phase. This phase is done to introduce the routes to the participant who were expected to learn the length of the route, main features along the route, the end point, and the turning points. In this phase, a first trial along the selected routes is conducted for each one of the participant together with one of the researchers and the researcher gave information to the participants about the area such as the turning points and the functions of the places around. The researcher gave the same information with the same words to each participant and told the participants to memorize the environmental cues which would help them in the test phase. This learning phase also check participants' ability to walk alone without holding their arms and each participant used a long cane during this phase.

Test Phase: In this phase, the participants were requested to re-walk the route and to talk about their experiences. In addition, they were asked to talk about environmental cues which help them during way-finding. In this phase, the researcher didn't provide help to reach the target. In addition, the researcher did not talk with the participant during the way-finding process. However, if participants felt lost or they were confused, they could request help from the researcher. The participants' verbal reports were recorded during the way-finding process with the video recorder.

Post-test Phase: In this phase, the participants were requested to evaluate the walking tour in two different urban environments. The participants talked about environmental cues that they focus on during way-finding in two different urban environments and were requested to explain how different urban environments affected their way-finding process. The results of post-test phase were used to have better understanding of blind individuals' way-finding process.

2.5. Measures

Verbal descriptions of the participants which were recorded during the way-finding process in two different urban environments were evaluated. The transcripts of the recordings were coded according to the environmental sensory inputs such as auditory information, tactile information, and olfactory information. In addition, their short-term memory was also evaluated through the transcripts of the recordings. The categorization was made according to space features such as sound, texture, air movement, temperature and smell and we measured how many times they use this information in their verbal reports.

3. Results and Discussion

3.1. Findings in Kemeralti

In Table 1, the categorization of verbal descriptions uttered by the participants is presented. The categorization is done according to information derived from environmental sensory inputs, i.e., sound, texture, air movement, temperature and smell. In addition to information from the environmental inputs, information retrieved from personal memory is coded also.

Table 1. Findings of the participants in Kemeralti District

Congenitally Blind Participants	URBAN FABRIC Kemeralti					
	<i>Sound</i>	<i>Texture</i>	<i>Air Movement</i>	<i>Temperature</i>	<i>Smell</i>	<i>Memory</i>
1	18 (40%)	9 (20%)	4 (9%)	13 (29%)	1 (2%)	6 (12%)
2	9 (41%)	6 (27%)	2 (9%)	0	5 (23%)	9 (29%)
3	14 (38%)	11 (30%)	6 (16%)	3 (8%)	3 (8%)	7 (16%)
4	12 (44%)	8 (30%)	4 (15%)	3 (11%)	0	7 (21%)
5	18 (58%)	7 (23%)	2 (6%)	0	4 (13%)	7 (18%)
6	19 (53%)	12 (33%)	3 (8%)	0	2 (6%)	4 (10%)
7	12 (63%)	5 (27%)	1 (5%)	0	1 (5%)	5 (21%)
8	28 (63%)	5 (11%)	5 (11%)	5 (11%)	2 (4%)	4 (8%)
9	15 (71%)	3 (14%)	2 (10%)	0	1 (5%)	7 (25%)
TOTAL	145 (51%)	66 (23%)	29 (10%)	24 (9%)	19 (7%)	53 (16%)

Finding 1: All the participants reached the target without getting lost at the end of the study. Sound (51%) is the most used environmental sensory input among other environmental inputs during way-finding in Kemeralti. The auditory cues are vital for the congenitally blind participants' way-finding process, because they use the auditory cues to estimate their distance to the obstacles, to understand where they are and what the surroundings are as also cited in Portugali (1996). Portugali (1996) also mentions that blind people's navigation in outdoor environments is performed by assessing the distance of sound source, the estimation of landmarks' location and reference points that help them to orient themselves. For example, some of the participants mentioned that the stationary sound sources such as air-conditioner or

non-stationary sound sources such as high wheels help them orient themselves in Kemeralti. They explained this as follow:

P.1. *"Woman wearing high-heeled shoes is passing by me. The sound of heels helps me understand the place of the wall around me. And also I feel the person carrying the bag in his left hand. The sound of heels and the sound of the bag help us orient ourselves in such a crowded environment"*².

Some of the participants also thought that their way-finding process rely on echoes primarily which help them estimate the shape and the size of obstacles in the nearby which is also supported by Kellogg (1962) and Rice (1967). These researchers discussed that echo helps blind individuals determine the type of outdoor environment in which they are located and also determine the size and the shape of obstacles that they come across during way-finding (Kellogg, 1962; Rice, 1967). Below, there is statement of one of the participants who relied most on echoes:

P.8. *"There is a high wall in front of me. My words hit the wall and come back".*

P.8. *"There is a big gap in the right side of me. When I turn right, my voice travel out in the air. It doesn't hit any obstacles".*

As cited in Ashmead and Wall (1999), the echo of the city helps blind people walk parallel to a wall or an obstacle, because the wall creates a wall of sound on the sides of a participant. Freska (1999) suggests that blind people gain this specific spatial knowledge by exploring the environment and memorizing landmarks. The continuity of solid-void organization leads them to plan how to walk as a strategy of learning and remembering a route. They orient themselves according to the walls of a given space. Therefore, solids can create barriers and a feeling of enclosure and voids create break points which can be references for blinds' way-finding process. Some of the participants mentioned the importance of solid-void organization of an environment and how this organization helps them in their way-finding process:

P.5. *"I cannot walk easily in wide open areas. Because, in wide open areas, it is difficult to find references to narrow my path. I cannot control myself in reference to the environment in such areas. However, in this route I can take the buildings as references to control myself during way-finding. My cane's sound hit the walls of the buildings and comes back at me".*

Finding 2: Smell (7%) is the least used environmental cue among the other ones by the participants in Kemeralti. This is probably related to the non-stationary sources of smell. The participants cannot rely on olfactory information because the olfactory information can easily change according to other environmental features such as wind as also mentioned by one of the participants:

P.4. *"To take olfactory cues as a reference can't be always correct. They can easily change according to the direction of the wind or the store can be closed at that particular time. Olfactory cues aren't reliable for me".*

Ferdenzi et al. (2010) also state that there have been many research on auditory and tactile information in environments, however, there are not many studies on sense of smell. In blind conditions, if there is no access to environmental information such as hearing and touch, olfaction may be particularly important for the participants. For example, Kemeralti is an urban environment which has a high level of crowding. If the participants cannot reach the other environmental cues, they need olfactory cues to orient themselves. One of the participants mentioned this as follows:

P.3. *"When I need extra information for way-finding in such a crowded environment, I follow the olfactory sensory inputs such as coffee, corn and new cloths".*

² All verbal descriptions of the Turkish participants were translated into English by the author.

Finding 3: The way how blind people generate cognitive maps in their mind is different than in the case of sighted ones. Blind people store primarily non-visual information to construct cognitive maps. However, as a sighted researcher one of our main questions was "how blinds use this non-visual information to generate cognitive maps". Some of the participants gave detailed information about this and reported as follows:

P.5. *"We construct cognitive maps in our minds different than you. For example, you generate it based on visual information, however, we construct it based on the information such as the voice of coffee machine or the smell of coffee".*

P.7. *"I constructed a cognitive map of this space in my mind. For example, the rough floor texture with restaurants' patios on both side is one of the references for me. When I passed these patios, the floor texture changed from rough to smooth. Another reference to construct a cognitive map is the smell of coffee. This place is always located at the same corner. Or at the third turning point, there was an air-conditioner sound. I coded this place in my mind as the third turning point. Therefore, our cognitive maps are based on sound, smell and texture".*

Millar (1988) hypothesized that blind individuals reach a target by previously memorized movements and they code this information as part of their cognitive maps. In addition, Portugali (1996) argues that this type of information is generally gained via exploratory search or repetitive travel behavior in a local environment as it was done in this case study. One of the participant explained how she stored and used the information which was gained in the learning phase of the case study as follows:

P.4. *"At the end of the wall, there is a second turning point. I cannot remember the names and the function of the places. I create a cognitive map in my mind and I have my own references to remember the places. In order to remember the second turning point, I don't need to memorize the mosque on my right hand side. The important thing is when the wall finishes on the right side; there is a turning point there".*

The auditory, tactile and olfactory cues from an environment give information to blind individuals about their surroundings. They collect references based on these non-visual aspects and construct their cognitive maps in their minds.

3.2. Findings in İzmir Fair Park

Table 2. Findings of the participants in İzmir Fair District

Congenitally Blind Participants	URBAN PARK İzmir Fair Park					
	Sound	Texture	Temperature	Air Movement	Smell	Memory
1	7 (37%)	10 (53%)	2 (11%)	0	0	4 (17%)
2	0	5 (100%)	0	0	0	7 (58%)
3	14 (32%)	29 (66%)	1 (2%)	0	0	13 (23%)
4	3 (15%)	17 (85%)	0	0	0	9 (31%)
5	4 (20%)	14 (70%)	2 (10%)	0	0	6 (23%)
6	10 (42%)	12 (50%)	2 (8%)	0	0	9 (27%)
7	12 (48%)	12 (48%)	1 (4%)	0	0	8 (24%)
8	17 (57%)	13 (43%)	0	0	0	7 (19%)
9	9 (45%)	11 (55%)	0	0	0	6 (23%)
TOTAL	76 (37%)	123 (59%)	8 (4%)	0	0	69 (25%)

Finding 1: All the participants reached the target without getting lost in the park like in Kemeralti. However, the park offers different types of sensory information than Kemeralti. Therefore, the priority of the chosen senses is different from the situation in Kemeralti. Tactile information (59%) is the most used cues among the other environmental cues during way-finding process in the Fair Park. One possible reason for this could be related to the environment. In the park, there are not many sources of sound and the existing ones are far away from the route. Therefore, it is possible that participants used sense of touch more than sense of hearing during way-finding. One of the participant explained why they use tactile information in this urban space as follows:

P.8. *"In this space, there are not many elements that can be taken as references. However, the floor takes and directs us where we want. There is no chance to go in another direction out of your way".*

As cited in Moore and Bloomer (1977), the sense of touch provides concrete information to participants when compared to hearing, smelling and even seeing. Moore and Bloomer suggested that the sense of hearing, smell and even seeing are more abstract senses in terms of bodily experience. They also added that spatial experiences could be gained from touching (Moore & Bloomer, 1977). The blind participants reported that İzmir Fair Park is an open environment whereas they did not use the same term for Kemeralti District. They called İzmir Fair Park as an open environment because there are not buildings, walls or barriers to create a feeling of enclosure for the participants. They told that they should follow something not to get lost in such an open environment and added:

P.1. *"The ground is smooth in the Fair Park. However, I need to find an edge as a reference. Without following anything in the ground, I cannot go straight".*

P.4. *"In the İzmir Fair Park, the most important reference for us is the curbs. They are always stable there".*

P.9. *"The ground takes us where we want to go. The ground directs us".*

It is also written in AFB (2015) that open spaces are a double edge sword for blind individuals. Because blind people may think that these spaces provide freedom to them, on the other hand, they are often too noisy to navigate in. On the contrary, open spaces are difficult to navigate

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because there are no obstacles which create echo for blinds to make navigation easier. The Fair Park is an example of such an open and difficult environment to navigate. The information provided by touching seems to be the primary sensory information which is used by the participants during way-finding process.

As also cited in Gaunet and Briffault (2005), sunshine appearing and disappearing, gusts of wind can be felt by the skin and provide information about crossroads. The skin can detect the temperature, and the foot can measure the gravity with the density and texture of the ground (Gaunet & Briffault, 2005). Below, I include the statement of one of the participants who felt the sunshine better than the other participants and used this information along the walking tour:

P.1. *"Now, the sun hits the back of my neck. It is following me. I can recognize the row of trees while the sun appears and disappears. Therefore, I can follow the shadow of the trees along the route".*

This participant also claimed that blind participants can see the space with their skin, as Pallasmaa (2005) proposed, and the participant added:

P.1. *"Our face works as the eye. We can see with our faces, because our faces are always in the process of collecting information from the surroundings".*

Finding 2: It was found that air movement and smell are not used by the participants at all during way-finding process in the park. This is probably related to the physical features of the environment, because this environment offers a homogeneous smell of a green environment and there has not been any other source of smell. As cited in Koutsoklenis and Papadopoulos (2011), the direction of the wind, the presence of other smells, and the consistency of particular odors are factors that affect the use of olfactory cues for way-finding. They state that "smells also come from natural elements (the ground, sea, and trees, for example), from animals (such as horses), and from other objects or attributes that produce distinctive smells (like a garbage can or a sewer)" (Koutsoklenis & Papadopoulos, 2011, 699). On the contrary, the Fair Park cannot provide any of these factors to the participants in terms of smell and air movement and the participants told:

P.9. *"Olfactory cues are distributed homogeneously. In addition, there are no obstacles around to cut the air. Therefore, it is difficult to recognize them in such a wide area".*

Finding 3: The obstacles help them estimate their distance to an object, understand their location and direction as also hypothesized in Millar (1988). Millar (1988) claimed that reaching the target, distance and direction are determined by previously memorized movements. The learning phase helps them memorize the reference points and understand the features of the environment. One of the participants stated the following:

P.3. *"We came across the race track and there is a low obstacle on my right side. Now, I understand that I am on the correct path because of this fixed obstacle here. This is one of the references for me along this path. In addition, sometimes there will be crossroads on my way; however, I will go straight until I find the building on the right side which is another reference for me".*

Finding 4: As it is seen in Table 3, the participants used more sensory information in Kemeralti than the Fair Park.

Table 3. Comparison of two different urban context

	Congenitally Blind Participants (9 participants)

	<i>Sensory</i>	<i>Memory</i>
Urban Fabric (Kemeralti District)	283 (84%)	53 (16%)
Urban Park (İzmir Fair Park)	207 (75%)	69 (25%)

The chosen routes in the two urban environments have the same length and the same number of turning points. Each turning point in two urban contexts provides strong sensory information. Kemeralti provides richer and more diverse sensory cues for the participants than the Fair Park in the form of non-visual inputs such as sound, touch, and smell. The memory of blind participants has a better significance in İzmir Fair District than Kemeralti since the environment provides less cues in the park. In order to create a cognitive map of an environment and reach the target in the Fair, it is important to memorize the obstacles and reference points.

4. General Discussion and Conclusion

In this study, there are two urban contexts which offer different environmental features. The results show that when the urban context was changed, the participants' way-finding strategies according to the features of an environment changed as well. We conclude that the context in which blind people navigate has a significant impact on their strategies of way-finding, i.e., in Kemeralti the participants were more dependent on the environmental cues whereas in the Fair Park they were more dependent on their internal representations of the environment. For example, as also mentioned in the results, sense of hearing is the most used sense in Kemeralti by the participants. In the park, there isn't much source of sound as a reference for them. Therefore, the participants mostly used tactile information instead of auditory in this urban environment. Sense of touch is the most used sense in the park by the participants. Sense of smell isn't as significant as sense of hearing and sense of touch for the participants in both urban environments. Their way-finding strategies are related to the features of the environment they navigate in.

Before the study was conducted, it was expected that participants can reach the target easier in the park than in Kemeralti because of the fewer number of obstacles. However, the participants reported that they felt lost in İzmir Fair District because of the openness and lack of enclosure. The results show that the participants used less sensory information during way-finding process in the park. When the participants have obstacles and boundaries which help them orient themselves in an environment, even the crowd can be a reference for them during way-finding, these obstacles and boundaries create a feeling of enclosure for the participants. However, in the park, the sense of enclosure is almost lacking because of the features of the environment. In this study, another important finding is that the sound of the city and the echo of the environment is the most important factor for blind participants in a dense urban environment as mentioned in the literature. However, when there are not enough obstacles which create an echo for the participants, they substitute it with another sense, which in İzmir Fair District case was the haptic sense.

Familiarity is very important in the navigation of all people, but especially for blind individuals. The learning phase in the procedure makes the route more familiar for the participant. Urban heritage is a key element in the familiarity with our surroundings. The features of an urban environment that constitute the urban heritage create a unique urban identity and strong reference points in the city. Blind individuals and sighted ones' landmark choices are different from each other. The bakery which is located at the same corner for many years can become a strong reference point and the main landmark of the city for all people. It can be a visual landmark for sighted ones and olfactory landmark for blind individuals. The places which are

located at the same place and preserved for many years carry on the identity and culture of cities. As long as such places can exist, we do not need to create a new design for making way-finding easier.

5. References

- AFB. (2015). *American foundation for the blind*. Retrieved at August 20, 2015, from <http://www.afb.org/default.aspx>.
- Ashmead, D. H., & Wall, R. S. (1999). Auditory perception of walls via spectral variations in the ambient sound field. *Journal of Rehabilitation Research and Development*, 36(4), 313-322.
- Coughlan, J., & Manduchi, R. (2009). Functional assessment of a camera phone-based wayfinding system operated by blind and visually impaired users. *International Journal on Artificial Intelligence Tools*, 18(03), 379-397.
- Dodds, A. G., Howarth, C. I., & Carter, D. (1982). The mental maps of the blind: The role of previous visual experience. *Journal of Visual Impairment & Blindness*, 76 (1), 5-12.
- Ferdenzi, C., Coureaud, G., Camos, V., & Schaal, B. (2010). Attitudes toward everyday odors for children with visual impairments: A pilot study. *Journal of Visual Impairment & Blindness*, 104(1), 55.
- Freksa, C. (1999). Spatial aspects of task-specific wayfinding maps. In J. S. Gero & B. Tversky (Eds.), *Visual and Spatial Reasoning in Design* (pp. 15-32). Key Centre of Design Computing and Cognition: University of Sydney.
- Gaunet, F. (2006). Verbal guidance rules for a localized wayfinding aid intended for blind-pedestrians in urban areas. *Universal Access in the Information Society*, 4(4), 338-353.
- Gaunet, F., & Briffault, X. (2005). Exploring the functional specifications of a localized wayfinding verbal aid for blind pedestrians: Simple and structured urban areas. *Human-Computer Interaction*, 20(3), 267-314.
- Herman, J. F., Herman, T. G., & Chatman, S. P. (1983). Constructing cognitive maps from partial information: A demonstration study with congenitally blind subjects. *Journal of Visual Impairment & Blindness*, 77, 195-198.
- Kellogg, W. N. (1962). "Sonar System of the Blind New research measures their accuracy in detecting the texture, size, and distance of objects" by ear." *Science*, 137(3528), 399-404.
- Koutsoklenis, A., & Papadopoulos, K. (2011). Olfactory cues used for wayfinding in urban environments by individuals with visual impairments. *Journal of Visual Impairment and Blindness*, 105(10), 692-702.
- Leonard, J. A., & Newman, R. (1967). Spatial orientation in the blind. *Nature*, 215, 1413-1414.
- Millar, S. (1988). Models of sensory deprivation: The nature/nurture dichotomy and spatial representation in the blind. *International Journal of Behavioral Development*, 11(1), 69-87.
- Millar, S. (1994). *Understanding and representing space: Theory and evidence from studies with blind and sighted children*: Clarendon Press/Oxford University Press.
- Moore, C., & Bloomer, K. (1977). *Body, memory and architecture*. New Haven: Yale University Press. ISBN 0300021429.
- Pallasmaa, J. (2005). *The eyes of the skin: Architecture and the Senses*. Chichester.
- Passini, R., & Proulx, G. (1988). Wayfinding without vision an experiment with congenitally totally blind people. *Environment and Behavior*, 20(2), 227-252.
- Portugali, J. (1996). *The construction of cognitive maps* (Vol. 32): Kluwer Academic Publishers. ISBN 0-7923-3949-5.
- Rice, C. E. (1967). Human echo perception. *Science*, 155(3763), 656-664.
- Saerberg, S. (2010). "Just go straight ahead" How Blind and Sighted Pedestrians Negotiate Space. *The Senses and Society*, 5(3), 364-381.

Thinus-Blanc, C., & Gaunet, F. (1997). Representation of space in blind persons: vision as a spatial sense? *Psychological Bulletin*, 121(1), 20.

Two Geographical Sections Where Traditional County Fairs Cluster in Turkey: Southern Marmara and Western Black Sea Subregions

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Introduction

Various spatial forms in which shopping and trade take place have been encountered throughout history. Fairs, an example of these forms, attract attention with their history, which dates back to very ancient times, and by embodying many functions (e.g. economic, social, religious, and entertainment) altogether (Çalışkan, 2008:218). The traditional fairs, whose existing examples in Turkey are predominantly found at the district centers – with their limited examples found in villages – today and which are established on specific days of the year, go on receiving great attention in the environments where they are held depending on the various functions they offer. Fairs are traditional shopping spaces where various needs can be satisfied altogether in short-term periods and where the visitors coming from rural environments make use of their shopping, entertainment, and social functions. Besides satisfying the everyday needs of the inhabitants of rural environments with no frequent or regular shopping possibilities, fairs are places in which seasonal or annual household needs and the need for various agricultural tools and materials can be satisfied. Animal sales, various entertainment activities (e.g. funfair, concerts, and performances) and traditional activities (e.g. oil wrestles) are also held in some fair organizations. Fairs may be regarded as entertaining rituals of annual and comprehensive shopping with no alternatives in the environments in which the rural life predominates.

Fairs not only attract visitors from various places, particularly from neighboring settlements, but also have a pull effect on the mobile retailing tradesmen who reside in various regions of Turkey. The significant majority of those who deal with trade at fairs are the mobile fair tradesmen who make a living by following the fairs established successively. These mobile retailers visit the fairs on a route that they regularly follow every year and use their box-body vehicles, which they generally drive by themselves, in carrying the goods and in their need for accommodation at the fair. During fairs, they sell goods and services in the temporary places they rent for a specific fee.

Until recently, fairs were particularly the trade and entertainment spaces of the rural section which had no alternatives. The interest in fairs has decreased at some localities with both an increase in shopping possibilities and the change in the entertainment culture. It is seen that in the process which has developed depending on urban, socio-economic, and cultural developments, the fairs have diminished nationwide and that their distributional areas have been confined to small cities and provincial areas (Çalışkan, 2008:217). On the other hand, the impacts of the industrialization and urbanization processes experienced in Turkey substantially vary by area. It is observed that especially in the places with a high rate of urbanization, the traditional fairs have been replaced by entertainment and trade fairs and festivals. In the past, the settlements in which fairs were established were areas with favorable locations in terms of transportation and trade. However, today fairs are encountered in the environments which fail to develop in agreement with transportation and trade trends and whose socio-economic development is relatively low (Çalışkan, 2008:219).

The studies on fairs that were carried out in Turkey include publications/manuscripts which predominantly cover various pre-Republican periods (e.g. Kayaoğlu, 1981; Sümer, 1985; Küpeli, 1989; Şen, 1993; Faroqhi, 2000; Özcan, 2006; and Ülgen, 2012). Nevertheless, the

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studies focusing on the fairs in the Republican period are rather limited (Tongur, 1940; Çalışkan, 2008, 2010). The lack of studies including fieldwork on this subject also attracts attention.

Purpose And Method

The existing fairs in the two neighboring geographical subregions of the Black Sea and Marmara Regions (the Southern Marmara Subregion and the Western Black Sea Subregion), which stood out in the distribution of traditional fairs in Turkey, were determined with the study presented here. The main purpose of the study is to find out the characteristics of clustering that occur according to the temporal and spatial distributional characteristics of the existing fairs in the two geographical subregions addressed, according to the administrative unit scale, and according to their positions in the fair series. In this way, it was aimed to find out the positions of the fairs in the study area within the temporal and spatial distributional patterns. Besides, determination of the main lines in which the fairs are concentrated and the spatial gaps which become evident in time are among the other purposes of the study. The study presented here reveals that fairs are not local phenomena but essentially display the quality of a retail trade network in integrity and in a relationship with each other. These attributes indicate that it is necessary to plan and manage fairs by considering them on the national scale and to produce policies for the future.

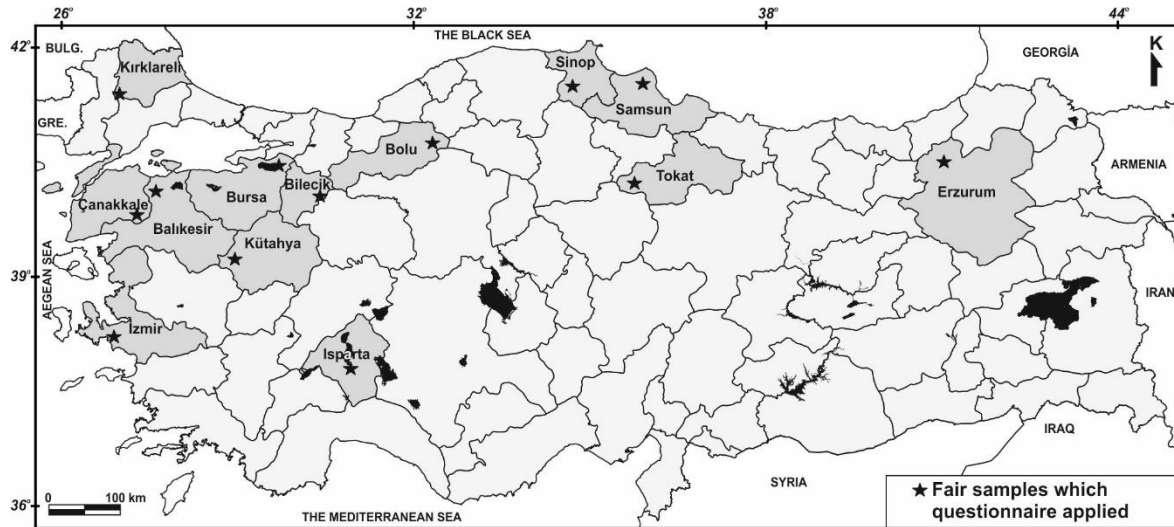
The information and data provided in the study are based on the questionnaires and interviews performed during the fieldwork in 13 different provinces between 2013 and 2014 (Table 1). A total of 611 questionnaires were applied to the tradesmen – one of the most important components of fairs. Some 235 tradesmen who also attended fairs other than the fair in which the questionnaires were applied visited 8 fairs per year on average. Hence, the data obtained from the mobile fair tradesmen were the basic sources of data about the annual cycle of the fairs. Besides, the information obtained from 63 municipalities and offices of the heads of villages via mail also provided current data about the existence of fairs in and around the settlements in which no fieldwork was carried out.

Table 1. The sample fairs at which fieldwork was carried out and the number of tradesmen surveyed within the scope of the research

Fair and Name of the Province in which it is found	Number of questionnaires applied to the tradesmen	Fair and Name of the Province in which it is found	Number of questionnaires applied to the tradesmen
İnhisar, Bilecik (*)	38	Pehlivan köyü, Kırklareli	51
İznik, Bursa (*)	52	Karadede-Bafra, Samsun	35
Gönen, Balıkesir (*)	50	Zile, Tokat	51
Yenice, Çanakkale (*)	50	İspir, Erzurum	30
Gerede, Bolu (*)	52	Seferihisar, İzmir	46
Boyabat, Sinop (*)	52	Simav, Kütahya	52
		Pınarpazarı-Eğirdir, Isparta	52

Two Geographical Sections Where Traditional County Fairs Cluster in Turkey

The fairs indicated with (*) are within the field of this study.



Map 1. The fairs at which questionnaires were applied and fieldwork was carried out and their locations

The borders of the geographical regions and geographical subregions in the 1:1,800,000-scale Map of the Civil Administration Divisions of Turkey by the General Command of Mapping were taken as the basis for the maps prepared within the scope of the study.

In the study, the fairs held in May and June were evaluated as spring fairs and the fairs held in July as summer fairs. The fairs in August, September, October, and November were classified as autumn fairs.

Findings

Today a total of 71 fair organizations per year take place in 63 settlements distributed in 21 provinces in Turkey. Some of them are fairs which are held twice a year in different months (Bayramiç, Ezine, Manyas, and Çan). Some fairs (Gerde, Dörtdivan, Yeniçağa, and Pazarköy) are also held in two periods in successive months in autumn.

Today the existing fairs in Turkey are distributed in nine geographical subregions in four geographical regions. The most fairs are found in the Marmara and Black Sea Regions (55). The fairs in these two regions constitute 87% of the fairs in Turkey. Among the geographical subregions, the most fairs are established in the Southern Marmara Subregion of the Marmara Region (26). This subregion is followed by the Western Black Sea Subregion of the Black Sea Region (22).

In the Southern Marmara Subregion, the fairs are held in a total of 26 settlements – 15 district centers, 7 towns, and 4 villages – in 4 provinces (Çanakkale, Balıkesir, Bursa, and Bilecik). The number of settlements in which fairs are held twice a year is 4 in the Southern Marmara Subregion. So, the total number of organizations held in this subregion per year is 30. Hence, it is understood that 42% of the fair organizations in Turkey take place in the Southern Marmara Subregion only.

In the Western Black Sea Subregion, however, the fairs are distributed within the boundaries of 7 provinces, namely Bilecik, Sakarya, Bolu, Eskişehir, Kastamonu, Çorum, and Sinop. Fairs are established in a total of 22 settlements – 19 district centers, a town, and 2 village settlements – located within the boundaries of these provinces. Since the number of settlements in which fairs are held twice a year in the Western Black Sea Subregion is 4, the total number of fair organizations taking place in this subregion per year is 26. 37% of the fair organizations in

Turkey are distributed in the Western Black Sea Subregion. Accordingly, 79% of the fair organizations in Turkey are located in these two geographical subregions.

The number of settlements in Turkey with fairs held twice a year is 8. Of these settlements, 4 are in the Southern Marmara Subregion, while the other half of them are in the Western Black Sea Subregion (Table 2).

The total number of district fairs in Turkey is 45. 34 of them are in the two subregions which constitute the study area. The number of fairs established in the town settlements in Turkey is 9, and 8 of them are established within the study area. A similar case applies to the village fairs. 6 of 7 existing village fairs in Turkey are in the Southern Marmara and Western Black Sea Subregions. 79% of the fair organizations, 86% of the village fairs and 89% of the fairs held in the towns in Turkey are within the boundaries of these two geographical subregions.

Table 2. Distribution of the fairs in the Southern Marmara and Western Black Sea Subregions according to the number of times they are established per year

The fairs held once a year (40)
The Southern Marmara Subregion (22)
Gönen, İvrindi, Kepsut, Savaştepe, Büyükyenice, Korucu, Sarıköy, Şamlı, Kocakonak, Kuşcenneti, Orhanlar, and Yazlık in Balıkesir ; Biga, Bozcaada, Gökçeada, Lapseki, Yenice, Akçakoyun, Pazarköy, and Çardak in Çanakkale ; İznik in Bursa ; and Osmaneli in Bilecik .
The Western Black Sea Subregion (18)
Gölpazarı, İnhisar, Söğüt, and Yenipazar in Bilecik ; Göynük, Mudurnu, Seben, and Tekkeköy-Işıklar in Bolu ; Ayancık, Boyabat, Durağan, Erfelek, and Bektaşğa in Sinop ; Mihalgazi and Sarıcakaya in Eskişehir ; Taraklı in Sakarya ; Kargı in Çorum ; and Ağlı in Kastamonu .
The fairs held twice a year (8)
The Southern Marmara Subregion (4)
Bayramiç, Çan, and Ezine in Çanakkale and Manyas in Balıkesir .
The Western Black Sea Subregion (4)
Gerede, Dörtdivan, Yeniçağa, and Pazarköy in Bolu .

Today the most fairs in Turkey are established in autumn (53). The number of fairs established in spring is 15, whereas the number of fairs established in summer is only 3. Despite the example of only 1 spring fair in the Western Black Sea Subregion, 13 spring fairs are available in the Southern Marmara Subregion. The number of autumn fairs is 25 in the Western Black Sea Subregion but 15 in the Southern Marmara Subregion. The months in which the most fairs are held are June (11) and September (12) in the Southern Marmara Subregion but September (13) and October (10) in the Western Black Sea Subregion. The spring and autumn fairs display a relatively balanced distribution in the Southern Marmara Subregion, whereas the majority of the fairs in the Western Black Sea Subregion consist of autumn fairs (Table 3).

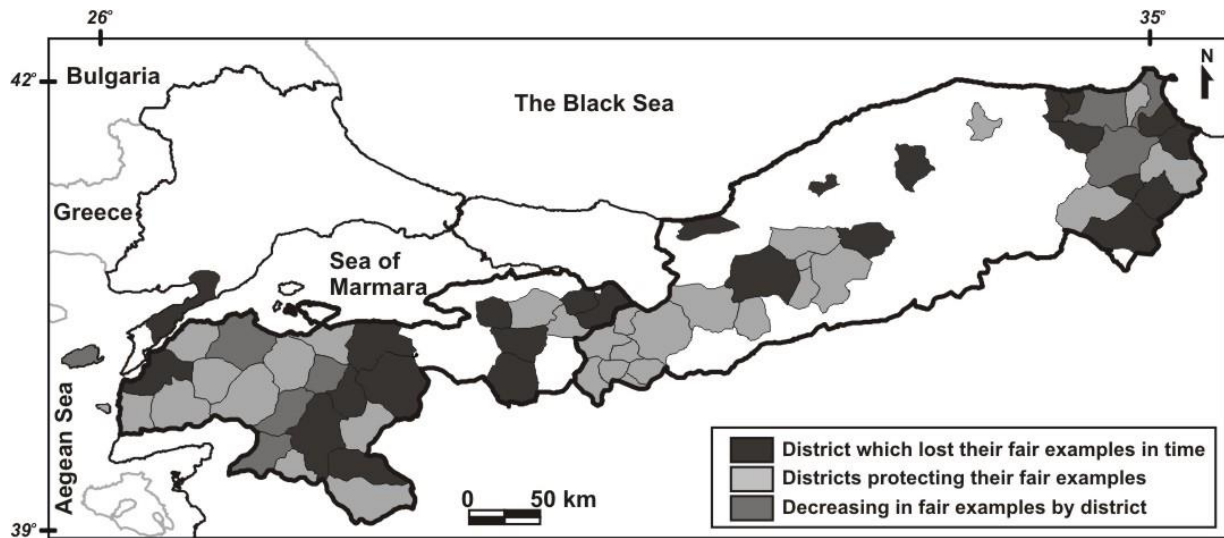
The fairs still existing in the Western Black Sea Subregion are predominantly distributed in the Inner Western Black Sea Area. At this locality, remarkable concentration is particularly striking in the middle section of River Sakarya. On the banks of River Sakarya, which continues its westward flow through the deep valley starting from the Gökçekaya Dam Lake, are the districts of Sarıcakaya, Mihalgazi, and İnhisar. The other settlements in which fairs are established line up around the river in the section where River Sakarya is directed northwards with a curve and approaches the west most (Osmaneli, Geyve, and Pamukova). Again the settlements in which fairs are established (Söğüt, Yenipazar, Gölpazarı, and Taraklı) attract attention on the routes where the roads which follow the valley of River Sakarya are distributed into the inner sections. They are district settlements which are located at a distance of approximately 20 km from the valley of the river. In the Southern Marmara Subregion, however, it is striking that the existing fairs are particularly concentrated in the inner sections of the Biga locality as well as in the

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environments where the Karesi locality neighbors the Bursa locality and the northern part of the Inner Western Anatolia Subregion.

Table 3. Distribution of the fairs in the study area by season and month

Season	Months	Fairs
Spring (14)	May (3)	Bayramiç and Ezine in Çanakkale and Bektasğa in Sinop.
	June (10)	Akçakoyun, Biga, Çan, and Pazarköy in Çanakkale and Manyas, Şamlı, Orhanlar, Yazlık, Gönen, and Sarıköy in Balıkesir
	May-June (1)	Yenice in Çanakkale.
Summer (2)	July (2)	Tekkeköy-Işıklar in Bolu and Bozcaada in Çanakkale.
Autumn (40)	August (4)	Bayramiç, Çardak, and Gökçeada in Çanakkale and Yenipazar in Bilecik.
	September (24)	Manyas, Kuşcenneti, İvrindi, Korucu, Büyükyenice, Savaştepe, Kepsut, and Kocakonak in Balıkesir; Çan, Ezine, and Lapseki in Çanakkale; İznik in Bursa; Gerede, Dörtdivan, Yeniçağa, Mudurnu, and Pazarköy in Bolu; Gölpazarı, Osmaneli, and Söğüt in Bilecik; Sarıcakaya and Mihalgaži in Eskişehir; Ayancık and Erfelek in Sinop; and Ağlı in Kastamonu.
	October (11)	Gerede-II, Göynük, Seben, Dörtdivan-II, Yeniçağa-II, and Pazarköy-II in Bolu; İnhisar in Bilecik; Kargı in Çorum; Taraklı in Sakarya; and Boyabat in Sinop.
	November (1)	Durağan in Sinop

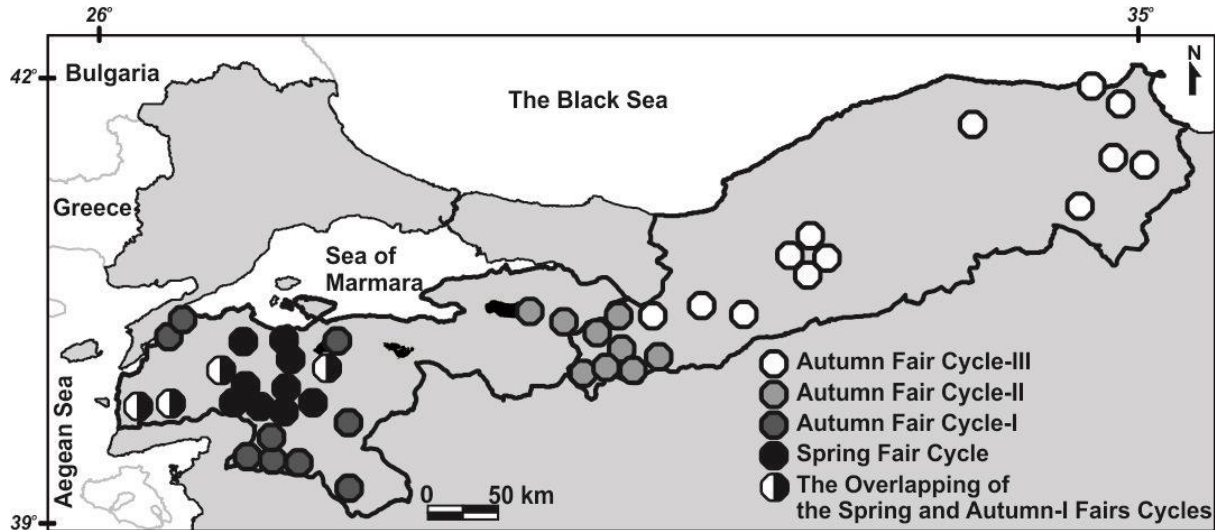


Map 2. The changes which occurred according to the existence of fairs in the districts in which fair examples in the Republican period were determined

Fairs are in series which follow each other in a specific order in specific seasons throughout the year according to their dates of establishment. The information obtained from the questionnaires and interviews applied to the tradesmen within the scope of the study reveals the flexible structure of each fair cycle within itself and in connection with the other cycles. Accordingly, it is possible to detect 4 different fair cycles – 3 in autumn and 1 in spring – in the two geographical subregions (Map 3 and Table 4).

Table 4. The seasonal cycle groups in which the fairs in the study area are included

Fair Series	Settlements in which Fairs are established
Spring Cycle	Bayramiç, Ezine, Yenice, Manyas, Çan, Biga, Yazlık, Sarıköy, Orhanlar, Akçakoyun, Pazarköy, Gönen, and Şamlı.
Autumn Cycle I	Çardak, Bayramiç, Ezine, Büyükyenice, Kepsut, Korucu, İvrindi, Kuşçenneti, Çan, Lapseki, Kocakonak, Manyas, and Savaştepe.
Autumn Cycle II	Yenipazar, Gölpazarı, Söğüt, Mihalgazi, Osmaneli, Sarıcakaya, Taraklı, İnhisar, and İznik.
Autumn Cycle III	Ağlı, Mudurnu, Dörtdivan, Yeniçağa, Pazarköy, Gerede, Erfelek, Ayancık, Seben, Göynük, Kargı, Boyabat, and Durağan.



Map 3. Spring and autumn fair cycles in the study area

The dates of establishment of fairs are adjusted every year for various reasons. Nevertheless, the dates of establishment of some fairs have remained unchanged for long years and they are well known with this feature of theirs. This is striking in the fairs with a central role or in the fairs with local cycles within themselves. In Turkey, the majority of fairs with unchanged dates are again in the study area: Pazarköy, Mengen, Gerede, Dörtdivan, and Yeniçağa in Bolu; İznik in Bursa; Yenice, Akçakoyun, and Pazarköy in Çanakkale; Kargı in Çorum; and Pehlivan köy in Kırklareli.

Furthermore, the dates of establishment of some fairs coincide. All the fairs with coinciding dates of establishment in Turkey are the fairs which are established in the study area (Seben-İnhisar, Taraklı-Mudurnu, Taraklı-Sarıcakaya, Ayancık-Gerede I, Sarıcakaya-Mudurnu, and İznik-Gerede II). The coinciding dates are essential in that they show that fair competition is particularly high in the Western Black Sea Subregion.

Some fairs which are known to have existed in the Republican period disappeared particularly in the last 30 years. Having resulted in the formation of gaps in the fair system due to the geographical neighborly relation, this process led to the weakening of the links of the chain. The non-existing İnegöl, Yenişehir and Orhangazi (Bursa) fairs and the non-existing Pamukova and Geyve (Sakarya) fairs in the Southern Marmara Subregion and the non-existing Akyazı and Sapanca (Sakarya) fairs in the Çatalca-Kocaeli Subregion created gaps in the fair cycle in the west of the Western Black Sea Subregion, with which they were connected more. The complete disappearance of the fair examples in the provinces of Düzce, Zonguldak, Karabük, and Çankırı created a wide gap between the east and the west of the Western Black Sea Subregion (Table 5).

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Table 5. Classification of the districts according to the change in the existence of fair examples in the study area

Name of the Subregion	Districts which preserve their fair examples	Districts in which the fair examples have decreased	Districts in which the fair examples disappeared
THE MARMARA REGION			
Southern Marmara	Lapseki, Ezine, Bayramiç, Çan, Yenice, Bozcaada, Gönen, Bandırma, Sındırgı, Kepsut, İzmit, and Osmaniye	Biga, Manyas, Balya, İvrindi, and Gökçeada	Çanakkale Mrk., Gelibolu, Karacabey, Mustafakemalpaşa, İnegöl, Yenişehir, Orhangazi, Geyve, Pamukova, Balıkesir Mrk., Susurluk, and Bigadiç
THE BLACK SEA REGION			
Western Black Sea	Mihalgaç, Sarıcakaya, Gölpazarı, Söğüt, İnhisar, Yenipazar, Taraklı, Göynük, Mudurnu, Seben, Dörtdivan, Yeniçağa, Gerede, Mengen, Erfelek, Durağan, Kargı, and Ağlı	Bolu Mrk., Ayancık, Boyabat, and Sinop Mrk.	Osmancık, Akçakoca, Gökçebey, Eskipazar, Eflani, Çatalzeytin, Hanönü, Türkeli, Saraydüzü, Dikmen, and Gerze

The districts in which the fair examples disappeared in the Southern Marmara Subregion are Mustafakemalpaşa and Karacabey (Bursa) as well as Büyükorhan, Harmancık, Keles, and Orhanlı (Bursa) in the area neighboring the Southern Marmara Subregion in the north of the Inner Western Anatolia Subregion – the Uludağ locality. The disappearance of these fairs also affected the fairs in Balıkesir, with which they were more connected in the fair cycle. Wide gaps separated from the fair system appeared within the provincial boundaries of Bursa and Sakarya.

“What are the three greatest fairs among the fairs you have attended?” was one of the questions that the fair tradesmen were asked during the questionnaires applied at all sample fairs on the scale of Turkey. The responses received reveal that of the greatest fairs, 2 are in the Western Black Sea Subregion, while the other one is in the Southern Marmara Subregion (Table 6).

Table 6. The 3 greatest fairs among the fairs attended by the tradesmen

Name of the fair	Frequency	Percentage (%)
Gerede	72	35
Boyabat	68	33
İzmit	66	32
TOTAL	206	100

The fairs in Turkey encompass a large number of fairs at which animals are sold too. We can determine the outstanding fairs among them as Gerede, Boyabat, Gönen, İspir, and Seferihisar. In fact, Seferihisar is entirely an animal husbandry fair. It is established that the examples representing the animal fairs in Turkey are also substantially represented again by the fairs in the study area.

Conclusion

The fairs in the Western Black Sea Subregion and the Southern Marmara Subregion display some characteristics of clustering as some of their distinctive attributes (e.g. according to the

number of times they are established throughout the year, according to the administrative unit scale, according to the season, according to the months, according to the seasonal cycles, and according to the animal husbandry function) separate.

In the two geographical subregions addressed in the study, the fairs go on existing at the district centers with which the rural environments with no frequent or regular shopping possibilities are connected particularly in the inner sections. With the study, it was demonstrated that the fairs established in these settlements were connected with local and regional cycles according to their successive dates of establishment.

Traditional fairs are rapidly diminishing depending on both the socio-economic developments experienced in the Republican period and the change in the understanding of entertainment and shopping. The fairs that disappear in this process leave gaps between the spatial relations. Essentially, local fair cycles and concentration lines have impacts which facilitate the connections between sellers and procurers in the procurement of products and goods. There is no doubt that the facilitating impact of local cycles on the marketing processes is also essential. Hence, the fact that the neighborly relations of fairs were economically supportive of the existence of each other influenced the formation of local cycles. By possessing such cycles, the fairs in the provinces of Çanakkale, Balıkesir, Bilecik, Bolu, and Sinop in the study area have become more enduring and been able to preserve their existence.

In Turkey, traditional fairs constitute a cultural, economic, and spatial system which should be regarded as a whole on the national scale. Therefore, the organization and planning processes of the traditional fairs whose existing examples are gradually diminishing should not be left merely to the responsibility of local governments. The institutions responsible for producing policies in the fields of economy, trade, and culture on the national scale should also be in this process. Strategies and policies on the national scale should be produced for the traditional fairs which attract attention with their economic, cultural, and social roles.

Acknowledgement

This study is supported by the TÜBİTAK (The Scientific and Technological Research Council of Turkey) (Project No.: SOBAG 113K239). We express our sincere thanks for the financial support.

References

- ÇALIŞKAN, V. (2008). Geleneksel Periyodik Ticaret Mekânları Olarak Panayırılar: Çanakkale Örneği, Trakya Üniversitesi Sosyal Bilimler Dergisi, Cilt:10, Sayı:2, Aralık, 2008.
- ÇALIŞKAN, V. (2010). Religious Fairs of Rums on Islands of Gökçeada (Imbros) and Bozcaada (Tenedos), Turkey: Opportunities for Contribution to Tourism and Dialogue between Civilizations, Shima: The International Journal of Research into Island Cultures, v4 N2.
- FAROQHİ, S. (2000). Ticaret: Bölgesel, Bölgelerarası ve Uluslararası, Osmanlı İmparatorluğu'nun Ekonomik ve Sosyal Tarihi, Cilt 2 (1600-1914), (Edits: H. İnalcık ve D. Quataert), Eren Yay. İstanbul
- KAYAOĞLU, İ. (1981). Anadolu Selçukluları Devrinde Ticari Hayat, A.Ü. İlahiyat Fakültesi Dergisi, C.XXIV, s. 359-373, Ankara Üniversitesi Yayınları, Ankara.
- KÜPELİ, Ö. (1999) Osmanlı Devleti'nde Panayır Organizasyonları ve Gönen Hacı İsa Panayırının Tarihine Dair, Osmanlı Ansiklopedisi 3. Cilt (İktisat), Yeni Türkiye Yayınları, Ankara.
- ÖZCAN, K. (2006). Anadolu'da Selçuklu Dönemi Yerleşme Tipolojileri-I, Pazar ya da Panayır Yerleşmeleri, Anadolu Üniversitesi Sosyal Bilimler Dergisi , 2006; 6 (1):205-224.
- SÜMER, F. (1985). Yabanlu Pazarı Selçuklular Devrinde Milletlerarası Bir Fuar, Türk

Two Geographical Sections Where Traditional County Fairs Cluster in Turkey

Dünyası Araştırmaları, (37), İstanbul.

ŞEN, Ö. (1993). Osmanlı Panayırları (18.-19. Yüzyıl), Eren Yayınları, İstanbul.

TONGUR, H. (1940). Türk şehirlerinde pazar ve panayırlar, Belediyeler Dergisi, Ankara.

ÜLGEN, P. (2012). Geç Ortaçağ Avrupası'nda Pazar ve Panayır İlişkisinin Ticaret Hayatındaki Rolü ve Türk-İslam Dünyasındakilerle Karşılaştırılması, Uluslararası Sosyal Araştırmalar Dergisi, cilt:5, sayı:21.

Instrumental Approach to Sustainable Urban Development Process: Political Participation, Urban Policy and Urban Planning

Aygul Kilinc

1. Introduction

The concept of sustainability related to urban development is a largely sophisticated term that comprises the preservation and the enhancement of productivity and functionality in urban area. The fact that the public services obliged by the urban development are given within a criterion of specific standards and the continuity in the service deliveries is ensured forms the existential basis of the urban managements. Furthermore, maintaining the productivity within specific standards in the execution of the services is the initial rule so as to carry out the right of quality life in cities. In the daily life, maintaining the productivity in urban functions and acquiring harmony and consistency in urban components is a crucial circumstance. In this study, the issues of “political participation”, “urban policy” and “urban planning” have been discussed with an instrumental approach as tools that ensure the sustainable urban development.

1.1. The Concept of Sustainability and the Sustainability of Urban Development

Urban area is habitat for all living beings. In this sense, maintaining the sustainability in urban areas as a living space for animals, plants and people is significant. In urban areas in which the population is dense, natural environment and resources are substantially devastated. The intense abuse of nature and natural hazard due to overloading is the outcome of a long process. In a world in which this devastation surpasses the rate of self renewing of the renewable natural resources, it is inevitable to worry for the future generations. That is why; the issue of “sustainability” has become quite significant for the humanity recently as distinct from old times. As it is regarded as a general principle, the ones who have taken over their living space from the previous generation have been held liable to deliver it to the next generation with least depredation. At this point, the principal of maintaining a quality life in their own living space for living beings has turned into a vital emphasis within the context of the “sustainability” concept. Because this concept states us that social relations between society and nature are made possible in the long run.

The sustainable development concept in the Report on Our Common Future that was published in 1987 by World Commission on Environment and Development (WCED, 1987) with the sponsorship of United Nations is explained as “the development that meets the requirement of today without making concessions to the ability of the future generations to meet their own requirements” (Mikaeili and Memlük, 2013: 41; Mengi and Algan, 2003: 2; Yıkılmaz, 2003: 114). The sustainable development was required to be conducted by sticking to the efficient operation of democratic processes. In this regard, the governance concept was brought to the agenda and the foundation of the governance concept was laid with “Agenda 21” (Yıkılmaz, 2003: 119). In the United Nations Conference on Environment and Development that was held in Rio de Janeiro and was called as the “World Summit”, the concept of sustainable development became prominent. In this conference, the emphasis was put on “Agenda 21” that would enable the participatory mechanism and processes to become prominent as well (Göymen, 2014: 15). “Agenda 21” is a plan that focuses on the issue of how the development will be sustainable in social, economical and environmental aspects (Yıkılmaz, 2003: 116). It has been projected that “Agenda 21” is to be created with a participatory process that these co-partners will conduct together in every town for the development in the local area.

At the same time, in this process, there is an emphasis on the crucial roles of the local managements and non-governmental organizations in executing the participatory democracy.

It can be seen that the sustainability concept was associated with urban areas in the “Conference on Sustainable Cities” that was held in Rio in 2000 (Mikaeili and Memlük, 2013: 41). This association has been made in the way that urban functions would meet the demanded and expected life quality. However; when doing this, it has been provided that the options of the generations of today and future would not be restricted, also it has been emphasized that this is not supposed to cause negative effects within and outside the urban borders. In addition to that, the sustainability of urban development has been associated with the fulfilment of the condition that environmental, social and economical aspects are supposed to be taken into account altogether. Hence, it can be said that the sustainable development, starting from the 1980s, has become the determinant of the environmental politics all over the world; and its sphere of influence has not been limited only to environment, but it has been integrated with the understanding of economical and social development as well (Mengi and Algan, 2003: 2). The concept of sustainability in urban system has been indicated to be a socio-economical, demographical and technological development system that supports the long term preservation of resources and sturdy urban areas (Mikaeili and Memlük, 2013: 41).

Considering the meaning of the sustainable development concept, it can be said that the emphasis is on two basic concepts: sustainability and development (Mengi and Algan, 2003: 1-2). Therefore, the concept of sustainability signifies the continuity of something. The concept of development emphasizes the necessity of the fact that a quantitative change, progress and recovery are supposed to be qualitative at the same time as distinct from growth. The sustainable development has been defined as “the environmentalist world view that aims economical development without self sacrifice from the principle of the rational use of environmental values and natural resources without causing waste and by taking today’s and future generations’ rights and interests into consideration” (Keleş, 1998: 112). The urban development as a concept that refers to the organization of human relations, the production of built environment and the combination of so many social elements is the process of growth in urban population, increase in the numbers of urban areas and improvement in urban areas (Keleş, 2006: 24).

European Urban Charter that is directly concerned about the urban development and life quality concentrates on four basic topics. These topics are stated as the improvement of physical urban environment, development of present housing stock, creating social and cultural opportunities in the settlements, social development and encouragement of public cooperation. Within this basic framework, it can be understood that the significance of qualitative aspects of urban development has been drawn attention to. The Urban Charter that aims at defining the required principles and liabilities for a rational and efficient urban management by having them acknowledged in all the countries in the world has emphasized the significance of an approach that is based on decentralization for a good urban management (Göktürk, 2002: 219). Aalborg Charter that was approved in 1994 in the direction of the Rio Declaration principles is regarded as one of the most important steps that were taken in constructing sustainable urban areas. In the charter, the histories of the urban areas and the preservation of cultural environment are emphasized and the attention is drawn to the functions of local managements in constructing sustainable development (Charter of European Cities and Towns Towards Sustainability, 1994).

According to the Report on European Sustainable Cities, the problem of urban sustainability has been acknowledged as an issue related both to the problems in the cities and the problems caused by cities. In the report, it has been emphasized that urban managers are supposed to solve these problems on a local level as far as possible in a respectful way to local, regional and global natural systems while meeting the social and economical needs of city

dwellers instead of pushing the problems towards other places or assigning them to future generations (BM, 1997). Report on European Sustainable Cities has attributed the process of sustainable development in urban areas to some principles (European Sustainable Cities, 1996). One of these principles is urban management. This principle calls attention to the operability of an urban political process that underlines especially planning and urban governance. Another principle emphasizes that the concept of sustainability is supposed to be taken into account with its social, environmental and economical aspects. It indicates that policies integrating these three aspects are supposed to be flourished. Another principle gives importance to the ecosystem concept. The ecosystem concept and approach urges an urban management system based on ecosystem principles that include the preservation, maintenance and improvement of natural resources and other environmental resources in cities in the manner that will contribute the sustainable development and the regulation of city traffic and transportation. Another principle considers cooperation and collaboration in sustainability as necessary. It anticipates all urban agents to participate in the process of urban resources management.

The issue of urban development sustainability is a complex and difficult field that has political/institutional, economical, socio-cultural, environmental and spatial aspects and that enforces urban managements. As Gedikli states, issues such as solving the problem of cities' substructures and superstructures, greening the environment, built environment's obligation of being compact, the forms of use of mixed terrains, transportation system, new designs trending solar power for clean energy requirement, population density in urban areas constitute only some of the many issues to urge upon for sustainable cities. Some issues such as the preservation of the green texture in a city and addition of new green areas to this texture; reducing pollution and protecting bio-diversity; regulation of urban climate conditions; creating cost-effective urban drainage systems; improvement of physical environment in cities; enhancement of aesthetical image and life quality; increasing its economical value make cities liveable and contributes to the stability of people's physical and mental health (Gedikli, 2016: 9-22). This situation necessitates preventing urban sprawl; protecting nature while intensifying urban areas; using urban substructures more efficiently and actively and bringing sustainable urban development into the forefront (Mikaeili ve Memlük, 2013: 40). Hence, the fact that built environment is compact, continuity is provided and urban parts are in harmony with one another in an urban area is considered significant with regard to the sustainability of urban development.

1.2. Political Participation, Urban Policy and Urban Planning as Tools of Sustainable Urban Development

Urban managements that carry all the liabilities of enabling the sustainability of urban development keep the three significant instruments to use for this purpose. "Political participation", "urban policy" and "urban planning" are three important instruments that can direct the urban development process healthfully and help in keeping this process under control. Each of these instruments that are believed to be capable of enabling the sustainability of urban development is explained separately below in subheadings. These explanations are useful in elucidating the direct relations of these aforementioned instruments that seem to be independent from each other with the sustainability of urban development and in understanding their decisiveness on development process.

1.2.1. Political Participation

Political participation is a relatively new concept despite state's long-standing background of over thousands of years. According to Eroğul (2013: 227-231), there has been significant developments throughout the history that contributed political participation to get stronger. For

instance, the attempts to bring in a legal framework to the right to vote and stand for election, to political organization, to taking office in equal conditions, to benefit from the right for a fair trial in the court, to freedom of the press, to the right for a peaceful meeting even at minimum have been important developments that made political participation stronger. According to Kapani (2010: 144), political participation is a concept that determines the situations, attitudes, behaviours of the members of the public (citizens) towards political system. This concept involves a large manner and activity area from a simple place to an intense action. The place where the direct participation of the public is present is urban area and all of the activities in urban areas although it is limited in the processes of making political and administrative decisions. The most distinctive feature of direct/participatory democracy that finds itself a field of application in urban area nowadays mostly through local managements is that participation in collective decision-making is not restricted to the act of voting (Saribay, 1996: 71-72).

According to Kapani (2010: 145), direct participation to especially political and administrative decision-making processes in urban areas can manifest itself in different levels and diverse forms. For instance, at the lowest level, one can follow political events through written, verbal and visual media, participate in a meeting as an audience or discuss political events with special contacts. Or one can write in the newspapers as to the political events and problems, give speeches in radio programmes and meetings or granting money to a party or candidate. In the highest level of political participation, one can become an active member in a political party, hold office as an executive, or actively work in the election campaigns. Whichever level and intensity it takes place in, the ultimate place where political participation decision turns into an action from a mere idea, namely becomes concrete is the urban area. And maybe, it is the reappearance of the direct democracy that was applied in the Ancient Greek cities, this time on a local scale.

Democracy is a concept related to the decisions about politics or obligatory rules for any group ranging from families to friends group o larger groups (Beetham, 2004: 25). The main instrument that puts democracy into practice is decision mechanism. This mechanism is the most effective instrument to supervise the social or political power, be it on national or on local scale. While humanity in the process of social development has evolved from a community to a political society, the direct democracy method practiced in the Ancient Greek cities has also evolved and given its place to representative democracy. According to Heywood (2013: 291-292), representation as a political principle is a form of relation that enables an individual or a group to act in the name of a larger community of people. In this sense, representation makes the connection between the government and the governed by means of defence of people's ideas or guaranty of their interests. However, representative democracy corresponds to a restricted and indirect democratic regime. The fact that decision-making bodies are elected in urban managements on a local scale gives the citizens of a state the right to participate in political decision making processes as equals and choose their representatives (Sabuktay, 2009: 73). The political participation on a local basis makes people closer to the experience of direct democracy.

It can be said that representative democracy actualised prevalently on a national scale has given its place to direct democracy on a local scale. It is possible to see that more powerful participatory democracy base has become functional on a local basis particularly through the operation of participatory mechanisms. On a local scale, political participation can turn into an easier application via local formations such as the city councils projected in "Agenda 21". In this application that projects direct participation, city dwellers have the right to be determinant at the point of decision making about the policies that especially concerns the city as often as required even though not on every level and every situation (Barber, 1995: 195). With this aspect, direct participation in decision making processes on a local basis comes as an important instrument that draws attention to the demands and expectations of city dwellers. In this sense,

political participation has become an unquestionable presupposition with regard to contributing to the sustainability of urban development.

1.2.2. Urban Policy

Politics is the act of composing strategies for the healthy continuation of the social life as a parallel to common objectives and problems, and applying these strategies rationally. In the act of determining policies, there are three basic elements such as determination of the problem, the detection of the objectives and choice of method (Çubuk, 2016). In this context, policy qualifies the future oriented projects systematically and it is composed as an extensive text in which objectives, principles, fields of application and instruments are defined within a specific period. In the context of determined policy, plans, programs, projects, application/action applications are regulated according to their own inner hierarchies (Atauz, 2011). It is important that each of these instruments of sub-application should correspond to the objectives and principle of the primary policy that constitute the joint policy in terms of both objectives and operation method.

Urban policy is a body of instruments that central authority will bring in for creating ideas, goals and strategies for the continuity of city life in a healthy and nice in front of common objectives and problems and providing harmony, cooperation and orientation between various social interventions (Çubuk, 2016). Urban policy that is the route map of local managements can be studied as a far reaching concept in the meaning of the rules that determine the distribution of population on a national scale and economical activities on a national level. At the same time, this concept can be defined as the body of micro-scale precautions for solving the problems that can be encountered especially in cities as a result of urbanization movements (Keleş, 1982: 71).

Any comprehensive strategy related to urban system should contain the policies that are designed to change the spatial form and the policies that affect social processes in a city and it is supposed to associate these (Harvey, 2003: 52). In this regard, it is possible to list some of the qualities of urban policy. For instance, urban policy helps someone make positive connections between living environment and social life. It causes improvement and orderly progress of the built environment. It aims to produce rational solutions for various problems of city dwellers. It ensures the demands and expectations of city dwellers to find correspondence on the political and institutional platform. In short, urban policy is an important instrument of operation that illuminates the road of urban management as an extensive text that contains all the aspects of urban development and hosts the visions about future.

1.2.3. Urban Planning

Urban planning is a physical act that contains the institutional, economical, socio-cultural, environmental and spatial aspects of urban development. According to Thomas Adams, urban planning is a science, art and occupation field that deals with the problems related to directing the formation of cities' physical development regarding the social and economical needs (Keleş, 2006: 111-112). There are numerous functions of the activity of planning. However, the "regulative function" of society and "corrective function" (Tekeli, 2009: 35-41) of any social institute can be said to be the outstanding functions. It has been emphasized that (urban) design activity that is the artistic aspect of urban planning has found itself a large place in the process of planning. According to Türk (2012: 255), some urban planners define the physical details that involve aesthetical solutions and interventions in urban planning as urban design. Some of the architects acknowledge the urban planning as a large-scale architecture application.

The fact that the design activity cannot be degraded to absolute planning can be attributed to aesthetic and symbolical judgements that are among the objectives of design (Tekeli, 2011: 36). Because, the concept of planning evokes the act of arrangement that has the meaning of regulation; however it does not evoke anything more than this. On the other hand, design refers to an artistic act with its creative aspect beyond an art of regulation and arranging (Vardar, 2015: 20). Therefore, arrangement of a spatial field in a way to contain the design also involves aesthetical and symbolical judgements. As Tekeli states, in the act of absolute planning, the objectives that moral field judgements bring in is being executed based on scientific propositions and it does not contain aesthetical judgements inside. On the other hand, design brings the judgements of aesthetical and moral fields together with the propositions of scientific fields (Tekeli, 2011: 37). In this context, the act of urban planning that also contains the activity of design should be attributed value with regard to the urban development and the sustainability of development. Because the cities with identities that are outstanding with their distinctive features can only exhibit their difference with their acts of urban planning that contains design as well.

The space–size of the planning operation, in the most general terms, is related to the use of land/terrain. This issue is a physical act related to how the land is to be used and formed for the benefit of the country. The planning of terrain usage is a body of plans that are made so as to create distinct terrain usage styles appropriate for sustainability and conforming to ecological, social and economical conditions to protect the other environmental resources from getting harm and so as to determine the land and water potential in a manner that will form the basis on every scale (Güngördü, 2012: 39). In urban planning, it is a significant strategy to aim for an intensified built environment instead of a disorderly built environment in terms of the efficient usage of the terrain and effectuating the urban services as required. The compact urban planning pursues this goal to perform this strategy. The compact city is regarded as an alternative model against the prevailing urbanization process that causes the depletion of resources and destroys natural environment (Mikaeili ve Memlük, 2013: 41). The compact city practice is related closely to the urban services. It is essential to abide by the principle of efficiency and activity at the point of performance of the urban services. In a disordered settlement, one cannot mention the efficient use of resources and effective performance of the services.

2. Method

The sustainability of urban development is the direct outcome of how and in what way to use the three important instruments, “political participation”, “urban policy”, “urban planning”. In this study, it is argued that a sustainable urban development is possible only through effective and appropriate use of these aforementioned instruments. In this study that has been conducted by leading a theoretical argument, firstly, the significance of sustainability in terms of urban development has been implied. Later on, the determination of the instruments in question on urbanization process has been studied. The findings related to the argument have been included. Finally, the study has been concluded with a general evaluation.

3. Findings

The principles that are prominent in the Report on European Sustainable Cities in relation to the sustainable development process in fact emphasize the instruments of political participation, urban policy and urban planning. For instance, it is aimed to draw attention to the operability of an urban political process that emphasizes especially planning and urban governance via urban management principle. The sustainability emphasis, which is another principle, implies

that urban policies that contain all of the social, environmental and economical aspects are supposed to be produced. The third principle concentrates on the importance of ecosystem notion. It is underlined that environmental resources, particularly natural resources, city traffic and transportation regulation should be made, protected, and restored in the manner that will contribute to the sustainable development. The last principle regards cooperation about sustainability as compulsory. It especially emphasizes the participation of the urban agents in decision making processes related to city.

The sustainability concepts in the sense of planning and especially governance allege to be the determinants over the urban development as the two phenomenons of two different periods in the same century. The sustainability concept during the years in which planning was respected in Turkey had not taken part in literature yet. On the other hand, in the periods in which the sustainability concept appeared and was widely acclaimed, planning began to lose its reputation. In other words, planning has become an outdated practice by losing its reputation due to global economical conjuncture in the period in which direct participation in political and administrative decision making processes was emphasized especially on local basis since the beginning of the 1990s in which the term governance was being used. However, it is possible to see these two approaches that could be the complementary of one another as important instruments of change and development in urban areas instead of seeing them as equivalents.

Sustainable urban planning has the aim of incorporating numerous elements such as economy, substructure, population, housing, land use, environmental values, transportation, traffic and pollution into the planning process and creating rational solutions for these urban problems. It is especially crucial to use the land properly considering the public interest. The fact that built environment is disordered affects the efficiency and quality of the urban services directly. Particularly energy generation and consumption in urban sprawls affect the ecological system adversely. In this sense, preventing urban sprawl, arranging the intensity in urban areas properly and using urban substructure more rationally have become a vital issue. In this context, compact city operation can be seen as an option.

The sustainability of urban development is required to be considered with political/administrative, economical, socio-cultural, environmental and spatial aspects and decisions are supposed to be made in this context. Urban managements that carry all the liabilities of enabling the sustainability of urban development keep the three significant instruments to use for this purpose. "Political participation", "urban policy" and "urban planning" are three important instruments that can direct the urban development process healthfully and help in keeping this process under control. The success in the sustainability of development in urban area depends on the urban managements' power to use these instruments.

4. Conclusion

Rapid urbanization triggered by industrialization has alienated human beings from nature. Human beings have distanced themselves from being a part of nature, have started to use natural environment and resources recklessly and have regarded themselves as powerful enough to exploit nature. Economical systems that created the consumerist society have reinforced and accelerated this process. Decrease in rural population and increase in urban population density due to the migrations from rural areas triggered the problems in urban areas. The problems in the cities that deepened day by day have made it urgent for an intervention to the urban area. The difficulty of healthy urban development and sustainability became a more important issue when these predicaments in urban area reached to the extent in which they threatened the life quality of a large group of people. The issue of urban development and the sustainability of this development have begun to be discussed at the international, national and local levels. The meetings that suggested cooperation were conducted more frequently and common decisions

were made in these meetings. However, the most significant liability of the future of our living environment has been pushed towards city dwellers and urban management today as it was in the past. The sustainability of urban development seems to be possible only through the efficient use of three important instruments; “political participation”, “urban policy” and “urban planning”. The possibility of success depends on the condition of self sacrificing and conscious performance of urban managements and fulfillment of city dwellers’ duty with the awareness that the urban responsibility brings in.

5. References

- Atauz, A. (2011). *Yerel yönetim / kent politikası*. Retrieved June 12, 2016, from <http://www.mimarlarodasiankara.org/dosya/YERELKENT.pdf>
- Barber, B. (1995). *Güçlü demokrasi*. Translated by Mehmet Beşikçi. İstanbul: Ayrıntı Publications.
- Beetham, D. (2004). *Demokrasi ve insan hakları*. Translated by Bilal Canatan. Ankara: Liberte Publishers.
- BM (Birleşmiş Milletler) Habitat-2 Konferansı. (1997). *Sürdürülebilir insan yerleşimleri yolunda*. Retrieved June 12, 2016, from <http://www.deltur.cec.eu.int/kitap/khabitat.rtf>
- Charter of European Cities and Towns Towards Sustainability. (1994). *The Aalborg Charter*. Retrieved at June 15, 2016, from <http://www.sustainable-cities.org/keydocs.html>.
- Çubuk, M. (2016). *Kamu politikaları ve kentsel politikaların şehircilik uygulamalarında anahtar rolü ve dünyadaki gelişmelerden Türkiye gerçeğine bakış*. Retrieved at June 12, 2016, from <http://www.planlama.org/new/planlama.org-yazilari/kamu-politikalari>
- Eroğul, C. (2013). Siyasal katılma. Prepare for publication: Gökhan Atılğan & E. Atilla Aytekin. *Siyaset bilimi: kavramlar-ideolojiler-disiplinler arası ilişkiler*. Ankara: Yordam Publications, p. 227-237.
- European Sustainable Cities. (1996). *Report of the expert group on the urban environment (March 1996)*. Brussels: Published by the European Commission-DGXI environment, Nuclear Safety and Civil Protection. Retrieved at June 15, 2016, from file:///C:/Users/User/Downloads/EUROPEAN%20SUSTAINABLE%20CITIES_REPO RT.pdf
- Gedikli, B. (2016). *Sürdürülebilir kentsel gelişim*. Retrieved at July 24, 2016, from http://www.rec.org.tr/dyn_files/42/5097-1-Surdurulebilir-Kentsel-Gelisim.pdf
- Göktürk, A. (2002). Kentsel haklar kent yoksullarını kapsar ise. Prepare for publication: Yasemin Özdek. *Yoksulluk şiddet ve insan hakları*. Ankara: TODAİE Publications, p. 217-233.
- Göymen, K. (2014). Önsöz. Prepare for publication: İnan İzci. *Katılımcı yerel yönetim*. İstanbul: Kalkedon Publications, p. 11-17.
- Güngördü, E. (2012). *Coğrafi mekânda planlama ve kalkınma ilişkisi*. Ankara: Nobel Publications.
- Harvey, D. (2003). *Sosyal adalet ve şehir*. Translated by Mehmet Moralı. İstanbul: Metis Publications.
- Heywood, A. (2013). *Siyaset*. Translated by Bekir Berat Özipek. Ankara: Adres Publications.
- Kapani, M. (2010). *Politika bilimine giriş*. Ankara: Bilgi Publisher.
- Keleş, R. (1998). *Kentbilim terimleri sözlüğü*. Ankra: İmge Bookstore.
- Keleş, R. (1982). Türkiye’de kentleşme ve kentsel gelişme politikaları. Türköz Erder (prepare for publication). *Kentsel bütünleşme*. Türk Sosyal Bilimler Derneği Türkiye Gelişme Araştırmaları Vakfı / Türkiye Gelişme Araştırmaları Vakfı-4, p. 67-78. Ankara.
- Mengi, A. and Algan, N. (2003). *Küreselleşme ve yerelleşme çağında bölgesel sürdürülebilir gelişme AB ve Türkiye örneği*. Ankara: Siyasal Bookstore.

- Mikaeili, M. and Memlük, Y. (2013). Ekoloji ve çevre açısından kompakt kent kavramı ve uygulama örnekleri. *Journal of Anatolian Natural Sciences (Anadolu Doğa Bilimleri Dergisi)*, 4(2), 37-50. Retrieved at June 12, 2016, from http://www.dogadergisi.net/html/arsiv/pdf/4-2/201342_37-50.pdf
- Sabuktay, A. (2009). Yönetişim demokrasi ve yerel seçimler. *Memleket Siyaset Yönetim*, 4(9), p. 72-86.
- Sarıbay, Y. (1996). *Siyasal sosyoloji*. Bursa: Uludağ University.
- Tekeli, İ. (2011). *Tasarım mimarlık ve mimarlar*. İstanbul: Tarih Vakfı Yurt Publications.
- Tekeli, İ. (2009). *Modernizm modernite ve Türkiye'nin kent planlama tarihi*. İstanbul: Tarih Vakfı Yurt Publications.
- Türk, Y. A. (2012). Kentsel tasarım. Prepare for publication: Melih Ersoy. *Kentsel Planlama-Ansiklopedik Sözlük*. İstanbul: Ninova Publishers, p. 255-258.
- Vardar, A. (2015). Nazım plandan nesir projelere kentsel tasarım. *Planlama*, 2005/3, 20-32. Retrieved at June 21, 2016, from http://www.spo.org.tr/resimler/ekler/387337ba1e0b024_ek.pdf
- Yıkılmaz, N. (2003). *Yeni dünya düzeni ve çevre*. İstanbul: Sosyal Araştırmalar Vakfı-3.

A Study on Architecture Students' Disability Awareness

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1. Introduction

Architecture is an art of creating spaces for the freely use of society regardless of age, gender or statue. Although it is an art of creating independent spaces, there are lots of people facing with obstacles, becoming incapable or needing special help in their homes, workplaces or surroundings. According to Imrie (1999), first of the factors which cause and sustain social inequality is the built environment. Especially for those who are seen as disabled, built environment is discriminative and hard to use. Although the designers, who are responsible for creating unimpeded spaces, are the leader solvers of these problems, most of them disregard usability and accessibility concepts in their design process. Instead, design is done beforehand and then, these 'special requirements' are implemented into it after the design was over (Malik, 2006). However, according to Pallasmaa, (2005) all sense organs are experiencing the environment and architecture should not only be perceived by eyes but also by whole body.

For architect, anyone who has difficulty or incapability in using a product is considered as disabled and anything which does not address to anyone or any situation is considered as an obstacle. Moreover, design holds the same rules for those who need special help or support in some part of their lives. If a chairman considered as disabled because he is not able to control his/her legs, then an elderly having difficulties in perceiving environment, a child having difficulties in reaching something or a pregnant having difficulties in climbing up stairs are all also must be considered as disabled. Therefore, architect being the most active actor of the design process is expected to think through design and create spaces which everybody can use freely. But only if an architect has sensitivity and awareness about impediments and disabled individuals, he reflects his knowledge into the design. Such skills were primarily gained in places as is known the architecture schools. Along with learning how to design, the students also learn that they are the ones who create and constitute the built environment and its relations and therefore, they learn significant issues for the design. Courses and educations in these schools are of capital importance in order to develop students with the sense of social responsibility along with design education.

1.1. The Aim and method of the study

The aim of this paper is to identify the disability awareness of architecture students who are expected to create future's unimpeded spaces through how they apply their knowledge in their designs. Sample of the study consists of students from Faculty of Architecture in Karadeniz Technical University. In this survey questionnaire study was done. In order to prevent directing students and reducing data loss, open ended questions were used, so students were supported to express their thoughts freely. Thereafter, by classifying collected answers, main headings were identified. And answers belonging to each subject were processed in the data table, then frequencies distributions were calculated and the data was interpreted for showing up the disability awareness via students' works in design courses.

There are 1092 undergraduate students attending in KTU Faculty of Architecture in 2015-2016 educational years. Total sample of the study was calculated as 413 with 99% reliability and 5% error allowance and was proportioned to number of students of the departments. But analyses were conducted with 441 survey collected at the end of the study. 107 (24,3%) of these subjects were from Department of Urban and Regional Planning (DURP),

137 (31,1%) from Department of Interior Architecture (DIA) and 197 (44,7%) from Department of Architecture (DA).

1.2. Courses of the Education Program

In the study, it was aimed to identify how Faculty of Architecture students in KTU apply their disability awareness to design projects. So, the courses in the curriculum play an important role in constituting and improving theoretical background. Main knowledge is given and problems and their solutions are discussed in the theoretical and applied courses. Students are expected to apply their knowledge acquired from the theoretical and applied courses to their design and planning projects in the design studios. Students try to constitute a holistic design concept according to the users and user requirements, usability, functionality, accessibility etc. as well as the form, function and aesthetics. Student and the coordinator improve the project with a reciprocal critical process by mentioning the significant issues about the project topic in changing weighs in every semester.

The courses in architectural education program that mention the concepts about disability or design for all are listed in Table 1. Some of the issues of these courses are human-measurement-form relations, anthropometry, universal design, human- environment-perception, human-nature relations, responsibilities for individual and society, reasons of urban problems, transportation and building bylaws, user variety and accessibility (Karadeniz Technical University Course Catalog/ECTS Information Package, 2016).

Table 1. Department of Architecture Curriculum (Comp: Compulsory, El.: Elective)

Class	Fall Semester	T	H	Spring Semester	T	H
1.	Architectural Design-1	4	4	Building Science (Comp.)	2	0
				Architectural Design-2	4	4
2.	Architectural Design -3	4	4	Environmental Behavior Information (Comp.)	2	0
				Architectural Design -4	4	4
3.	Architectural Design -5	4	4	Approaches to the Build Environment (El.)	2	0
				Principles of City Planning (Comp.)	3	1
				Architectural Design -6	4	4
4.	Architectural Design -7	4	4	Introduction to Professional Practice(Comp.)	3	1
				Architectural Design -8	4	4

The courses in Department of Interior Design (DIA) aim to inform students about universal design, user requirements, furniture design or interior space design are listed in Table 2. Prominent issues can be summarized as the relation of person and space, anatomical, physiological and psychological dimensions of the user, usability of the furniture, wet space design, kitchen design, universal design and principles of designing accessible spaces for disabled, elders and children (Karadeniz Technical University Course Catalog/ECTS Information Package, 2016).

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Table 2. Department of Interior Architecture Curriculum (Comp: Compulsory, El.: Elective)

Class	Fall Semester	T	H	Spring Semester	T	H
1.	Introduction to Interior Design (Comp.) Interior Design Studio-1	2	0	Interior Design Studio -2	4	4
2.	Human-Space Relationship (El.) Disciplines Related to Interior Architecture (El.) Interior Design Studio -3	2	0	Interior Design Studio -4	4	4
3.	Kitchen Design (Elective) Interior Design Studio -5	2	0	Design of Wet Place (El.) Furniture Design (Comp.) Interior Design Studio -6	2	0
4.	Space Design For Disabled People (El.) Interior Design Studio -7	2	0	Interior Design Studio -8	4	4

Considering the courses in Department of Urban and Regional Planning (DURP), there are three theoretical courses and planning studios in the curriculum (Table 3). The contents of the courses can be summarized as planning urban open areas and factors of social gender, disability and elder in design, urban design for all users and improving social responsibility projects (Karadeniz Technical University Course Catalog/ECTS Information Package, 2016).

Table 3. Department of Urban and Regional Planning Curriculum (Comp: Compulsory, El.: Elective)

Class	Fall Semester	T	H	Spring Semester	T	H
1.	-			Planning Studio-1	4	4
2.	Planning Studio-2	4	4	Planning Studio-3	4	4
3.	Urban Open Space and Design Principles (El.) Planning Studio-4	2	0	Principles and Methods of Urban Design (Comp.) Social Responsibility for Planners (El.) Planning Studio-5	2	0
4.	Planning Studio-6	4	4	Planning Studio-7	4	4

2. Findings and Discussion

2.1. Definitive Information

Sample of this study consist of 77% female and 23% male students. Considering distribution according to classes, it was observed that distributions were almost equal (1st class: 23,5%, 2nd class: 26,5%, 3rd class: 25%, 4th class: 25%).

When subjects were asked if they have any disabilities, 437 (99,1%) of them answered as they have no disabilities and 4 (0,9%) of them answered that they have. Disabilities that students have are visual impairments and physically impairment on the hand finger. One of the student did not indicate his disability.

When subjects were asked whether they have an individual with disabilities in their environment, 312 (71%) of them stated that there was no individual with disabilities and 129 (29%) of them answered as yes. 90 (72%) students of those answering 'yes' stated that the individual with disability was in their relative or neighbor group. 33 (32%) students of those answered that they had an individual with disability in their environment states that disability was physical, 29 (28,1%) of them stated that disability was mental and only 1 (1%) student stated that disability of the individual was due to old age (Table 4).

Table 4. State of the individuals with disability in students' environment.

	N	%		N	%
Physically challenged	33	32	Visually impaired	6	5,8
Mentally challenged	29	28,1	Physically challenged and Visually impaired	3	2,9
Hearing impaired	11	10,7	Not being able to speak	1	1
Down Syndrome	11	10,7	Senility	1	1
Physically and Mentally challenged	8	7,8	TOTAL	103	100

2.2. Information Related to Courses

When students were asked whether they had any courses relating design for disabled or for all, 61% of them answered that they had some courses but 39% of them stated that they had not have or do not remember if they had such courses.

Students of DA (85%) stated that they mostly had the knowledge in Building Science course, students of DIA stated as Interior Design Studio (26%) and Space Design for Disabled People (35%) course while students of DURP stated mostly Social Responsibility for Planners (47%) and Principals and Methods of Urban Design (35%) courses (Table 5).

2.2.1 Acquisitions from the Courses

Students were asked to write down what they remembered from the courses. All the answers belonging to subjects were classified listing one by one and eight main headings were identified. Those are concepts of the disability and disability awareness, function-furniture, universal design approach and principles, name of the approach, users in universal design, anthropometry, non-discrimination/integration and slogan (Table 6).

Table 5. Students' acquisitions from the courses

ARCHITECTURE	N	%	INTERIOR ARCHITECTURE	N	%
Environment Behavior Information	2	2,5	Space Design For Disabled People	22	35
Approaches to the Build Environment	2	2,5	Furniture Design	3	5
Principles of City Planning	1	1	Kitchen Design	4	6
Introduction to Professional Practice	1	1	Design of Wet Place	5	8
Architectural Design	6	8	Interior Design Studio	16	26
Building Science	66	85	Disciplines Related to Interior Architecture	2	3
URBAN and REGIONAL PLANNING	N	%	Human-Space Relationship	2	3
Urban Open Space and Design Principles	3	9	Symposium	1	2
Social Responsibility For Planners	16	47	Introduction to Interior Design	7	11
Principles and Methods of Urban Design	12	35			
Planning Studio	3	9			

Table 6. Identified main headings from students' acquisitions

CONCEPT OF DISABILITY AND DISABILITY AWARENESS	
Definition of obstacle and Definition of disabled	Providing disabled people to join to life, participation
Removing the obstacles	Responsibility, social responsibility ,Public interest
Having a good grasp of obstacles	The presence of disadvantaged groups
Communication	Every life is valuable.
Paying attention to disabled factor	Usability of the campus for disabled
Thinking people with disabilities in design	The adequacy of the design for disabled people
Obstacles can be permanent or temporary.	Difficulties that disabled people encounters
Disabled awareness, Awareness raising	Considering users
FUNCTION-FURNITURE	
Elevator, Platform lifts	Countertop size/width
Ramp gradient and length	Knee depth space
Electronic doors	Grab bars
Suitable washbasin	Space organization/ dimensions
Design accessible buildings	Sitting area design
Making arrangement in all areas	Building entrance and exits, Emergency exits
Accessible features of the stair and ramp	Accessibility
Suitable WC and bathroom for disabled people	Amenity paving in the building
Door size and direction of opening	Turnstiles transitions
Furniture size	Floors without rise changes
Parking area	Materials, Color
Circulation area, Corridor width	Kitchen Design

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Space design for people with disabilities	Pedestrian-street-building relations
Pavements	Pedestrian use in public spaces
Tactile paving for people with visual impairments	People with disabilities in square/ parking design
Maneuver area of 1.5 meters	People with disabilities in prayer place design
Considering disabled in building and in environment	People with disabilities in urban open space design
Organization of vertical circulation, Transportation	Usage of public space
Arrangements of the roads	Pedestrian comfort and continuity
Arrangements of the social spaces	Unimpeded transportation
NAME OF THE APPROACH	
Universal design	Design for the disabled
Forward-looking design	Design for human
Design for all	Inclusive urban design
USERS IN UNIVERSAL DESIGN	
Design must be done for all.	Appeals to everyone.
Design must appeal to all users.	Designs for everyone to use.
Design must be done suitable for all users.	Universal design includes everyone.
ANTHROPOMETRY	
Consideration of body size, Human dimension	Ergonomics
Consideration of standards	Anthropometric dimensions
UNIVERSAL DESIGN APPROACH and PRINCIPLES	
To be equitable	Perceptibility
Easy to understand and to use	Universality
To be safe	To solve the problems
To be the simplest solution	Holistic deciding
To design not make life difficult	Legibility
Functional design, Functionality	Easy of movement
Tolerance for error	Sustainability
Design which is used by everyone without difficulty	Flexibility of design
NON-DISCRIMINATION/INTEGRATION	
Not making feel of having disabilities	Distinction should not be done
To avoid discrimination	Disabled signs affect people adversely.
Not to reveal obstacle	To be integrative
To design without discrimination	Unity-integrity-harmony
Not to marginalize	To make people free
There is no disabled elevator.	Right to life
SLOGAN	
It is a style of thinking not a style.	Universal design is a necessity.
There is no barrier, there are designs not provide equal opportunities.	Emphasis should be put on universal design.
There are no barriers, we create all.	Universal design is sanitary.
Everyone is a disabled candidate.	To design for all has important implications.
	Pregnant, elderly, sick or a child are disabled too.

When students were asked to write down what they remembered from the courses, it was observed that what they remembered the most was about function-furniture issues (42,9%). Concept of the disability and disability awareness (16,1%) and universal design approach and principles (13,6%) were underlined, respectively (Table 7). In order to reveal the weightiness about conceptual and application knowledge based on departments and classes, the data was unified. The unification show us that conceptual content has a little big importance than practical content in students' minds in the faculty, regardless of the departments.

Table 7. Students' acquisitions from the courses according to departments

	DA		DIA		DURP		TOTAL	
	N	%	N	%	N	%		
CONCEPTUAL CONTENT	102	57	58	42	55	69	215	54
Concept of Disability /Awareness	17	9,5	21	15	26	32,5	64	16,1
Universal Design Approach and Principles	17	9,5	23	16	14	17,5	54	13,6
Name of the Approach	13	7	4	3	6	7,5	23	5,8
Users in Universal Design	19	11	5	4	2	2,5	26	6,5
Non-discrimination/Integration	15	8	5	4	3	4	23	5,8
Slogan	21	12	-	-	4	5	25	6,3
PRACTICAL CONTENT	77	43	80	58	25	31	182	46
Function-Furniture	73	41	73	53	24	30	170	42,9
Anthropometry	4	2	7	5	1	1	12	3

2.2.2. Acquisitions from the Courses According to Departments

Evaluated based on departments, it was observed that DA and DIA students remembered mostly details about function-furniture issues (41%, 53%) and students of DURP remembered function-furniture (30%) and concept of disability and awareness issues (32,5%) (Table 7).

While the conceptual issues were mostly stick in the mind of DA and DURP students, information built upon practical or application issues are prominent in DIA students' minds. This situation can be accepted as the return of designing big scaled projects (1/50, 1/20) and details (1/10, 1/5) and variety of applications in elective courses in DIA.

2.2.3. Acquisitions from the Courses According to Classes

It was observed that function and furniture issues were the most stated in all classes of DA except from 1st class. (2nd class: 89,3%, 3rd class: 45%, 4th class: 90,9%). 1st class DA students' awareness was of mostly related by conceptual content (93%). In 2nd class this awareness replaced with practical content (91%). Awareness of conceptual content and practical content issues were equal in 3rd class (50%) while awareness of practical knowledge was higher in 4th class (90%) (Table 8). This situation is probably caused from the conceptual course in 1st class that is an important effect on subjects. In 2nd class, rather than having courses about conceptual content, they have a close relationship with design courses, so practical knowledge issues cover a big mass in student mind. Having conceptual courses in 3rd class provides them to remember concepts and when they reach at 4th class, practical knowledge gains importance again.

Table 8. Students' acquisitions according to classes

	DA (%)				DIA (%)				DURP (%)			
	1	2	3	4	1	2	3	4	1	2	3	4
Concept of Disability / Awareness	14,1	5,4	5	-	6,3	37,5	6,1	27,1	-	-	17,8	58,1
Function-Furniture	4,3	89,3	45	90,9	43,8	25	75,8	29,2	25	-	42,2	12,9
Universal Design App. and Principles	10,9	1,8	25	9,1	25	12,5	10,6	22,9	50	-	22,2	6,5
Name of the Approach	10,9	-	15	-	6,3	12,5	-	4,2	-	-	8,9	6,5
Users in Universal Design	20,7	-	-	-	-	12,5	-	8,3	-	-	4,4	-
Anthropometry	2,2	1,8	5	-	6,3	-	6,1	4,2	-	-	2,2	-
Non-discrimination/Integration	15,2	1,8	-	-	12,5	-	1,5	4,2	25	-	2,2	3,2
Slogan	21,7	-	5	-	-	-	-	-	-	-	-	12,9
Conceptual Content	93	9	50	10	50	75	18	67	75	-	56	87
Practical Content	7	91	50	90	50	25	82	33	25	-	44	13

Function and furniture issues were also the most stated in all classes of DIA except from 2nd class. 2nd class students mostly stated concept of disability and disability awareness (37,5%). 4th class students indicated concept of disability and disability awareness (27,1%) near the function-furniture (29,2%). Awareness of DIA students in 1st class were observed equal regarding the contents of conceptual and practical. It was revealed that being the compulsory courses, "Introduction to Interior Architecture" and "Interior Design Studio" constitutes awareness almost equally in conceptual and practical issues (Table 8). In 2nd class levels of conceptual awareness increased because of the semester courses and practical issues gained importance in 3rd class. This case is thought to stem from the courses in 3rd class which are regarding application arrangements. In 4th class practical content awareness was decreased and it was determined that subjects were mostly remembered conceptual contents. This case was thought to be stemming from the course, although it was elective, "Space Designs for Disabled People" which increases disability awareness.

In DURP, universal design approach and principles is mostly indicated by 1st class (50%), function-furniture is indicated mostly by 3rd class (42,2%) and concept of disability and disability awareness is stated mostly by 4th class students (58,1%). While 1st class students of DURP remembered conceptual contents (%75), students of 2nd class did not answer, in other words did not remember anything. This can be caused from not taking any courses especially regarding these issues until 3rd class and therefore their awareness was limited to what they were heard and seen from their project coordinator and from the environment. When they reach 3rd class, it was observed that they remembered both conceptual content (56%) and practical content (44%) due to courses in 3rd class in the curriculum (Table 3). In 4th class this proportion replaces mostly with remembering details in conceptual contents (87%). In fact, this case was thought to be stemming from students' approach to their projects more conceptually (Table 8).

2.3. Arrangements Reflected in Design Projects

When asked if the students could convey their acquisitions from the courses to the design projects, 69% said that they could, whereas the remaining 31% said that they could not.

The students were asked to write how they conveyed their gains from the courses to the semester projects. All answers belonging to the participants were listed one by one and 24 main headings were identified are collected in Table 9.

Table 9. Classified arrangements reflected to the semester projects

DESIGN APPROACH	FURNITURE SIZE AND DESIGN
Secure and flexible design for children	Suitable furniture size for users
Flexible design	Suitable furniture size for children
Perceptible design for children with autism	Suitable furniture arrangement/form
Beveling the edges (corners)	ENTRANCE
Safe design	Accessible entrance
Facilitator design	Without stairs entrance
Uncomplicated ways	On the same level entrance
Continuous and safe pavements	STAIRS
Continuous roads	Appropriately sized stair risers and steps
Equal access	Escalator
Pedestrian priority design	MATERIALS
WET SPACE	Suitable floor/floor material
HORIZONTAL CIRCULATION	Suitable materials
ELEVATOR	RAMP
PAVEMENTS/ WALKWAYS/ PATHS	ACCESSIBILITY

Walking and pedestrian ways	Easy access to everywhere
To increase pedestrian axis	Accessible transportation
Disabled ways	Accessible furniture/space
Pavement height	Accessible center
URBAN FURNITURE	REGULATING THE TRANSPORTATION
Children playground	Regulating the traffic density
Rest area for elderly	Separation of pedestrian-vehicle
Resting area	Traffic lights and stops
Play sport park	Transport formation
Special space for the people with disabilities	Audio traffic lights
PARK AREA FOR DISABLED	SPACE SIZE AND DESIGN
MANEUVERING SPACE	Appropriate space size
RISES	Suitable space design for users
Not to design elevation changes	Floor height according to age
Avoid from rise changes	Kitchen furniture
RAILING	Children playground (indoor)
Railings/Handrails	Theater-Cinema seating area for disabled
Railings for children	Nursing room for children
Grab bar	Children activity area
BICYCLE ROAD	DOORS AND WINDOW
PLATFORM LIFTS	LIGHTING
WAYFINDING	TACTILE PAVING

Students stated that they conveyed their gains from their own experiences in educational process and from the courses to the design through ramp (19,5%), wet space (17,6%) and elevator (14%) arrangements, respectively. The least stated issue was the way finding (0,1%) (Table 10).

2.3.1. Arrangements on Term Projects According to Departments

When evaluated on the basis of departments, it was seen that DA students, in their designs, reflected ramp (27%), wet space (20,5%) and elevator (19,8%) arrangements at most (Table 10). Besides, stairs (5,8%), furniture size and design (5,3%) issues were stated. Although students mentioned nearly all the headings to a small extent, the situation show us that DA students approach to design from an upper scale or in the other words with a common view.

Table 10. Arrangements on term projects according to department

	DA		DIA		DURP		TOTAL	
REFLECTED GAINS	N	%	N	%	N	%	N	%
Design Approach	5	1,3	8	4	10	7,7	23	3,2
Stairs	23	5,8	8	4	3	2,3	34	4,7
Ramp	107	27	23	11,5	11	8,5	141	19,5
Elevator	78	19,8	23	11,5	1	0,8	102	14
Furniture Size and Design	21	5,3	29	14,5	-	-	50	7
Entrance	8	2	1	0,5	1	0,8	10	1,4
Rises	4	1	9	4,5	-	-	13	1,8
Doors and Windows	8	2	2	1	-	-	10	1,4
Horizontal Circulation	7	1,8	17	8,5	-	-	24	3,3
Wet Space	81	20,5	46	23	-	-	127	17,6
Maneuvering Space	-	-	4	2	-	-	4	0,6
Pavements/ Walkways/ Paths	6	1,5	2	1	33	25,3	41	5,7
Regulating the transportation	1	0,3	-	-	5	3,8	6	0,8
Park Area For Disabled	10	2,5	-	-	4	3,1	14	2
Accessibility	5	1,3	8	4	15	11,5	28	3,8
Space Size and Design	9	2,3	6	3	-	-	15	2

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Railing	9	2,3	7	3,5	-	-	16	2,2
Tactile Paving	1	0,3	-	-	6	4,6	7	1
Materials	3	0,8	3	1,5	-	0	6	0,8
Bicycle Road	-	-	-	-	3	2,3	3	0,4
Lighting	-	-	2	1,5	-	-	2	0,2
Horizontal Elevator	3	0,8	-	-	1	0,8	4	0,5
Urban Furniture	6	1,4	-	-	37	28,5	43	6
Wayfinding	-	-	1	0,5	-	-	1	0,1

DIA students reflected wet space (23%), furniture size and design (14,5%), ramp (11,5%) and elevator (11,5%) at most. Besides, rises (4,5%), stairs (4%), design approach (4%) and accessibility (4%) issues were also stated (Table 10). This was related to the fact that interior architecture students are more successful at working on small-scale details and conveying those arrangements to the projects due to the undergraduate education via the courses they have received. DIA students are also concerned with conceptual content such as design approach and accessibility. This situation is related to their conceptual courses.

DURP students also conveyed the issues related to their undergraduate education. They mostly conveyed urban furniture (28,5%), pavements/walkways/paths (25,3%) and accessibility (11,5%) arrangements to their designs (Table 10). However, mentioned rates of ramp (8,5%), design approach (7,7%) and tactile paving (4,6%) are low, this situation show that a small group in DURP students are more interested and sensitive to reflect solutions for disabled people in design via their gains from the courses.

2.3.2. Arrangements on Term Projects According to Classes

As a result of evaluating acquisitions of participants reflected in term projects according to departments and classes, it was seen that in all classes, architecture students mostly reflected ramp, elevator and wet space to their projects. 4th class students, however, conveyed all headings to their design even a small scale. This case was thought to be related to the courses they received and the information they gained during their undergraduate education. But considering that 1st class students conveyed little applications to their design, it was caused from not having worked on projects extensively and not having enough information about the topic (Table 11).

Table 11. Arrangements on term projects according to classes

	DA (%)				DIA (%)				DURP (%)			
	1.	2.	3.	4.	1.	2.	3.	4.	1.	2.	3.	4.
Design Approach	5	0,7	-	2	-	-	8,6	2,4	10,7	7,4	4,1	11,5
Stairs	20	3,7	6,5	5,4	6,7	11,9	4,3	-	-	-	2	7,7
Ramp	-	25,2	35,9	27	-	8,8	4,3	21,3	7,1	-	10,3	15,4
Elevator	30	21,5	13	20,9	-	-	14,3	16,3	-	-	2	-
Furniture Size and Design	20	6,7	1,1	4,7	46,7	17,6	15,8	6,3	-	-	-	-
Entrance	5	3	3,3	-	-	-	1,4	-	-	-	-	3,9
Rises	10	-	1,1	0,7	-	5,9	1,4	7,5	-	-	-	-
Doors and Windows	5	2,2	1,1	2	13,3	-	-	-	-	-	-	-
Horizontal Circulation	5	0,7	1,1	2,7	-	11,9	7,1	10	-	-	-	-
Wet Space	-	23,7	21,7	19,6	13,3	17,6	31,4	20	-	-	-	-
Maneuvering Space	-	-	-	-	-	2,9	4,3	-	-	-	-	-
Pavements/ Walkways/ Paths	-	1,5	2,2	1,4	6,7	2,9	-	-	21,4	25,9	30,6	19,2
Regulating the transportation	-	-	-	0,7	-	-	-	-	3,6	7,4	2	3,8
Park Area For Disabled	-	3,7	1,1	2,7	-	-	-	-	3,6	-	6,1	-
Accessibility	-	0,7	1,1	2	6,7	8,8	2,9	2,4	7,1	22,3	10,3	7,7
Space Size and Design	-	3	2,2	2	6,7	-	-	6,3	-	-	-	-

Railing	-	3,7	1,1	2	-	8,8	1,4	3,8	-	-	-	-
Tactile Paving	-	-	1,1	-	-	-	-	-	3,6	3,7	4,1	7,7
Materials	-	-	2,2	0,7	-	-	1,4	2,4	-	-	-	-
Bicycle Road	-	-	-	-	-	-	-	-	-	3,7	2	3,9
Lighting	-	-	-	-	-	-	1,4	1,3	-	-	-	-
Horizontal Elevator	-	-	1,1	1,4	-	-	-	-	-	3,7	-	-
Urban Furniture	-	-	3,3	2	-	-	-	-	42,9	25,9	26,5	19,2
Wayfinding	-	-	-	-	-	2,9	-	-	-	-	-	-

The gains of DIA students were observed to be more intensive in 2nd, 3th, and 4th classes. Because of not having enough information and application skills in the 1st class, they could not convey many solutions to their projects. In 2st class, besides furniture size and design (17,6%), wet space (17,6%) arrangements were added to the students' projects. In 3th and 4th class, it was observed that furniture size and design (15,8%, 6,3%) and wet space (31,4%, 20%) arrangements still at the highest level. At the same time, ramp (21,3%) arrangements were mostly in 4th class (Table 11).

The heading of urban furniture was the most stated by 1st class DURP students (42.9%). It was observed that the gains of DURP students reflected to their projects were mostly in the 3rd class. The main arrangements were pavements/walkways/paths (30,6%), urban furniture (26,5%) and ramp (10,3%). This situation is a result of the knowledge received from conceptual courses about the issue in this year. So the students' arrangements on term project are higher in 3rd class than the other classes. DURP students at all classes referred to urban furniture and pavements/ walkways/ paths, respectively (Table 11). That 2nd class student did not answer the question about the acquisitions but made arrangements in their projects is an indicator that students were taken the information unawares from the planning studios. Also, this is evidence that design studios have a significance role in design education.

3. Conclusions and Suggestions

As a result of the study carried out to identify the awareness of design students for disabled;

- It was observed that participants generally classified and accepted the persons as disabled were physically and mentally disabled. Only one participant emphasized that being elder could be accepted to the disability. So, it can be said that students have a limited understanding of disability.
- 39% of the participants did not remember the courses and the contents mentioning to disability, design for disabled/ all issues, although these kind of lessons (compulsory, elective and design studios) are exist in the curriculum. This shows students' low interest level about the courses or the said issues.
- Although DA students took different courses in every term and every year that were touch on the obstacle and disability concepts, they could not adapt theoretical knowledge to the next term. Mostly, the information belonging to relevant term was remembered. So the knowledge was not internalized thru adapting for the design. DIA students also could not convey the information to the text terms even though they received the courses about the issues in every term. In DURP, the issues were stated in design studios in every term as the other departments. But students received conceptual courses about the issue only in 3rd class. So the awareness level in 3rd class is higher than the other classes.
- 69% of the students stated that they adapted their knowledge to the design. The reflection of the knowledge related to the courses indicates the awareness and responsibility of these students but not the whole. Every department student reflected the concepts of design for disability and for all related to their disciplines' field of interest. When evaluated on the basis of departments,

it was observed that the students in DA remembered mostly the accessibility instruments as ramp, elevator, stairs and wet spaces. On the other hand, students in DIA remembered mostly design issues like wet space design and furniture sizes and their design. The students in DURP remembered mostly the planning issues as urban furniture and pavements/ walkways/ paths. It can be considered that while DA and DIA students have a practical view due to functional problems, DURP students have a more conceptual view on their projects due to scale and interest on social problems of the society and environment.

In this study it is aimed to measure the design students' disability awareness through their courses. Best way to determine the awareness of students is designing the projects for all. Because in design faculties, practical courses like design studios are significantly important. It is expected to reflect the students' knowledge to their term projects. For this purpose, it is asked to students how their knowledge reflects to their term projects. Some learn, some do not or some completely forget. In order to improve the empathy of the students and make the knowledge permanent, various applied courses can be provided every term. Some arrangements like workshops, social responsibility projects can be done to improve the empathy together with disabled participants through associations and clubs. When evaluating term projects, the criterion of having performed "design for all" before can be added to the criteria taken into consideration. And most importantly, the definition of disability in students' minds can be expanded from only orthopedic and mental disabilities to being old, pregnant, child and other short term disabilities. And the improvement of designers that can create places for everyone can be ensured as a social and vocational responsibility.

4. References

- Imrie, R. (1999). The body disability and Le Corbusier's conception of radiant environment. In R. Butler, & H. Parr. (Eds.). *Mind and body spaces: geographies of illness, impairment and disability* (pp. 25-45). London and New York: Routledge.
- Malik, S. (2006). More than meets the eye. In P. Devlieger, F. Renders, H. Froyen, & K. Wildiers. (Eds.) *Blindness and the multi-sensorial city* (pp. 177-201). Belgium: Garant.
- Pallasmaa, J. (2005). *The eyes of the skin* (1st ed.). United Kingdom: John Miley & Sons Ltd.
- Karadeniz Technical University Course Catalog/ECTS Information Package. (2016). Faculty of Architecture. Retrieved at May 10, 2016, from <http://www.katalog.ktu.edu.tr>

Time-Place-Human: The Reading of Geography from Historical Resources

Yasemin Nemlioglu Koca

1. Introduction:

Although historical geography has a background among fields of sciences, it is recognized as a new discipline in Turkey and can be assessed as an interdisciplinary science providing the connection between time and place. The historical geography provides the opportunity to observe the changes during the process in accordance with the scientific research methodology by uncovering the physical, human and economic geography features of a specific place in the past. In principal, it deals with investigation and description of geographical features of any region on the earth during historical periods and for this purpose analyses the distribution of human groups in the world and geographical positions of countries (the effects of features of place on the foundation and development processes of countries and the effects of demographic, economic and social aspect of the environment) (Elibüyük, 1997, p. 122-128). Especially, the utilization of historical resources on researches about population and economy, it precedes to the creation of cause and consequence correlation in determining the current situation. Within this framework, numerous written, verbal, visual historical works and documents constitute the resource for geographic researches. While it is possible to be obtained information about the physical features of place in the past as well as the population, settlement, urbanization, administrative division, agriculture, animal husbandry, industry, transportation, trade, services and socio-culture, it also possible to reveal the historical geography of the period investigated from these documents.

The geography that we live, bear witness to historical geography as an area expressed that “Cradle of Civilization”. Within this framework, travelogues, chronicles, maps, engravings, paintings and photographs, governmental written sources (muhimme defterleri (register of sultan decrees), şeriyye sicilleri (Ottoman court records), kanunnameler (Ottoman book of law), salnameler (yearbooks)), consular reports, intergovernmental agreements and correspondence are also included among sources of historical geography that have reached from the past until today. It is essential that these resources are compared in a methodological manner and that validity of the data retrieved be evaluated. Notwithstanding the foregoing, the main purpose of researches in this field is to determine the effects of place on human behavior and the power of human activities contribute to the place and to observe the process. Before discussing the structural features of historical geography here, the sciences of geography and history should be made specifications and emphasized their commons; this is due to the fact that the problem of perception of historical geography as a sub branch of history science and only be resolved in this manner.

2. Concepts:

The basic description of geography is the science analyzing the correlation between humans and place based on the principles of cause and consequence and distribution. History is the science analyzing the actions of humans in the past based on the principle of cause and consequence. It is observed that the commons in description of these two sciences is about the concepts of human, place and time. The science of history studying on time overlaps with the science of geography studying on place when the human factor becomes part of the equation. When it is considered that all historical incidents take place in a place, it can be understood how interwoven is the correlation between geography-history.

It is observed that two topics come into prominence in geography researches,

- Effects of regional or local geographical features on humans and their behaviors,
- Investigation and description of changes in geographical areas caused by human behaviors (Eskikurt, 2005, p.13).

Place is a concept with fundamental significance for understanding the societies and all branches of science which interested with them. The space occupied by objects, place meaning of space is absolute and relative. Absolute position is determination of the area of any place in the earth by the coordinate system .On the other hand, relative position is the position of one place with regard to another one, within the framework of the human induced variables as time, relations, politics and economics. The world which is the main factor of place, while was standing against all humanity as special size in the past, today is faced by the perception of contraction as humans become fully effective on place. Since people are in mutual interaction not only with physical place or the environment but also with other people, place as now ceased to be a concept and has been transformed into a social concept. John Urry point out in his work “Consuming Places”, today the place has ceased to be a geographical image and has been transformed into an economic, political, cultural, strategic and sociological problem and that it effects the way people perceive the world more than they perceive the physical world (Urry, 2015). As a consequence, from a scientific point of view, the concept of place has been transformed into an interdisciplinary point of intersection and union by the significance it has gained. Spatial factors or spatial metaphors are being used in an increasing number of social science doctrines and the concept of place has become one of the indispensable tools for querying basic assumptions of modern science. Within this framework, according to David Harvey, place as the main research question of geography, is so significant it cannot be left to geographers only and with this feature it occupies the center of social sciences (Harvey, 2010).

The second concept, time is continuity without any spatial dimension, outside the 3 dimensions of an object based on place. Time is relative; time, as designed, perceived and lives, is not stable and constant, the person cannot comprehend it experimentally with perception. According to Farabi and Aristoteles, the object is dependent on place for existence in time. Today however, place is approved of the means to make time visible. Notwithstanding the foregoing, time can be grasped with the factor of change perceived on place. Hence, the purpose of people is to determine the changes in place and as well as the causes and consequences of changes. Within this framework, it is the new purpose of science to place equal emphasis on time and place, which are the fundamental factors of human presence. One of the most significant duties of social sciences is to be able to overcome the contradiction between place-time and to ling these concepts with each other. All social incidents, concepts and relations take place on a certain place and place has an influence on society as well as the society has an influence on place.

The efforts of conceptualizing time and place, the two fundamental factors of social existence, bring the sciences of history and geography closer to each other. Geography has been perceived in different forms during times, it has undergone a transformation and its content and methods have diversified. While geography is related in general with geographical discoveries, mapping and observation of land in classical ages, it has focused on measurement and positioning of land after the 19th century. Researches of geography during the 20th century started to focus on the places created by human, the social effects of these places and hence how the society has organized the place. At this point, everything in the world and hence the place, the field of study of geography, needs research of time, hence the science of history as it has come out as consequences of processes that have changed in time. Notwithstanding the foregoing, even if the past culture, the socio-economic structure, development etc. of a region and a society is known very well, it is necessary to know the natural environment of that region or the society very well. Geographical conditions play an important role in occurrence of

historical incidents, while place shapes the incidents; it provides the opportunity for development of civilizations. It is impossible to write history without the science of geography. Moreover, the science of geography has also developed a series of sub-disciplines and these disciplines open the new doors for interpretation of history. Human geography and demography deals with distribution of people; economic geography puts forward the relations between and consequences of production and consumption, historical geography which follows their historical process, reveals the correlations between time-place. By globalization, place and time have become the main component of historical geographical studies.

3. Methodology and Resources

The historical geography research is needed a certain previous period, place, various resources and research methods. For this reason, although historical geography is within geography, by the increasing and spreading of research possibilities among fields of science, it has become an interdisciplinary area of research. According to Sırrı Erinç It is mandatory to keep in mind the conditions of physical and human geography of the country on one side as well the history of settlement and development on the other side in order to be able to fully comprehend the cultural and social structure of Turkey today (Erinç, 1972). In other words, it is necessary to investigate the environment that people today live, by taking into consideration the historical development of this environment. Notwithstanding the foregoing, although historical geography is within geography, it is in the position of an intersection between the disciplines of history and geography and it is unable to receive sufficient interest and attention in our country, with the thought that it is within the area of study of the science of history. Although İlber Ortaylı is a historian, he criticizes this matter by pointing to the importance of geography: There is no branch as historical geography in Turkish academic life. The fact that some colleagues among historians have a strong knowledge of geography is based on coincidences and the person himself. It is beyond doubt that nonexistence of this branch in academic life has been reflected in secondary education. Most of the times, the names of nations and geographical names are repeated unconsciously. It is believed that Damascus and Sam; Trablusgarp where Atatürk fought against the Italians, and Tripoli are the different places. It is obvious that we learn and try to teach history and also the geography of countries without a map. The young people of a nation, whose grandfathers created history and geography, are unfortunately unable to appreciate this legacy (Ortaylı, 2006).

Notwithstanding the foregoing, in the 19th century and the beginning of the 20th century, especially interest in historical geography increased by the works of western travelers were translated into Turkish and drew attention as a new field of science in the country. In this period, description of geography and its characteristics have been explained in various studies. One of the first works about historical geography in Turkish is the encyclopedic dictionary for 7 volumes named *Lügat-ı Tarihiye ve Coğrafiye* (Dictionary of the History and Geography) prepared by historian and geographer Yağlıkçızade Ahmed Rifat in 1881. In the recent years, scientists such as Şemseddin Sami, Abdürrahman Şeref, Ali Cevad, Zeki Velidi Togan, Hamit Sadi Selen wrote books related with historical geography (Gümüşçü, 2006, p.208-215). The *Historical Geography of Asia Minor* written by William Mitchel Ramsay in 1890 is the first work of historical geography about Turkey (Ramsey, 1890). *Coğrafya-i Tarihi Mülk-i Rum* (Historical Geography of the Byzantine) prepared by Celal Nuri İleri in 1918 is the first work in Turkish about historical geography of Turkey (İleri, 1918).

The language and culture appears as the main determining factor in research and analysis of resources in studies about historical geography. Although the language is one of the factors of analysis of human geography, it is also among factors of science. The language and names of settlement and regions are significant for description of social organization. The

language is an expression of place and its transfer into writing. Differentiation in language can happen in time in a place. By the changing the relation of people with places, the language starts to change or diversify. Even changes in alphabet, which is the signed form of transferring language into writing, can lead to differentiation of the same language. Although Turkish has been spoken in Anatolia for more than one thousand years in the geography that we live in, it has undergone transformations from Ancient Turkish during the period of Beyliks to Ottoman Turkish during the Ottoman period and to Modern Turkish. Within this framework, in order to be able to evaluate documents from previous periods, it is necessary to know the form of Turkish at that time and the alphabet of that time. For this reason, researchers of historical geography should have a general command of the language and alphabet of the matter that they investigate and should prefer the method of seeking assistance from experts when they have a problem. Especially the differences of language and denomination in the historical sources that we come across are also among the main components that put forward the political, economic, administrative and socio-cultural change of a place.

Examples 1; The Istanbul Straits named as Bahr-i Siyah Boğazı (The Black Sea Strait) by a map in 1841 produced by Bahriye Nezareti (Ottoman Ministry of the Navy), named as Istanbul Boğazı (The Istanbul Strait) by a map in 1895 produced by Nafia Nezareti (Ottoman Ministry of the Public Works), named as Karadeniz Boğazı (The Black Sea Strait) by a map in 1908 produced by Harbiye Nezareti (Ottoman Ministry of the War).⁵

Culture, which is another factor of geography, enlightens historical change as the field of influence of civilizations in the world. Civilizations have geographical boundaries and these boundaries are analyzed in two groups as active boundary and real boundary. Active boundary is limited by physical geography; the real boundary is the boundary of social, economic, political and cultural effects of that civilization. The real boundary of civilization is determined by the leader culture forming that civilization. Civilizations with wide cultural boundaries surpass active boundaries and can influence other places. Notwithstanding the foregoing, great civilizations are founded in areas only where economic and social development can take place and geographical conditions should provide the means spatially. The Turkish civilization has a cultural structure passing its active boundaries with its real boundaries influencing larger areas. For this reason, researchers can find cultural traces of Turkish civilization in different geographies and at different times.

The using of historical resources in researches of geography aims to reach resources in the period analyzed and to investigate by making use of them and to place them in their real place in the stage of history. The resource means material providing information which is everything said, written or produced by people, however not all materials providing information are considered as a resource. It is crucial for the researcher to be selective and observant at this point. The resources of historical geography are all kinds of records, documents, laws, contracts, treaties, letters, maps, reports, records of goods and chattels of religious institutions and foundations, court records prepared by local and national administrations about administration, population, taxation and propriety and produced by private persons reached our day. However, these resources and data are not valid for researches to be conducted on ancient periods and societies. The studies about those periods are needed data generated from researches of areas and archeological excavations.

A material should be produced in the period of investigation or it should be produced by making use of resources close to that period in order for it to be considered as a resource. Materials in the first group are called main resource and are very significant in researches of

⁵ 886/110 - Map of the Marmara Sea - The Istanbul Naval Museum

HRT 2174 - Map of the Rumelia Railways - The Prime Ministry Ottoman Archives

452/85 - Map of the Istanbul Strait - The Istanbul Naval Museum

historical geography. The secondary group resources gain significance in the absence of main resources and they are described as primary resource created by making use of the main source. The secondary resources produced by making use of primary resources also gain significance in the absence of primary resources and main resources. Since primary and secondary resources other than main resources are as witness statements, their correctness needs to be supported by and compared with other resources. Main resources can be classified in the following manner:

3.1. Land and Surface Researches

The land itself is a resource for researches of geography. Examinations and data generated land the can provide information about locations of settlements, their dimensions and features, environmental conditions in ancient times, historical events and the technological level of the civilization of that time. Archeological excavations are especially the most significant aids of periods for which no documents and records exist. Material cultural assets are also considered as archaeological data just like the first tools, houses, buildings, temples, remains of pottery, figurines, seeds, plant remains and skeletons, starting from beginning of history of civilization. Archaeological sites, tumulus, monuments and cemeteries in Anatolia and Thrace are published both in press and also in electronic within the framework of Archaeological Settlements of Turkey (TAY).

3.2. Settlements and Structures

Are among the principal resources of historical geography for each period in the past. Places of settlements, regardless of whether they are located in rural areas or in the city, provide social, economic and cultural information about their period from data generated from factors such as structures, commercial premises, roads, housing, streets and facilities. By analyzing structures like that, it becomes possible to get information about the construction style of a building, the materials used, building place and its function as well architectural style of the time. The effects of cultural geography appearance in architecture or on settlements are observed. In a way, a relation is formed between a settlement and human relations. In time, places of settlements can be faced with destruction, change of name or transfer to another place. They can sometimes be caused by natural disasters or decisions and behavior of people. Determination of settlements/locations units in historical geographical studies can be carried out from distant past until today or with a reverse implementation from today until our past.

3.3. Names of Places and Settlements

While people give names for settlements, they preferred names that reflect their own past, cultures, passions, traditions and customs. The meaning of the name provides information about people and their organization or the geography of the region. The names of places and settlements have changed in time in our country and in the world sometimes because of administrative and political reasons and sometimes with the dialect of local people or in time. The language, time and meaning of names of settlements are an area of research for historical geography.

3.4. Maps, Plans and Sketches

Maps provide the absolute geographical location in the world. By providing the opportunity to analyze the forms of distribution in geography, it also provides an opportunity to reveal

relations, to communicate the results of researches in a more generalized manner and to record geographical data. Maps, the method to represent a place and a tool to visualize the factors on a place, can be transformed in to a 3 dimensional visual by the Geographical Information Systems today. The importance of Geographical Information Systems is understood more each day for visualization and query of information in current works of historical geography. On the other hand, the historical maps provide information about the features of geographical structures of the period and also the lifestyles, economic, cultural and political relations of people living in that region or city. There are 2597 maps, 1099 plans and sketches in The Prime Ministry Ottoman Archives, 1120 maps and 41 atlases in Istanbul Naval Museum. Furthermore as miniatures, engravings and photographs, there are 137 albums in The Prime Ministry Ottoman Archives and 31275 photographs in Istanbul Naval Museum (The Prime Ministry Ottoman Archives, 2010).

3.5. Written Archive Materials

Are firmans (edicts), berats (exemption licenses), judgements, ahidname (bill of oath), divan (imperial council) and parliamentary decisions, kanunname (book of laws), nizamname (regulations), custom contracts, letters, records of the foundation, mühimme (register of important sultan decrees), tapu tahrir (cadastral records), avarız (special tax), cizye (tax for non-Muslims), temettuat (business tax) books in the Ottoman Empire. There are approximately 150 million documents belonging to different periods and classified according to the procedure of books and files in the Prime Ministry Ottoman Archives, which is the source referred to most by researchers in Turkey. The materials belonging to the Ottoman Era, which is the archive of an empire, directly interest almost 40 countries that still exist in our day and indirectly interest tens of countries that it has relations with. There are 300,000 archive materials in the Istanbul Naval Museum.

-Tapu Tahrir (Cadastral Record) books, since ancient times, states that have established central authority have conducted several censuses in order to determine the population and economic structure. Especially, all states founded in the Mediterranean Basin have carried out census of land and population in order to determine the taxpaying population. The records generated have been named differently in each country. They were named as Tapu Tahrir (Cadastral records) Books in Ottoman Empire, Domesday Book in United Kingdom, Ceraid in Italy, Revk in Egypt. These records have been discovered as a unique source for social and economic research and have started to be used. The cadastral record books, a party of which is in the archives of General Directorate of Land Registry and Cadaster are among the most important parts of Ottoman Archives. There are 1100 tahrir books in The Prime Ministry Ottoman Archives and 2322 tahrir books in General Directorate of Land Registry and Cadaster. (The Prime Ministry Ottoman Archives, 2010). These records comprise of mufassal (through books), icmal (extracts), avarız (special tax), evkaf (foundation) books and provide statistical data source for researchers.

-Kanunnameler (Book of laws), can be a fundamental source about certain matters and also can have a key role in explanation and interpretation of administrative, military, legal and financial information in some documents. Law books, in the manner they were implemented during the Ottoman Era, are laws and regulations imposed with the orders and decrees of Sultans about administrative, financial and penal law as well as Sharia Law and regulations implemented during the time.

-Şeriyye sicilleri (Ottoman court records), are the records of lawsuits in Ottoman courts. There are 20,000 books in The Prime Ministry Ottoman Archives. The Shariah records recorded according to Ottoman district system include orders and verdicts ruled by Kadi (Muslim Judge) as well as orders, instructions, certificates and ordinances. The records of Kadis not only include the lawsuits in courts but also included transactions and regulations such as notary records, settlement deeds; transactions about sales, donations, lending as well as municipal transactions; the prices of products sold in markets; documents about artisans, tradesmen, craftsmen; records of civil law such as inheritance and wills, marriages and divorces; copies of orders and ordinances sent by central administration about buildings belonging to the public and foundations, their construction and repairs.

- Temettuat (business tax) books, dividend tax is the tax paid by tradesmen and craftsmen for their annual revenue. All property, land, animals and products belonging to everyone were recorded in dividend books for all settlement areas such as districts and villages. The administrative structure of those periods has been taken as basis for description and cataloging of Dividend Books. The information in the books has been taken as basis and they were divided by provinces in alphabetical manner and each province was divided into districts. The total number of books is 17,747 for the dates 1256-1261/ 1840-1845.

-Salnameler (Yearbooks), Salnames, considered among significant resources, are records that summarize important incidents in past years and provide brief and very significant information about the years that they belong to. Very important information about historical, geographical, administrative structures, institutions, biographies, economy, army and navy, education, culture and other areas of the period can be retrieved from year books. Furthermore, information that is rare to access such as plotting scales, sketches of roads and bridges, urban plans and maps etc. can also be found. The salnames were published for the first time in 1847, and then were published annually for all ministries and cities after 1865.

3.6. Manuscripts

Although they are seen as secondary resources about a region, they are the most important resources as they reflect the impressions and information transferred by people living in that time. In this sense, works of geography that reached our days since the ancient times should be considered as pioneers of historical geography. Manuscripts of antique periods generally reflect the physical geography features of regions while they describe a geographical area. They also include socio-economic components when they refer to a city or a port. Some of the issues covered by ancient geographers are significant as secondary sources because they also have geographical information about ancient times. Manuscripts describe the geographies referred to Greek and Roman classics narratives, the holy land described in the Bible and provide the history of geographical reviews and discoveries with the change of boundaries of states and empires.

Examples 2;

Historia of Herodotus in AD. 5th century

Historia of Polybios in AD. 5th century

Geografika of Strabones in 1st century

The Natural History of Gaius Plinius Secundus (Elder Pliny) in 1st century

Chronicles recording historical incidents chronologically and generally reflecting the subjective opinion and observations of the author as well as travel books reflect opinions about travels. The starting point of the author in travel books is not what happened but geography.

However, since these works are not objective, the information should be compared with their main and primary resources and should be analyzed thoroughly. The travelers and observers in the past and today have recorded their observations about the geographical areas they visited in the Mediterranean basin and the historical period. At the outset of these are works from antique years and especially the works of domestic and foreign travelers that provide information about Anatolia as of the 14th century. These works provide information about the historical geography of Anatolia, antique names and epigraphs; military information such as the condition of the Ottoman army; religious groups in the Ottoman society, routes to create the trade in Anatolia, surface features; natural wealth such as rivers, lakes and mines, the climate conditions of a certain area, rural settlements and rural life.

Examples 3;

La Embajada A Tamorlán of Ruy Gonzáles de Clavijo in 1406

Le Voyage D'Outremer de Bertrandon de La Broquière of Bertrandon de La Broquière in 1432

Voyage au Levant of Pierre Belon in 1553

Les Voyages du Sieur du Loir En Turquie of Sieur du Loir 1654

Relation D'un Voyage Fait Au Levant of Jean De Thévenot in 1664

Les Six Voyages de Jean Baptiste Tavernier of Jean Baptiste Tavernier in 1676

Relation Nouvelle d'un Voyage de Constantinople of Guillaume Joseph Grelot in 1680

D'un Voyage du Levant of Joseph Pitton De Tournefort in 1718

A Description of the East and Some Other Countries of Richard Pococke in 1745

Batmut'ıwn Pontosi vor ē Seaw Tsov of Minas Bzhshkian in 1819

Researches in Asia Minor, Pontus and Armenia of William John Hamilton in 1842

Description de L'Asie Mineure of Charles Felix Marie Texier in 1862

Voyage Dans Le Lazistan Et L'Armenie of Deyrolle Théophile in 1876

Examples 4;

Rihlat İbn Batuta of Muhammad İbn Battuta in 1355

İ'lam el-İbad fi A'lam el-Bilad of Mustafa İbn Ali el-Muvakkıt in 1525

Kitab-ı Bahriye of Piri Reis in 1526

Beyan-ı Menazili Seferi İrakeyn of Matrakçı Nasuh in 1537

Mir'atü'l-Memalik of Seydi Ali Reis in 1557

Tuhfetü'l Kibar Fi Esfari'l Bihar of Katib Çelebi in 1657

Seyahatname of Evliya Çelebi in 17th century

Fransa Sefaretnamesi of Yirmisekiz Çelebi Mehmet Efendi in 1721

Avrupa Seyahatnamesi of Hayrullah Efendi in 1864

Sultan Abdülaziz Han Hazretlerinin Avrupa Seyahatnamesi of Halimi Efendi in 1867

Avrupa'da Bir Cevelan of Ahmet Mithat Efendi in 1891

Avrupa Seyahatnamesi of Mustafa Sait Bey in 1898

4. Conclusions

The historical geography is a science that tries to determine the effect of geography on history, which gained importance and developed by the 19th century. In principal, historical geography investigates the geographical features of a region in the world in historical periods and it is interested in distribution of people and settlement models. From this point of view, determination of geographical facts and location is especially crucial in historical geography studies. However, lack of sufficient methodological studies in this field leads to confusions in researches. Documents, constituting significant resources for historical geography researches, put forward the principle of change. Especially records proving the past of a region should be taken into consideration for researches of human and economic geography. The most important

point in analysis of historical document is language and cultural structure. Periodic comparison should be made when making use of documents, validity of documents should be determined and they should be compared with other resources. Main source and primary source should absolutely be reached in use of resources.

5. References

- Ahmet Mithat Efendi. (H.1308/M.1891). *Avrupa'da Bir Cevelan*. [Travel in Europe]. İstanbul: Hakikat Matbaası; *Avrupa'da Bir Cevelan* (2015). Ed: Fazıl Gökçek. İstanbul: Dergah Yayınları.
- Başbakanlık Devlet Arşivleri Genel Müdürlüğü. (2010). *Başbakanlık Osmanlı Arşivi Rehberi*. [The Prime Ministry Ottoman Archives Guide]. İstanbul: Başbakanlık Basımevi.
- Belon, P. (1553). *Voyage au Levant*. [Travel to Levant]. Paris: Gilles Corozet; *Voyage au Levant*. (2001). Paris: Chandeigne.
- Bzhshkian, M. (1819). *Batmut'iwn Pontosi vor ē Seaw Tsov*. [Geography of Pontos]. Venice: St. Lazarus Monastery; *Karadeniz Kıyıları Tarih ve Coğrafyası*. (1969). Trans: Hrand D. Andreasyan. İstanbul: İstanbul Üniversitesi Edebiyat Fakültesi Yayınları.
- Clavijo, R.G. (1406). *La Embajada A Tamorlán*. [Ambassador to Timor]. Madrid; *Timur Devrinde Kadis'ten Semerkand'a Seyahat*. (2007). Trans: Ömer Rıza Doğrul, İstanbul.
- De Tournefort, J.P. (1718). *Relation D'un Voyage du Levant*. [Travel to Levant]. Paris: La Compagnie; *Tournefort Seyahatnamesi*. (2005). Ed: Stefanos Yerasimos. Trans: Ali Berktaş. İstanbul: Kitap Yayınevi
- Deyrolle, T. (1876). *Voyage Dans Le Lazistan Et L'Armenie*. [Travel to Lazistan to Armenia]. Paris: Libraire Hachette; *1869'da Trabzon'dan Erzurum'a Seyahat*. (1939). Trans: Ekrem Koçu. İstanbul: Çığır Kitabevi.
- Elibüyük, M. (1997). Coğrafya'nın Önemi, Tanımı ve Sınıflandırılması [The Importance, Description and Classification of Geography]. *Türk Kültürü Araştırmaları Dergisi* [Journal of Turkish Culture Researches]: XXXIII/1-2:122-128, Ankara.
- Erinç, S. (1972). Türkiye: İnsan ve Ortam [Turkey: Human and Environment]. Güney-Doğu Avrupa Araştırmaları Dergisi [The Journal for South-Eastern European Studies]. 1:165-194, İstanbul.
- Eskikurt, A. (2005). Tarihi Coğrafya Çalışmalarının Metodolojisi Konusunda Genel Bir Değerlendirme [A General Comprehensive Review on the Methodology of Historical Geography Studies]. *Marmara Coğrafya Dergisi* [Marmara Geographical Review]:11:13, İstanbul.
- Evliya Çelebi. *Seyahatname*. [Travel Book]. (17th century). Süleymaniye Kütüphanesi Pertev Paşa 458; *Seyahatname*. (2003). Ed: Yücel Dağlı, Seyit Ali Kahraman. İstanbul: Yapı Kredi Yayınları.
- Gaius Plinius Secundus. (1855). *The Natural History*. Trans: John Bostock, London: Red Lion Court.
- Grelot, G.J. (1680). *Relation Nouvelle d'un Voyage de Constantinople*. [New Travel to Constantinople]. Paris: Damien Foucault; *İstanbul Seyahatnamesi*. (1998). Trans: Maide Selen. İstanbul: Pera Turizm.
- Gümüşçü, O. (2006). *Tarihi Coğrafya* [Historical Geography]:208-215. İstanbul: Yeditepe Yayınları.
- Hamilton, W. J. (1842). *Researches in Asia Minor, Pontus and Armenia*. London; *Küçük Asya*. (2013). Trans: Kasım Toraman. Ankara: Midas Kitap.
- Harvey, D. (2010). *Postmodernliğin Durumu* [The Condition of Postmodernity]. Trans: S. Savran, İstanbul: MetisYayınları.

- Halimi Efendi. (1867). *Sultan Abdülaziz Han Hazretlerinin Avrupa Seyahatnamesi [Travel Book of Europe of Sultan Abdülaziz]*. Tarih-i Osmani Encümeni Mecmuası. İstanbul; *Sultan Abdülaziz'in Avrupa Seyahati* (1991). Ed: Cemal Kutay, İstanbul: Boğaziçi Yayınları.
- Hayrullah Efendi. (1864/2002). *Avrupa Seyahatnamesi [Travel Book of Europe]*. Ed: Belkıs Altunış Gürsoy. Ankara: T.C. Kültür Bakanlığı.
- Herodotus. (2002). *Historia; Herodot Tarihi*, Trans: Müntekim Ökmen, İstanbul: İş Bankası.
- İleri, C.N. (H.1336/M.1918). *Coğrafya-i Tarih-i Mülk-i Rum [Historical Geography of the Byzantine]*. İstanbul: Orhaniye Matbaası.
- Katib Çelebi. (1657). *Tuhfetü'l Kibar Fi Esfari'l Bihar. [Gift for Elder about Sea Voyages]*. TSMK. Revan 1192; *Tuhfetü'l Kibar Fi Esfari'l Bihar*. (2008). Ed: İdris Bostan. Ankara Başbakanlık Denizcilik Müsteşarlığı.
- Le Voyage D'Outremer de Bertrandon de La Broquière. [Travel of Bertrandon de La Broquière]*. (1892). Ed: Charles Schefer, Paris: Ernest Leroux; *Bertrandon de La Broquière'in Denizaşırı Seyahati*. (2000). Trans: İlhan Arda, İstanbul: Eren Yayıncılık.
- Mustafa Sait Bey. (1898/2004). *Avrupa Seyahatnamesi [Travel Book of Europe]*. Ed: Burhan Günaysu. İstanbul: YKY.
- Mustafa İbn Ali el-Muvakkıt. (1525). *İ'lam el-İbad fi A'lam el-Bilad. [Descriptions of Cities]*. İstanbul Süleymaniye Kütüphanesi, Kılıç Ali Paşa 682/8.
- Nasuh el-Silahi el-Şehir Bi Matraki. (1537). *Beyan-ı Menazil-i Sefer-i Irakeyn. [Chronicle of Stages of Campaign of Iraq]*. İstanbul Üniversitesi Kütüphanesi 5964; *Beyan-ı Menazil-i Sefer-i Irakeyn*. (1976). Ed: H. Yurdaydın, Ankara: TTK.
- Ortaylı, İ. (2006). Önsöz [Foreword]. *Dünya Tarih Atlası [World History Atlas]*. İstanbul: Doğan Burda Dergi.
- Piri Reis. (1526). *Kitab-ı Bahriye. [Book of Navigation]*. İstanbul Süleymaniye Kütüphanesi Ayasofya 2612; *Kitab-ı Bahriye*. (2002). Trans: F.Pekol, F.Kurtoğlu, H.Alpagot. Ankara: T.T.K. Yay. No:2.
- Pococke, R. (1745). *A Description of the East and Some Other Countries*. London: W. Bowyer.
- Polybios. (1889). *Historia*. Trans: Evelyn S. Shuckburgh, New York: Macmillan.
- Ramsay, W. M. (1890). *The Historical Geography of Asia Minor*. London: John Murray.
- Seydi Ali Reis. (1557). *Mir'atü'l-Memalik. [Mirrors of Countries]*.
- Sieur du Loir. (1654). *Les Voyages du Sieur du Loir En Turquie. [Travels to Turkey of Sieur du Loir]*. Paris: François et G. Clouzier.
- Strabones. (2000). *Geografika; Antik Anadolu Coğrafyası*, Trans: Adnan Pekman, İstanbul: Arkeoloji ve Sanat.
- Tavernier, J.B. (1676). *Les Six Voyages de Jean Baptiste Tavernier. [Six Travelsof Jean Baptiste tavernier]*; *Tavernier Seyahatnamesi*. (2006). Ed: Stefanos Yerasimos. İstanbul: Kitap Yayınevi.
- Texier, C.F.M. (1862). *Description de L'Asie Mineure. [Description of Little Asia]*. Paris: Didot Frères; *Küçük Asya: Coğrafyası, Tarihi ve Arkeolojisi*. (2002). Trans: Ali Suat. Ankara: Enformasyon ve Dokümantasyon Hizmetleri Vakfı.
- The Travels of Ibn Batuta*. (1829). Ed: Samuel Lee. London: John Murry; *İbn Battuta Seyahatnamesi*. (2005). Trans: A.Sait Aykut. İstanbul: Yapı Kredi Yayınları.
- Thévenot, J. (1664). *Relation D'un Voyage Fait Au Levant. [Travel to Levant]*. Paris: Thomas Joly; *Thévenot Seyahatnamesi*. (2009). Ed: Stefanos Yerasimos, Trans: Ali Berktaş, İstanbul: Kitap Yayınevi.
- Urry, J. (2015). *Mekanları Tüketmek [Consuming Places]*. Trans: Rahmi G. Ögdül, İstanbul: Ayrıntı Yayınları.

- Yağlıkçızade, A.R. (H.1299/M.1881). *Lugat-ı Tarihiye ve Coğrafiye [Dictionary of the History and Geography]*. İstanbul: Mahmut Bey Matbaası.
- Yirmisekiz Çelebi Mehmet Efendi. (1866). *Sefaretname-i Fransa.[Book of Embassy of France]*. İstanbul: Matbaa-i İlmiye-i Osmaniye; *Yirmisekiz Çelebi Mehmet Efendi'nin Fransa Sefaretnamesi*. (1993). Ed: Beynun Akyavaş. Ankara: Ankara Üniversitesi Basımevi.

What Is The Impact of New Design with The Designer and The Production Identities?

Murat Özdamar

1. Introduction

Without search and knowledge we cannot get on with any subject; that is a worldwide and centenarian concept. So in order to have a good name which is related with the professional life, the ones should be open minded, and be a researcher.

Of course there may be questions for “Search for what?”, but within Interior Architecture/Design people should develop themselves by searching. Searching for the previous attempts and get them together with their own decisions. By that way we have the “new designs”.

The “New Designs” are the valuable parts within the Interior Architecture/Design profession. Those are the things that we get according to the knowledge, researches, and deciding for lots of things and feelings about the project and/or product. That is why IFI (International Federation of Interior Architects / Designers) which was founded in 1963 describes that;

“Interior designers and interior architects synthesize human and environmental ecologies and translate science to beauty addressing all the senses.” (IFI, 2011, para. 13)

“The practitioner listens, observes, analyses, improves and creates original ideas, visions and spaces that have measurable value.” (IFI, 2011, para. 14)

“The responsibility of the interior designers and the interior architects is to define the practice and the required expertise, educate ourselves and the public realm as experts in the built environment.” (IFI, 2011, para. 15)

within IFI Interiors Declaration (2011).

By defining the problems related with the functions, the interior architect/designer can level the interiors by researching and adding creativity in order to solve the problem, because of that the interior architect/designer deals with the space analysis, space designs, site checking, building systems, aesthetics, constructional information, materials, relative equipment and equipment providence information.

That is why, “The interior architect/designer should be the one who has the ability, knowledge, and the experience for preparing the drawings and the documents for the interior spaces.” (Ozdamar, 2016)

But the interior architect/designer is not the only one who is forming a design. After having the period of designing, there will be the long and the important process for the production.

2. Designing - Producing

Design is the creation of a plan or convention for the construction of an object, system or measurable human interaction (Wikipedia, 2016), as a process, design not only involves adding pleasing features to a final product, but it requires the performance of different activities pursuing the creation of an appealing, usable and functional object. Design therefore plays an

important role both in the creation and in development of meanings (Verganti, 2008), and in order to form a design, we have to know about the answers of the question “How?”

In doing so, the designers have two ways to communicate; verbal and visual language. This is by the fulfilment of the necessary conditions, by putting forward the design and by this way the assessment is available for interpretation.

In order to create/make a design which is going to be evaluated, the problem should be well defined, and there should be the necessary research on the topic or topics. So the designer need to learn or must have experience about the information collection methods or research methods in order to have the needed information about the subjects.

However, I do not think that it can be done only by visiting and collecting information on the internet, as that is often today. In order to get on with a topic or topics, beside the information technology, the interior architecture/design students should get on with the experienced people on topics and/or with the related companies in order to get information which is about the reality.

During the educational period of Interior Architecture and Environmental Design, the students always design new things with their projects which is the creation phase, but during the critiques I am asking them that question, “How?”, by that way they will be introduced with the beginning of the real professional life, as lots of things will be asked to them; structural analysis, used/usage materials, connecting points, connecting ways, ending points and by that way they will be ready for the questions that they will be facing with after their graduation.

That is why they will be facing with a project schedule within their professional life;

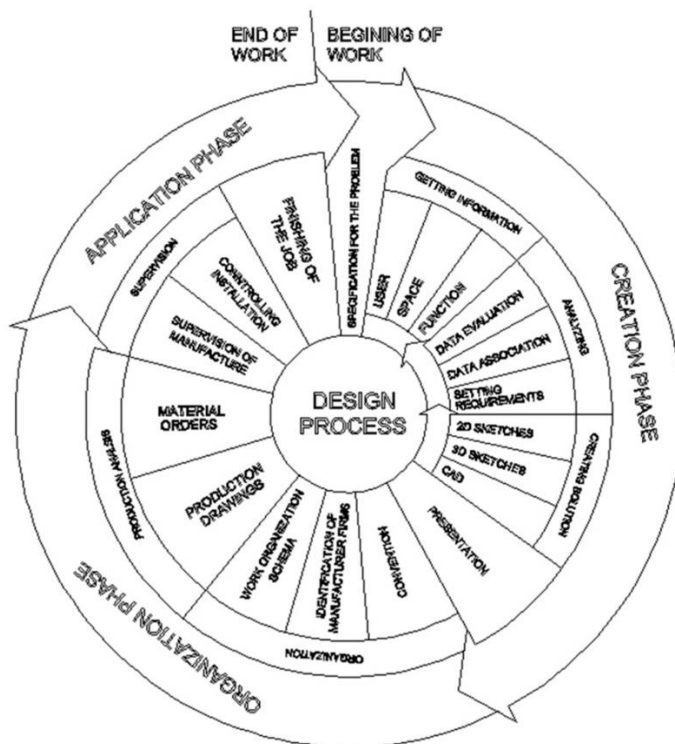


Figure 1: Design Process

Balaban, E., “Design Management in Interior Architecture”. Access: 20. 11. 2014, pg.5.

According to some furniture producers/carpenters the designing process is 30%, but the producing period is the 70% of the procedure for the designed element. So according to them, the interior architect/designer should know and/or learn about the production phases of a designed element. Beside these the impact and the prosperity of the design is also so important for the firm and the designer.

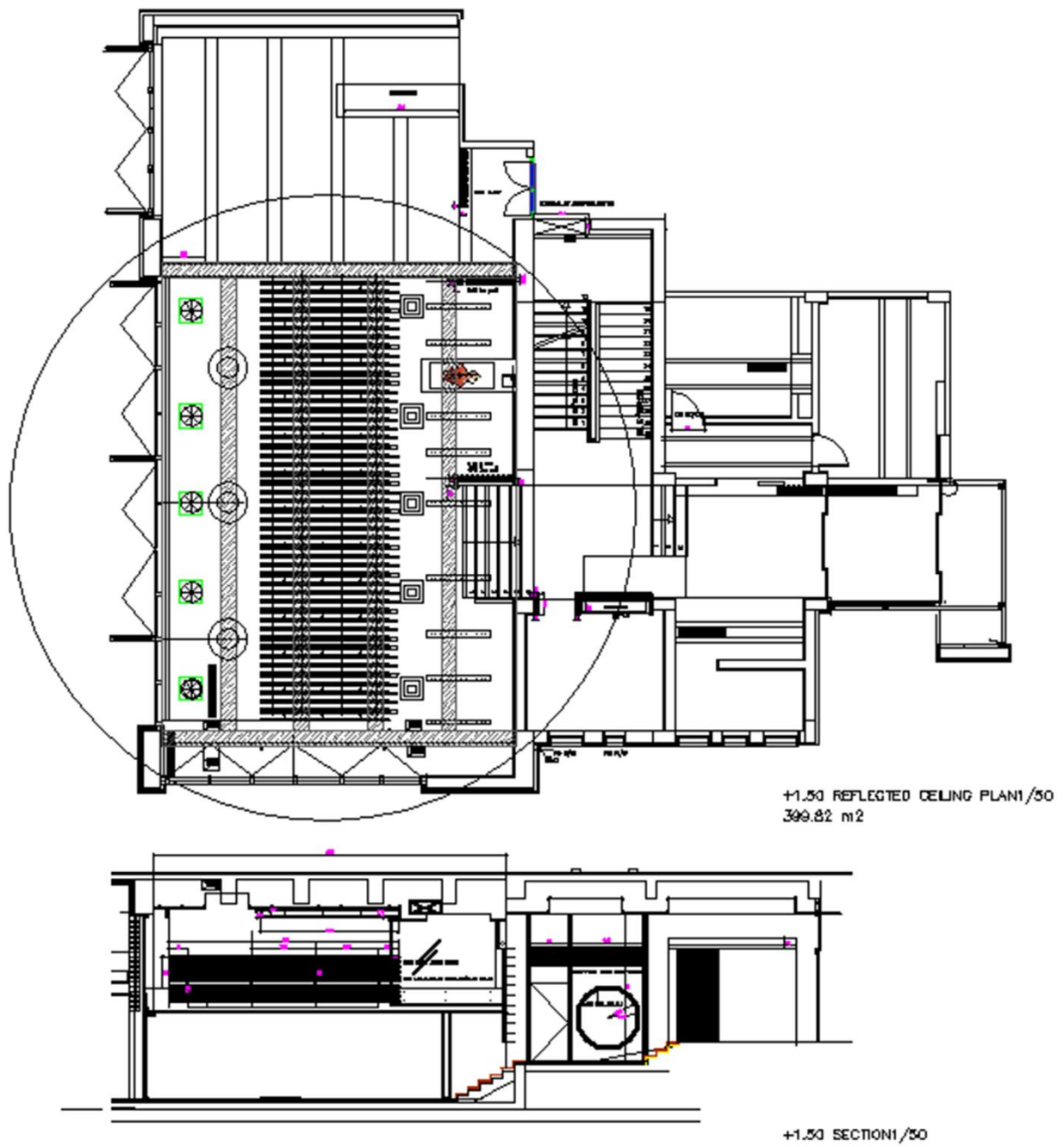


Figure 2: Production Drawing for the Ceiling, 2009
 Photo: Murat Özdamar

Murat Özdamar

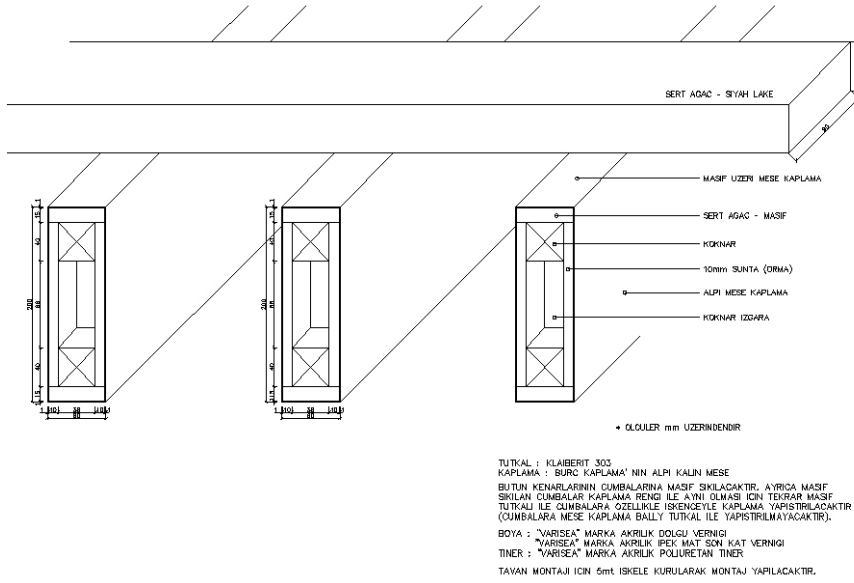


Figure 3: Production Drawing for the Ceiling, 2009
 Photo: Murat Özdamar



Figure 4: The Ceiling and the Handrail, 2009
 Photo: Murat Özdamar

3. Hypotheses

Hypothesis 1;

“Having the chance of forming new furniture design, affects the designers in a positive way.”

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That is for sure that designing without any blocking is the main dream for a designer, but of course we have some standards, but nevertheless being able to design new furniture in a positive and attractive way is a success for a designer. In a way that is an innovation.
Hypothesis 2;

“The successful new designs makes a positive contribution for the production identities.”

The commercial prosperity is an important aspect for a production identity that is why they are always seeking for the successful new designs while getting on with the market conditions, style and fashion that goes on.

4. Data and Methods

With the purpose and need of getting the data for the two hypothesis depending on the topics;

Qualitative data collection methods were used;

The examinations by searching for the sources on the subjects are done,
The observations are done in Siteler/Ankara/TURKEY,
The conduct interviews,
And the surveys are done with the designers and the production identities.

Mainly the surveying method was used/done by filling out the surveys, but during the surveying method it is seen that the respondents were not likely to answer the whole questions during the questionnaire or the survey. That is why, some main questions were chosen in order to ask, and their scope were reduced in order to get the elegant and pure answers.

The first hypothesis was mainly related with the “interior architects/designers” and the surveys were done with 42 interior architects/designers. Identical questions were asked during the survey in order to get the real decisions of them and to get the accurate inference.

The second hypothesis was tested by using questions for the productional identities and during the period 38 identities helped me during the analysis. Like the first one, identical questions were asked, and the way they prefer to get on with the Interior Architects/Designers were all were analysed during the research.

5. Research Results

During the research, firstly, the preferred Interior Architect/Designer format was asked that, the producer firms want or wait for, and after lots of decisions I got two main answers about it;

1. New graduated, so that they can teach about their own details related with the productions.
2. Really experienced on furniture production, so that they can manage to introduce new and usable details about the subject.

Secondly, it is one of the hardest periods for a manufacturer, to say “I can do it” for a new furniture design; because it means that, he/she has to be working for the production/manufacturing way/process of that design.

But during the research, two different way of decisions were seen; firstly there are the firms which are comfortable with their current position, and have the Interior Architect/Designer just for planning or drawing what they have thought during the interview

with the customer. So those interior architects/designers are working just for having the production drawings.

Secondly, but on the other hand, there are the firms which are really caring about the design of their products. During the interviews they told about the interior architects/designers that they have on the production line, but very little number of interior architects/designers are managing with the designing process. This shows us that, not much companies use interior architects/designers during the product design or design of free furniture but the choice changes when it is built-in furniture.

Thirdly the interior architects/designers have to decide and know about the production process of the design that they had; and in order to know it, they should be experienced through the subject, which is the experimenting process about it. But the other part of the production, which is the manufacturer; they should also have to be open for the improvements or the developments in order to get on with the interior architects/designers. There are the ones who do not give up using the old technological producing ways; according to the surveys, some of the producers do not abdicate with their ways which are related with;

1. Hard to learn about the new things,
2. No need to learn about new things,
3. Usage of money,
4. The knowledge they have is enough for their productions.

Because of this, new technological improvements, and design approaches should be traced with both by the interior architects/designers and the producers. But apart from technical and production topics, the main point is “to be open for a new idea”, which is the main point for a new design.

The new design is always has the experimenting process, in order to produce it, the idea of being open to the improvements is the main process of the question.

But on the other hand, there are the furniture firms those are really making the point of the new design and the production ways for that, which we call “research and development”; design is not only with its drawing, as it is mentioned before, we have to care about the production ways of it, because of that both the designers and the production identities have to know about the technological equipment that has been done for the furniture production.

There are some brand marks which are just related with those accessorial or detailing instruments, during the design process.

During the “research and development” process, the interior architects/designers should be commanding the two and three dimensional way of working. By that way all the people will be able to see the negative or positive points within a design. Of course again there may be the difference between the governing and governed. But it is certain that the use of computerized equipment, computer programs has really an important role during the design process but the main point is the “decision”.

Fourthly, it is a deep honour for an interior architect/designer, to have a design which is produced or will be produced, so that the honour and achievement will force the one in order to be more successful and honourable, and beside this the production identity strengthens its own position in the market with preferred designed products.

6. Conclusion

The main thing with the market is of course earning money, but in order to have it, the one should be capable of doing something in a good way. The Interior Architecture/Design and the professional of it has to know about it.

What Is The Impact of New Design with The Designer and The Production Identities?

In order to have a good position within the market, we have to be brave with our designs, and in order to be brave with the design we have to know all the things about it, the conceptual analysis, the design way, the materials for the improvement and the details of it. By that way we or the firm will have the chance of living the honour of the new improvement. And in order to have it, the business way should be brave enough for inviting the new ways or prosperous/successful ways of working and designing.

Mainly by the educational period of the profession; the students have to know about the reality that is getting on with the real world. Generally, the students are getting on with the “creation phase” of the design within their educational lives, so that is why during the educational period of them while they are designing we have to ask them the question “How?”, by that way they will be prepared for the real professional life.

Of course there will be the question, “Will they be able to be the interior architect/designer or will they be production drawer?” that is really a hard question, but according to me; to work is the way for achievement. That is why we have to share these things with our students, in order to make them ready for the professional life.

7. References

- Balaban, E. (2014, January). *Design Management in Interior Architecture*. Retrieved at November 20, 2014 from https://prezi.com/av_1guyagmlj/icmimarlikta-tasarim-yonetimi.
- IFI, International Federation of Interior Architects (2011). *IFI Interiors Declaration*. Retrieved at April 23, 2016, from <http://www.ifeworld.org/#Homepage>.
- Schwartz, C. (2013). Drawing Conclusions: A Student’s Introduction to the Realities of Their Designs, *Design Principles and Practices: An International Journal – Annual Review*, 7, 19-28. Retrieved at June 11, 2016, from <http://ijgar.cgpublisher.com/product/pub.282/prod.14>.
- Ozdamar M. (2016). Design in Interior Architecture/Design and “The Real Life”, *The Global eLearning Journal*, Volume 5, Issue 2. Retrieved at May 12, 2016, from <https://globalelearningjournal.files.wordpress.com/2010/11/06-c3b6zdamar.pdf>
- Radovic R. (2013). Business Challenges and Design: Theory and Practice in the Furniture Industry in the Republic of Croatia. *Business Systems Research*, Volume 4, No: 2, 79-93. doi:10.2478/bsrj-2013-0014
- Roper, S., Micheli, P., Love, J.H., Vahter, P. (2016). The Roles and Effectiveness of Design in New Product Development: A Study of Irish Manufacturers, *Research Policy*, Volume 45, Issue 1, 319-329. Retrieved at May 12, 2016, from <http://www.sciencedirect.com/science/article/pii/S0048733315001560> doi: 10.1016/j.respol.2015.10.003
- Union Chambers of Turkish Engineers and Architects; Chamber of Interior Architects of Turkey (2012). *Interior Architectural Project Drawing and Presentation Standards Specification*. Retrieved at March 21, 2016, from <http://www.icmimarlarodasi.org.tr/uploads/docs/izim%20ve%20Sunuş%20Standartları.pdf>.
- Verganti, R. (2008). Design, meanings, and radical innovation: a meta-model and are search agenda. *Journal of Product Innovation Management*. 25, 436–456. doi:10.1111/j.1540-5885.2008.00313.x.
- Wikipedia (2016). Tasarım [*Design*]. Retrieved at May 23, 2016, from <https://tr.wikipedia.org/wiki/Tasar%C4%B1m>

Public Spaces Created by The Consumer Society: Shopping Centers

Duygu Ozgur, Emine Coban Sahin

1. Introduction

The increased production volume and rate as a result of the Industrial Revolution have brought along increased consumption volume and rate in the direction of increased supply of goods, going beyond the goal of meeting basic needs. The change in the goals of production and consumption has changed the balance between them and has resulted in "consumer culture" (Kademoglu, 2011).

Consumer culture affects society as well as city formation and physical development of urban spaces. Its physical and social effects reconstruct the relationship between the user and space, and spaces built as part of this new construction by consumer culture play different roles.

In the present day societies, consumption becomes a common ground, the relationship between public space and consumption changes, expands and deepens. This change results in new types of public spaces which take on different functions and could be regarded as products of consumer culture (Uzun, 2008). Shopping centers are places where this changing process is most clearly observed.

In the scope of the research, the concepts of consumption and consumer culture which have turned shopping centers into public spaces were addressed, and emerging process of the phenomenon of consumer society was investigated. Furthermore, the impacts of the development process of shopping centers, which have their roots in traditional plazas and shopping culture and still have their place in modern day, on the city were analyzed. The concept of the shopping center as a public space was examined thoroughly by observing user behavior and questioning their feelings and needs using the 'Vialand Shopping Center' which was designed to be an open space as an example.

1.1. The Concept of Consumption and Formation Process of Consumer Society

For Baudrillard, who defines the concept of consumption as a sign, "Consumption is the virtual totality of all objects and messages presently constituted in a more or less coherent discourse. Consumption, in so far as it is meaningful, is a systematic act of the manipulation of signs." (Baudrillard, 2016).

As for Bocock, "Consumption" is a phenomenon that had preceded production, he defines it as "a socially constructed, historically changing process" (Uzun, 2008).

As to the concept of consumerism, it is described as "a social and economic order based on the systematic creation and fostering of a desire to purchase goods and services in ever greater amounts". As a result of these concepts, the individual does not make a distinction between her/his real needs and false needs and believes that the acts of acquiring and displaying goods earn her/him privilege in society. While the individual thinks s/he is unique among others in society doing that, s/he becomes part of consumer society (Baudrillard, 2016).

The world economy which builds around the circle of packaging, putting up for sale and consuming of goods obtained by collecting and processing raw material has caused people, who are directed to consume by the increased production following the Industrial Revolution, to evaluate products or services by their "possessibility" and "image" first while purchasing them. This has created a society dominated by the desire to possess more than necessary, that is, the "consumer society" (Sarı, 2008).

1.2. Shopping Centers (Spaces) and Their Effects on the City

Shopping centers are places which were born of necessity, and where time and space intertwine and people are encouraged to buy. The aim is to create a feeling of timelessness and spacelessness to cause a loss of sense of space to direct people to consumption.

In retrospect, the activity of shopping first started with people bartering goods they produced (Bastug, 2005). Starting with the bartering system, the activity of shopping evolved first into traditional Ottoman bazaars called *arasta*, *bedesten* and *han*, and then to the bazaars that consist of shops and small stalls (Ozeren et al., 2011). In the present day, shopping centers carry on this function as successors of these structures.

Within their development process historically, shopping centers have often been built as multistorey buildings consisting of dead-end streets and a small square, sometimes conventional streets having shops on both sides, or a composition of streets and squares, and sometimes an open space in the middle of the multistorey structure with shops arranged in linear axis, and sometimes shops surrounding a small square. Often being a single building, the structure is actually in a conventional linear order that directs the consumer under the impression of a public space which is created by means of decorative arrangements and landscape elements (e.g. plants, water elements, urban accessories) used inside the building (Diskaya Tas & Demirkan, 2007).

In the present day society which we call consumer society, the number of shopping centers gradually increase in big cities which were associated with production in the past. Istanbul has had its share of shopping centers that keep increasing in number all around the world with a huge slice. First, Galleria Shopping Center was opened in 1988 and following that 6 shopping centers were opened in Istanbul before 1995. In the year 2000 their number had reached 16 and afterward has increased rapidly to reach 117 today (Ozaydin & Firidin Ozgur, 2009; Erin & Gonul, 2015).

For Vural (2005), spatial organization of shopping centers is based around a theme, and a simulation of a thematic space is presented to people using various architectural elements. Shopping centers have the characteristics of a theatrical scenery where a non-existent space or situation is frozen for a moment. Therefore, these places are a means for making people feel as if they were in a fantasy world.

Shopping centers that were built to include various functions brought together under one roof have made outdoors unnecessary and introduced a new sense of public space through the world they built indoors. These spaces are created to give people all pleasures of every kind of consuming experience. The actual aim is to ensure money flow, buying and continuation in these places. People are only seen as a medium for this flow. The aim is to create a fantasy environment without regarding any cultural and geographical differences or level of welfare. Any kind of external factor is prevented from breaking people's concentration while consuming. Shopping centers are created as virtual environments. What actually happens while trying to ensure consuming is that the sense of space is getting consumed.

As products of modernization, industrialization and urbanization, these places accelerate consumption causing people to spend their free time in there. The modern individual spends her/his spare time in these places to go shopping, have fun, relax and meet friends. When these places serve as a place to spend free time, their way of doing that is not casual but systematic, therefore, they are turning "spare time" into a definite activity like corporate activities. From another perspective, shopping centers as the new meeting places are the new icons of today's consumerism and 'new cathedrals' of their cities.

2. Materials and Method

2.1. Materials

'Vialand Shopping Center', one of the most popular shopping centers in Istanbul, is the main material of the research. Vialand, based in Eyup and Gaziosmanpasa towns of Istanbul (Figure 2.1), is the first theme park built in Turkey in 26 May 2013.

Other materials include various written sources from the literature related to the subject of the research, internet sources, and the photographs taken in the area.



Figure 2.1. The location of the research area (Google Maps)

In addition to the theme park, there is a shopping center and a show center in Vialand (Figure 2.2). Covering an area of 600 thousand square meters, Vialand comprises of a 200 thousand m² theme park, a 100 thousand m² show center and a 350 thousand m² shopping center and 110 thousand m² rentable areas (4500 closed and 2400 open commercial areas) and parking lots with an 8000 vehicle capacity (Wikipedia).



Figure 2.2. The function chart of the research area (Photo http://anmgroun.net/project_vialand.html)

2.2. Method

The method of the research is examining of Vialand Shopping Center, one of the open shopping centers in Istanbul, with respect to the design criteria of its open areas and assessing of the use of the area during shopping in terms of quality and quantity in order to reveal that shopping centers, regarded as main public spaces, that emerged as a result of globalism and consumer society actually do not have the quality to be public spaces to spend free time.

The research was conducted by working on the subject of the research and surveying the literature related to the research and relevant internet pages, and making observations and interviewing users in the area for a particular period of time.


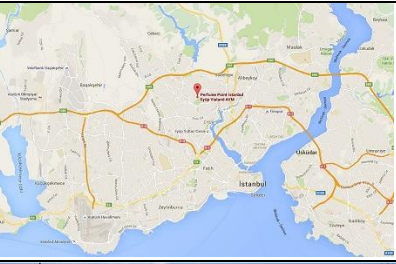



3. Findings

3.1. Features of the shopping area examined in the scope of the research

The research area is examined in terms of its various functions and facilities that are appealing to various types of users, and its location in the city and accessibility, and its structural and spatial features. Having many functional values and diversity of users, and being built as an open area instead of being concentrated under one roof suggest its difference from other shopping centers in the city.

Assessments regarding the location, accessibility, functions, and architectural features of the structure of the research area are provided in the table (Table 3.1) below with titles designated in parallel with the observations and determinations made on the physical space.

Table 3.1. Features of the shopping area examined in the scope of the research

Location in the City	<p>Town: Eyup</p> <p>Previous function of the area: Alibeykoy Quarries</p> <p>Covering area: 600.000 m²</p> <p>Date it was put into service: 26 May 2013</p> <p>Characteristics: The first theme park built in Turkey (Keskin, 2013)</p>	
Accessibility	<p>İETT buses (public transport)</p> <p>By private vehicle via E-5 or TEM highway (The area has parking lots with an 8000 vehicle capacity)</p> <p>Free shuttle bus services available from different points</p>	
Features of Use	<p>Theme park (200 thousand m²)</p> <p>Shopping Center (350 thousand m²)</p> <p>Show Center (100 thousand m²) (Wikipedia)</p>	
Architectural features	<p>The majestic Vialand Chateau based on a 2000 m² area at the entrance of Vialand theme park was created with an architectural decoration to create a dreamland atmosphere for its visitors. Its decoration is an important advantage over other shopping centers.</p> <p>Sometimes you may walk by columns evoking images of Roman period and sometimes you may find yourself in front of a contemporary clock tower.</p> <p>From traditional to contemporary, many kinds of design styles, ornamental elements and furniture were used. You may walk on a street with a wall designed with a single type of material on the right side and a wall designed with various types of material with several colors on the left side.</p>	
Features of Open and Green Areas	<p>Having conceptually different architectural styles together in the construction of the space, open and green areas do not seem to be harmonious in terms of the design approach used in the area. In the street shopping concept created, botanical elements (trees, shrubs, and twining, ground cover and seasonal plants) arranged in the streets are somewhat sufficient in terms of species but insufficient quantitatively. And the botanical arrangement in open and green areas outside of the shopping place is nonfunctional and the quantity of plants used is insufficient.</p>	

Shopping centers are usually built as multistorey structures consisting of surrounding shops around a middle space that resembles of a small square with a function similar to a square. The structure, the main function of which is shopping, includes shops, food & beverage areas, theatre, playgrounds, parking lots and sometimes office spaces. However, these centers have been expanding their range of functions in recent years.

Unlike most of the shopping centers in Istanbul, Vialand Shopping Center created a new concept with a horizontal development adding shows and playground activities for entertainment purposes, and open-air green area activities for recreational purposes to its shopping function instead of a vertical development in the form of a multistorey building including residential areas.

Not fitting the description of a fully closed and air-conditioned shopping center concentrated under one roof, it has been built as a shopping avenue with shops that are entered directly from an open area and landscape elements were added to the design of streets to create a sense of street shopping. One of the reasons why it was built this way is that shopping places have turned into socializing areas.

3.2. Present Landscape Characteristics of the Area

In the scope of the research, we tried to assert the area's potential to be a public space and its present landscape characteristics were examined by means of visual analyses in terms of quality and quantity. Within this scope, design characteristics and structural and botanical elements were examined. Furthermore, amenities and potential threats of the area were asserted.

Public Space Potential: The area is one of the most preferred public spaces because of its features such as accessibility and location. Its use as a public space is very common by virtue of the religious center (Eyup Sultan Mosque) and Feshane and housing zones nearby, the theme park and show center, food & beverage facilities, a wide variety of shops and cafes and a theater.

Design Characteristics: There is no main concept perceived in the shopping center. There are areas with very different types of architectural designs together. Besides, landscape design characteristics do not manifest an identity.

Structural Elements: The area has all requisite structural elements such as WCs, parking lots, food & beverage facilities, and service areas. In addition to these, an entertainment area, a stage, cultural areas, ATMs, and a supermarket are present. The area itself is insufficient in terms of some structural elements e.g. lack of places to sit just to rest other than places to eat.

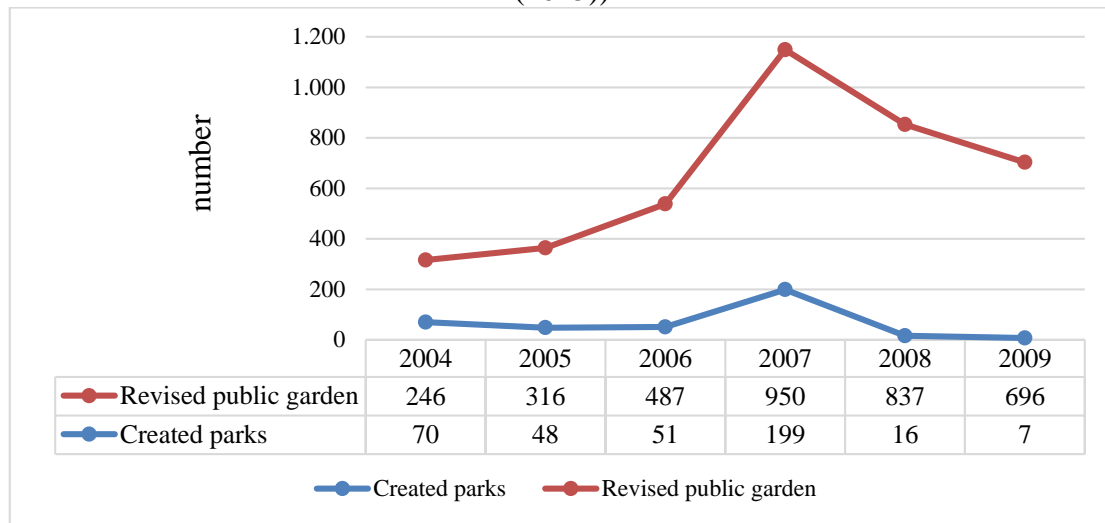
Planting Elements: The area is quite poor in terms of planting elements. In spite of being an open shopping center, quantity of plants, diversity of species, and the extent of green areas are considerably insufficient. It does not have the quality to be a public open space in terms of planting elements.

Amenities-Threats: Amenities of the area include its location being adjacent to several strategic areas and housing areas, it containing areas that children can spend a long time, parking lots, means of transportation, safe entrance and exit, continuity of shopping circulation, food & beverage facilities, WC, and safe walking areas.

And main threats of the area are crowd, air quality, limited green area, and lack of resting areas.

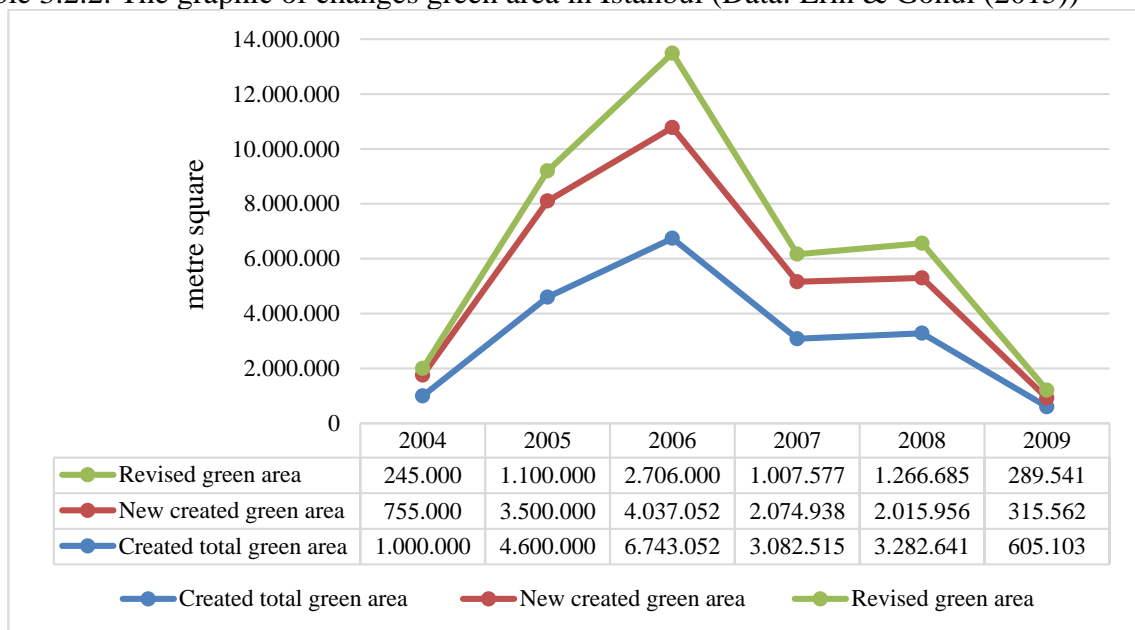
Public Spaces Created by The Consumer Society

Table 3.2.1. The graphic changes of park and garden areas in Istanbul (Data: Erin & Gonul (2015))



According to the graphics prepared within the scope of the research, in which the data prepared by the Istanbul Metropolitan Municipality Directorate of Parks and Gardens that show rapid increase in the number of shopping centers between 2004-2009 (which was previously used by Erin I. & Gonul T. (2015)) was used; there had been a decrease in the number of parks, green areas, recovered areas, and cultivated areas. (Table 3.2.1).

Table 3.2.2. The graphic of changes green area in Istanbul (Data: Erin & Gonul (2015))



In the study, a decrease in the number of recovered green areas and created green areas was seen as in the table given (Table 3.2.2) (Erin & Gonul, 2015). The decrease in the number of these areas shows that there had been a decrease in the number of plants cultivated. The most significant reason of this decrease is the increased number of shopping centers and active use of them, and recreational open areas not being as popular as they used to be and shopping centers having a severe impact on them.

4. Discussion and Conclusion

Consequently, considering the findings, Vialand is one of the shopping centers considered as one of the most popular public spaces today without having an individual identity or rules in terms of design and function. It keeps getting more crowded each day. It is in high demand with the beneficial effect of its nearby areas. Public spaces created only for sale purposes play a huge role in turning people into individuals who do not emotionally bond with a place and are alienated from their environment and other people.

We are transforming into people who abandon their social customs and societies without identities that are taken with the global atmosphere of shopping centers. Our public spaces with sociocultural quality, the neighborhood concept and street culture are diminishing each day. People become alienated and isolated.

Changing and development process of the activity of shopping from past to present have changed positions, functions and forms of shopping centers. These are places that sustain their continuity while their number keeps increasing, and the space they take keeps expanding greatly although their concept remains the same with only their range of functions expanding according to present day needs.

They assume quality of being public spaces for incorporating entertainment and various social and cultural demands to their structure although their basic function is shopping. Assuming this function, they negatively effect urban life and society shadowing open and green public spaces.

Considering their spatial location in the city, building shopping centers discrepant with urban fabric disturbs the stability of land use pattern in the city. Common use of these places have negative effects such as traffic problem and air and noise pollution as well as decreased use of open and green areas and loss of urban vitality, thus causing a decrease in the number of recreational public open spaces or preventing them from being built.

From a social perspective, these places negatively effect urban identity and urbanite's sense of belonging because they have transformed into public spaces preferred by the user not only for shopping but also for spending free time and socializing.

Several suggestions must be made regarding negative effects stated above:

- Individuals should abandon their consuming desires that cause crisis and societies should avoid becoming a consumer society.
- They should realize that consuming only brings temporary happiness and avoid superfluous shopping.
- Habit of spending time in open and green areas that have a local identity and character should be adopted in lieu of spending time in shopping centers.
- Shopping centers should not be regarded as main public areas to spend free time for a social life.
- Number of shopping centers regarded as public areas despite actually serving only financial gain purposes should not increase. Instead of building shopping centers, quality of open-air green areas should be improved and people's preference should be diverted to these areas where they can socialize, be culturally nourished, feel the sense of belonging and rest mentally and psychologically.

5. References

- Bastug, Z. (2005). *Shopping Center and Changing: Viewing On General Usage Areas In Today's Conditions*. (Master thesis). Istanbul Technical University, Istanbul.
- Baudrillard, J. (2016). *The Consumer Society* (6th edition). doi: 9755391410.
- Diskaya Tas, S. & Demirkan, M. (2007). The Shopping Centers İn The Process Of Historical Development. *Journal of Istanbul Culture University* (Vol. 1, pp. 15-22).

- Dovey, K. (1999). *Framing Places, Mediating Power in Built Form*, Psychology Press.
- Erin, I. & Gonul, T. (2015) The Effect Of Conversion Of Shopping Centers On Life And Urban Space: In The Case of Istanbul. *City and Society* (Vol. 2, pp. 129-142). doi: 7897678343213.
- Ersoy, M. A. (2006). *Shopping Center Site Selection and Forum Istanbul Shopping and Entertainment Center Case Study*. (Master thesis). Istanbul Technical University, Istanbul.
- Kademoğlu H. (2011). *Shopping Centers as New Public Places of Modern Life*. (Master thesis). Istanbul Technical University, Istanbul.
- Keskin, S., I. (2013). 'How many shopping centers in Istanbul?'. Retrieved at May 18, 2016, from <http://emlakkulisi.com/istanbulda-kac-tane-avm-var/170896>
- Google Maps. Retrieved at May 12, 2016, from <https://www.google.com.tr/maps/@41.0605089,28.9292139,12z>
- Ozaydın G. & Firdin Ozgur, E. (2009). 'Evaluation of Shopping Malls as Large Urban Projects In The Case of Istanbul'. *Journal of Architecture* (347, pp. 84-88).
- Ozeren, M., Kılıçaslan, Ç., Malkoç, E. & Kuçukerbass, V., E. (2011). Evaluation of Open-Air Shopping Centers in Terms of Design Criteria: Forum Bornova Shopping and Lifestyle Centre. Research Article. Ege University, *Journal of Agriculture Faculty*, 48(3):255-264. doi: 1018-8851
- Sarı, I. (2008). A Different Approach to Consumer Society Truth. Homepage. Retrieved May 16, 2016 from <http://www.isa-sari.com/tuketim-toplumu-gercegine-farkli-bir-yaklasim/>
- Uzun, I. (2008). *Evaluation of Public Space – Consumption Interaction in The Case of Shopping Centers in Izmir*. (Doctoral dissertation). Dokuz Eylül University, Izmir.
- Vural, T. (2005). *A Critical Approach to the Meaning and Spatial Transformation of Shopping Malls, in the Context of Changing Production and Consumption Patterns in our Century*. (Doctoral dissertation). Istanbul Technical University, Istanbul.
- Yamaçlı, R. (1997). *The 'Location' Concept in Context of Architectural Design and Visual Environment Interaction in The Case of Istanbul Edirnekapi-Fatih-Sehzadebası route*. (Doctoral dissertation). Istanbul Technical University, Istanbul.
- Wikipedia, The Free Encyclopedia. Retrieved at May 14, 2016, from <https://tr.wikipedia.org/wiki/Vialand>

Evaluation of Urban Outdoor Furniture in the City of Nevsehir on the Point of View Landscape Architecture

Esra Ozhanci, Meliha Aklibasinda

1. Introduction

Open and green areas are extremely important for healthy development of cities. These areas have many different functions for cities in terms of recreation, ecology and field organization. They provide active and passive recreation opportunities with their recreational functions, and also enable sportive and entertainment equipment inside and outside the city boundaries (Emur & Onsekiz, 2007). In developed countries, the quantities and qualities of open and green areas are accepted as the indicators of civilization and life quality. In this context, many developed countries are directed towards planning and creating a city square, and forming an ecology that is proper for human life by considering the mental and physical needs of humans (Gul & Kucuk, 2001).

In order for the open and green areas/parks to be functional, the amount of the area per capita, the equipment, the quality of each green area within its borders in terms of services, and the visual efficiency are important factors (Etli, 2002; Emur & Onsekiz, 2007).

Because of all these ecological and sociological needs, the importance of urban identity and image has increased in recent years, and the *urban furniture* term has become a modern concept. Many studies are being conducted on this topic in recent years.

In any landscape, or in any urban area, the elements that are placed in a position to cover the needs of the users like comfort, information, roaming control, protection, and entertainment are called “Facility Equipment” or “Urban Furniture” (Erdogan et al., 2011). The shape, tissue and colors of the surfaces of the space limiters that constitute the geometry of the area and the facility equipment in the area constitute the quality of the area (Altincekic, 1997).

Many times, the relations between morphological properties and social value systems may be followed in a one-to-one manner. For example, in a society where certain body shapes and attitudes are forbidden, the objects come to being in a manner that does not force people to that specific body shape. If a society has high and hard stools with upright backrests and ironed pants and shirts with upright neckbands, respectful sitting positions, formal lifestyles, and structural dances (such as waltz, etc.), this reflects a society which consists of low and soft plastic-foam armchairs, sitting in a cross-legged position, free lifestyle and spontaneous dance (such as rock, etc.) (Asatekin, 1976).

We can emphasize the relation between a space and the user by stating that the behaviors of the users shape the area where people live, and the physical environment created has influences on the behaviors of a person (Altincekic, 1997).

In terms of the city, facility elements are important because of their qualities that define, determine and specify the environment in which they exist (Aksu, 2012). They are important not only due to their functional aims but also due to their refreshing effects on the urban landscape. These nonstructural elements that manage and guide mostly the pedestrians are the building blocks of the multi-purpose planning (Guremen, 2011).

In addition, Yildizci (2001) classified urban furniture according to their functions as follows; ground covering, sitting units, lighting elements, road and information signs, limiters, the water element, upper cover elements, sales units, artistic objects, game zone elements, other.

The purpose of this study is to determine the positive and negative sides of the city parks located in the city center of Nevsehir in terms of design principles, and evaluate them in terms of facility equipment based on the notion that determining the adequacy and standards of external areas is a necessity today.

2. Material and Method

The material of the study is the facility equipment used in the city parks of Nevsehir. For this purpose, a field study was conducted in the city center, the prominent parks were determined; and the best examples were selected among the smaller parks that were similar to each other in terms of character and facility equipment. The parks that were selected in the Study area are located in the City Center, in Guzelyurt, in Ragıp Uner and in 2000 Evler Neighborhoods. The city parks; Bahcelievler Park, Cennet Park, Gulbahce Park, Cultur Park, Yapıtek Park, Hilal 1-2 Park, Ceren Park, Ozenkur Park, Sehit Cavus Selim Bingol Park, Tabipler Konagi Park and Walking Track, Narcicegi Park, Raif Nail Akman Park, Tuzlusu Park and Zeki Soyak Park (Figure 1).

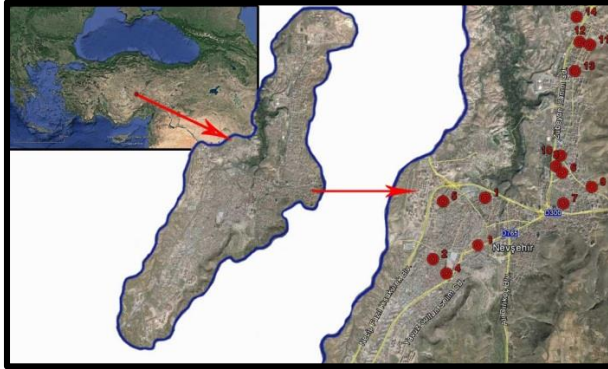


Figure 1. The Study area (The positions of the 14 parks in the city center).

In the study, the facility equipment placed in the city parks in Nevsehir have been classified according to their usage aims and types, and evaluated in terms of design principles (like aesthetics, function, material, color, tissue, shape, agreement, perceptibility, etc.). On-site observations were made in the parks on the use of the urban furniture, and photographs were taken. In the light of the observations and literature information, the situation of the landscape facility equipment was examined in terms of landscape architecture. The observation-analysis-synthesis method was used in this study. On-site applications were made in the scope of the study. Also, the required recommendations are made to solve the problems.

3. Findings

• Classification of the Urban Facility Equipment Placed in the Urban Parks of Nevsehir

The urban facility equipment placed in the urban parks of Nevsehir has been classified according to the purpose and types. These types are grouped as in the following table (Table 1). The facility equipment used as the bases of the evaluation are the Ground Covering(GC), Sitting Units(SU), Lighting Elements(LE), Information Signs(IS), Limiters(L), Water Element(WE), Upper Cover Elements(UC), Sales Units(SU), Artistic Objects(AO), Game Zone Elements(GZ), Litter Bins(LB), Flower Beds(FB) and Other Elements(OE).

•Evaluating the Urban Facility Equipment in the Urban Parks of Nevsehir in terms of Design Principles

Ground Covering: Ground covering materials constitute the most basic element of the place because they are the basis of the area. All the other elements rise on this base and gain activity in the human eye.

Ground covering equipment has aesthetical properties like *tissue, color, line and form* as well as functional properties. These are; *the separation of the conflicting functions, the separation*

of intended usage areas, the separation of ownership borders and the drainage (Basal et al., 1993). These functions are the basic qualities that have to be present in a public recreation area. An urban park must be enabled to guide its users to the right points from the very moment of the interaction, reveal the separations in the area, and ensure a healthy drainage.

Table 1. The Classification of the Urban Facility Equipment in the Parks according to the Intended Purposes and Types

	Bahcelievler Park	Kultur Park	Gulbahce Park
GC	Keystone (2 types), Concrete bordure	Keystone	Keystone, Tile keystone
SU	Concrete amphi theater system (4 stairs), Picnic tables	Under tree graded sitting units (wooden), Picnic tables, Benches	Benches (Wooden-iron, Wooden-concrete), Picnic tables
LE	External light with street-type electric poles (single)	High lighting armatures(single-double), High projector lighting armatures (double-triple-quadruple)	High lighting armatures (single) High projector lighting armatures (triple-quadruple)
IS	Spor equipment introductory plate	Entrance to the park, entrance to the sales unit	Official institution plate, Billboard, Disabled vehicle charging station plate
LE	nonexistent	Wooden-pebble-space covering terrace and barriers, Barbed wires isolating watermills, Barbed wires isolating pools	Plant barriers
WE	Pool -source water film (not active)	Ornamental pools and natural stream image	Moving ornamental pools
UC	Shape octagonal pergole	Wooden-covered passages, Wooden square pergole	Picnic tables with roofs, Wooden-covered passages
SU	nonexistent	existent	existent
AO	nonexistent	Next to the Culture and Art Center arrangements	Atatürk statue, Wooden objects
GZ	Playground	nonexistent	nonexistent
LB	Capless shape litter bins	Cap wooden-shape litter bins, Capless shape litter bins (2 types)	Capless wooden-shape litter bins Capless shape litter bins
FB	nonexistent	nonexistent	Pool shore-concrete flower bed
OE	nonexistent	Fountain (2 units), Watermill, Cat house, Bird seed hopper pole, Wooden bridge	Disabled vehicle charging station, Cat house, Bird seed hopper poles
	Cennet Park	Yapitek Park	Hilal 1-2 Park
GC	Keystone	Keystone	Keystone
SU	Concrete sitting units (pentagon and semicircle)	Benches (shape) Picnic tables	Benches (wooden-concrete) Picnic tables
LE	External light with street-type electric poles (single)	High projector lighting armatures (quadruple), External light with street-type high lighting (single)	nonexistent
IS	nonexistent	Introductory plate, Billboard	Introductory plate
LE	nonexistent	Places plant barriers	nonexistent
WE	Stream rehabilitation area	nonexistent	nonexistent
UC	Natural-looking wooden-covered passages	Shape octagonal pergole	Shape octagonal pergole Wooden-covered passages pergole (playground)
SU	nonexistent	Existent	nonexistent
AO	Rock designs	nonexistent	nonexistent
GZ	Playground	Playground	Playground
LB	nonexistent	Capless shape litter bins	Capless shape litter bins
FB	nonexistent	nonexistent	nonexistent
OE	nonexistent	Sports field	nonexistent
	Ozenkur Park	Narcicegi Park	Ceren Park
GC	Keystone	Keystone	Keystone

Table 1. (continued)

<i>SU</i>	Concrete amphi theater system (2 stairs), Concrete circle benches, Concrete circle under tree benches, Picnic tables	Benches(shape) Picnic tables	Benches (wooden-shape) Picnic tables
<i>LE</i>	nonexistent	nonexistent	External light with street-type high lighting (single)
<i>IS</i>	Park introductory plate	Sport equipment introductory plate, Playground introductory plate	Sport equipment introductory plate
<i>L</i>	Plant barriers The combination of plant-artificial fence	nonexistent	nonexistent
<i>WE</i>	nonexistent	nonexistent	nonexistent
<i>UC</i>	Shape octagonal pergole	Shape octagonal pergole	Shape octagonal pergole
<i>SU</i>	nonexistent	nonexistent	nonexistent
<i>AO</i>	nonexistent	nonexistent	nonexistent
<i>GZ</i>	Playground	Playground	Playground
<i>LB</i>	Capless shape litter bins(3 tip)	Capless shape litter bins	Capless wooden-shape litter bins
<i>FB</i>	nonexistent	nonexistent	nonexistent
<i>OE</i>	Fountain (tree mounted)	Sport field, Fitness equipment, Cat house	Fitness equipment
S. Cavus Selim Bingol Park		Raif Nail Akman Park	Tab.Kon.P. and Walking Track
<i>GC</i>	Keystone Massive Concrete	Patterned concrete mosaic floor Tile mosaic floor	Keystone, Ruber floor (walking track -400 m)
<i>SU</i>	Picnic tables	Wooden-concrete semicircle sitting units Benches(shape)	Benches(wooden-concrete) Picnic tables
<i>LE</i>	External light with street-type electric poles (single)	High projector lighting armatures (triple)	High projector lighting armatures (double-quadruple) External light with street-type electric poles (single)
<i>IS</i>	nonexistent	nonexistent	Walking track and abacus plate
<i>L</i>	nonexistent	Shape bariyer, plant barriers	nonexistent
<i>WE</i>	nonexistent	Graded water-fall	nonexistent
<i>UC</i>	Shape octagonal pergole	Shape covered system, Wooden semicircle	Picnic tables with roofs
<i>SU</i>	nonexistent	nonexistent	existent
<i>AO</i>	nonexistent	nonexistent	nonexistent
<i>GZ</i>	Playground	Playground	Playground
<i>LB</i>	Capless shape litter bins	nonexistent	Large litter tank, Capless shape litter bins, Cap wooden-shape litter bins
<i>FB</i>	nonexistent	nonexistent	nonexistent
<i>OE</i>	nonexistent	WC, Sport field, Fitness equipment, Cat house	Fountain, Fitness equipment, Cat house, Bird seed hopper poles
Tuzlusu Park		Zeki Soyak Park	
<i>GC</i>	Andesit, Tile keystone	Keystone	
<i>SU</i>	Picnic tables	Picnic tables	
<i>LE</i>	High projector lighting armatures (quadruple), External light with street-type electric poles (single)	External light with street-type electric poles (single)	
<i>IS</i>	nonexistent	nonexistent	
<i>L</i>	Plant barriers, Barbed wires	nonexistent	
<i>WE</i>	Graded water-fall	nonexistent	
<i>UC</i>	Picnic tables with roofs	Shape octagonal pergole	
<i>SU</i>	nonexistent	nonexistent	
<i>AO</i>	nonexistent	nonexistent	
<i>GZ</i>	Playground	Playground	
<i>LB</i>	Capless shape litter bins	Large litter tank, Capless shape litter bins	
<i>FB</i>	nonexistent	nonexistent	
<i>OE</i>	Fountain, Stone retaining wall, Sports field	Sports field	

The factors that influence the selection of materials are the function of the area that will be furnished, traffic, costs, climate, security, endurance and local conditions (Basal et al., 1993). The coverings are the elements that are mostly influenced by external factors like the intensity of the users and the climate in the park. For this reason, the selection of materials must be made by considering the conditions of the surrounding area, and the long-term wear and tear and breakdowns must be reduced to the minimum level.

It is observed in the building of the roads in Nevsehir that stone cladding (keystone, granite pitcher granite) are used in the city. Except for the asphalt coating used in the main arteries of the city, stone cladding is preferred commonly. When the parks are considered in this context, it is observed that mainly keystone, slate and mosaic basement are used in many points (Figure 2). This choice leads to the inability of making a distinction between functional and demesnlal separation. The parks are almost integrated with roads, the perception is strengthened, and the places are stereotyped. It is clear that this is not a healthy selection. In addition, in the intra-city roads as well as in the intra-park roads, problems like deformations and the inappropriateness of the repaired areas appear as a result of not applying the materials in an accurate manner.



Figure 2. Positive and Negative Examples of the Ground Coverings used in the Parks

More successful results could be received with the selection of softer and clearer grounds instead of the application in existing elements. For example, preferring grass joint, using designed grounds, handling the color agreement in a more modern scale, and using different coating on roads with different characteristics are some solution offers.

Sitting Units: Uzun (1992) defined the sitting groups as the elements used for the purpose of relaxing physically as well as the comfort of humans. Each user group -whether the elderly or the young- finds the opportunity of sitting, observing and watching the surrounding in these units in addition to the use of the place for resting. They discover the situations and the areas around and go to these points if they desire.

Wooden-iron, wooden-concrete, shapes, concrete benches and picnic tables attract attention as the basic and common sitting groups in the parks located in the city center of Nevsehir. Aside from these, the parks in which there are different applications also attract the attention. For example, under tree graded sitting units (wooden) have been used in the Culture Park. This use is a good example in which the plants are used functionally. In addition, it poses a successful scene as an application. In Bahcelievler Park, on the other hand, there is an amphitheater application, which is an important element of landscape designs. In this application, although the amphitheater system has been designed with artificial elements and it has still missing points in practice, there is the water-fall effect as the basic point. It is a good application in case the pool is used actively. However, the pool has gone dry; and for this reason, a giant artificial mass is dominating the landscape unlike what is desired. Aside from these practices, it is also observed that circular sitting units are also used.

Lighting Elements: Lighting elements are the elements that determine the daily use in urban areas that are a part of the safety of the place influencing the perception, and in some parts,

being a part of artistic elements. In the study area, there are no lighting elements in some parks; while there are street-type electric poles (single) in some parks to obtain external light. Of course, no healthy results have been obtained with these elements, and the opportunity of using the park all day long has been limited, and the basic security perception has been made to become impossible.

High lighting armatures have also been observed in the parks; however, the common lighting sources are high projector lighting armatures (Figure 3). These armatures have single, double, triple and quadruple usage, and are extremely influential lighting elements. However, today's technological developments have made it possible to use LEDs (Light Emitting Diodes) in lighting. LED Projectors have been preferred because of being more economic, not containing poisonous substances and having long lives.



Figure 3. The High Lighting Armatures Used in the Parks

In addition, not providing lighting in different heights in the parks have made it impossible to provide proper lighting for the places and their usage.

Road and Information Signs: It has been observed that road signs and information signs do not exist much in the urban parks of Nevsehir. Aside from the informative signs for the game zones and condition tools placed in the areas, there is no systematic signing. It could have been made possible to find the road within a park by even placing an introductory plate in the entrance to the park.

Limiters: The limiters are also called as engirdling elements, and are used as limiting elements in landscape designs and as privacy elements. These elements have developed together with the concept of possession, and are used to strengthen the aesthetics today. In recreational areas, the recreational characteristics of the area (the functional characteristics) determine the siege (Basal et al., 1993). In other words, the aesthetics and function are evaluated together.

Mostly the point limitations have been applied in the city parks in the area. These are mostly in the form of iron grids and barbed wire used for the purpose of isolating pools, watermills, and sports areas. The plant barriers have been used for aesthetical purposes except for limitation and privacy at some points, and the bush groups have been preferred as materials. Especially in Ozenkur Park, there is a beautiful application of this practice. In some areas, a strong privacy and limitation have been established with trees and bushes.

In addition, wooden-pebble-space covering terrace and barriers have been used in the terrace design with a visual aim in the Culture Park. Examples of the limiters used in the parks are given in Figure 4.



Figure 4. Limitations with Different Types and Purposes Applied in the Parks

The Water Element: The water element has not found due place in the parks. In four parks included in the study, water usage has been observed, geometric ornamental pools have been used with cascades in some places, water film has been applied in some places or the pool is made to become active with sprinkler water show; and in one of the parks, a natural stream image has been obtained with an inclined water flow (Figure 5).

However, the majority of these water systems are not active. The pools are waterless, and because of this reason, the advantages that might have been gained with the use of water element have turned up to be disadvantages, and have made the parks to look even more artificial because of the massive concrete structures. When the topic is considered in terms of design principles, pools may be preferred in agreement with their environments in terms of size and shape. However, these elements, which are supposed to serve aesthetic concerns, are scattered carelessly, and out of order with a neglected look. The material selection has been made in a random style; and in some areas, barbed wires have been used to keep people away from the pools because of the mistakes stemming from the design works.



Figure 5. The Inactive Water Use in the Parks

Upper Cover Elements: Single-type iron profile, octagonal pergola, picnic tables with roofs and wooden-covered passages in fewer numbers have been used as the upper cover in the parks located in the study area (Figure 6). The octagonal pergolas are uncomfortable systems that are far from being aesthetical. The advantageous side is not being damaged easily (the Vandalism Effect) and the repair and maintenance costs are lower. However, they are not suitable for the modern age, and are far from modernity and ecological vision.

Aside from these, the wooden picnic tables are ergonomic and aesthetical. In addition, they cover less space and are ideal for a user group. They increase the naturalness level of the urban areas with their ecological sights in wooden-covered passages, and they also increase the feeling of natural environment of the user. Using natural or natural-like materials is a factor influencing the preference. According to many studies, natural materials are the primary parameters related with the visual quality (Kaplan & Kaplan, 1989; Parsons, 1991; Tips & Savasidara, 1986; Ozhanci, 2011). It is an important point that has to be cared not only for cover elements but also for the other elements and usage types.



Figure 6. The Samples of Cover Systems Used in the Parks

Sales Units: Sales Units were observed rarely in the city parks. The three of them (Kultur, Tabipler Konagi and Gulbahce Parks) are in the form of open tea houses/restaurants opened for business, and the one in the Yapitek Park is in the form of sales unit from which the neighborhood people may make use of.

Artistic Objects: It is not possible to claim that artistic objects are used in the urban parks that are the subject matter of this study. Only one object with plant-wooden combination has been used in the Gulbahce Park. There is an Ataturk Statue in the same park in front of the Culture Directorate, and we see that rocks are used casually in the Cennet Park. It's being next to the Culture and Art Center makes it possible to observe the plastic objects and the arrangements in the Culture Park in limited points.

Game Zone Elements: Children's game zones are important in that they solve an extremely great problem in cities where there are almost no safe and quiet environments for children as a result of fast urbanization (Basal et al., 1993). Children's Game Zones must be the areas that are designed especially for children from different age groups to develop their imaginations. It is possible to claim that there is definitely one playground for children nearly in all parks located in the study area. Many parks have been shaped mostly around this theme. However, aside from this, there are no other specific design applications for children.

Litter Bins: Mostly iron profile and wooden-iron profile litter bins with a great variety have been placed in the parks. These litter bins are fixed to the ground, and do not occupy much space, and provide healthier outcomes because they are scattered to the park. Although the majority of the litter bins are well-cared for and new, there are also some bad examples. The existence of litter bins in public recreational areas is an important indicator of civilization. This is an element that motivates people to keep the environment clean. This facility equipment must be in adequate number, and in proper distance.

Flower Beds: No considerable flower bed practices have been observed in any of the parks.

Other: Aside from the abovementioned equipment, there are also sporting areas, conditioning tools, and fountains in the parks. Fountains are important elements in the Turkish Culture and Art. For this reason, they have to present a higher aesthetical value. They are the 3-Dimensional architectural elements of landscape applications. Fountains are used both in aesthetical and in functional terms, and cover the drinking water needs of people. The fountains used in the study area are applied in single or in quadruple manner, and are built from natural stones that are specific to the region. However, it has also been observed that this equipment is used in a careless manner in terms of hygiene and is out of order in some places. In addition, cat houses and are common applications in the city parks in Nevsehir. This application is extremely important in that children, who are the pioneers in being environment-friendly and animal-friendly park users, are raised in this direction (Figure 7).



Figure 7. A Cultural Element; the Fountain and Cat Houses and Bird Seed Hopper Poles, which are the Animal-Friendly Corners of the Parks

4. Conclusion

Every society creates certain sets of rules and value systems in order to evaluate and control the behaviors of its individuals. Being an accepted member of the society is only possible by obeying these norms. The psycho-social security sense of an individual is possible with the belief of being accepted by the society, and the individual evaluates whether s/he will be in a psycho-social security when s/he uses the objects in the environment. For this reason, the design and the quality of formal usage of the objects must be suitable for the social values system (Asatekin, 1976).

Each application/landscape must have a concept, and the practices and the materials used must be selected in this context. Otherwise, the design will blur minds, and make it difficult to perceive; and therefore, loses its clarity. Natural and natural-like materials must be used in an accurate manner in a part with natural concept; and the modern technology must be used well in a park in which the materials are brought to the front line in an artificial image.

In this context, the environmental conditions of the area and various clues and concepts may be used in the design process. The city of Nevsehir is located in the Cappadocia Region together with some other cities (Kırşehir, Nigde, Aksaray and Kayseri), and the best examples of the efficient geological structures of the region, the underground cities, and the immense cultural wealth are located in Nevsehir. The region is an important tourism area for our country.

It is inevitable that the special geographical area of Nevsehir is influential in shaping its urban and rural structure. Tourism is one of the important dynamics of the city and is a developmental factor. There are several geological formations in the city, and this brings the specific residential areas to the forefront.

Using the natural and cultural values that are specific to the area in different values and forms will be an important element in the design process not only in the benchmark points of the city but in the parks and recreation areas. The direction, intensity, and technique of this are determined in the light of the competence of the designer. Of course, the practical applications must be in the right amount. The users must not be drowned in details. Not only the plastic objects, but also the whole of the facility equipment may be designed in this direction; or these concepts may also be used to create contrasts.

Unfortunately, the topic does not develop in the control of the designer-practitioner; and the economic structure of local administrations and the allocations limit the practices. The design and the actual product may be different; or sometimes, the designs are made in the light of the limitations. For this reason, all the landscape applications become stereotyped. It becomes impossible to see specific designs.

No matter in which direction the design is made, the facility equipment must be ergonomic, durable, economic, agreeable with the environment, dynamic and perceivable. In the sample of Nevsehir, the practices must be handled again, and new designs must be made with a specific identity and dynamic. Designs that are without specific characteristics are not

worth repeating. On the contrary, it is monotonic and does not attract the user. Places must be designed according to short-term and long-term usage, and the facility equipment must cover the needs. In other words, they must not be stereotyped, and must show the variety.

5. References

- Altıncekic, S.C. (1997). Mekan organizasyonu ve Beyazıt çevresi [The organization of space and Beyazıt çevresi]. *İstanbul Üniversitesi Orman Fakültesi Dergisi [Journal of the Faculty of Forestry Istanbul University]*, 47(2), 201-228.
- Aksu, V. O. (2012). Kent Mobilyaları Tasarımında Özgün Yaklaşımlar [Original Approaches in Urban Furniture Designs]. *Inönü Üniversitesi Sanat ve Tasarım Dergisi [Inönü University Journal of Art and Design]*, 2 (6), 373-386.
- Asatekin, M. (1976). Endüstri Tasarımında Tasarım Olcutlerine Butünsel Bir Yaklaşım [Integrative Approach to Design Criteria In Industrial Designs]. *ODTU Mimarlık Fakültesi Dergisi [ODTU Journal of Architecture Faculty]*, 2.
- Basal M., Memluk Y., Yılmaz, O. (1993). Peyzaj Konstruksiyonu [Construction of the Landscape]. *Ank. Üniv. Zir. Fak. Yayınları [Publications of Ankara University Agricultural Faculty]*, 1322- 381, Ankara.
- Emur, S.H., Onsekiz, D. (2007). Kentsel yaşam kalitesi bileşenleri arasında açık ve yeşil alanların önemi – Kayseri/Kocasinan ilçesi park alanları analizi [The importance of open and green areas between components of Urban life quality- Analysis of Kayseri / Kocasinan parklands]. *Sosyal Bilimler Enstitüsü Dergisi [Journal of Social Sciences Institute]*, 22(1), 367-396.
- Erdogan, R., Oktay, H.E., Yildirim, C. (2011). Antalya-Konyaaltı Parklarında Kullanılan Donatı Elemanları Tasarımlarının Kullanıcı Görüşleri Doğrultusunda Değerlendirilmesi [Evaluation of Outdoor Furniture Designs in Antalya-Konyaaltı Parks with Regard to Users' Preferences]. *Artvin Çoruh Üniversitesi Orman Fakültesi Dergisi [Artvin Çoruh University Faculty of Forestry Journal]*, 12 (1):1-8.
- Etli, B. (2002). Edirne İli Merkez İlçe Yeşil Alan Sisteminin Peyzaj Mimarlığı İlkeleri Yonunden İrdelenmesi [The Study Of Open Green Area System Of Edirne City As Regards Landscape Architectural Principles]. *Trakya Üniversitesi Bilimsel Araştırmalar Dergisi [Trakya University Journal of Natural Sciences]*, B, 3(1), 47-59.
- Gül, A., Kucuk., V. (2001). Kentsel Açık-Yeşil Alanlar ve Isparta Kenti Orneğinde İrdelenmesi [The Research Of Isparta And The Open –Green Areas In Urban], *Süleyman Demirel Üniversitesi Orman Fakültesi Dergisi [Süleyman Demirel University Faculty of Forestry Journal]*, ISSN:1302-7085, A(2), 27-48, Isparta.
- Güremen, L. (2011). Kent kimliği ve estetiği yönüyle kentsel donatı elemanlarının Amasya kenti özelinde araştırılması [A Research About Urban Furniture In The Aspect Of Urban Identity And Aesthetics Within The Example Of Amasya Province]. *e-Journal of New World Sciences Academy Social Sciences*, 3C0073, 6 (2), 254-291.
- Kaplan, R., Kaplan, S. (1989). The Experience of Nature: A Psychological Perspective. Cambridge University, Cambridge U.K.
- Ozhanci, E., Yılmaz, H. (2011). Rekreasyon Alanlarının Görsel Peyzaj Kalitesi Yonunden Değerlendirilmesi; Erzurum Örneği [Evaluation of Recreation Areas for Visual Landscape Quality; Sample of Erzurum, Turkey]. *Iğdır Üniv. Fen Bilimleri Enst. Der. [Iğdır Univ. J. Inst. Sci. & Tech.]*, 1(2): 67-76.
- Parsons, R. (1991). The Potential Influences of Environmental Perception on Human Held. *J. Environ. Psychol.* 11, 1-23.
- Tips, W. E. J., Savasdidara, T. (1986). The influence of environmental background of subjects on their landscape preference evaluation. *Landscape and Urban Planning*, 13, 125-133.
- Uzun, G. (1992). Peyzaj Konstruksiyonu [Construction of the Landscape], Cukurova Üniversitesi Ziraat Fakültesi Yayınları [[Publications of Cukurova University Agricultural Faculty] 80-PM 306, Adana.

Yildizci, A.C. (2001). Kent Mobilyalari Kavrami ve İstanbul'daki Kent Mobilyalarının İrdelenmesi [City Furniture Concept and Investigation of Urban Furniture in Istanbul] . I. Uluslararası Kent Mobilyalari Sempozyumu Bildiriler Kitabı [Proceedings Book of The International Symposium on Urban Furniture], Istanbul, 29-34.

Plant Designs That Improve Urban Comfort on Urban Main Transportation Roads

Muberra Pulatkan

1. Introduction

The trees that play an effective role in satisfaction of the longing of individuals for nature are one of the significant components of urban economy. Plants are especially needed in cities under intense population pressure to increase the quality of life. Along with population increase, urban green areas decrease in numbers, while the needs of individuals for a healthy life increase.

The benefits of plant material in urban green areas for the city and citizens could be listed as shade, pollution reduction, reduced storm water runoff, increased property values, habitats for wildlife, windbreaks, blocking undesirable views, creating parks for recreation and providing a link between increasingly urban existence and the natural world. Dense planting, especially combined with solid barriers or land forms, can reduce noise significantly. As cities become denser, reduction of noise pollution becomes a significant factor in increasing human well-being and reducing stress (Trowbridge & Bassuk, 2004). Plant materials can act as a supplementary insulation resource supporting the attainment and maintenance of our comfort requirements. Plants can be the first line of defense in absorbing, reflecting, or filtering extreme temperatures, allowing cellulose or synthetic materials to perform at their highest efficiency (Austin, 2001). Plants of varying heights and placement can control the brightness of both daytime lights, which changes through the day as the position of the sun changes and nighttime glare from stationary artificial lights. Also they help reduce glare from paving and building surfaces, making travel by foot or in vehicles more comfortable (Walker, 1985).

Dense construction and transformation covers most urban areas and results in losses in open green areas. This necessitates conducting planting work in confined spaces (Figure 1). As a result, especially street and road planting become prominent.



Figure 1. The pocket park in urban area (Paley Park, New York, USA)

The open green areas that working urban population could utilize are limited. On the other hand, streets, avenues and traffic islands are the most significant open green areas that urbanites could use in their daily lives as pedestrians or with their vehicles. Planting work in

such areas is more effective, long-lasting, predominant and functional when compared to other planting arrangements. Thus, urban street, avenue and traffic island trees are among the most important natural elements primarily in urban areas (Küçük & Gül, 2005).

Transportation is among the most important problems in urban life. It is necessary to consider and implement plant elements as main components of the roads during the planning stage. Planting on urban roads that have heavy traffic is quite effective for driver and pedestrian traffic safety. It increases the quality of life especially for pedestrians who have priority of use on urban areas.

Road trees, which are a significant element of urban open green area construct, provide identity and continuity for the city and its routes, create an effect of fullness, remove the monotony of the roads and form effective routes. They regulate the urban climate and reduce environmental pollution. Planted roads create a synergy with other urban green areas to contribute to the open green areas in cities.

In planned development cities, roads are the skeleton of the city and define the axis of urban development. If the topographical structure and prevailing winds are assessed adequately, wide avenues are ventilating corridors for the city. Planting applications where roads merge with rural areas connect urban and rural landscaping applications (Aslanboğa, 1986). Street trees are among the ornamental elements that beautify the cities. These lighten the sharp and monotonous image of buildings and render the cities more beautiful. Well planted streets provide safety and a cover during rainy days and s shadow and freshness during summer for pedestrians (Tanrıverdi, 2001) (Figure 2).



Figure 2. Trees that beautify the street (A: London-England, B: Zurich-Switzerland)

The real habitat of trees is forest ecosystems. The trees that form the forest have to survive along with other animate or inanimate natural factors within mutual assistance and struggle. The tree species that could survive outside the forests in open areas should be adapted to powerful winds, excessive heat produced by the sun, resistant to frost and could grow even in poor soil. The trees planted in urban roads have to survive under similar conditions to those that are exposed to negative effects of open areas outside the forests (Yılmaz & Aksoy, 2009).

Trees that would be planted on roads should have certain characteristics for success (Dirik, 2008):

- They should have a solid and long trunk,
- They should divaricate from the top and form a wide crown,
- They should be resistant against the air pollution and traffic dust that commonly occur in urban areas,
- They should not pollute the environment with their seeds and polens,
- They should have solid trunk without cracks,
- They should not have a pendulous form,

Plant Designs That Improve Urban Comfort on Urban Main Transportation Roads

- They should be perennials,
- They should grow rapidly.

Urban road planting has various aesthetic, functional and social benefits. These benefits were compiled from Aslanboğa (1997); Dirik (2008); Küçük and Gül (2005); Plant and Sipe, (2016), Soares et al. (2012) and listed below:

- Providing naturalness for the urban ecology,
- Breaking monotony,
- Provide a background for buildings,
- Creating a chain of spaces along the streets,
- Creating contrast or harmonic unity,
- Providing visual value, perspective and depth for the street,
- Connecting and separating buildings and spaces,
- Masking ugly views,
- Improving the visual quality of streets with their seasonal variations (Figure 3).



Figure 3. Fall colors on Street trees (Okayama-Japan,)

Functional benefits of urban planting could be summarized as follows:

- Shadowing vehicle and pedestrian bands,
- Providing safe relaxation, window shopping, and chatting possibilities for the pedestrians,
- Reducing the noise,
- Controlling the winds,
- Holding the dust,
- Controlling rain and surface water,
- Reducing the narrowing down effects of the buildings on the space,
- Increasing safety by separating vehicle and pedestrian traffic,
- Guiding the drivers towards the street and acting as signalization,
- Functioning as an element of emphasis,
- Contributing to urban ecological conditions (O₂ production, increasing relative humidity, balancing temperature),
- Carbon storage,
- Reducing the power pf air movements in the streets,
- Reducing the impact of urban heat islands,
- Positively effecting urban health and micro-climate,
- Providing significant contributions to the spiritual and physical well-being of urbanites,

- Providing shelter for the urban wildlife.

Its social benefits could be listed as below:

- Human health and peace,
- Physical, mental and social achievements,
- Increasing quality of life,
- Cultural communications,
- Visual and aesthetic quality.

For the plants to provide the desired effect both aesthetically and functionally, ecological conditions are quite important. Planted tree species should be suitable for the climatic and soil conditions of the region to provide sustainability.

2. Method

In the present study, planting design alternatives were produced for Kahramanmaraş Street, which is the most important main axis in Trabzon urban center that is under the negative effects of intensive utilization of main urban transportation roads. Vehicle – pedestrian safety and comfort of constructed planting designs were also assessed.

2.1. General Information on the City of Trabzon

Trabzon province is located in eastern Black Sea Region and occupies 4.664 km². It is located between east 38° 30' – 40° 30' meridians and north 40° 30' – 41° 30' parallels. Black Sea on the north, Gümüşhane and Bayburt provinces on the south, Rize province on the east, and Giresun province on the west surround the province (Figure 4) (Trabzon Valiliği, 2016).

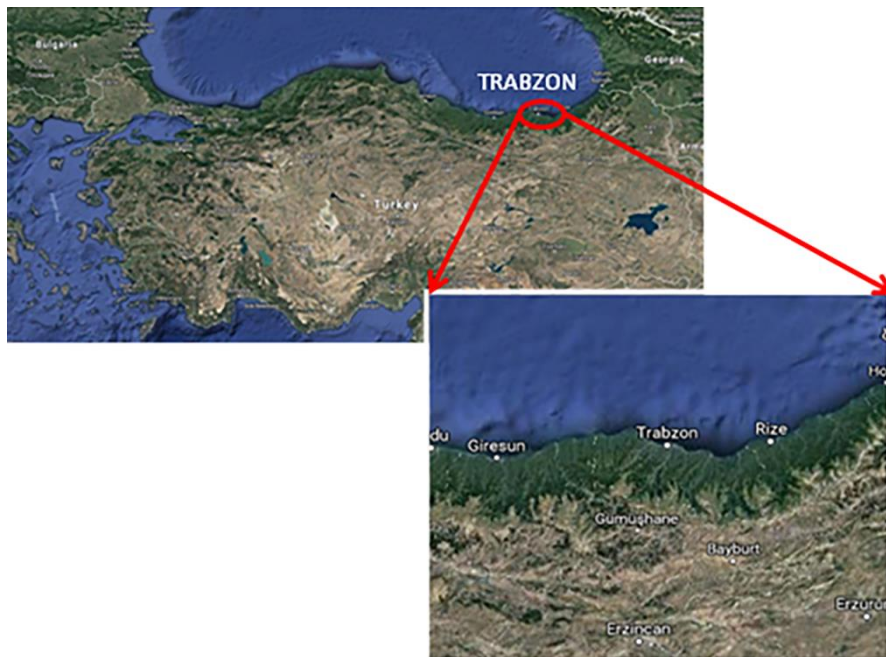


Figure 4. Geographical location of Trabzon province

2.2. Case study street: Trabzon Kahramanmaraş Street

The present study was conducted on Kahramanmaraş Street located within the boundaries of Trabzon province Ortahisar Township. The study covered the part of Kahramanmaraş Street that starts at the square park and ends at the central post office (Figure 5).



Figure 5. Trabzon Kahramanmaraş Street satellite view

3. Results

Urban centers face the highest need for accessibility. For this reason, Kahramanmaraş Street located in Trabzon city center is exposed to a heavy pedestrian and vehicle traffic.

Kahramanmaraş Street is a significant axis that serves the city center since it hosts several public transportation routes. It is also used by the pedestrians intensively as a shopping street since there are many businesses on it. In addition, it is utilized for passing time, walking and leisure activities. After the arrangements implemented in 2010, two-way traffic was transformed into one-way traffic. Currently traffic flows from the west to the east.

One of the most significant problems on the street is shared taxi stops and intense shared taxi traffic. It is necessary to implement further modifications to improve pedestrian and traffic comfort. Current status plan is presented in Figure 6 and current status cross-sections are presented in Figure 7.

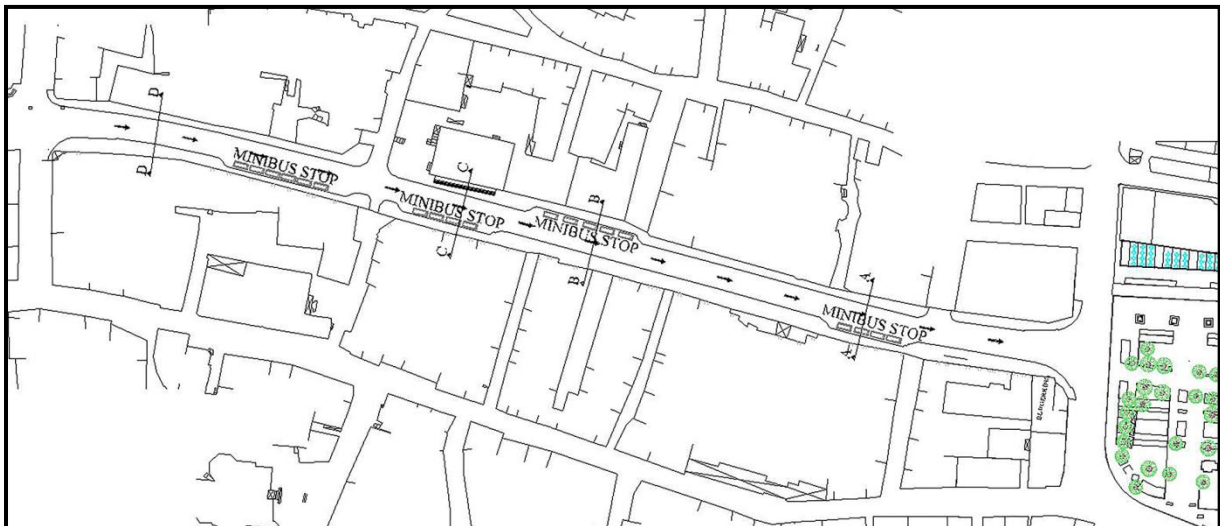
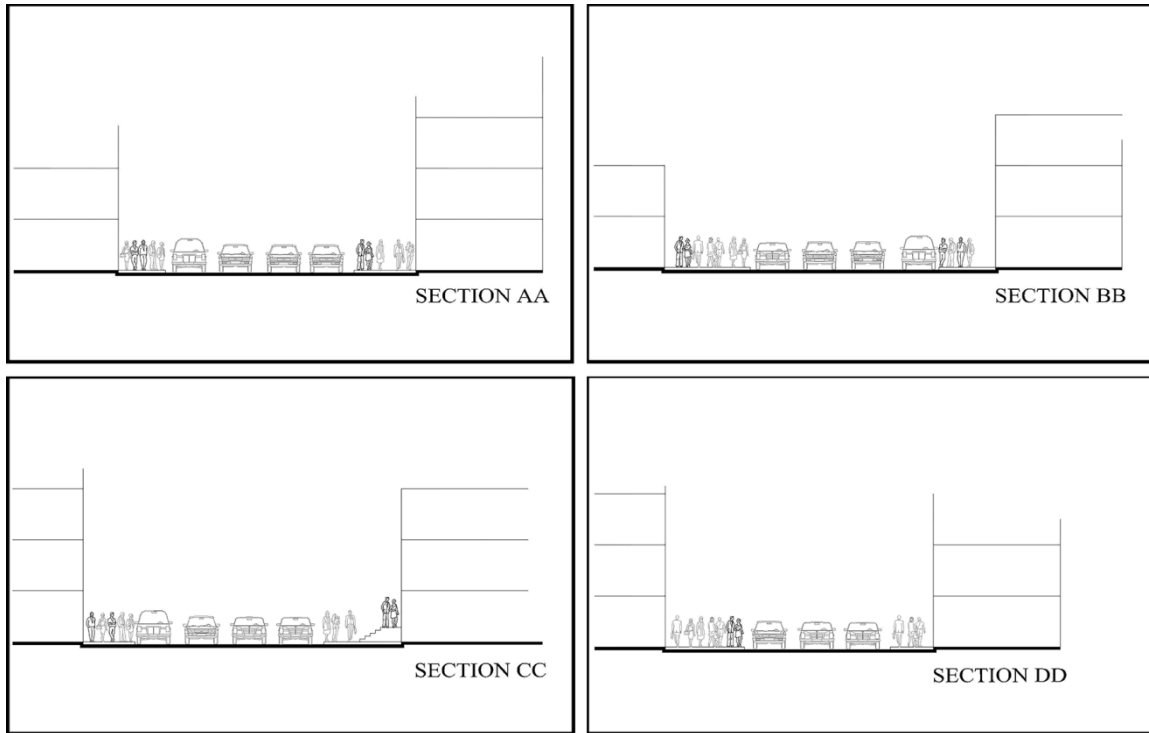


Figure 6. Kahramanmaraş Street current status plan**Figure 7.** Kahramanmaraş Street current status cross-sections

Current status cross-sections demonstrate that there is an intense traffic flow on all 3 lanes and shared taxi stops are located next to the traffic flow. Furthermore, the pressure of the pedestrians, buildings and vehicle traffic is obvious. The current status of the street creates an image of chaos for the users. Negativities such as the noise of the vehicle traffic and reduction of air quality by exhaust gases create problems for pedestrians and the individuals that inhabit the buildings on the street. In addition, during negative situations created by climate conditions, the street is not safe for pedestrians.

Based on all these negative conditions, it was considered that planting the street would make it comfortable for both vehicles and the pedestrians. For this purpose, alternative plant design proposals were constructed in accordance with the possibilities provided by the street. In the first Kahramanmaraş Street planting design proposal, double row alley was created with trees to be planted on sidewalk boundaries (Figure 8). As could be observed in proposal I cross-sections, this construct separates the vehicle and pedestrian traffic and rendered the street safer for pedestrians (Figure 9). Furthermore, shared taxi stops were separated from the existing traffic intensity.

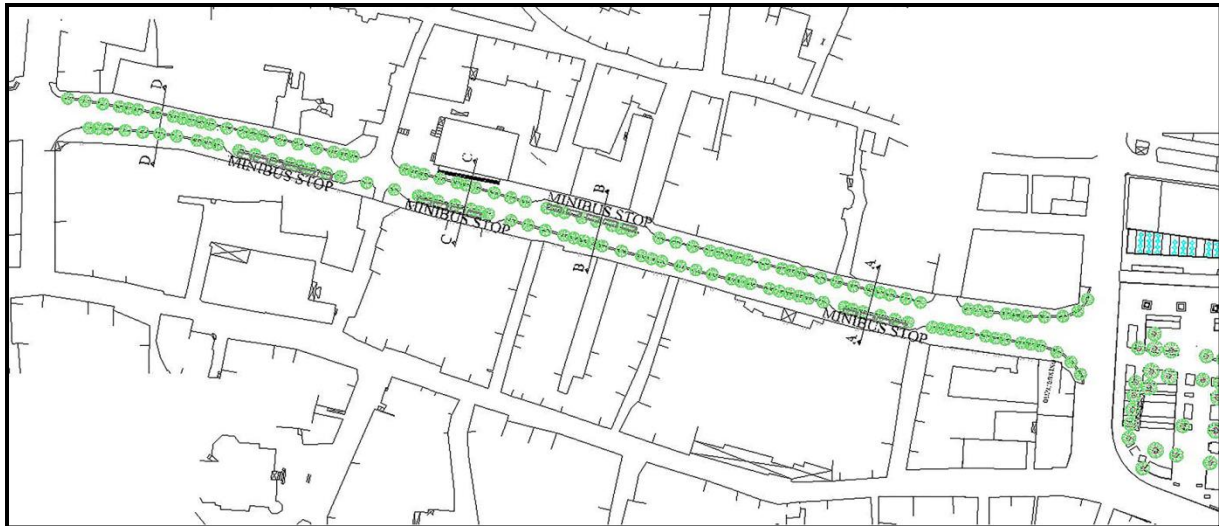


Figure 8. Kahramanmaraş Street planting design 1st proposal plan

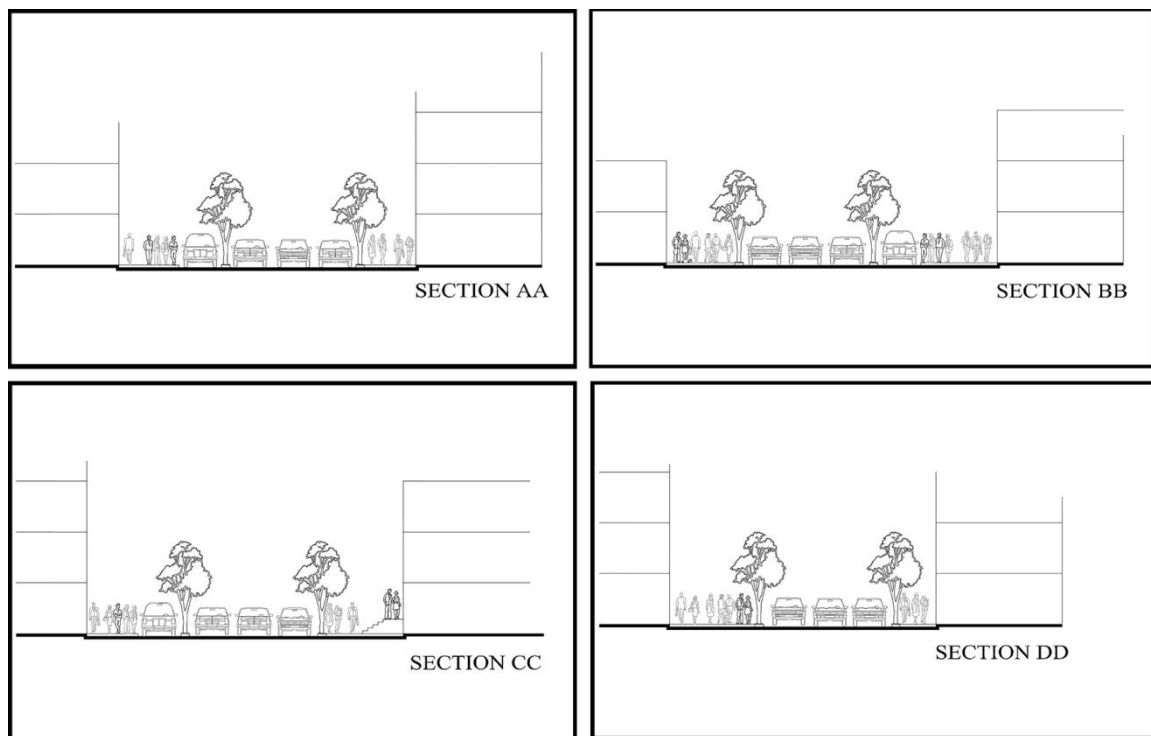


Figure 9. Kahramanmaraş Street planting design 1st proposal cross-sections

In Kahramanmaraş Street planting design 2nd proposal, in addition to double row street planting, a single row of trees were planted in the middle of the street (Figure 10). Plan cross-sections demonstrate that single row of trees planted in the middle of the street decreased the traffic to two lanes (Figure 11). Although this slowed down the flow of the traffic, the vehicles would be able to benefit from the positive effects of the trees. Thus, the street would become safer and comfortable for both pedestrians and the vehicles.



Figure 10. Kahramanmaraş Street planting design 2nd proposal plan

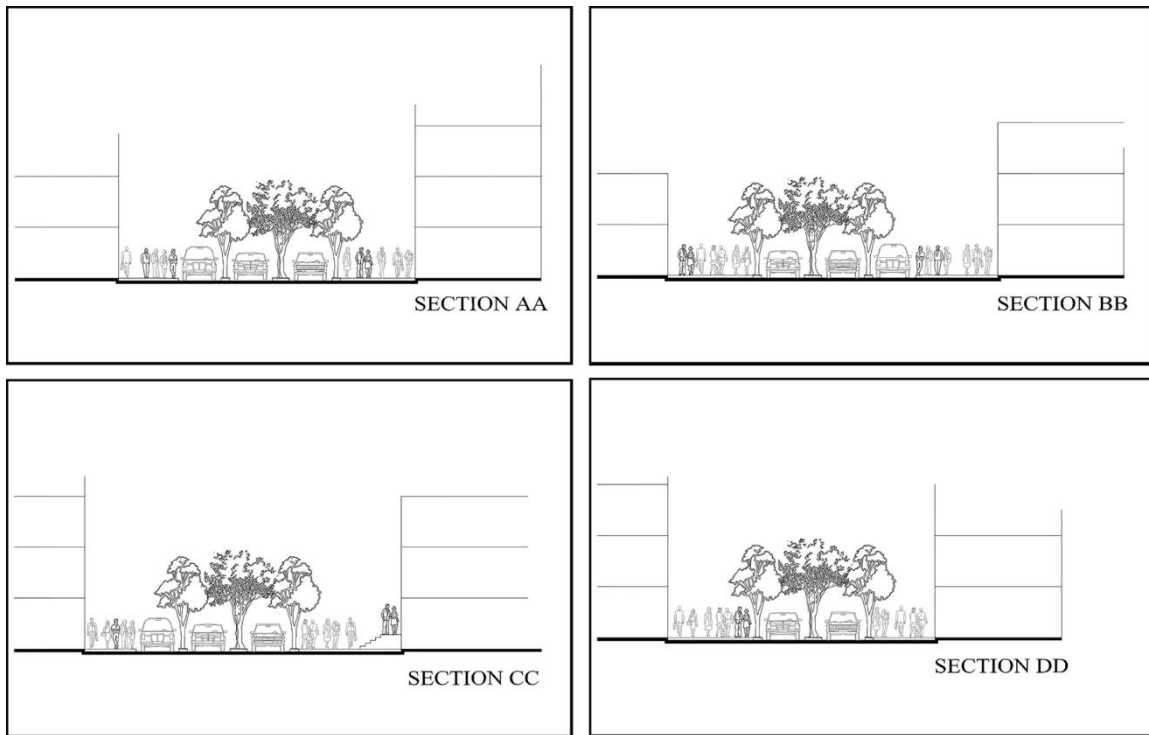


Figure 11. Kahramanmaraş Street planting design 2nd proposal cross-sections

As a result of these two proposals designed for street planting on Kahramanmaraş Street, it will be possible for the pedestrians to conduct their daily needs such as transportation, walking and shopping activities safely. Furthermore, individuals that wait for transportation in shared taxi stops on the street would be able to spend their waiting time more comfortably.

4. Conclusion

Pedestrian and vehicle traffic on Kahramanmaraş Street, which is the focal point of the city of Trabzon create extensive problems. Only after the arrangements implemented in 2010, the problem of vehicle traffic was relatively resolved by transforming the traffic into a one-way flow. Since the street is located at the city center, further arrangements are necessary to provide pedestrian comfort on the street that is used intensively by the urban population. For these

arrangements to succeed, street planting applications are inevitable. Necessary attention should be paid for street planting applications for these to fulfill their ecological, biological, social, aesthetic and functional objectives.

To reach the desired goals in street planting, suitability of the selected plant species for the urban conditions should be assessed. The maximum height, branching form, seasonal variations of the trees should be assessed. Selected plant species should have a solid form, with horizontal branches at a height of 2-2.5 meters from the ground, grow up rapidly in youth, and at the same time should have thick branches that could provide shade and protection from the rain. When these properties are ignored, it would be inevitable for the arrangements conducted to resolve the problem would fail. Furthermore, for the street trees to survive without problems, they should be maintained properly and regularly. Tree species that would be planted should be selected from natural species suitable for urban conditions and the climate and soil conditions of the region, which would in turn minimize the maintenance costs and would play an effective role on sustainability.

5. References

- Aslanboğa, I. (1986). *Kentlerde yol ağaçlaması [Road planting in urban areas]*, Ankara, Tübitak Publications.
- Austin, R.L. (2001). *Elements of planting design*. United State of America: John Wiley&Sons Inc.,
- Dirik, H. (2008). *Plantasyon teknikleri [The plant plantation]*. Istanbul: Istanbul University No: 4729.
- Küçük, V., & Gül, A. (2005). Isparta kentiçi yol ağaçlandırmaları üzerine bir araştırma [A study on urban road planting Isparta]. *Süleyman Demirel University Fen Bilimleri Enstitüsü Dergisi [The Journal of Institute of Natural Sciences]*, 9(3). Isparta.
- Plant, L., & Sipe, N. (2016). Adapting and applying evidence gathering techniques for planning and investment in streettrees: A case study from Brisbane, Australia. *Urban Forestry& Urban Greening*, 19, 79-87.
- Soares, A.L., Rego, F.C., McPherson, E.G., Simpson, J.R., Peper, P.J., & Xiao, Q. (2011). Benefits and costs of street trees in Lisbon, Portugal. *Urban Forestry& Urban Greening*, 10, 69-78.
- Tanrıverdi, F. (2001). *Peyzaj mimarlığı bahçe sanatının temel ilkeleri ve uygulama metodları [Fundamentals and application methods of landscape architecture garden art]*. Erzurum: Ataturk University Publications, No: 643.
- Trabzon Valiliği [Trabzon Governor's Office] (2016). *Trabzon tarihi ve coğrafyası [Trabzon history and geography]*, Retrieved from <http://www.trabzon.gov.tr/tarihcaografya>
- Trowbridge, J.P., & Bassuk, N.L. (2004). *Trees in The Urban Landscape*. United State of America: John Wiley&Sons Inc.
- Walker, D.T. (1985). *Planting design*. Arizona: PDA Publishers Corporation.
- Yılmaz, F., & Aksoy, Y. (2009). The evaluation of the road side plants in the city of Istanbul as examples Cumhuriyet, Halaskargazi and Büyükdere Streets. *Journal of Yasar University*, 4(16), 2699-2728.

“Interesting Walk” Approach In The Context of Walkability

Ceren Ünlü, Banu Çiçek Kurdoğlu

1. Introduction

Walkability was the most fundamental characteristic of cities before the automobile age. Access to work and shopping was achieved by slowly moving vehicles in pre-industrial cities. Therefore, everything within the city were related with each other and located in the immediate vicinity. Walkability was at a good level in industrial cities in the 19th century since many workers did not have a transportation opportunity with a carriage or trolley. Walkability ended in cities in 1920s due to automobile manufacturing. The modernist planning created automobile-focused cities that ignore pedestrians, dismembering quality pedestrian paths and lacking public life. The modernist planning and design restrained pedestrians into skyscrapers, shopping centers and tall high-rises, to closed areas in summary. The entire system was formed according to access convenience after 1950s (Frank, Engelke & Schmid, 2003; Roberston, 1994; Southworth, 2003 & 2005; Southworth & Ben-Joseph 2003, 2004)

Damages to nature infested by automobile-focused and rapidly developing cities that ignore public life have been discussed especially since 1970s at both national and international levels. Damages presented to nature by automobiles due to large-scale road systems since they generate more road necessity and due to their emission-increasing effect have been revealed. In addition, unfavorable effects of transportation provided by especially private vehicles on socialization and on the perception of that city have been stated. In parallel with these, the solutions of problems that are mentioned in urbanization trends that occurred after these dates have been focused. Planning approaches have been adopted about how the urban forms that are to provide high level of natural environmental protection are supposed to be. The sustainability concept that means passing on natural resources to future generations by achieving social, economic and ecologic balance has been included in all approaches. The significance of development of cities as pedestrian-focused and their re-walkability for achieving sustainable development has been emphasized (Burton, Jenks & Williams, 1996; Jacobs, 1992; Niemala, 1999; Southworth, 2005 & Silaydın, 2003)

The basis of New Urbanization trend that appeared in 1980s creates districts that could be walked and have various residences and business types. The first of these principles that have been developed in parallel with this is walkability. Creation of cities has been aimed with maximum 10-min walking of home-work distance by pedestrian-friendly street designs and connections where vehicles can enter in special situations (Katz, 1994 & URL1). Smart Growth perception encompasses all development and protection strategies aiding us to protect our health and natural environment and making the society more attractive, economically stronger and socially more divergent and one of its principles is to create districts that can be walked (EPA, 2011; URL2 & URL3). One of the principles of Green Urbanization trend, which aims to transform the existing cities to integration without fragmentation, is to create sustainable transportation and quality public spaces. In this context, pedestrian-friendly environment designs promoting engineless transportation types including walking and bicycling are aimed c. Sustainable Urbanization perception means the implementation of sustainability and resilient principles for the administration, planning and design of cities, and its main aim is to create cities that can be walked (Farr, 2007 & Sharifi, 2016). Ecological Urbanization perception means the development of multi-dimensional and sustainable human communities within a compatible, balanced and constructed environment, and its first step is to plan and improve sustainable production in a city and to increase energy and food production in the city scale and to create cities with adequate energy within themselves (Brugmann, 2009 & Ruano, 1998). In

this context, walkability concept becomes important as a tool diminishing energy spending in the city as an engineless transportation type.

It is possible to say that walkability is a crucial component for sustainability based on last-period urbanization trends. When walking is preferred in place of automobile, walkability has a role to diminish environmental effect due to developments including decrease in fossil fuel consumption, decreased emission, low noise and air pollution (Burton, Jenks & Williams, 1996; Newman & Kentworthy, 1999 & Southworth, 2005). Furthermore, walking has a favorable effect in terms of physical and mental health of individuals (Burton et al., 2006). There was more socialization in a district that can be walked according to a research conducted in Ireland (Leyden, 2003). People get in contact with each other better and develop a safety feeling. Moreover, space perception levels of individuals are higher and individuals adopt the city better. All of these mean that there are cities with a healthy environment and healthy societies. Thus, walkability is a crucial method for the solution of the mentioned problems of today's cities.

Walkability is the walking support level and promotion of a constructed environment by enabling comfort and safety to pedestrians, and establishing connection in a certain time and effort at various stops, and creating visual aesthetics throughout the path. Based on this definition, streets that are used for access to work, shopping, entertainment and relaxation, in summary to daily activities, are the most significant components. The quality of the streets, in other words, paths play a fundamental role to encourage people to walk instead of driving. Connectedness, sustainability, safety and visual quality are listed as the criteria of a preferred pedestrian path. Connectedness is explained as the establishment of a connection by the path between public areas, parks, open fields and recreation fields that are used by people every day. Sustainability means an uninterrupted path in terms of transportation, and to be related with mass transportation types including metro, trolley and bus at necessary points. Safety is the ability to protect life and property-health of pedestrians in terms of both traffic and social crimes. Finally, visual quality is to offer an interesting travelling throughout the path to pedestrians by means of physical components of the path. (Southworth, 2005)

Visual quality, one of the criteria indicated for a preferable pedestrian path, is the least comprehended and the mostly ignored part in planning and designing (Southworth, 2005). However, researches have shown that there is a positive relationship between the visual quality of streets and walking. The distance walked by individuals who perceive the sight of a street as pleasant turns out to be greater. A path having safe and strong connections and providing sustainability however having a monotonous physical order is not preferable for pedestrians (Southworth, 2005). In any case, if all of these were sufficient, human beings would not have searched variation. People desire to discover constantly therefore there must be an attractive path so that pedestrians will prefer walking in place of driving (Speck, 2013). In the study scope, the "Interesting Walk" concept focusing on visual quality without ignoring the other criteria of a preferable pedestrian path has been explained and assessing attractiveness based on the selected area made suggestions for development.

2. The Interesting Walk Concept and Principles

"The Interesting Walk" concept is expressed as a walkability stage in Speck's (2013) book and it is stated that the other stages will be inadequate for promoting walking in case this stage is not achieved. In this section, the concept is explained based on the "Interesting Walk" chapter in Speck's (2013) "Walkable City" book.

The street used by pedestrians plays a great role for preferring walking since they see, hear and sense everything in the site surrounding it (Handy, 1996). Considering the street in this context,

street is a volume as a matter of fact. This volume and the shapes within the volume perceived by pedestrians make up the street space.

The volume has three dimensions conceptually: surfaces make up the length, width, depth and borders of the volume. Horizontal components, forming the ground plane and raised ground plane, make up the subsurface, and vertical components make up the side surfaces and the volume is created. The ground plane is horizontal and the horizontal space formed by raising a section of the ground plane is the raised ground plane. Vertical components create a closing and surrounding sense for those who are in the volume. Every three-dimensional volume has an influence area of its own. (Divanoğlu, 1997).

Considering the street space as a volume, horizontal components making up the ground plane can be expressed as vehicle and pedestrian roads, and horizontal components making up the raised ground plane can be expressed as pavement. Vertical components creating a surrounding and closing sense can be defined as buildings and façades making up the side surfaces of a street space. Roads, buildings and façades form the borders of a street as a volume. However, there are other components as well within this street space. These components can be defined as streetscape components as well. In summary, buildings and façades, roads and streetscape components make up a street space. In more detail, buildings and façades: all structures (historical, new, ruined, etc.) and all façades of these structures that can be seen from the street (front, back, side) and all components located in these façades (windows, doors, cinctures, roofs, etc.), roads: roads that are used by only pedestrians and paving formed by materials covering these roads, roads that have vehicle priority usage and the vehicle road formed by materials covering these roads, streetscape components: can be used temporarily or permanently; bus stops, garbage cans, flag and electric poles, billboards and signboards, illumination components, arbors, arcades, retaining walls, terrace and garden walls, barriers, stairs, snack bars, telephone booths, sign boards, sitting banks, mail boxes, street boards, flower beds, flower pots, water components, etc.

An interesting path means that people prefer walking on that path instead of driving. In this context, the own influence area of a volume street space must be interesting. For this purpose, there are characteristics for the street space components to be interesting (building and façades, roads, street components). Speck (2013) stated these characteristics as diversity, depth, porosity, vertical orientation, human scale, continuity, good edge effect and functionality. The indicated characteristics are related with the perception of pedestrians about the space. These characteristics are defined below and their relationship with the design has been established based on examples.

Diversity (Dv.): It can be defined as the breakage of uniformity, repeat and monotony by means of components making up the street space. Pedestrians must continue to wonder during their walking by means of variation. However, there must be harmony within this variation. For example, Jan Gehl (2010) stated as a result of his observations that the width of the stores forming the commercially functional street side must be between 4-6m in order to provide different scenes at each five seconds for pedestrians.

Continuity (C): It is defined as lacking fragmentation and achieving harmony within variation. In case the components continue successively without interruption as being related with each other, they are perceived more clearly and distinctly (Divanoğlu, 1997). This characteristic is important for internalizing of that path by pedestrians who are in a space having variation.

Porosity (P): It can be defined as preventing the pedestrians to feel as outsiders within the area. A pedestrian walking on the street must command not only the street but also the structures or spaces that surround the street. For example, porosity in the façades is achieved by solutions that soften the difference between the private and public use. Pedestrians can feel related with the space outside of that closed area by windows and doors and interior

illuminations, or pedestrians can be related with that space by means of street components such as tents that are used outside of the closed area. This enables the pedestrians to command that area better and to continue their walking activity with more perception chance.

Good Edge Effect (GEE): Good edge effect can also be expressed as right confinement. Searching a place at the borders of the space where people wish to spend a short time is expressed as the “border effect” and as a matter of fact, it reveals the significance of right bordering of spaces (Gehl, 2010). For example, stones at a small child’s size situated at Siena’s Piazza del Campo square and creating a certain border effect at the square have an interesting effect for people in the place.

Depth (Dp.): Creation of designs providing an opportunity for activities including sitting, waiting and relaxing throughout the path can be expressed as depth. Depth is achieved by enabling these activities by the existence of the distance between the sides and vehicle road or by means of supporting the street components or by making certain arrangements within the pedestrian road and vehicle road. Moreover, columned sides create entry and harboring convenience as well (Divanoğlu, 1997)

Vertical Orientation (VO): Orientation is the position of the shape related to the ground plan, environment points or people following the shape (Divanoğlu, 1997). It is necessary to provide an impression for pedestrians that the walked distance is shorter in order to create an interest by means of orientation (Speck, 2013). The way to achieve this is the preference of geometrical shapes that will create orientation vertically for the design of street place components (Gehl, 2010).

Human Scale (HS): Street place design should take human scale as the basis. Street place component measures should not be highly different than human body measures. Human scale is very important for human perception. The size of the structures should be at a level not to create a boring effect for people. The details of the façades and street components should have a size to be perceived by people. All of these enable pedestrians to continue their walk on that path with open perceptions constantly (Divanoğlu, 1997 & Speck, 2013).

Functionality (F): A Street must be lively to be interesting. Liveliness that is mentioned here is the continuity of human activity always. Therefore, liveliness of all components of a street place must be continuous. For example, saving a street from being a deserted place at nights by illumination components, making a path lively by arrangements made on the sides even if the structures bordering the street are not used after a certain time, etc.

An interesting pedestrian path must have the indicated characteristics. However, another important aspect is the location of this path. At this point, city centers rank the first because city centers are the areas used intensely by the entire city and they have an effect on the city image. An interesting path created at the city center enables both its usage by city people at an equal level and also creates favorable effects for the city image. The start and end points of the path is important when the city center is concerned. Currently, an interesting pedestrian path, which has a potential in terms of human activity and is important in terms of recreation including nearby parks and cultural structures and is formed between points that don’t have a pedestrian connection, has more user mass and is more preferable in comparison to a path to be formed between any two points.

3. Study Area and Method

3.1. Study Area

Two different paths (Figure 1) connecting the Square Park and Ganita Park, which are the two green fields situated at the square region of Trabzon city and important and intensely used, have been selected as the study area based on the literature.



Figure 1. Study Areas (Path 1 and Path 2, Trabzon, Turkey)

Two partners established Ganita Park at the beginning of the 20th century, one of whom was a Greek and one was a Turk. It has been one of the important recreation areas of the city since its establishment date. Therefore, its historical and social significance is great for both the city and city people. Atatürk Square Park (Figure 2), situated at the city center, is one of the most crowded areas of the city. Its visitors have increased after its restoration. This park has an intense human traffic and is both a passage and relaxation point. Moreover, the square is surrounded by historical structures and is important for the city historically and socially.

Two different paths connecting the two recreation areas that are important for the city and explained above were assessed in the study scope. Path 1 (Figure2); the path making up the western border of Atatürk Square Park and extending throughout Gazipaşa Avenue continues with an overpass at the end of the same avenue and is connected to Ganita Park. Path 2 starts at the northeast border of Atatürk Square Park and extends throughout Güzelhisar Avenue and continues with Kalhana Street and is connected with Ganita Park with an overpass over the shore way throughout the ramparts.

3.2. Method

Workflow diagram (Table 1) of the study method is shown below. The purpose and the scope of the study are expressed in the introduction phase of the study. Definition and principles of the interesting walk is described in the title of Interesting walk by using collected conceptual data. Information about study area is given in the title of the study area. Inventory is created through photos and videos of study areas and observation. Interactive surveys, those created benefiting from literature review, study area observation, photos and videos of study area, are made the experts (11 landscape architectures and 9 urban planners).

Table 1. Workflow Diagram

1. Identify to Study Object	Express the purpose and the scope of the study	
2. Selection of Study Area		
3. Data Collection	Conceptual Data Collection	
	Study Area Data Collection	
4. Creating Inventory	Observation	Study Areas Photos
		Study Area Videos
	Survey	Make a survey to experts
5. Findings	Analysis of Inventories	
6. Conclusion		

Interactive survey steps are shown Table 2. Time-lapse videos start the beginning of the paths and end up finish of the paths. Interesting walk score of the paths and which criteria was positive which criteria has negative effects on the paths are expressed in the findings phase of the study.

Table 2. Interactive Survey Steps

Step 1	Explanation of Interesting Walk Approach and Interesting Walk Principles
Step 2	Presentation of Study Areas Informations (Location maps, photos, historical information)
Step 3	Display of Study Areas Time-lapse Videos
Step 4	Creation of Scoring Tables by the Experts

Interesting walk score of the paths and the score of the all criteria are calculated by the averaging of the scoring tables (Table 3).

Table 3. Example of Interesting Walk Scoring Table

	Building and Facades	Streetscape Components	Roads		
			Pavement	Vehicle Road	Pedestrian Road
Dv.					
P					
C					
Dp.					
GEE					
VO					
HS					
F					

The interest scores of the two paths were estimated by accepting the effect of all criteria and all street components on the average values equally. The assessment table of the positive, negative or neutral effects of the obtained averages is given below (Table 4). The numerical values obtained at the results section are revealed and positive, negative or neutral effects meant for the paths are expressed.

Table 4. Code Numbers and Effects

1	2	3	4	5	6	7
-3	-2	-1	0	1	2	3
1≤Negative Effect≤3			3<Notre Effect<5	5≤Positive Effect≤7		

4. Findings

The data gathered by taking the averages of the scoring tables formed in the study scope were classified under the titles Path 1 and Path 2. The interest averages and the criteria affecting these averages negatively were determined.

Path 1

The interest score of Path 1 was found as 3.64 by taking the average of the scores given by 20 experts. In this case, it is possible to say that the street place components don't have a positive or negative effect on the interest for the general perception of the path. It is seen that the street place components have a neutral effect on the interest in Table 5.

Table 5. Path 1 Interesting Walk Score

PATH 1				
	Buildings and Facades	Street Elements	Roads	Average
1LA	3,75	3,25	3,208333333	3,402777778
2LA	4,25	3,625	3,791666667	3,888888889
3LA	4,625	3	4,291666667	3,972222222
4LA	3,375	4	4,791666667	4,055555556
5LA	5,25	4	3,416666667	4,222222222
6LA	4,875	3,625	4	4,166666667
7LA	6,125	1,625	2,833333333	3,527777778
8LA	3,25	3,625	3,541666667	3,472222222
9LA	4,375	3,625	2,958333333	3,652777778
10LA	4,125	4,25	3,5	3,958333333
11LA	3,75	3	2,958333333	3,236111111
12UP	3,875	3,625	2,125	3,208333333
13UP	5,875	5	4,5	5,125
14UP	4,75	4,25	2,541666667	3,847222222
15UP	5	4,875	3,916666667	4,597222222
16UP	1,875	2,125	2,666666667	2,222222222
17UP	1,875	1,875	2,041666667	1,930555556
18UP	3,75	3	2,958333333	3,236111111
19UP	3,5	2,625	1,708333333	2,611111111
20UP	5	4,875	3,916666667	4,597222222
	4,1625	3,49375	3,283333333	3,646527778

It was determined that the border effect criteria of the street components; the depth criteria at the pavement; the border effect at the pedestrian way, the depth and human scale criteria had a negative effect by the result of surveys.

Path 2

The interest score for Path 2 was found as 3.14 by taking the average of the scores given by 20 experts. In this case, it is possible to say that the street place components don't have a positive or negative effect on the interest for the general perception of the path. It is seen that the street place components, buildings and façades and street components have a neutral effect on the interest, and the roads have a negative effect considering Path 2 interesting walk scores. It was determined that the continuity criteria at the buildings and façades; the porosity, border effect and continuity criteria at the street components; the variation, porosity, functionality and border effect criteria at the pavements; the variation, porosity and border effect criteria at the vehicle road; the variation, porosity, border effect and continuity criteria at the pedestrian road had a negative effect on the interest by considering Table 6 in more detail.

Table 6. Survey Results for Buildings and Facades of Path 2

Buildings and Facades								
	Dv.	P	VO	F	GEF	Dp.	C	HS
1LA	2	2	2	2	1	1	2	2
2LA	3	4	5	5	4	4	3	4
3LA	3	1	6	3	7	3	2	3
4LA	4	6	6	4	6	5	3	7
5LA	3	4	2	3	4	3	2	1
6LA	3	3	2	3	2	4	4	5
7LA	7	5	6	7	7	5	6	7
8LA	1	3	3	2	3	3	3	4
9LA	5	4	3	3	3	2	3	3
10LA	2	2	3	2	3	3	1	5
11LA	2	2	1	1	2	1	1	1
12UP	5	4	1	4	6	5	3	4
13UP	4	3	2	5	3	4	4	5
14UP	3	2	2	4	6	3	2	7
15UP	6	4	7	4	7	7	7	1
16UP	1	1	1	2	1	2	1	2
17UP	3	2	4	1	3	1	3	3
18UP	2	2	1	1	2	1	1	1
19UP	4	2	2	2	2	2	1	4
20UP	6	4	7	4	7	7	7	1
Avg.	3,45	3	3,3	3,1	3,95	3,3	<u>2,95</u>	3,5

The criteria negative affecting the interest based on the street place components considering the two paths are shown in Table 7 below.

Table 7. Negative Criterias for Path 1 and Path 2

	Path 1	Path 2
Buildings and Façades		Continuity
Street Components	Border Effect	Porosity-Border Effect- Continuity
Pavement	Depth	Variation-Porosity-Functionality-Border Effect
Vehicle Road		Variation-Porosity-Border Effect
Pedestrian Road	Border Effect-Depth-Human Scale	Variation-Porosity-Border Effect-Continuity

Suggestions for Path 1;

- The failure of street components to create a border effect can be overcome by creating areas with certain borders in perception and by using street components at certain points. As an example for creation of a border effect by street components is Piazza del Campo Square located in Siena city. Small stones and different floor covering created a perception of different places.

- Vehicles parked at the pavement, street components situated in the middle of the pavement and the destruction of cobbles stand out as the main things that need to be corrected by considering Path 1. Moreover, small changes can be created at the building façades to generate depth at the pavement. In a conducted research (Speck, 2013), it was stated that the

most important street components were tents that create a depth sensation at the pavement for people.

- A low value was obtained for the border effect because it was difficult to separate the area used as a pedestrian road in Path 1 and the vehicle road from each other in terms of perception clearly. Different floor coverings can be used to solve this. Moreover, the practices suggested for the pavement can be made in order to create a depth sensation here as well. The congestion sensation can be eliminated for people by means of green components and street components used at the pedestrian road because no change can be made on the criteria of the structure dimensions and distances at the point of human scale.

Suggestions for Path 2:

- The buildings and façades at Path 2 don't create continuity and therefore it weakens the street perception. Therefore, using street components that continue continuity at the building façades will strengthen the perception by ensuring the street to become a volume.
- Numerous deficiencies were stated for the pavement criteria. There is no pavement continuing constantly throughout Path 2. This also prevents creation of a border effect at the same time. Furthermore, the existing pavement is inadequate in terms of width. The building façades are not interesting for pedestrians as they walk on the narrow pavement because they isolate pedestrians. Continuity should be ensured first based on all of these. Areas can be formed as a continuation of the pavement for pedestrians only by creating a difference on the coverings at the roads that are at the same level with the vehicle road currently instead of a pavement that continues at the same height completely. This will both create a border effect and ensure continuity. A solution can be found for depth by creating widening at certain points in the created areas. Porosity at the buildings and façades can be ensured by creating a trading function at some points and by applications including showcases that could form a relation with the interiors of the façades at these points. Moreover, ensuring usage of this pavement for walking at the same will create functionality time and not only for a passage between certain points.
- The solutions to be proposed for the pedestrian and vehicle roads affect one another by considering Path 2. A border effect will be created for the vehicle and pedestrian roads when the pedestrian roads are created as distinguished from the vehicle road at the floor covering points that continues as connected with the pavement, and continuity will be achieved for the pedestrian road.

5. Discussions and Conclusion

The importance of walkability has been revealed by all recent urbanization trends to achieve sustainability, which has become a concept with an increasing significance in cities in recent years. Walking is a useful activity for both mental and physical health of the persons. In addition, it aids to eliminate many environmentally hazardous effects of automobiles when it is preferred for transportation in place of vehicle driving. Moreover, walking has a characteristic that strengthens the relationship established with the city by the individual and relating the individual with the place. Despite of all of these, people prefer driving vehicles today due to many reasons. In the study scope, the frequency of preferring walking was considered as long as an interesting pedestrian path was created no matter what causes the individual to drive an automobile because today's people wish to get away from a life style that becomes monotonous gradually. An interesting pedestrian path offers a choice to individuals at this point. A desire to perceive and discover the environment is aroused for the person by walking at this place by making the place that they go by more interesting and by the formation of a limited relationship with the surrounding and interesting pedestrian paths by the individual within the automobile.

The interesting walking expression was used by Speck (2013) and certain design criteria and application means were determined in the study for creating interesting pedestrian paths. An analysis was made at the square region in Trabzon which was taken as an example in this context based on the interest indicated by Speck (2013), and suggestions were made for the elimination of the deficiencies of the paths in terms of being interesting. The criteria revealed in the study scope are general and can be analyzed for other selected paths.

In conclusion, the study was conducted in the context of street design about what can be done to create a cleaner environment with less drivers, less vehicle driving, less CO₂ emission, more pedestrians and healthier individuals, and a new perspective was revealed in this field.

6. References

- Beatley, T., (2000). *Green Urbanism: Learning from European Cities*. Washington D.C.: Island Press
- Brugmann, J. (2009). *Welcome to the Urban Revolution: How Are Changing the World*. New York: Bloomsbury Press.
- Divanoğlu, D. (1997). *Temel Tasar-Tasar'ın Öge ve İlkeleri (Basic Design-Design Elements and Principles)*. Istanbul: Birsen Yayınevi
- EPA (U.S. Environmental Protection Agency). (2011). *Smart Growth A Guide to Developing and Implementing Greenhouse Gas Reduction Program*
- Ewing, R., Handy, S., Brownson, R. C., Clemente, O., & Winston, E. (2006). Identifying and measuring urban design qualities related to walkability. *Journal of Physical Activity and Health*, 3(July), 223-239.
- Farr, D. (2007). *Sustainable Urbanism: Urban Design With Nature*. New Jersey: John Wiles&Sons
- Frank, L., Engelke, P., & Schmid, T. (2003). *Health and Community Design: The Impact of the Built Environment on Physical Activity*. Washington D.C.: Island Press
- Gehl, J. (2010). *Cities for People*. Washington D.C.: Island Press
- Handy, S. (1992). *Regional versus Local Accessibility: Variations in Suburban Form and the Effects on Nonwork Travel*. Unpublished dissertation, University of California at Berkeley
- Jacobs, J. (1992). *The Death and Life of Great American Cities*. New York: Random House
- Jenks, M., Burton, E., & Williams, K. (1996). *A Compact City: Sustainable Urban Form?*. Spon Press
- Katz, P., (1994). *The New Urbanism: Toward an Architecture of Community* (1st ed.).
- Leyden, K. (2003). Social Capital and the Built Environment: The Importance of Walkable Neighborhood. *Am. J. Health*, 93(9), 1546-1551
- Niemala, J. (1999). Ecology and Urban Planning. *Biodiversity and Conservation*, 8, 119-131
- Newman, P., & Kentworthy, J. (1999). *Sustainability and Cities: Overcoming Automobile Dependence*. Washington D.C.: Island Press
- Robertson, K. (1994). *Pedestrian Malls and Skywalks: Traffic Separation Strategies in American Downtowns*. Newcastle: Athenacum Press
- Ruano, M. (1998). *EcoUrbanism: Sustainable Urban Settlements 60 Case Studies*. Barcelona: Gustava Gili
- Sharifi, A. (2016). From Garden City to Eco-urbanism: The Guest For Sustainable Neighborhood Development. *Sustainable Cities and Society*, 20, 1-16. doi:10.1016/j.scs.2015.09.002.
- Southworth, M. (2003). Measuring the Livable City. *Built Environment*, 29(4), 3343-3354
- Southworth, M., & Ben-Joseph, E. (2003). *Streets and the Shaping of Towns and Cities*. Washington D.C.: Island Press

“Interesting Walk” Approach In The Context of Walkability

Southworth, M., & Ben-Joseph, E. (2004). Reconsidering the Cul-de-sac. *Transportation Research at the University of California*, 24, 28-34 doi: <http://web.mit.edu/ebj/www/access24.pdf>

Southworth, M. (2005). Designing the Walkable City. *Journal of Urban Planning and Development*, 131(4), 246-257. doi:10.1061/(ASCE)0733-9488(2005)131:4(246)

Speck, J. (2013). *Walkable City: How Downtown Can Save America, One Step at a Time*. New York: North Point Press

Sılaydın, B. (2003). Fiziksel Planlama, Topumsal Bilinç ve Ekoloji. *Planlama*, 2003/1, 9-14

URL1: New Urbanism Principles, <http://www.newurbanism.org/newurbanism/principles.html>

URL 2: Smart Growth Definition, <http://www.newurbanism.org/newurbanism/smartgrowth.html>

URL 3: Smart Growth Principles, <http://www.newurbanism.org/newurbanism/principles.html>

Istanbul: The Mega City

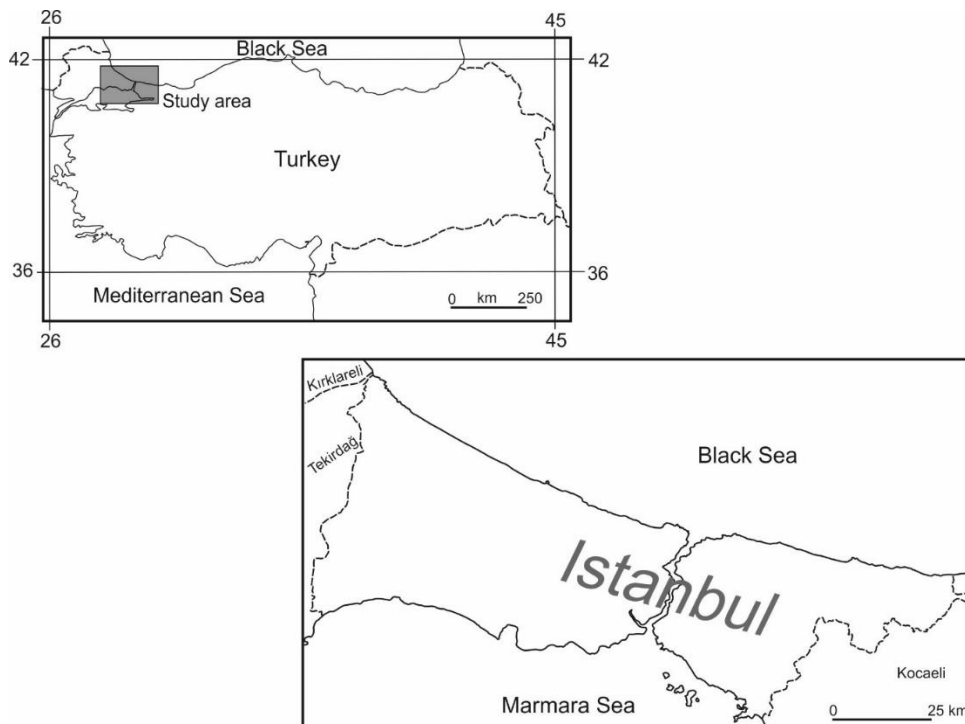
Mesut Doğan

1. Introduction

It is Istanbul which is at the most strategic point of Turkey, which is located in a prominent position in the world. Istanbul is a world city today. It is a mega city affecting the world and affected by the world in terms of economic, political, military, social and culture aspects. This mega city, the history of which goes back to very old times, is moving towards being a financial center on one hand and has become one of the world's major transportation hubs while standing out as the areas mentioned on the other hand. It is also a preferred tourism center for its ancient history and natural beauty.

Istanbul entered into change and development in economic and social areas after conquered by Mehmet the Conqueror in 1453. The people were started to be guided with the new educational institutions opened. The feature of the religious buildings of Istanbul, which had been governed by the Christian Culture for hundreds of years changed, mosques began to be built instead of churches. Muslims and non-Muslim societies started to live together. Economic and political developments taking place in the world also deeply affected the communities. Particularly the industry movements in 18th century made great contribution to the Western World. Ottoman Empire which had remained behind in this sense then began to invest in Istanbul in order to adapt the world's industrial development.

Fig.1: Location map.



Istanbul is an old settlement built on two peninsulas in the Marmara Region. It is one of the most important mega cities of the world which developed on both side of the Bosphorus separating Asia and Europe. Mega city concept was first used officially by the United Nations in 1972. Cities with a population of over 10 million were recognized as mega-cities. Istanbul first became one of the world's mega cities by surpassing 10 million population in 2000.(The

Law No.6360 was published in Official Gazette No: 28489 on 6 December 2012 and entered into force in Turkey. According to the provisions of this Law, the border of the all metropolitan municipalities are the border of the province where they are. Therefore, Istanbul City is all the area within the provincial border.

2. Developing and Changing Istanbul

The first settlement functions were very limited and not varied and effective like today. Agricultural activities were taking place first." Urbanization first started in the industrial societies and became great and factual over the time.

The first Urbanization movements began in the industrial societies of the world and became great and factual over the time. Because of the vitality in it, there was always a movement, incapability and spreading towards the adjacent areas. Cities entering a regular and planned spread movement with what happened achieved success in urbanization. However, when the world considered in general, there have always been problems arising from urbanization, and socio-cultural changes. In general, the common problems encountered showed themselves in a very high level, especially in developing and undeveloped countries. Industry attracting attention as the driving force caused the urbanization movement, together with population growth and migration." (Doğan.2013:239). Mega-cities all over the world began to form over time.

Although the Ottoman Empire closely monitored the developments and changes occurring in the world, it remained behind in terms of implementation, and not many projects have been developed. However, some slow steps were started to be taken in this direction over the time. In this context, The Ottoman, made the majority of its industrial activities in Istanbul. These moves led Istanbul towards a different and future-oriented stream. After the proclamation of the Republic, the investments and services in Istanbul increased even more, and today it has become one of the most important cities in the world.

Table 1: World's Mega Cities

No	City	Country	Population (Million)
1	Tokyo	Japan	37,5
2	Delhi	India	24,7
3	Mexico City (Ciudad de Mexico)	Mexico	21,4
4	New York	USA	20,9
5	Shanghai	China	20,8
6	Sao Paulo	Brazil	20,3
7	Mumbai	India	20
8	Beijing	China	16,6
9	Dhaka	Bangladesh	16
10	Kolkata	India	15
11	Karachi	Pakistan	14,5
12	ISTANBUL	TURKEY	14,377,018
13	Buenos Aires	Argentina	14
14	Los Angeles(LongBeach-Santa Ana	USA	13,9
15	Rio de Janeiro	Brazil	13,2
16	Manila	The Philippines	12,5

Istanbul: The Mega City

17	Moscow	Russia	12
18	Osaka-Kobe	Japan	11,8
19	Lagos	Nigeria	11,6
20	Al-Qahirah (Cairo)	Egypt	11,4
21	Guanzhou- Guangdong	China	11,1
22	Shenzhen	China	10,9
23	Paris	France	10,7

Source: The United Nations (UN)

Istanbul, 12th among the 23 mega cities of the world according to data from the United Nations, was both a target for many great civilizations and the capital of many empires.

In the Ottoman Empire where the industrial development began too late “ In 1800, in Istanbul the places having links to water and sea links were at two sides of the Bosphorus, coasts of The Marmara Sea and the Estuary, İstinye and the Estuary bays which were strategically important locations for the shipyards, and the places having links to railroads were centers such as Küçükçekmece, Yedikule, Zeytinburnu and Bakırköy. These industrial plants such as gashouses providing gas for Dolmabahçe and Beylerbeyi Palaces spread to the regions in the shores of the Bosphorus, the Estuary and the Marmara sea having fertile soil were making different types of industrial manufacturing and for different purposes due to their locations. For example there were shipyards, anchor production plant, Şirket-i Hayriye(a company established for the passenger and cargo transportation in the Bosphorus), Feshane-i Amire(Fez and woolen weaving factory), Cibali Tobacco Factory, brick, clothing and food factories at the coasts of the Golden Horn; production plants in various fields in the regions at the coast of the Bosphorus such as Üsküdar, the Göksu Stream, Beykoz Paşabahçe, Büyükdere, İstinye, Tophane and Beşiktaş; several industrial plants between Yedikule and Bakırköy at the coast of the Marmara sea; a match factory and the Azadlı Gunpowder Factory in Küçükçekmece)” (Emre. 2008:60). Industrial activities were carried out over the time in the regions such as “Topkapı, Zeytinburnu, Halkalı, Bomonti- Feriköy, Rami, Küçükköy, Bayrampaşa, Levent, İstinye, Kâğıthane, Eyüp in the European Side and in Kadıköy, Maltepe, Kurtköy, Kartal, Ümraniye, aşağı-yukarı Dudullu and Üsküdar in the Asian Side. Due to the industrial plants established at the coasts of the bost sides of the Estuary, waste and rubbish islands, arising from the pollution and accumulation emerged in time, formed, the bottom of the sea was covered with the mud and finally due to the oxygen depletion it became impossible for the organisms to live in the Estuary which is known as “the Golden Horn” and was remarkable in terms of tourism.” (Doğan,2013:523). Today, industrial plants have moved to Avcılar, Ambarlı, Yakuplu, Çakmaklı, Kırac, Çatalca, Esenyurt, Hadımköy in the European Side and Ümraniye, Tuzla, Pendik, Sancaktepe, Sultanbeyli in the Asian Side.

That Istanbul, which is an important transportation center, is at a location combining the Asia and the European Continents has been a big factor in its becoming a mega city. In Istanbul, “with the modernization movements started in 19th century, the development of urban areas and the changes in the lifestyles increased the demand for urban transport”. (Sertkaya Doğan,2013:137). Istanbul had always relations with the neighborhood and attracted the neighborhood. Being a manufacturing center, It has been an industrial and commercial center. It continued its development with the population it attracted and the power of communication. The road network spread all over Istanbul like a cobweb, railroads reached particularly to the suburbs and then to Edirne and to Europe on the West and to the different regions of Turkey in the Anatolian side. Metro and tram lines now began to spread in Istanbul, though being late. Istanbul, had been providing air transportation with a single airport has had its second airport. The works for the third airport continues.

The maritime transport network, the date of which is based on the history has been accelerated and the numbers and route diversity have been achieved. In this context, transportation which was revived with both international and domestic lines has been an important factor in economic growth as well.

Changes arising from the rapid developments in the world took place one after the other. In this situation, the functions of Istanbul also diversified. Agricultural activities in Istanbul began to disappear gradually. Istanbul was the center of the capital obtained from the sale of agricultural products and agricultural mechanization. After 1950, with the beginning of the change and the steps taken in Turkey, Istanbul started to gain more importance and enjoyed a rapid rise. Activities in Istanbul, gained great momentum, depending on the specialization and differentiation processes. The city's land use shape changed. Industrial, commercial and residential areas began to be more clear.

Industry developed the service and the quaternary sectors, known as secondary activities along. As the industrial activities increased in Istanbul, the service sector first started to distinguish from the others.

Universities are science centers and also affect the socio-cultural characteristics of the area they are established in. Universities established in Istanbul are the old and well-established ones among the universities established in Turkey. Because of the increasing numbers and their national and international relations, they affected Istanbul more.

The Large masses of rural population began to settle in Istanbul, and therefore the newly residential areas were appeared. "Squatting" was spreading very quickly like immigration together with housing problem in Istanbul which was facing fast migration. In other words, Istanbul's face was changing. In Istanbul, the history of which dates back to very old times, the rural population began to dominate in the newly-formed neighborhoods and districts and accordingly the rural way of life was started to be imposed on the social and cultural life

The socio-cultural structure started to change as Istanbul received additional population. Professional groups increased rapidly and some professional groups gained a large advantage as well. Commercial activities, especially in historic peninsula accelerated and the products manufactured there were being sent to all four sides of the country. However, professions in Karaköy-Taksim-Sisli axis were mainly done for foreign trade purpose. This shows that the commercial nature of the two regions were different from each other. For this reason, we can see the formation of international banks, hotels, restaurants and small scale stocks in the mentioned Karakoy-Taksim-Sisli axis. Thus the import and export of the goods to and from the West was accomplished. The economic activities of this axis revealed the urbanization and being an urban phenomenon there in the socio-cultural context. The offices appeared in the Beyoglu and Sisli Directions was reflecting the growing face of Istanbul as well. The number of houses decreased as the number of the offices increased. Today, the mobility of business hours of this area and subsequently expending central business area ends at the end of business hours and these areas become desolated and deserted. This situation can be monitored more clearly between Hasim İscan Underpass and the end of the peninsula in the historic peninsula

Table-2 The Total Populations of Istanbul(as province) and Turkey in General based on the Census Of Population Periods

Census of Population Year	Total Population of Istanbul Province	Turkey's Total Population	Istanbul / Turkey Rate (%)
1927	794444	13648270	5,82
1935	833599	16158018	5,16
1940	991237	17820950	5,59
1945	1078399	18790174	5,73
1950	1166477	20947188	5,57
1955	1533822	24064763	6,37
1960	1882092	27754820	6,78
1965	2293823	31391421	7,31
1970	3019032	35605176	8,48
1975	3904588	40347719	9,67
1980	4741890	44736957	10,59
1985	5842985	50664458	11,53
1990	7309190	56473035	12,94
2000	11332000	72065000	14,77
2007	12573836	70586256	17,8
2008	12697164	71517100	17,75
2009	12915158	72561312	17,81
2010	13255685	73722988	17,98
2011	13624240	74724269	18,2
2012	13854740	75627384	18,3
2013	14160467	76667864	18,4
2014	14377018	77695904	18,5

Source: DIE (TÜİK) General Census of Populations

When Table 2 is examined, It will be seen that the share of the population of Istanbul has been continuously rising within the population of Turkey. While about 5,82% of Turkey's population were living in Istanbul in 1927, this ratio was 5.57% in 1950, 8.48% in 1970, 12.94% in 1990, 14.77% in 2000, 17.8% in 2007, 17.98% in 2010 and 18.5% in 2014.

The population of Istanbul, which was 680.857 in 1927, began to be expressed in million over the time. Istanbul's population exceeded 1 million in 1945, 2 million in 1965, 3 million in 1970, 5 million in 1985, 7 million in 1990, 10 million in 2000, 11 million in 2007 and 14 million in 2013. Population of Istanbul province which is 14,377,018 in 2014 is closer to 15 million.

Prominent central business areas in leading mega-cities of the world are also extremely important for Istanbul as well. Such that, the central business areas are effective not only in the city itself but also in the country and the world. The communication centers, institutions, bureaucracy, media organizations, complexes, social and cultural associations, educational institutions, accommodation facilities, restaurants, banks, stock exchanges, financial

institutions and service sectors which are located in these areas constitute the heart of the cities, just as in Istanbul. This feature is particularly obvious in the Zincirlikuyu-Maslak axis and Ataşehir and the neighborhood.

Istanbul the population of which increased significantly toward the end of 20th century and which sells more goods both to internal and foreign markets, began to open up to greater production and sales market. The market trade occurring over the time in the areas outside the historical peninsula and Beyoğlu, such as Osmanbey, Zeytinburnu and Merter has led to the creation of other centers in mega city Istanbul.

The developing technology began to destroy the profession of craftsmanship in Istanbul. Profession of craftsmanship was damaged and new apprentices were not been able to be educated, for products manufactured with the machines in the factories were put on the market quickly and accepted at cheaper prices. Many different professions in the buildings in the historical peninsula began to disappear. Within these professions, weavers, knitters, brass-iron smelters, tailors, carpenters, goldsmiths and so on can be mentioned.

The service sector was mainly in the historical peninsula in Istanbul in the past. In Istanbul which developed and became a mega-city over the time, the service sectors multiplied by increasing in the industrial areas, residential areas and central business areas.

With changes and developments occurring, social weakness seen all over the world was started to be seen in Istanbul as well. The coffee shops found in the neighborhoods started to lose their characteristics and people began to alienate. Again, due to the apartment life which alienates people, joy and sorrow which had been used to be shared in the past started not to be shared anymore. "The neighborhoods in Istanbul were places where people who were living in a great solidarity were in the sense of common feelings, thoughts and unity and where the joy, pain, success and particularly risks such as fire risks were shared." (Göney-Bayartan,2010:550). Again, today, the children have started to live in their flats in the apartments dependent on technology or in the playgrounds isolated from the outer world instead of playing in the street and are fed irregularly.

Vefa, Zeyrek and Süleymaniye districts having wooden mansions with garden where the bureaucrats lived and were known for their socio-cultural characteristics, were the districts the urban population lived in.

After 1850s, public agency areas were created in a section of Sirkeci, Beyazıt, Gedikpaşa and Sultanahmet where the bureaucrats living in the neighborhood worked in the historical peninsula. Many service building such as educational institutions, courts, municipal services buildings, land surveying offices and finance offices were constructed in these areas.

Residential areas began to spread to a wider area due to the increasing population. Thus, along with the commercial offices, residential increased as well in Tarlabaşı, Beyoğlu, Harbiye and Nişantaşı. The residential areas began to spread from the historical peninsula towards the neighborhood areas. Zeytinburnu, Alibeyköy, Mahmutbey and Şirinevler attracted attention in the European Side. As industrial activities increased, Paşabahçe, Dudullu and Maltepe came into prominence in this process.

Because of the population pressure in Istanbul, 1-3 storey houses were began to be replaced by vertically oriented multi-storey apartment buildings. On the other hand, the new residential areas where mainly slutter houses were built started to spread very rapidly. Thus, classes determined according to income, culture, education and social life started to shape. People having better economic conditions have moved away from the central parts of the city. Yeşilköy, Etiler, Levent, Emirgan, Yeniköy, Zekeriyaköy and Bahçeşehir in the European Side, Kadıköy, Erenköy, Çekmeköy, Ataşehir in the Asian Side and both coasts of the Bosphorus started to attract more demand.

3. Conclusion

Population which is effective Istanbul's being a mega city is also a factor forming its number one problem at the same time. Depending on the density and crowding, together with major problems such as environmental, noise, image and light pollutions, other problems such as especially squatters and unplanned urbanization at first and migration, infrastructure, transportation, unemployment, health, education, socio-cultural degeneration and expensive life are experienced.

In Istanbul which has been growing and developing over the time, the natural environment has been seriously damaged. Residential, commercial buildings, industrial facilities, roads, airports, shopping centers, educational facilities, health complexes, service areas has led to the destruction of green areas.

4. References

- Doğan, M., 2013, " The Industrialization Process in Istanbul from past to the Present and its 10-year development", Marmara Journal of Geography, Issue 27, pp 511-550, Istanbul.
- Doğan, M., 2013, "Urbanization in Turkey: Metropolitan Cities and Changing Socio-Economic Structure in Urbanization Process", The Book Presented to Prof.Dr. Süha Göney, pp 137-164, Yazın Basın Yayıncılık, İstanbul. pp 511-550, İstanbul.
- Emre, Ş. B., 2008, The Analysis of the Refunctioning of Industrialization and Industrial Buildings on the Examples from Istanbul, Mimar Sinan Fine Arts University Institute of Science(Unpublished Master's Thesis), Istanbul
- Göney, S.-Bayartan, M., 2010, "The Assigned And Vanished Geography-Istanbul And NearAround", Capital of Culture Istanbul, (Ed: F. Başar), Turkish Cultural Service Foundation, 548-559 pp, Istanbul.
- Sertkaya Doğan, Ö., 2013,"Role and Importance of Maritime Lines for the Transportation in Istanbul", The Book Presented to Prof.Dr. Süha Göney, pp 137-164, Yazın Basın Yayıncılık, İstanbul.

The Interaction of the Design Studios with the Professional Life in Interior Architecture/Design

Murat Özdamar, Betül Bilge

1. Introduction

All through the educational period of Interior Architecture/ Design, the “designing courses” has the most important place, as, both the educational and the professional phases of Interior Architecture/Design mainly begins with the designing procedure which is formed by the abstract decisions and conceptions of them.

The designing ways of the students is the most important point during their educational period. But the designing characteristics, ways or the procedures of the students is not the only need of them for their professional life. That is why, during the educational period, we have to be dealing with the professional life for the students in order to show the forthcoming life that they will be facing with. Beside the designing procedures of the students, we have to make them ready for the professional life of them.

As IFI (International Federation of Interior Architects / Designers) which was founded in 1963 describes that;

“Theoretical, applied, and innate knowledge are fundamental to the practice of interior design and interior architecture.”

within IFI Interiors Declaration (2011).

But we have to know how to use it, and in order to know it, we can be learning it during our educational period, as there is a Latin sentence “verum ipsum factum” that is inscribed above the entry doors of Venice School of Architecture. In English it means “understanding arises through making.” (McCarter 2008). This sentence or aphorism causes an exposing of a question, “what does the interior architects/designers make?”

Firstly we make the interior architectural/design of the projects, after those; secondly the presentational and technical drawings and thirdly for some of the Interior architects/designers; they “make” the construction of their own or his or her colleagues’ projects.

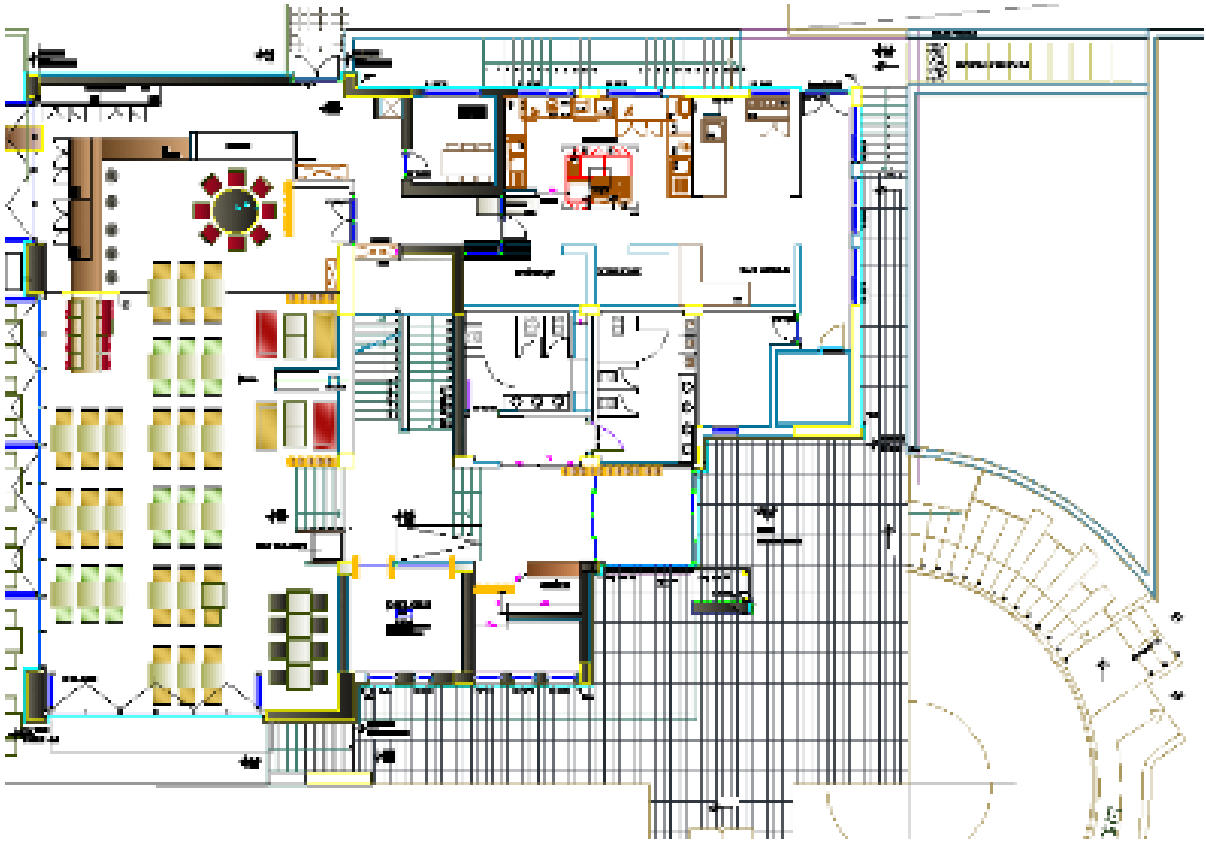


Figure 1: Plan Drawing, 2009
Photo: Murat Özdamar



Figure 2: General View 1, 2009
Photo: Murat Özdamar



Figure 3: General View 2, 2009
Photo: Murat Özdamar

That is why we have two different decisions as; Matthew Crawford discusses the conflict between ‘knowing that’ and ‘knowing how’ within his book “Shop Class as Soulcraft”. According to him, “knowing that” has a really important role which we have during the educational period, but also he states that “knowing how” should be done and understood

during the same period in order to learn about the construction of the designs of the students (Crawford, 2010). Also Kahvecioglu (2007) suggests that the complex structure of design education forces the use of creative management strategies or organizational processes, both individually and in groups, which is a real need for the candidates of professional interior architects/designers.

2. The “Project”

Snodgrass, discusses the correlation between the theoretical and practical for the educational period of designing. Firstly the terms “theory” and “practice” were examined by the correlation with the Greek origins of the words. The word “theory” in Greek “*episteme*” means, the knowledge that pre-exists; and the word “practice” in Greek “*techne*” means making something according to the episteme. (2000), so firstly we have to teach and show about the differences between the theory and the practice to the students.

Through the “Studio Sessions” of Interior Architecture/Design educational period/life, the students are dealing with many functional subjects about the main design problem, where they have to be able to decide all about them in order to complete/finish their projects; the historical background of the profession, the structural, mechanical, constructional and attractional knowledge, the presentational tools or ways, drawings and drawing techniques and computerized showing ways (Ertek, 2014).

But generally during that period, they do not enforced for the constructional decisions of the projects. They mainly deal about the theoretical part of their projects, The sentence in Latin words at the beginning part of the work here comes again, “understanding arises through making”, so that is why we call them “apprentice” when they are new graduated. So we have to make them experienced for those knowledge during their educational period.

In order to make them know about such things with their projects, the chosen project types and size of them should be cared;

Firstly, in order to teach about something, the content of the project is much more important than the size of it. The big size of the project is not the applicable way of teaching for interior architecture/design. Of course, there will be big projects within their professional life, but the students of us should learn about the problem solving methods or wright designing ways. By that way it will not be important whether the size of the project is big or small as the answer for the question or the reaction for the problem will be same.

Secondly, after having the general layout, the profession Interior Architecture/Design mainly deals about the “Details” within a project, and in order to be dealt with the details they have to know about the materials and constructional equipment and ways for those. And to know about those, the theoretical knowledge will not be enough. Because of that, there has to be practical education during the projects of them. By that way the students will be able to design by deciding about the materials or ways according to their interior architectural/design projects.

This means that, the project is not a drawing only, it has many branches. But for a project we have firstly 5 questions, those are;

- For what?
- Where?
- For whom?
- How?
- When?

But when we are asking for those questions for designing a project, we meet 3 main points apart from those, especially beginning by the educational period of the profession;

- Function, functionality,
- Aesthetics,
- Durability,

of the design. So in order to answer for those headlines the students have to answer those by the beginning of their educational period in the “design courses”.

3. Educational Access

The educational programs should be used in order to show the students the need for the professional needs especially for the materials those will be used for the projects.

When we search for the academic programs of the schools, we meet with the lessons those are getting on especially with theoretical ways, the students may see the photographs and the drawings of the materials, but that has to be done in a much more active way by getting on with the materials itself.

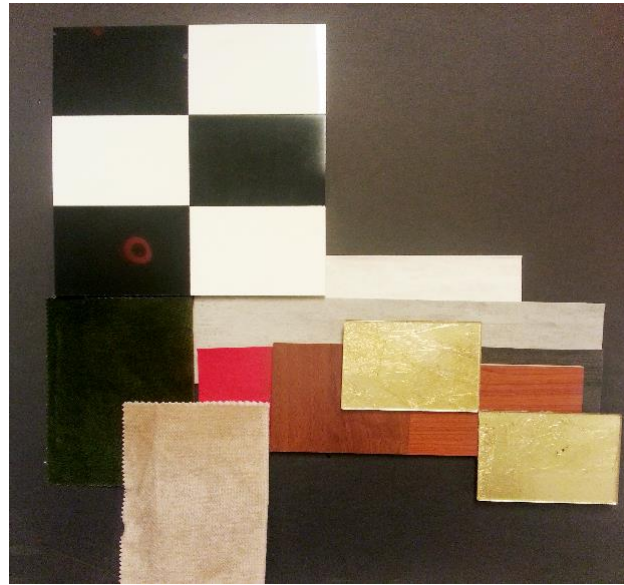
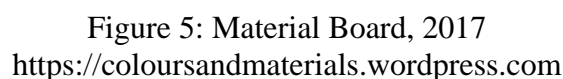


Figure 4: Material Board, 2015

Photo: Murat Özdamar



So this way of educational approach will make a new kind of program which will make the students ready for a new trend within the building industry; “Design-built”. It is a way for managing all the things with integrating a business from start to finish, as can be done by our students in the future, to provide the clients with a fully designed and totally integrated interior architecture/design projects (Haddad, 2014).

“The students of Interior Architecture/Design has to have the constructional and material data and knowledge in a living way”

The examinations by searching for the sources on the subjects are done,
The observations are done,
The conduct interviews,
And the surveys are done with the students and the professionals of Interior
Architecture/Design.

Mainly the surveying method was used/done by filling out the surveys, but during the surveying method it is seen that the student respondents did not like to answer the whole questions during the questionnaire or the survey. That is why, some main questions were chosen in order to ask, and their scope were reduced in order to get the elegant and pure answers.

The hypothesis was mainly related with the “interior architect/design students” and “interior architects/designers”. The surveys were done with 34 students and 21 interior architects/designers. Identical questions were asked during the survey in order to get the real decisions of them and to get the accurate inference.

6. Research Results

During the research, the problems about the new Interior Architect/Designer candidate format was asked to the Professional ones, and the main answers about the questions are;

- The problem of not dealing with the details of the designs,
- The problem of not knowing about the materials,
- The problem of timidity or hesitating.

And according to the students;

- The problem of time scheduling with the projects,
- The problem of cannot finding all the related things on internet,
- The problem of “hard to find the materials”.

Generally the students want the knowledge directly prepared for them and want to get it without any occupation.

The main research way for them is “internet”, and they want to learn everything about the subject by getting on with those internet sites.

“Hesitating to ask for something”, is another problem that both sides are approving. So it has to be analysed.

According to the questions and the answers with the Interior Architects/Designers and the students of the profession; the main problem is seen with the correlation of the professional life with the education.

7. Conclusion

All the things that we get through is for the development of our professions, that is why we have to be correlating the two sides of the profession.

In order to get them together, the main solution will be by having courses which can be getting them together, but the new question arises there;

“do we have to give them the chance of having the professional, technical education?”;

or

“do we have to wait for them in order to find their own answers or ways by finding those professionals?”

That is really a hard question. But according to the elderly ones “direct observation of something or to be participating within an event” is the main idea for learning and understanding.

So in today's conditions we have to be correlating with both sides within the educational part that we have; and get them together in a consistent way in order to have developing profession of Interior Architecture/Design within the future.

References

- Ciravoglu, A. (2003). Mimari Tasarım Eğitiminde Formel ve Enformel Çalışmalar Üzerine (Formal and Informal Studies in Architectural Design Education). *Yapı*, 257, 43-47.
- Crawford, Matthew B. 2010. *Shop Class as Soulcraft: An Inquiry into the Value of Work*. New York: Penguin Books.
- Cross, N. (2006), *Designerly ways of knowing*. London:Springer-Verlag.
- Design-built. (199999). Retrieved at January 20, 2017, from <https://en.wikipedia.org/wiki/Design%E2%80%93build>
- Ertek, H., (2014). “İçmimarlık Eğitiminde Ekolleşme”. 1. Uluslararası İçmimarlık Eğitimi Sempozyumu. Hacettepe Üniversitesi, Türkiye.
- Haddad, R. (2014). “Research and Methodology for Interior Designers.” *Social and Behavioral Sciences* 122, 283 – 291.
- IFI, International Federation of Interior Architects (2011). *IFI Interiors Declaration*. Retrieved at January 19, 2017, from <http://www.ifiworld.org/#Homepage>.
- Kahvecioglu Paker, N. (2007). Architectural design studio organization and creativity, *ITU A/Z*, 4/2, 6-26.
- McCarter, R. 2008. “The Thought of Construction.” In *Ghost: Building an Architectural Vision*, by Bryan MacKay-Lyon, 190-212. New York: Princeton Architectural Press.
- Schön, D.A.(1987). *Educating the reflective practitioner: toward a new design for teaching and learning in the professions*. San Fransisco: Jossey-Bass.
- Schwartz, C. (2013). Drawing Conclusions: A Student's Introduction to the Realities of Their Designs, *Design Principles and Practices: An International Journal – Annual Review*, 7, 19-28. Retrieved at June 11, 2016, from <http://ijgar.cgpublisher.com/product/pub.282/prod.14>.
- Snodgrass, A. (2000). “On Theorizing Architectural Education.” *Architectural Theory Review* 5, no. 2 (November): 89-93.

A Study on the Factors Affecting Land Use: The Case of Rize Province

Neslihan Yilmaz

1. Introduction

The agricultural sector has a different position and importance in almost every country. Agriculture preserves its characteristics of being an economic and social sector by meeting the need for the nutrients, and creating employment both in itself and associated sectors, and contributing to GDP, and providing resources to other sectors.

Given the structure of the agricultural sector, the components related to the land use appear to be the size and fragmentation of agricultural lands, the ownership of the land and other types of land tenure in the enterprises. In the literature review conducted for the study, it was found that there are no researches concerning agricultural land use in Rize province, selected as the study area. The topography of the city and the scattered settlements of the agricultural enterprises can be said to be quite effective in this case.

Rize, which holds extremely inclined and uneven surface shapes of the Eastern Black Sea Region, where it is located, has the narrowest agriculture lands and the lowest average agricultural enterprise size of 1,2 ha according to the data from the last agricultural census in Turkey conducted in 2001. In terms of agricultural sector, the current status in the region shows dependence on tea cultivation, which covers more than 90 % of the agricultural lands in the region(Anonymous 2014). Tea producer status is attained based on ownership of a tea producer card in the agricultural enterprises. As a matter of fact, although there is one tea production license which can be obtained against a deed representing ownership of the land in the agricultural enterprises of the region, there are usually more than one tea producer cards. In addition, there is widespread migration from rural areas across the province.

Lastly, through the decision of Council of Ministers numbered 93/5096, the licenses of the licensed tea gardens in Rize were renewed by determining their size, and unlicensed tea cultivation fields created until that period were granted license, and creating new tea cultivation fields was prohibited (Karakas, 1994). This means that expansion in the size of tea cultivation fields was prohibited in 1994 and onwards.

The purpose of this study is to investigate the size of the land managed, and the type of land tenure other than ownership, and land fragmentation factors in Rize agricultural enterprises. As a result of the study, an analysis will be made whether or not said factors aggravate the problems of agricultural land use in the province.

2. Material and Method

2.1. Material

The material of the study contains the "primary data" which were obtained from face to face interviews during 2012-2013 period in Central, Findikli and Hemsin Districts of Rize, and the "secondary data" which were obtained from relevant publications.

The interviews were conducted with agricultural producers, who are the landowners, and the village mukhtars. Producer interviews were carried out in town centers of Central, Findikli and Hemsin Districts of Rize and their 12 villages, which were selected. In addition to producer interviews, interviews were also carried out with mukhtars in these 12 villages of the Districts.

2.2. Method

2.2.1. The Selection of the Region Surveyed

Rize is divided into two main sub-regions in the Agriculture Master Plan based on the weight of agricultural activity. The first sub-region covers coastal districts, while the second covers the districts in the hinterland which have high altitudes and mountainous parts (Anonymous 2015). The districts and their villages which characterize the agricultural structure and socioeconomic features of Rize in terms of coastal region and hinterland were deliberately selected. The survey included the town center of Rize Central District and its 2 villages (Ambarlik and Kucukcayir), and town center of Findikli District and its 4 villages (Sumer, Caglayan, Arili and Ihlamurlu) as coastal areas, and town center of Hemsin District and its 6 villages (Levent, Yaltkaya, Nurluca, Akyamac, Hilal and Kantarli) as hinterland. The reason for adding the district centers to the survey area is due to the fact that there are also large numbers of producers in the district centers.

In the selection of districts, the criteria of 1st and 2nd sub-regions that could be represented in terms of production pattern, the geographic and socioeconomic circumstances were taken into consideration besides dense population and the number of producers. One of the reasons for selection of Findikli District in the first sub-region comes from the fact that it has the largest hazelnut production fields, which is the most common agricultural crop in Rize after tea. Additionally, one of the factors taken into consideration in the selection of Hemsin District is the presence of organic tea cultivation. The criteria taken into account in selection of the villages belonging to the districts were whether these villages had the population and number of producers more than average of the districts, and whether they represented the districts in terms of production pattern, geographic and socioeconomic circumstances. Selection of the villages in the districts in different numbers is related to the number of producers in the villages. The number of villages where the study was carried out was higher in the places where the producer density was insufficient.

2.2.2. Selection of Subjects

Starting from the fact that almost all of the agricultural producers in the region are tea producers, official records of the Tea Institution were relied on for the selection of producers to be surveyed within the scope of the research. Accordingly, a population of 7000 producers from the town centers of Central District, Findikli and Hemsin Districts and the villages in these districts was created. Based on this population, the sample size was set as 220 by using Simple Random Sampling Method Based on Ratio Averages (Miran 2003) based on confidence level of 95 % and error margin of 0,065.

The histogram and normality graph of the tea cultivation land of 7.000 tea producers determined is given in Figure 1.

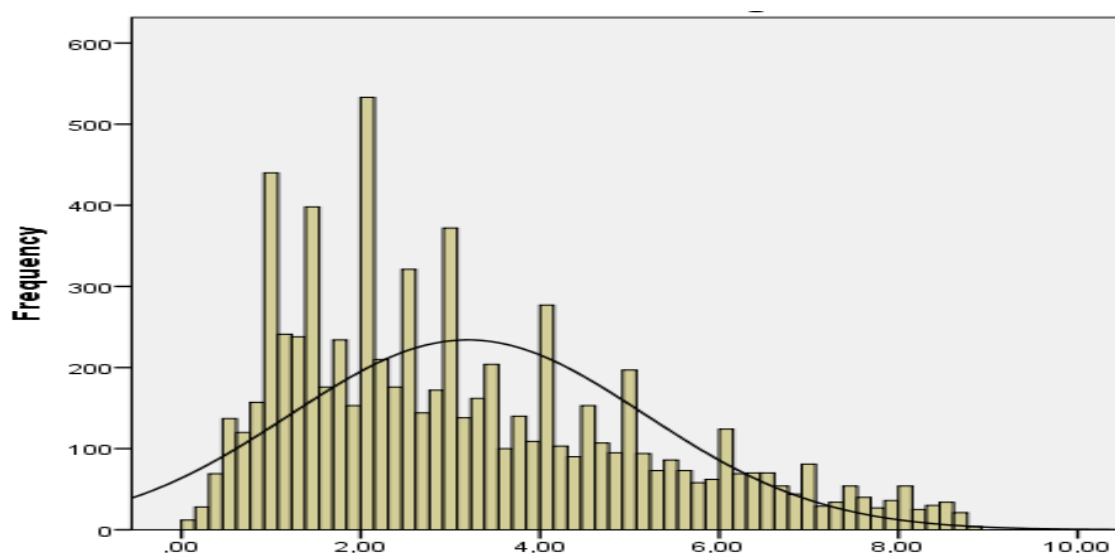


Figure 1. Histogram and normality graph of the population related to the tea field

As Figure 1 shows, the population is divided into 3 layers: 0-2 decares, 2-4 decares and more than 4 decares. Based on the weight of the each layer within the population, the number of producers on whom the survey would be conducted from each layer was determined as follows.

Layer	Share within population (%)	Number of survey
I	22	49
II	25	56
III	53	115
Total	100	220

The proportional distribution of 220 interviews carried out within scope of 3 land layers related with the district centers and villages was provided.

Frequency distribution of data obtained through surveys carried out in the study was tabulated and interpreted.

3. Findings of the Research

It is important to investigate the issues regarding to the size of enterprises in agricultural land use, and land fragmentation and corresponding effects, and the use of different land tenure types other than land ownership in Rize within the framework of the study. These factors were investigated through interviews with mukhtars and producers included in the study, and the findings obtained are explained below.

It was found that the average size of the land or average size of the enterprise, owned and managed by the interviewed producers and their family in the region was 5 decares. It was further found that this resulting size was split in 4 parcels on average basis. Existence of such a high number of parcels arises from topography of the land.

As already referred in "Introduction" part, the expansion of tea production fields, which form 90% of the agricultural lands in the region, has been prohibited since 1994. In this context, the changes in the size of the land managed by the producers since 1994 period and associated reasons are important. As clear from Table 1, more than 70 % of the producers interviewed

within scope of the study stated that there has been no change in the size of the land they have managed during this period.

Table 1. The changes in the size of land managed by the producers since 1994 and associated reasons

		Number of Producer	%
Change in the size of land managed	Increased	15	6.8
	Decreased	46	20.9
	Not Changed	159	72.3
	Total	220	100.0
The impact of opening new lands in forest areas on the increase of the land size managed	Yes	5	33.3
	No	10	66.7
	Total	15	100.0
The impact of migration on the change in the size of land managed	Yes	7	11.5
	No	54	88.5
	Total	61	100.0

One third of the respondents, who expressed the increase in the size of agricultural land they manage, stated that they opened new lands in forest areas despite the ban. A relatively low rate of the producers whose land size changed stated that the change was due to migration from the region.

Another reason cited by the producers for the decrease in the size of land they manage is completion of cadastral works in Rize. By the completion of cadastral works in the region, the lands on which producers had grown tea and other plants such as apple, pear and hazelnut remained in the forest area, and consequently they were dispossessed of these lands.

During the interviews held with the producers, it was stated that agricultural land fragmentation is widespread and has been going on in the region since previous times until now. As a matter of fact, agricultural land fragmentation took place due to the inheritance division for more than two thirds of the surveyed producers' family enterprises, and the lands under these enterprises were divided into 5 pieces on average.

Table 2 looks into an approach where the right to use entire family land is given to one person provided that the corresponding allowance is paid to other family members in order to prevent the division through inheritance.

Table 2. The approach where the right to use entire family land is given to one person provided that the corresponding allowance is paid to other family members in order to prevent the division through inheritance

		Number of Producers	%
The approach where the right to use entire family land is given to one person	I approve	119	54.1
	I disapprove	69	31.4
	I am undecided	32	14.5
	Total	220	100.0

Among the producers surveyed, the percentages of the ones who approved, disapproved and were undecided are almost equal. In the field study, it was determined that the producers

consider land as a forward-looking financial security or investment tool, and they have the traditional thought towards preservation of family land. Furthermore, whether or not they consider migrating from the region does not create significant differences between the views in question. The reason why some producers who consider migration still want to keep their inheritance shares from family land stems from the idea that they may return in the future or continue farming.

The land fragmentation in Rize province is not solely due to inheritance division but also due to the fact that the owner of land can divide it among other individuals giving them producer status with tea producer cards. The reason for this case is that the ownership of a tea producer card provides opportunity to be registered in the social insurance system through agricultural activity. In this sense, even if the land fragmentation through legacy division is prevented, it is still likely to continue by way of tea producer cards ownership.

In the interviews carried out with agricultural producers and mukhtars, it was determined that except the type of land tenure based on ownership, there is only one land tenure type depending on the execution of sharecropping activities in the region, and the sharecroppers are generally provided from somewhere else outside Rize. The direction of change in the number of sharecroppers, which can be considered as an indicator of land tenure type change, was analyzed through interviews conducted with the mukhtars of villages as a part of this study concerning 1994 and afterwards. As mentioned, the expansion of tea cultivation fields, which cover almost all of the provincial agricultural lands, was also prohibited in 1994 and onwards. It was found that the number of sharecroppers increased in the relevant villages of Findikli District, and did not change in Kucukcayir Village, and increased in Ambarlik Village of Central District, and decreased in Levent and Hilal Villages of Hemsin District, and did not change in other four villages.

The factors affecting the increase in the number of sharecroppers were determined to be lack of labor in the households of land owners who continue to reside in the region, and land owner disability to cultivate land due to old age or disease, and migration from the region. The mukhtars also added that whether or not the sharecroppers are individuals who are land owners' relatives could be effective in the increase. Although land fragmentation continues in the region and consequently the revenue obtained from agricultural activity is becoming less, land owners' relatives can agree to cultivate these small sized lands as sharecroppers. However, this point was only true for Ambarlik village. Although there are generally no sharecroppers coming from outside in the villages of Hemsin District, as the case in Ambarlik, revenue level in these places being lower than other Districts caused by the loss of efficiency owing to organic agriculture prevents the increase, and even the number of sharecroppers decreases in Levent and Hilal villages.

The impacts of land fragmentation on agricultural activity, which are important for this research, were investigated through interviews conducted with the mukhtars of villages as a part of the study. The mukhtars stated that the continuation of division in agricultural lands caused by inheritance division or tea producer cards leads to partial or full cease of operation/emptying of agricultural enterprises in the region.

In the interviews conducted with the mukhtars, it was found that agricultural lands of the region shrank to the extent at which it could not provide sufficient income so much so that it could only meet the operational costs, and the situation leads to partial or full cease of operation/emptying of agricultural enterprises. Other reasons for partial or full cease of operation/emptying of agricultural enterprises were disputes among shareholders in case of joint deeds on lands, and replacement of agricultural activity with non-agricultural ones, and inability to find sharecropper due to less income derived from small lands. Moreover, mukhtars added that migration took place due to livelihood difficulties in the producer families whose

agricultural lands were fragmented, and the decrease in agricultural labor in these households contributed to abandonment or partial non-cultivation of the lands.

Investigation into the relationship between fragmentation and productivity level as another impact of land fragmentation on agriculture in the region showed that more than half of the mukhtars expressed that productivity level decreases in the fragmented lands. The main causes for the decline in productivity level were stated as follows: The producers whose income dropped due to a fragmentation do not use adequate input, and they perform deficient land and crop care applications, and the inadequate land and crop care continues in case of delivery of these lands to others for cultivation. Another reason specified by the mukhtars is that the migrating population, including the producers forced to migration due to land fragmentation in their familial agricultural enterprises, cannot remain in the region to be able to resume agricultural activities.

4. Conclusion

The aim of this study is to investigate factors influencing the use of agricultural lands in Rize province and make analysis on whether the findings relating to these factors will aggravate the problems of the province's agricultural land use. In the study area, which has Turkey's smallest agricultural lands due to geographical reasons, the size of land managed under agricultural enterprises, land fragmentation, perspectives of the farmers to hand over family agricultural lands to only one person in order to prevent fragmentation, and different land tenure types gain great importance.

Land size of agricultural enterprises in district centers and villages representing Rize was found to be 5 decares and divided into 4 average parcels. This shows that the average agricultural enterprise size of the province which was found to be 12 decares according to the last 2001 agricultural census has radically shrunk. In fact, fragmentation of agricultural lands by both inheritance and tea producer cards resumes in the region. In addition, the producers who declared that their land size has shrunk after 1994 pointed cadastral works as the most important reason. However, the ongoing practice of clearing forest area to open land in the region makes this situation as expected.

The continuing fragmentation of land in the study area makes it necessary to transfer family lands to a single person in order to prevent the division of family enterprise. The approach to give the right relating to use of entire family land to only one family member is not welcomed by the producers interviewed despite the compensation to be paid. Producers see the land as a financial security that can be converted into money in the future, when necessary. In addition, the traditional idea relating to preservation of family land and maintaining connection with the region being only possible by means of keeping land in case of migration seems to prevail. With respect to the agricultural land fragmentation by way of tea producer cards, the fact that the tea producer card ownership provides opportunity to be registered in the social security system through agricultural activities comes to the forefront.

The effects of land fragmentation on agricultural activities are crucial for the future of agriculture in the province. In order to reflect the general view in the research area, interviews were conducted with mukhtars on this subject. It was found that the continuation of land fragmentation by means of inheritance division or tea producer cards caused partial or full cease of operation/emptying of the agricultural enterprises. This is caused by various issues such as excessively decreasing income derived from fragmented lands (especially lands smaller than 5 decares), and the disputes between shareholders in case of joint deed where there are more than one shares on the same land, and the producers' shift to non-agricultural work fields due to having decreased agricultural income. In the event that the lands where income level declines as a result of fragmentation are managed, due land and crop care is not provided.

The fact that agricultural producers begin to use other types of land tenure instead of the type based on ownership is among the factors reflecting a change in the use of agricultural lands. Apart from the type of land tenure based on ownership, it was found that there is only one type of land tenure depending on the execution of sharecropping activities in research area, and majority of the sharecroppers come from somewhere else outside Rize. In order to reflect a general view of land tenure type change in the region, interviews were conducted with mukhtars, and the period covering 1994 and onwards, during which expansion of tea cultivation areas is banned, was taken into consideration.

As a result of the interviews conducted with mukhtars, it was observed that the number of sharecroppers mostly increased during 1994 and later period in the villages examined. This was caused due to the fact that the producer families were experiencing shortage of agricultural labor. Due to ongoing land fragmentation in the region, the lands which shrank to a large extent and thus failed to provide enough income could only be cultivated by the land owners' relatives who agreed to work as sharecroppers, which prevented these lands from being desolate. However, this approach led increased number of sharecroppers only for Ambarlik village. In fact, mukhtars noted that the lands which generate insufficient income are tried to be given to sharecroppers who, being profit-driven and coming from somewhere else outside Rize, reject such a proposal.

According to the above mentioned points, prevention of land fragmentation in the agricultural enterprises and ensuring the use of agricultural lands by their owners or the owners' relatives seem to be effective factors in not leaving these lands uncultivated. Preventing the lands from being no longer agricultural lands in the region, which has the narrowest agricultural lands across Turkey, is of considerable importance. Since fragmentation continues through tea producer cards, legislative arrangements aiming to prevent land division through inheritance division will not be effective. In this context, legislative arrangements limiting the number of tea producer cards in agricultural households depending on the size of the land also gains importance. The expansion of land tenure type relating to sharecropping in the region and furthermore, providing the majority of sharecroppers from somewhere else outside mean that producers will quit engaging in agricultural activity.

Rize shows that the continuity of agricultural production becomes dependent on external factors. In order to solve this problem, land owners and their relatives or at least the local people need to be encouraged to cultivate the agricultural lands. Legislative arrangements towards improving agricultural income will be useful to encourage agricultural employment in the region. Consequently, improvement of agricultural income will provide cultivation of the agricultural lands besides giving them proper care.

5. References

- Turkish Statistical Institute. (2014). Agricultural statistics. Retrieved from <http://tuikapp.tuik.gov.tr/bitkiselapp/bitkisel.zul>
- Turkish Food Agriculture and Livestock Ministry. (2015). Province master plan records. Retrieved from <http://www.tarim.gov.tr/Konular/Plan-Program-Ve-Faaliyet-Raporlari/II-Ve-Bolge-Master-Planlari>
- Açıl, A.F. 1957. Türkiye Çay İşletmeleri. Ankara: Ankara üniversitesi Ziraat Fakültesi Yayınları.
- Kaptangil, K. 1992. Çay Tarımının Ülkemizdeki Sosyo- Ekonomik Etkileri ve Değerlendirilmesi. Rize: Çaykur Yayınları.
- Karakaş A.A. (1994). Rize ili Merkez İlçede Ortapazar Çay Fabrikası bölgesinde çay üreticilerinin sosyo-ekonomik yapısı. (Doktora Tezi). Ankara Üniversitesi, Türkiye.
- Saklı, A. R. 2008. Türk Çayının Dünü ve Bugünü. Rize: Kızılkulesi Yayınevi.