ECLAS European Council of Landscape Architecture Schools
Istanbul Technical University, Department of Landscape Architecture

27TH ECLAS CONFERENCE IN ISTANBUL
29 SEPTEMBER-2 OCTOBER, 2010

"CULTURAL LANDSCAPE"

CONFERENCE PROCEEDINGS

Istanbul 2010
Taşkışla



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Schools



ITU
Landscape Architecture Department

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Editors
Ahmet Cengiz YILDIZCI, Yasin Çağatay SEÇKİN, Gülşen GÜLER

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CULTURAL LANDSCAPE

Editors
Ahmet Cengiz YILDIZCI
Yasin Çağatay SEÇKİN
Gülşen GÜLER

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Opening Remarks by the Rector of Istanbul Technical University



Distinguished Professors, Colleagues and Guests,

Good Morning.

On behalf of 2,200 faculty members and 25,000 students, it is a pleasure to welcome you to Istanbul Technical University, for the 27th European Council of Landscape Architecture Schools Conference on Cultural Landscape. I am certain the dynamic discussions awaiting you the next few days will make this event a most enlightening one.

In our rapidly globalizing world, ITU firmly maintains a leading position in science and technology as a pioneer through the ages. Over the course of these past 2 years, we have proudly initiated visionary reforms within the University: Changes regarded as an exemplary model for other Turkish Universities.

The Istanbul Technical University, established in 1773, is one of the oldest and largest Technical Universities in the region, maintaining a strong tradition of excellence in education and research. A global awareness of the necessity and importance of quality in education is exemplified with our ABET certificate of equivalency in 21 engineering programs. We are currently preparing for the renewal and full accreditation in 2010 for 24 programs.

ITU's Technopark is the leading technopark in the Country, hosting more than 70 national and international corporations covering a wide spectrum of science and technology. These corporations, the most able groups in our Country, provide the most valuable and largest number of patents which define the future of scientific developments.

The Istanbul Technical University is an institution of higher education that is celebrating its 237th academic year – a year that will be remembered by both students and faculty members. The University Senate has approved an addition and change to the traditional Turkish language of instruction with 30 percent English courses, new degree programs taught entirely in English. This Fall, we will welcome students into these new programs.

Today, we are gathered to address one of the major assets of our society: cultural landscapes. Increased globalization has resulted in remarkable cultural and natural landscape changes, which, in turn, have led to challenges in many areas affecting our society. The discussions that will take place over the course of the next few days are critical, and will assist educators and policy makers all over the world, for the future.

I wish you a fruitful conference and invite you to enjoy the cultural and historical aspects of the beautiful city of Istanbul, the 2010 European Capital of Culture.

Thank you.

Prof. Dr. Muhammed Şahin
Rector

Welcome message from the Dean of Faculty of Architecture (ITU)



The Faculty of Architecture Istanbul Technical University is very pleased to host “ECLAS -“The European Council of Landscape Architecture Schools” 2010 İstanbul Conference: Cultural Landscapes” in its building Taşkışla.

Istanbul Technical University Faculty of Architecture has 5 departments in undergraduate level and 16 master degree and 7 PhD programs in different graduate schools of ITU. Architecture, Urban and Regional Planning, Industrial Product Design, Interior Architecture, Landscape Architecture are the four years undergraduate programs. Architecture program was evaluated as “substantially equivalent” by NAAB for 6 years in 2007. The faculty members of Landscape Architecture Department have courses and supervise thesis in two master degree programs. These are Landscape Architecture and Interdisciplinary Urban Design master degree programs. The doctorate program on Landscape Architecture serves to educate new researchers and academicians in the area. Professional landscape architecture education in Turkey organized under four different types of school; forestry, agriculture, architecture and fine arts. The Landscape Architecture Department of ITU was the first department which was established in a school of architecture at 2002. The department has cooperation with of architecture and urban and regional planning departments of ITU; also with other landscape architecture departments of European Countries and USA to exchange students and making double major programs.

Culture is defined as all products of mankind by anthropologists. Therefore cultural landscape means the landscape which "..represent the combined work of nature and of man." The term "cultural landscape" often reflects specific techniques of sustainable land-use, considering the characteristics and limits of the natural environment they are established in, and a specific spiritual relation to nature. There are many traditional and very well known cultural landscape sites in Turkey, like, Capadocia, Hasankeyf, Pamukkale, Amasya and Mardin. ITU Faculty of Architecture always support to scientific meetings which focused on conservation and sustainability of cultural landscapes. Istanbul 2008 International Landscape Architecture Symposium was organized by the Chamber of Landscape Architects and hosted by ITU Faculty of Architecture. The main theme of the symposium was "Changes in Cultural Landscapes". Some of the sites which defined as cultural landscapes were worked in the meeting of ICOMOS Turkey 18th World Monuments and Historical Sites Day at 2007 again hosted by ITU Faculty of Architecture. The panel of meeting had been focused on the subjects of "Cultural Landscape of Istanbul and Planning", "Planning and Cultural Landscape of Capadocia" and "Cultural Landscape and its Conservation of Hasankeyf Region". I believe that all characteristics, problems and opportunities of cultural landscapes of Turkey and the other places in the World are going to be discussed in the conference and will be reached sustainable results.

It is a great pleasure for us to host ECLAS -"The European Council of Landscape Architecture Schools" Conference and its distinguished participants in ITU Faculty of Architecture especially in 2010 as the year of European Cultural Capital for Istanbul.

Prof. Dr. Orhan Hacıhasanoğlu
Dean ITU Faculty of Architecture

Message from the President of ECLAS



The 2010 conference of ECLAS (European Council of Landscape Architecture Schools) aims to support the debate among students, teachers, researchers and practitioners on different European perspectives about “Cultural Landscapes”. Landscapes are, by definition of the ELC (European Landscape Convention), the result of the “action and interaction of natural and/or human factors”. Conference contributions focus on ‘Natural Processes’ and on ‘Cultural Processes’, and also on technology as one of the drivers of cultural landscape change. Landscapes are in transition, in many different ways: because of migration and urbanisation, because of changing energy and food production, and because of other factors. Hence, the ECLAS conference also discusses how these themes may best be introduced into landscape architecture education, and how research may best address these themes by developing new methods and approaches.

ECLAS conferences are always held on special occasions and in special cities. The 2010 conference makes the year the city when Istanbul is the European Capital of Culture. The theme ‘Cultural Landscapes’ is particularly fitting to celebrate this important event. Istanbul is a central pillar in the building of European history, including art history and cultural history. But Istanbul also features one of the most fascinating (urban) cultural landscapes of all of Europe: it developed over several thousand years and it is alive and vigorous and exciting, as it ever was. Students who participated in this year’s virtual seminar in international landscape

architecture got a first glimpse of the multi-faceted cultural landscapes of Istanbul. Everybody is eager to now be part of the real thing!

On behalf of ECLAS I am thanking the Landscape Architecture Department of Istanbul Technical University for hosting the 2010 conference. ITU is a leader in landscape architecture education and research in Turkey, and also internationally. Landscape architecture projects that ITU members have worked on have made a substantial impact in city politics, and also left their imprint on the cultural landscapes in Istanbul, and in many other places. Participants of the Istanbul Conference will be able to visit such places, and I am convinced that, in addition to conference papers and posters, these field trips will be very educational, and they will stimulate participants to engage into enlightening debates.

Conference and field trips are events where we meet our trusted colleagues, and where we make new friends. ECLAS has become more than an academic organisation – the people teaching and researching landscape architecture in Europe have started to grow together as a 'social network'. Knowing that, inside large academic institutions, each landscape architecture department individually is relatively small, together, as the ECLAS group, we have started to make a noticeable impact in Europe, and well beyond. While our website (and the LE:NOTRE website in particular) has been instrumental in supporting this very positive development, the meetings in real reality are what counts. In Istanbul we will meet friends, and I am very much looking forward to that.

Prof. Dr. Diedrich Bruns
President of ECLAS

Welcome to Istanbul and to a New Beginning for LE:NOTRE at ECLAS 2010



The relationship between ECLAS and the LE:NOTRE Project has always been a close one, and perhaps because of this it has also been an continuing source of confusion for people new to either of the two.

Put simply, LE:NOTRE is a European Union Thematic Network Project run on behalf of ECLAS, which is the organisation of European higher education institutions involved in teaching and research in landscape architecture. LE:NOTRE Project – ECLAS Organisation: the situation could not be more straightforward.

The ECLAS – LE:NOTRE relationship began with a decision to investigate the possibilities of obtaining EU funding, taken at the 2000 ECLAS Conference in Dubrovnik, one which turned out to be a milestone in the development of the organisation. The first application was made in 2001 and the project was approved and started in October 2002. At the time it was assumed that the project would run for three years and then everything that had been produced would be re-integrated into a newly invigorated ECLAS. At this stage the relationship was still clear: LE:NOTRE was just a project of ECLAS...

But LE:NOTRE did not end after three years. First it was extended by a one year 'Dissemination Project' and this was followed in 2006 by the three year LE:NOTRE TWO. After the first

year of this, the opportunity came along to extend the project worldwide, and we were again successful in receiving 'Mundus' funding to run in parallel with the remaining two years of LE:NOTRE TWO, during which time we enrolled 36 new universities in the project.

Instead of following LE:NOTRE TWO straight away with another bid for a further three years of funding, a decision was taken to apply for a one-year 'Accompanying Measures' project - LE:NOTRE TWO+ in order to have more time to consult with and inform members about the plans for LE:NOTRE III. This is where we have got to today, more than ten years after this first decision taken at the 2000 ECLAS Conference: The 2010 ECLAS Conference marks the end of LE:NOTRE TWO+ and the start of LE:NOTRE III. Having been granted more than €2 million support from the European Union, is LE:NOTRE still 'just' a project of ECLAS...?

As in 2000 in Dubrovnik, here at the 2010 Istanbul Conference, ECLAS again stands at a crossroads. Having now been through eight successful LE:NOTRE applications and nearly completed seven separate projects, we now stand faced with a paradox: on the one hand LE:NOTRE cannot go on for ever, indeed we have already conceded that there will not be a LE:NOTRE 4; but on the other hand involvement in LE:NOTRE has now expanded beyond the original scope of ECLAS, whose narrowly defined membership no longer corresponds to the range of groups which now form part of LE:NOTRE. Just winding down LE:NOTRE in 2013 at the end of LE:NOTRE III would mean that much of what has been achieved in extending the boundaries beyond Europe and involving students, practitioners and academics from other disciplines, for example, would be lost. LE:NOTRE cannot continue, but it cannot simply stop either.

There is only one way out of this dilemma: LE:NOTRE has to change in order to survive. The planned answer lies in the creation of the 'LE:NOTRE Institute'. This initiative has already featured in both the LE:NOTRE TWO (feasibility) and TWO+ (establishment) bids, and the task of bringing it to life will now form a central part of the new LE:NOTRE III project, which formally starts on 1st October 2010 – here at the Istanbul conference. If LE:NOTRE is to continue to develop and thrive after the end of LE:NOTRE III, we have to start now to create the new LE:NOTRE, we cannot leave it until the end of the project. At the 2000 ECLAS Conference we took the first steps towards setting up LE:NOTRE, let the 2010 Conference mark the birth of a new ECLAS project: the 'LE:NOTRE Institute' with its three divisions: Education, Research and Innovative Practice. The new Institute is planned to provide a new and sustainable platform to support teaching, research and the interaction with innovative practice in the field of cultural landscape, but also in all other branches of the discipline of landscape architecture. Where could be more a suitable place for this to happen than in this historic yet dynamic city poised between East and West and with its vision set firmly on the future? Welcome to Istanbul and to the future of ECLAS and LE:NOTRE!

Prof. Dr. Richard Stiles
LE:NOTRE Project Network Coordinator

Welcome Message from the 27 th. ECLAS Chairman



The Minister of Environment and Forestry, Honorable Prof. Dr. Veysel Eroğlu,
The Mayor of Istanbul, 2010 European Capital of Culture, Honorable Architect Dr. Kadir Topbaş,
My Rector, Prof. Dr. Muhammed Şahin,
My Dean, Prof. Dr. Orhan HACIHASANOĞLU,
Distinguished directors of the landscape architecture departments
The President of ECLAS, Esteemed Prof. Dr. Diedrich Bruns,
The President of LE NOTRE, Esteemed Prof. Dr. Richard Stiles,
The President of BENA, Esteemed Prof. Dr. Fokion K. Vosniakos, and
Dear guests, I cordially welcome you to the 27th ECLAS conference.
Our department, that is hosting this great international event, was established in 2002. This relatively new department has volunteered to organize such a big event based on its strong background and experience. Shaped by the long standing tradition and scientific background of ITU, our department promotes high standards of teaching with the support of ITU's Architecture, and Urban and Regional Planning Departments. I would like to honor the memory of the deceased faculty members, Prof. Dr. Kemal Ahmet Aru, Prof. Dr. Gündüz Özdeş and Prof. Dr. Ahmet Keskin, who have contributed a great deal during the foundation years of our department. I also would like to extend my gratitude to our retired professors Prof. Dr. Hande

Suher, Prof. Dr. Ayten Çetiner and Gündüz Atalık. My deepest appreciation goes to Prof. Dr. Gülsüm Sağlamer and Prof. Dr. Hasan Şener, who were the rector and the dean at the time, for believing in and supporting the establishment of our department. As a founding director of the landscape architecture department, I sincerely appreciate the assistance of Prof. Dr. Orhan Hacıhasanoğlu in developing our program.

I am grateful to the former president of ECLAS Prof. Dr. Jeroen de Vries, the president of LENotre Prof. Dr. Richard Stiles, and the current president of ECLAS Prof. Dr. Diedrich Bruns and his executive committee members for believing in our department's ability to successfully organize the 27th ECLAS Conference.

That Istanbul is the European Capital of Culture was the major reason for defining the topic of ECLAS 2010 Conference as Cultural Landscape.

UNESCO describes cultural landscapes as 'combined works of nature and of man [which are] illustrative of the evolution of human society and settlement over time, under the influence of the physical constraints and/or opportunities presented by the natural environment and of successive social, economic and cultural forces, both external and internal'.
In the conference, the concept will be discussed under 4 main headings:

- Responses of cultural landscapes to changing natural processes
- Landscapes as a reflection of changing cultural processes
- Technology as a driver of cultural landscape change
- Education, research methods and approaches

After announcing the call for the abstracts, the conference secretariat received a total of 249 abstracts from 42 countries. Each abstract was evaluated by 3 referees based on a 6 point scale, and the average of the three evaluations was assigned as the final score of each entry. Finally, 90 full paper presentations and 20 poster presentations were included in the conference program. I am much obliged for the help of 112 scientific committee members during the evaluation process. I express my appreciation to Prof. Dr. Erich Buhmann and Prof. Dr. Joachim Kieferle for providing the "Abstract Submission and Peer Review System".

I thank our key note speakers Laurie D. Olin of RLA, FASLA and Patricia O'Donnell of FASLA, AICP, IFLA, and ICOMOS for accepting our invitation. Their presence will enrich our conference.

With this conference, I, once more, realized the intricacies of hosting such an organization, whose success depends on sponsorship. I am indebted to our Rector, Prof. Dr. Muhammed Şahin, and our Dean, Prof. Dr. Orhan Hacıhasanoğlu, for their moral and financial support. Likeways, I am thankful to the Minister of Environment and Forest, Prof. Dr. Veysel Eroglu, the Mayor of Istanbul, Dr. Kadir Topbaş, the 2010 European Capital of Culture Organization, and TUBITAK. I am grateful to our two international sponsors for their financial support: Arcangeli Gino, which is one of the Italy's biggest nurseries and exporter of landscape architecture plant materials, and Piante Faro, which is the largest producer of Mediterranean plants.

Last but not the least, I am grateful to the faculty members and assistants of our department, especially to the conference secretariats Assistant Professor Yasin Cagatay Seçkin and Research Assistant Gülşen Güler, who have to deal with hundreds of e-mails each day. I thank our students for their help with the organization. I, finally, extend my gratitude to my wife, Dr. Ayten Yıldızcı, for being with me every step of the way. I am aware of the challenge of pleasing everyone in this kind of event. Therefore, I apologize from our guests for the mistakes that happened or may happen, and ask for their understanding. I wish the participants a very fruitful and productive conference; I do hope you will also take time to enjoy the fascinating 2010 European Capital of Culture with its friendly people, and natural and cultural landscapes.

Prof. Dr. Ahmet Cengiz YILDIZCI
ECLAS 2010 Chairman

DETERMINING THE CHANGES IN MULTI-COMPONENT CULTURAL LANDSCAPES OF BOSPHORUS

Nurgül Erdem
Mert Ekşi
Gül Aslı Aksu
University of Istanbul, Faculty of Forestry, Department of Landscape Architecture, Subdepartment of Landscape Techniques (Turkey)

Keywords: *Istanbul, Bosphorus, Sariyer, Beykoz, Cultural Landscape, Cultural Heritage, Coastal Planning*

Abstract

Analyzing the cultural landscape variables and changes of the Bosphorus in the historical process constitute the basic purpose of this study. Within this objective, the scope is to analyze the changes on the basis of the districts (Sariyer, Besiktas, Beykoz, Uskudar) of the Bosphorus and to determine affected key points.

In the last 20 years, urbanization in Istanbul has particularly spread towards the North direction. The effects of this situation can be seen directly on the Bosphorus. Within the legal boundaries and impact areas of the Bosphorus, the land use plans based cultural landscape change has been examined in terms of green texture, residential areas, industry, business – commercial areas, transportation, and cultural focus.

Introduction

According to Erinc, in terms of its physical properties the Bosphorus is a triangular shaped large area. The top is on the north of the Istanbul Channel and the other corners are on Küçükçekmece and Tuzla. According to various sources, the first legal regulation to draw the borders of Bosphorus was named “Dersaadet Municipal Act” in 1877 (Erdem, 1996).

In the first period of historical development in Bosporus there can be seen few sacred springs, temples and fisherman’s village. With the conquest of Istanbul in 1453, Bosporus has experienced significant population growth. Bosporus had gained a summer place identity by buildings like pavilions, residences, and embassies etc. which were built in Ottoman era.

Growth of Population over time, new transportation systems, industry and trade points which appear in the impact area has undergone a change of former resort and recreational identity of the Bosphorus and its impact areas. Whereas the area has tried to be protected by laws and regulations, this change has been influenced the cultural landscape.

Natural Landscape Elements Of Bosphorus

Location

The metropolis of Istanbul which was founded on Asia and Europe continents is divided into two parts by the Bosporus channel that links the Black Sea to the Marmara Sea (Figure 1).

Istanbul Strait (Bosphorus)’s geographical position with the look of numeric values, including the recesses and protrusions along the coast is on the Asian side from the Maiden Tower to Anadolu Feneri approximately 35 km, on the European side from Sarayburnu to Rumeli Feneri 55 km in length. The distance of the Bosphorus by the opening to the Black Sea is 3600 m while the opening to the Marmara is 1675 meters. The closest distance where two continents comes together is with 698 meters is the transition between Rumeli Hisari and Anadolu Hisari (Cubuk, 1981).

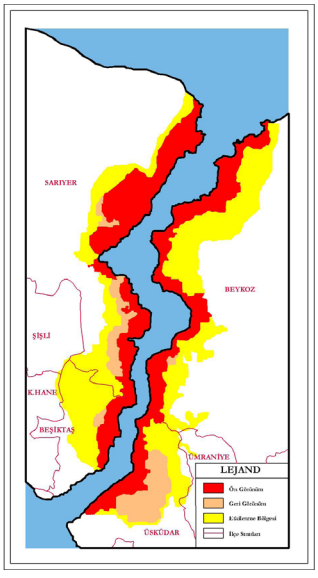

Figure 1. Location of the Bosphorus and Administrative Boundaries

Topography

The low plateaus that line the Bosphorus from both sides that range in altitude of 100 to 200 m from the sea form the basic elements of topography of Bosphorus area. The undulations on the opposite sides of the strait show an asymmetric formation. The highest points on the west side are near the Black Sea shores (200-230 m), whereas the highest points on the east side are closer to the Marmara Sea (Baytin et al., 2003).

Climate

The Bosphorus and its periphery are under the effect of northern mediterranean climatic conditions characterized by winter precipitation and water deficit in summer. But local climatic conditions prevail between different parts due the location, altitude and vegetation cover. The annual average temperature ranges between 13.6 C and 13.9 C and the annual precipitation between 672 mm and 1050 mm. The relative humidity is between 70 to 80% (the highest in Turkey) (Yaltirik et al, 1975; Baytin et al, 2003; Erdem, 1996).

Green Areas And Vegetation

Green areas of Bosphorus which have kept their sustainability until today can be classified in 2 classes. These are natural green areas and manmade green areas. In these natural green areas, there are Forest areas (Belgrad and Alemdag), forests in military zones, plantations, recreation and meadows. In manmade green areas, there are agricultural areas, residential areas and gardens, parks and graveyards.

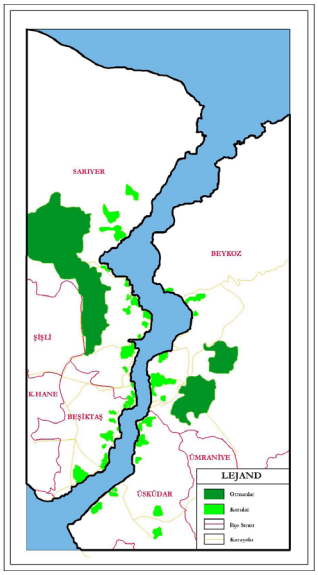

Figure 2. Use of Green Areas in Bosphorus

The natural vegetation cover of the Bosphorus is characteristic to European Siberian phytogeographic zone. The natural vegetation cover is composed of deciduous species some evergreen. The forest texture is rich in terms of species. According to the climatic conditions Chestnut (Castanea), Oak (Quercus), Elm (Ulmus), Linden (Tilia), Ash (Fraxinus), Locust (Robinia) are the most prominent ones. The most important species of machi formation are Laurel (Laurus nobilis), Mastic Tree (Pistachio terebinthus), Judas tree (Cercis siliquastrum),

Broom (Spartium junceum), Firethorn (Pyracantha coccinea), and Oak (Quercus latifolius, Quercus coccifera). Apart from the natural vegetation cover there are other vegetation types that have perfectly acclimatized in time in Bosphorus and became an inseparable part of it, like Plane Tree (Platanus orentalis), Horse Chestnut (Aesculus hippocastanum), and especially Cypress (Cupressus sempervirens), Stone Pine (Pinus pinea) (Pamay, 1973; Baytin, et al, 2003; Erdem, 1996).

At residential area gardens along the coastal strip (the mansions, ambassadors ...) and at the public and mass housing areas common green spaces along Bosphorus ridge it's possible to see exotic plants which are not conforming to the Bosphorus microclimate as well as natural vegetation.

Bosphorus Cultural Landscape Components

Transportation

Sea Transportation has gained momentum with the construction of piers of Bosphorus. After this, regular sea transportation has been started between the two shores and through the coastline. With active sea transportation, non-Muslim population and ambassadors of foreign embassies have started to move to the coastline of Bosphorus.

Bosphorus residential area was used as a summer place until 1950's and far from urban activities. So there wasn't a need for land transportation. Between 1956 -1960 years, roads which were built in I.Abdulhamit period were enlarged and land transportation was strengthened. By the construction of Bosphorus bridges and highways, Bosphorus area had been pulled into a busy transportation network. This has caused irregular urbanization.

Because of wavy and narrow structure of shoreline of the Bosphorus Land transportation couldn't meet the demand in time period; therefore, there come up the new roads which were built on the poles that cross the shoreline of Bosphorus. With these roads shoreline were damaged as well as physical and historical aspects.

Density of sea transportation in the city and international sea transportation with the Montreaux Straits Convention, Bosphorus have very busy and dangerous sea traffic (www.hssgm.gov.tr). This transition causes some accidents also when domestic sea transportation is taken into consideration. These accidents threaten the coastline as well as causes big losses for historical culture.

Residental Areas And Artchitecture

According to EYICE, in Byzantine period structuring is formed from a few villages and hunting seats and many churches.

After the conquest of Istanbul, Turkish population had been situated and new villages had been formed. (Kuban, 1973). In 17 and 18th century Bosphorus had gained summer place property and this brings recreational uses too.

At the 19th century, with internal migration from Anatolia, slums which spread towards the ridges were added to the residential areas gathered in coastline. With the increase on land values and the changes in legal structure in time, slums have changed to mass housing

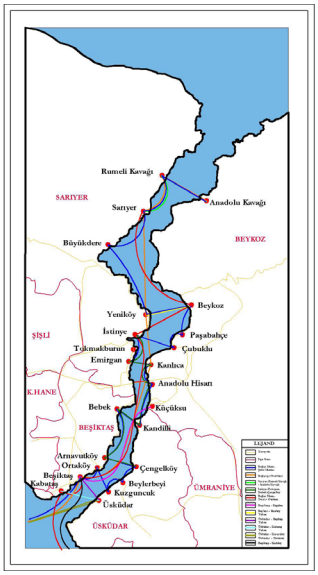

Figure 3. Bosphorus Sea and Land Transportation Network

(villa architecture) and apartment type residences. With construction of the Second Bosphorus Bridge (FSM) and its motorways in 1990, skyscraper architecture with high business – commerce density has affected the Bosphorus Impact Area (especially 4 Levent-Maslak, Ümraniye-Kavacik).

Apart from the general characteristics of traditional Turkish house the specific characteristics of the Bosphorus affected the architecture of the buildings on the strait. The primary factor affecting the design was the Bosphorus view, and the houses were designed to benefit the most of it. The second important factor was the sun (Baytin at. all, 2003).

As the general formation of the strait is on north-south axis, the houses on the European side get the morning sun whereas those on the Asian side get the afternoon sun. This is reflected on their facades (the latter have shutters to protect them from this negative factor). As the houses were almost built on the sea the principle rooms were on the upper floors and the material used for the construction was wood instead of masonry to get enough protection from damp. But the late examples represent western styles such as Art Nouveau, Neoclassical, Baroque or Rococo and all were masonry buildings belonging to foreign consulates or the palace members or the emperor (sultan) himself. The colors used in their facades were mainly pale colors (primarily white) to contrast with the green vegetation surrounding them (Tunbis et al 1995, Soylemezoglu 1973).

Industry And Commerce

In 1812, after the Leather and Shoe Factory was established in Beykoz, industrial facilities have been started in Bosporus. With the establishment of Istinye Shipyard in 1957 industrial facilities have been started and this have been followed by establishment of Match and Tea Factories in Buyukdere, Brick and Glass Factories in Pasabahce and Stone quarries on two sides of the Bosphorus.

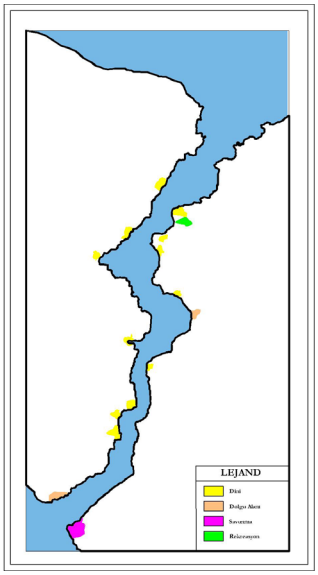

Figure 4. Old Residential areas of Bosphorus

Bosphorus Interaction Area was accepted in 1950. In Levent and Maslak Region which are belong to this area, with Automotive and Industrial sites; have caused domination of big buildings and commercial areas.

Socio – Cultural Structure

The cultural structure consists from a multi-religious Byzantine and Ottoman mixture. The Bosphorus where people with high economic income preferred to live had an identity with tourist attraction, consistent association of social and architectural culture which comes out of a multi-religious structure.

Due to internal migration, the Bosphorus has experienced a significant cultural change instead of simple population increase. The slums which spread through the hills were added to the characteristic coastal waterside residence, mansions and palatial architecture. With squatters, Anatolian rural life has moved to the Bosphorus.

Legal Situation

Beyoglu Master Plan which was adopted in 1954 has given an opportunity to the construction of new industrial sites in Bosphorus. With Slums Act No. 775 (1966), kind of legalization was given to the suburbs.

In 1970 first conservation steps have been applied to the waterside residences by Gayrimenkul Eski Eserler ve Anitlar Yüksek Kurulu – GEEAYK (The Council of Monument) which is an official conservation agency in Turkey. In 1974, 1/5000 scaled “Coastline and Waterside Residences” plan had been adopted. In 1973 GEEAYK had constituted “Bosphorus Natural and Historical Conservation Arbitrament” which contains important issues about protecting the natural areas of Bosphorus. In 1975, Bosphorus have been registered as “Natural and Historical protection area” by the Turkish Ministry of Culture. In 1977, Master Plan That Contains Natural and Historical Protection Values” was accepted.

In 22.11.1983, “Bogazici Law” which is the first protection law for a special area was inured. With this law, Directorate of Bosphorus Housing was established. Bosphorus Protection Area was separated in 3 zones which are “preview zone”, “back view zone” and “impact zone”.

In 3 May 1985, with the Construction Law No. 3194 46, 47, 48 and 7. Sections and main protection principles for Bosporus had been eliminated. Planning and application authorization was taken from Directorate of Bosphorus Housing. Planning and application authorization for the “preview zone” was given to the Istanbul Metropolitan Municipality. Planning and application authorization for the back view zone” and “impact zone” was given to the local municipalities. In 1988, a revision plan was made in the Master Plan of Preview, Back View and Impact Area of Bosphorus. With this revision, open and green areas have been identified as dense residential areas.

Cultural Landscape Elements Of Bosphorus

Within the legal border of Bosporus and its impact areas, changes of cultural landscapes will be analyzed in terms of green structure, residence areas, industry, business – commercial areas, transportation and cultural focal points based on municipal plans.

Between 1975 and 1980 years, population growth has begun to spread to the north of strait. During this period, Uskudar have had the maximum increase of %72,45 while Sariyer had %64,41, Beykoz %42,64 and Besiktas %14,53 respectively. In addition to this increase in the total population, population increase in the old villages shows that there were residential areas which were permitted outside the village areas.

Slums that come with the population growth, usually located in the Beykoz - Ortaçeşme, Tokat valley, Gumussuyu-Pasabahce, Cubuklu-Kanlica, Anadoluhisari, Kandilli, Cengelkoy, Kuzguncuk which are on Anatolian side and also on Sariyer–Buyukdere, Boyacikoy, Cayirbasi which are on the European side of the Bosphorus

According to Selcuk’s study in 1992, residential / green space ratio in 1977 is %48, in 1983 is %45, in 1988 is %77 and in 1991 is %89.

Nearly 75 % of unplanned structuring in Bosphorus are located on green areas, recreation areas, parks, meadows, treeless recreation areas, protection areas, agricultural areas, forest areas, state forests and the remaining part 25 % are located on residential areas, sport areas, playgrounds etc (Erdem, 1996).

Towards the results that are obtained from this study, most significant changes in cultural landscapes were determined in Beykoz Kavacik and Sariyer Istinye districts in 30 years period.

With the construction of Second Bosphorus Bridge, existing green areas had been changed to suburban structure and with the increasing land values and legal regulations, this suburban structure have changed to villas, commercial areas and residential blocks. Therefore, identity of these areas has completely changed and green structure have been substantially destroyed.

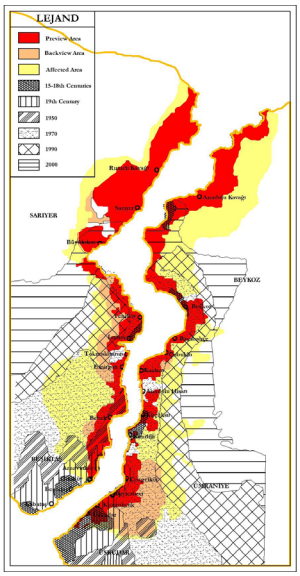

Figure 5. Structured areas in Bosphorus in the years 1930 - 1950 - 2000.

Districts that are close to Istinye (Sariyer), industrial and commercial based settlements have increased. This increase has caused dense usage of motorway network. With this dense usage, green and open spaces have become residential areas. Therefore Istinye has departed from the cultural landscape of Bosphorus and become an urbanized area with many skyscrapers. Especially for the Maslak district there is a skyscraper based usage is present. This structure which damages the Bosphorus silhouette, also heavily damages the ecology and identity of Bosphorus.

Conclusion

For the preview, back view and impact zones which are primarily important areas to control the structuring in the Bosporus there aren't enough structuring conditions. Structuring by ignoring the topographical forms has caused some irreversible applications such as in the Kavacik Valley.

This structuring which is occurred on the pasture areas, shrubs, woods, forest, green areas, such as agricultural lands, have caused a change on cultural landscapes of Bosphorus. Thus housing pressure on green areas must be removed and Bosphorus identity must be protected.

Intensity of Industrial and commercial areas cause congestions on transportation. Instead of construction of the Third Bosphorus Bridge which will damage the rare forest texture of the Bosphorus, sea transportation must be enhanced.

National and International transportation that threaten the Bosphorus shoreline should be taken under control with new legal regulations.

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