

**WATERFRONT DEVELOPMENTS IN THE MIDDLE EAST
CASE STUDY:
THE GOLDEN HORN PROJECT, ISTANBUL, TURKEY**

by
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ABSTRACT

This thesis examines waterfront developments in the Middle East . It concentrates on the Golden Horn project in Istanbul as it raises a number of issues that are central to any such development in that region. In order for us to appreciate the problem, the thesis starts with an examination of the history of the city of Istanbul. This is followed by an investigation of the role of the Golden Horn in its life throughout history. The main issue raised in waterfront developments in a Middle Eastern context is discontinuity between the city and the new development through the introduction of new users, functions, scale and sensibilities alien to what exists now. Istanbul, being part of an international heritage, its preservation and continuity to the water's edge becomes a moral obligation as well as a practical need to protect the rest of its fabric from the repercussions of overloading. A performance specification is put forward to integrate the development back into the life of the city. Formally, urban waterfronts in the context of the Middle East are problematic as no precedent exists for dealing with the water's edge. Hence an investigation of the cultural attitude to nature and the form of the city is put forward, from which principles and orders are extrapolated to aid the designers in their approach to the problem.

Thesis Supervisor: Prof. Ronald Lewcock
Title: Aga Khan Professor of Architecture & Design for Islamic Societies.

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DEDICATION

**To my mother and father, Tahia and Sulayman Alamuddin for their
love, support and encouragement.**

INTRODUCTION

WATERFRONT DEVELOPMENT:

The subject of waterfront developments in the Middle East is fascinating to a designer as it raises a number of major issues with respect to their use, relationship to the cities in which they are located, and their form. A waterfront is a very special area in any settlement. As a natural feature, it is unique and powerful. It is life-giving, and yet destructive and frightening when the elements are out of control. It is an edge, and a limit yet it links the settlement to the outside world, hence it becomes a source of income for the city, but also makes it vulnerable to attack.

Originally most Middle Eastern cities, though located near water, faced it with a wall for obvious reasons of defense, fear of flooding, and the introverted nature of those settlements. Hence the waterfront was an "outside the wall" area used for commerce, gardens, and peripheral events such as fairs, cemeteries and hermitages, depending on the nature of the waterbody - whether it was a river or a sea. With the increase in population, the upper classes, attracted by the openness and lushness of this fertile land, moved to the area. Other mixed use development followed as the cities grew beyond their walls, expanding over time and, as the need arose, with little formal recognition of the water's edge.

Today the waterfront, although still an edge, is less of a link to the outside world due to the advent of technology. It still plays a role in commerce, but its destructive power is now harnessed and

controlled. In the West, and especially in the U.S , until the 1960's a "depression-scared generation" was in charge of the waterfronts, thus allowing them to be exploited for industrial use. In the 1970's, three change factors freed the waterfronts from the grip of industry: a shift from a manufacturing to a services economy, improvements in cargo-handling facilities that reduced the loading operation by a factor of seven, and a shift from rail to truck transport making large areas of railyards obsolete. ¹

Development on the waterfronts in the West has either been of conservation, such as in Venice and Marseilles, or redevelopment, such as London and Boston, or new development, such as Port Island and Foster City in the U.S. Waterfronts in the West today, especially in the U.S tend to be developed as leisure and consumer marketplaces. Hence 19th century industrial port areas are now becoming 20th century "people oriented places", with the original structures rehabilitated and converted into leisure places. ²

In the Middle East, the waterfronts are being considered as the last frontier of development. In cities like Kuwait and Baghdad, there was little development on the waterfront, today large-scale development schemes are under construction or study to give those cities an appropriate waterfront and edge.

In Istanbul, the waterfront along the Golden Horn was also invaded by industry; however, a cleaning operation removed all that, giving the edge back to the city for redevelopment.

THE GOLDEN HORN PROJECT:

The Golden Horn project is arguably the largest environmental improvement project in the world.

In May 1984, the Municipal Council of the main city of Istanbul approved the project proposed by Mayor Dalan for the cleanup of the Golden Horn. This 8 km-long sea inlet had become a foul-smelling cesspool, heavily polluted by the industries that had been growing on its banks since the 1950's. The notion of capitulation within the Ottoman Empire turned Turkey into an open market rather than a producing state. The New Turkish Republic reversed the trend and became even protectionist about its industry. Therefore industrial growth was witnessed in the 1950's, with Istanbul taking the brunt of it because of its central location in Europe and Asia. The industry was located on the Golden Horn, again because of easy access provided by the water. Soon the whole area became a dense industrial zone, emitting poisonous gas and odours, with no proper infrastructure or technical facilities *"If you stuck your finger in the water, you'd have pulled out bare bone,"* explained the Mayor. However, by 1988, he promised to have the waters of the Golden Horn as *"blue as my eyes"*.

The Golden Horn project is in three stages the first (estimated to have cost 36 million \$.) ³ involved the removal of "disagreeable" buildings (4000 structures in all), the relocation of the population (250,000 people in all), the removal of industry to an industrial zone on the city fringes (622 factories and a number of businesses said to

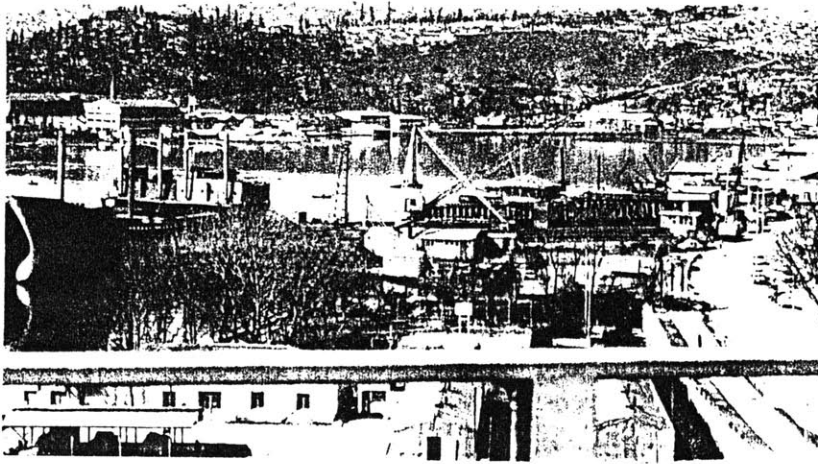


Fig.2. A view of the Golden Horn before '84.

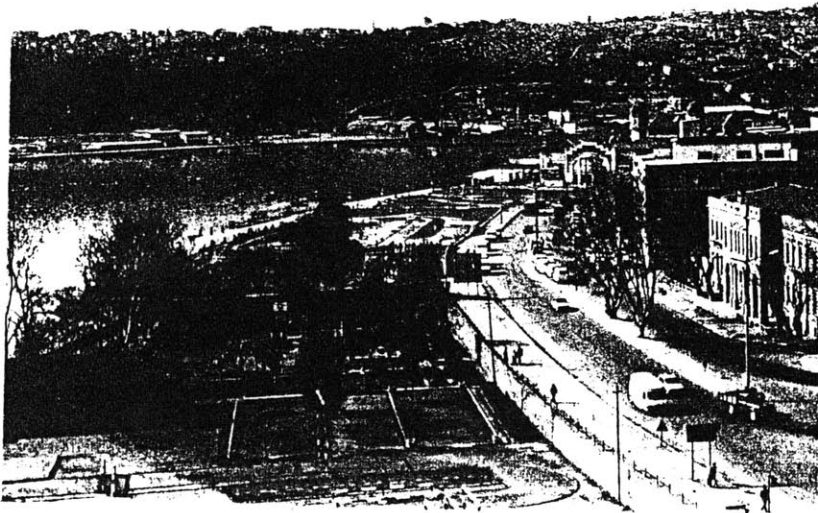


Fig.3. Same view in '86.

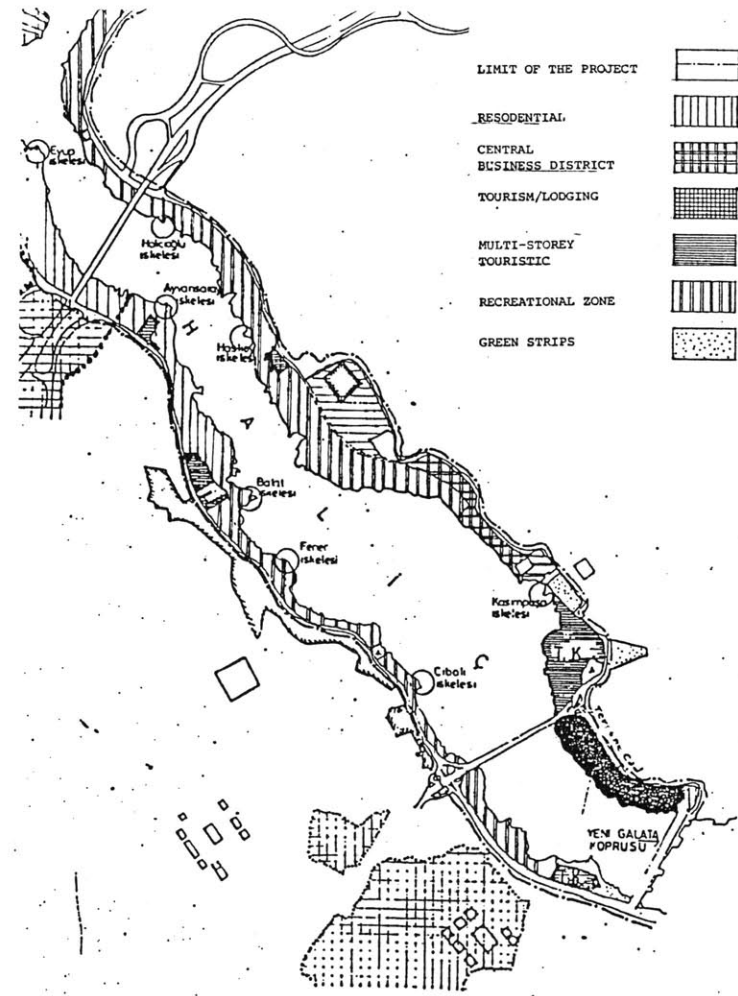


Fig.4. The Golden Horn masterplan, 8.May.'84
(for expropriation purposes.)

employ 30,000 people in all) and the restoration of historic buildings for cultural and tourist use with a "green area" designated for recreation. ⁴

The second stage of the project involved the installation of a sewage collectors' system along the coast to clean up the water. ⁵ To improve the water circulation, the Galata bridge, built on floaters, is to be replaced with a bridge built on piers to allow the currents to flow through.

The third stage of the project_what is planned for the cleared area, now planted as one huge lawn_ is ambiguous. The Mayor himself told us that the "parks", as they exist, now are a temporary solution so as not to leave the cleared areas unsightly.

The project has been very popular. In a study done by the Municipality, 70% of the inhabitants of Istanbul supported it. The achievements of the project are, without a doubt, tremendous. Pollution in the city as a whole has been reduced considerably, and, in the Golden Horn, aquatic life will return within the next two years. Already two dolphins have been sighted in the Horn for the first time in 60 years. The removal of industry has improved the traffic situation in the city and helped to improve the working conditions of the employees; the Horn was not a designated industrial zone and was therefore under no regulation.

The clearing of the Horn has an important psychological dimension to it, too. *"People thought it was an unsolvable problem. It became in the eyes of the citizens a hopeless situation "* ⁶

Municipality literature tells us that, as the citizens look at the Golden Horn today, they see the *"modern Istanbul of the future where the beautiful, the natural and the historical are praised."* ⁷

The result of this operation is the creation of 2500 hectares of cleared site in one of the world's oldest, busiest cities. The master plan of the area prepared for the expropriation of land shows the strip as a recreation area; note that the Galata side is blacked out. Although, under expropriation law, the government has to indicate its intended use of the land, 50% of the area was actually owned by the Municipality in the first place, and the master plans themselves have a time limit after which they can be changed. Furthermore, in some cases, a law that allows the destruction of any structure deemed "unvertical" was brought into play, thus complicating matters further. The legal aspects of this project are a study in themselves with 2000 on-going court cases already. ⁸ Moreover, there is the question of the Bulk-head line that, according to Germen, is not clear: If you own land on the shore, how far out can you build piers etc....? However, from our point of view, what the legal aspect tells us is that all is possible on the Golden Horn.

The Golden Horn project raises a number of issues with respect to the city and its inhabitants in terms of its use and development. It also asks the designer important and challenging questions with respect to notions of continuity, precedent and form. In this sense, its study is relevant for all waterfront developments, especially in the Middle East, where the context tends to be historic, the nature of the



Fig.5. The Golden Horn today.

city introverted, and there is no language for handling the water edge.

In order to appreciate the situation, we need first to try to understand the city of Istanbul itself and the role that the Golden Horn has played in its history. The project is a phase in a sequence of developments that needs to be understood for us to appreciate the problem; only then can we present a design approach.

CHAPTER ONE

HISTORY OF ISTANBUL

Unique in the world for belonging to two continents, Europe and Asia, Istanbul has also been the capital city of two great Empires- Byzantium and Ottoman.

Istanbul is still Turkey's largest city, with a population of six million people. With its strategic location, it is still the industrial and commercial center of the country, despite the fact that Ankara is the actual capital. Located at latitude 41 degrees North, longitude 29 degrees East, the city is moderately hot in the summer; winters are wet but mild, with temperatures ranging from 27 degrees to -5 degrees Centigrade. The European part of the city is divided in two-the historic peninsula and the Galata quarter-by the narrow inlet called the Golden Horn (Halic). The Bosphorous, on the other hand, separates the European city from its suburbs in Asia.

THE ANCIENT CITY:

The history of the city goes back at least two thousand years, with scant evidence of the first settlement dating from the third or early second millenium.

The first substantial amount of evidence that exists, however, tells of a Megrian colony of tradesmen and fishermen established around the mid-seventh century B.C on the west end of the peninsula, with two minor colonies in Galata and Kadikoy. The main settlement had a harbour along the Golden Horn, and two main

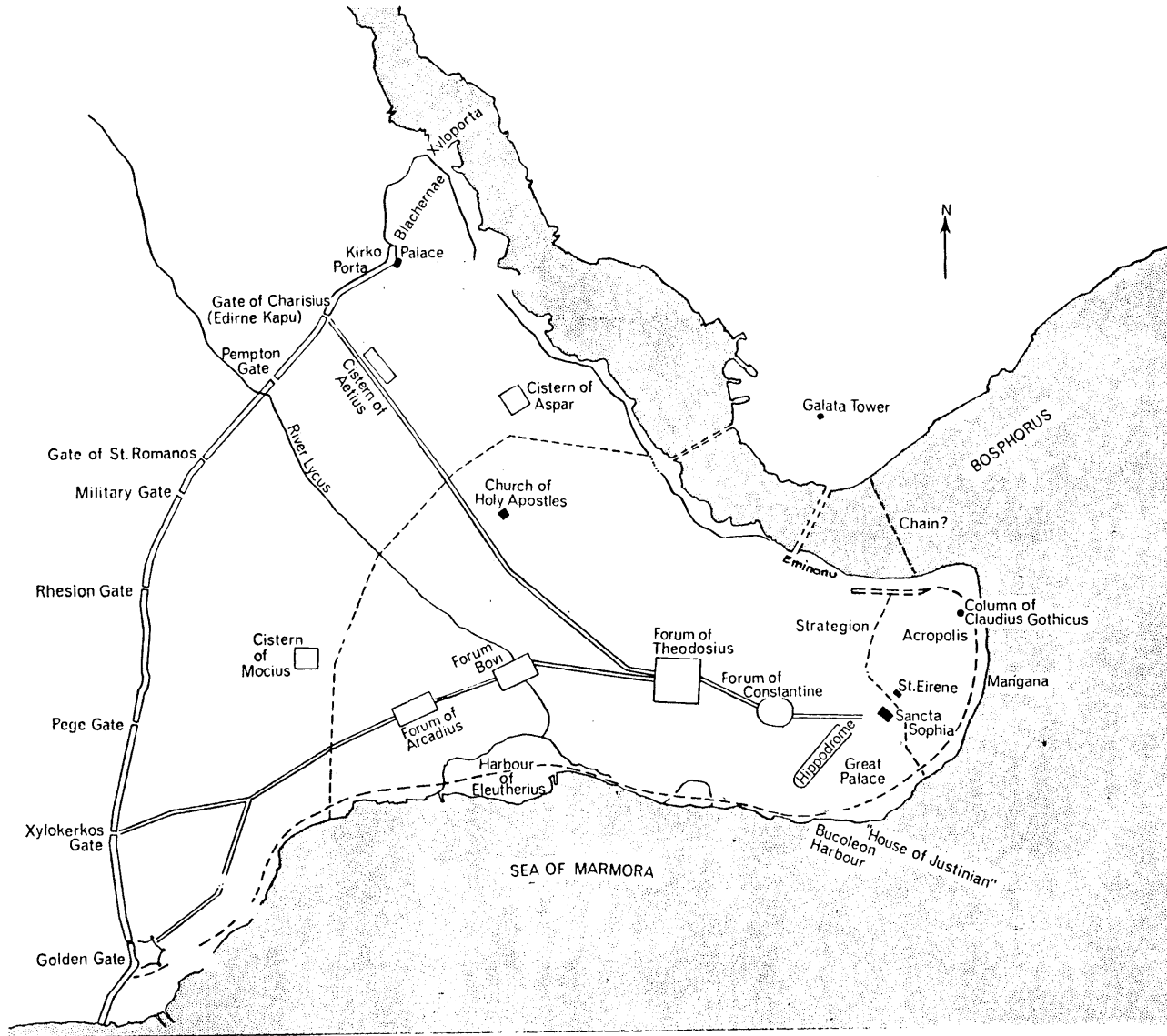


Fig.6. The Byzantine city.

open spaces, the Strategion and Thrakion. Its center, the Acropolis with its temples, theaters, etc..., was on the present site of the Topkapi Palace.¹

THE BYZANTINE CITY: CONSTANTINOPLE

In 330 A.D, when Constantine moved his capital to Byzantium, he renamed it New Rome. However, it was better known as Constantinople- Constantine's City. Using its existing urban elements, the Emperor mapped out a grand plan for his city, enlarged by the new city walls. Its urban form was characterized by the diversions of its elements connected by porticoed avenues. Constantine also built major structures in his city including the Great Palace next to the Hippodrome, the original Hagia Sophia, and the church of the Holy Apostles crowning its fourth hill.

Across the Golden Horn, Galata consisted of a narrow strip near the water front called Sykae. In the fifth century, Galata was a typical Roman town with its church, theater, bath and harbour. In the late sixth century it acquired a tower called Galatou, used to anchor a huge chain that was strung across the Golden Horn to protect the city from the enemy.

In the fifth century, the Byzantine city did not expand, but slowly filled up the area between Constantine's walls and Theodosius'. This area was less dense than the ancient part of the city, except near the popular shrine and the palace of Blachernae. This Palace was built in 491 AD for the Imperial family to visit the

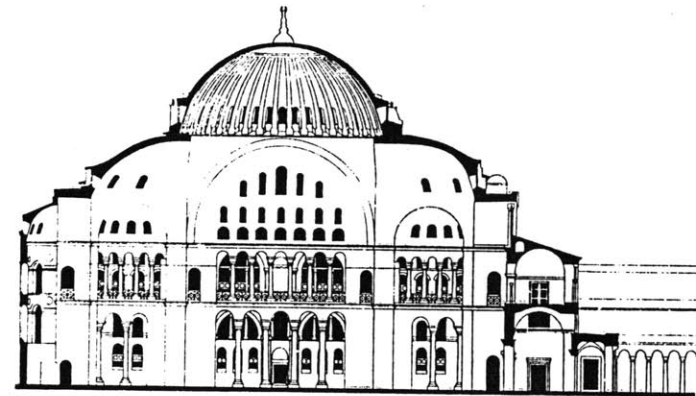
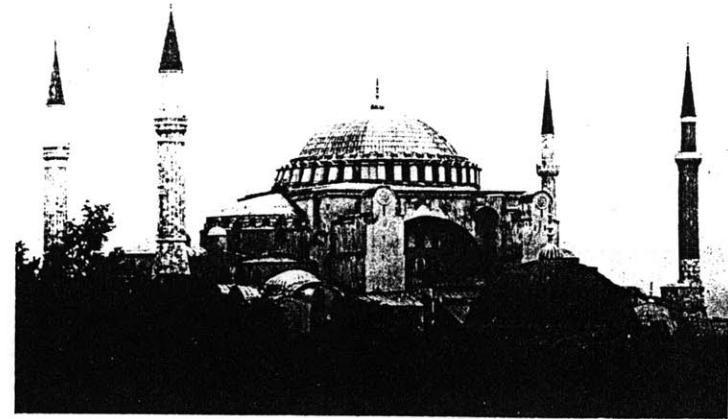


Fig.7. The Hagia Sophia.

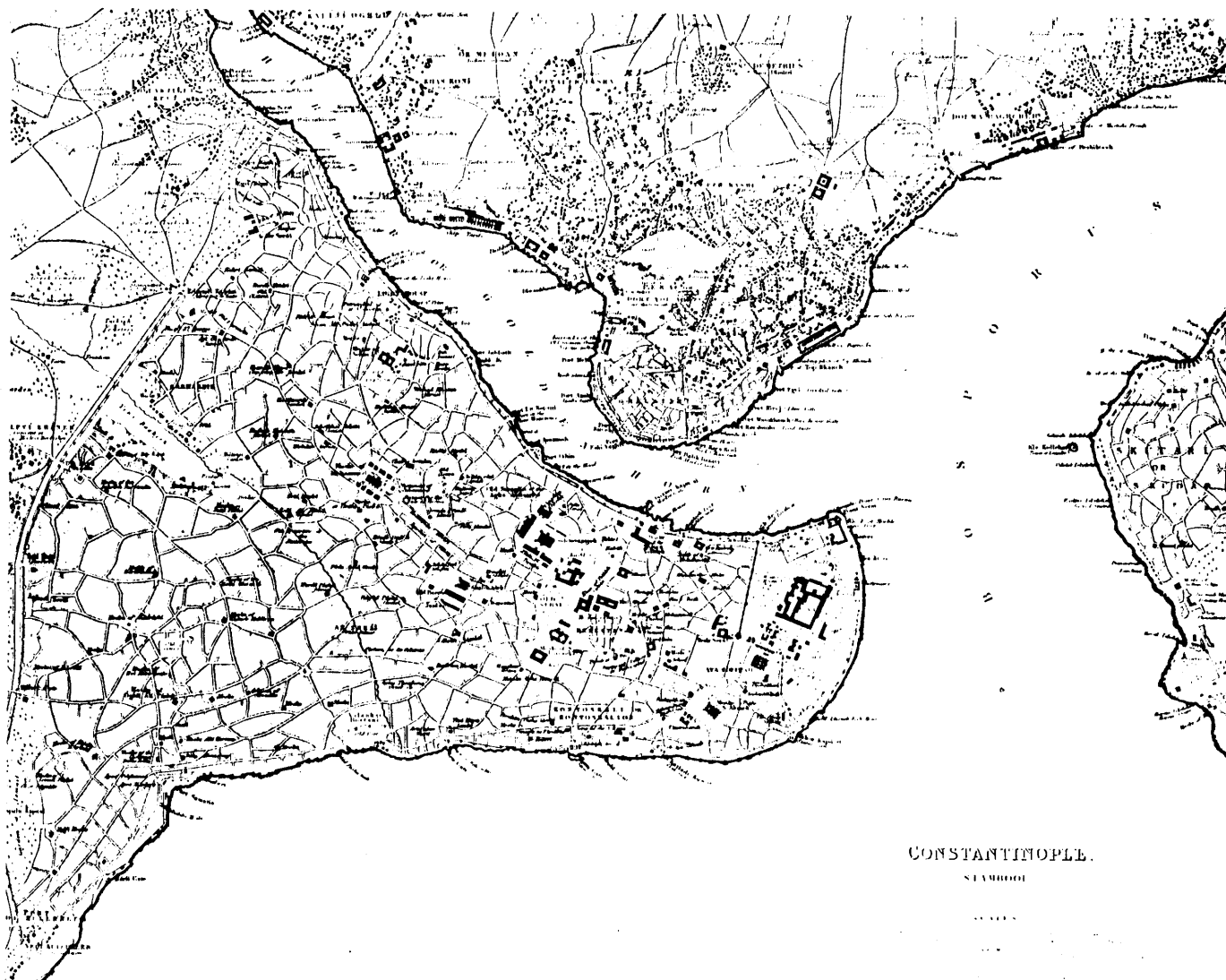


Fig.8. The Ottoman city. Engraved by B.R. Davis. 1840.

shrine and, in the thirteenth century, it became the imperial residence. ²

The main elements of the fabric of the Byzantine city were five principal forums (the largest being Forum Tauri, the present Beyazit Sq.), and the Mese (Middle road). The Mese was a wide, regular avenue that started at Augusteion and branched off into two roads leading to the Golden Gate and the Gate of Andrianople respectively. The fabric, however, is described in a literary work of the fifth century as being dark, narrow, and crooked, with fires often destroying large neighbourhoods. The high density of the city (especially in the old section where building regulations mention ten-storey structures) necessitated the building of many subterranean and above-ground cisterns for the storage of water for summer. These cisterns were all located in the Western section of the city, and became vegetable gardens in later Byzantine times as they lost their water storage function. ³

It is interesting to note that by the sixth century four of the seven hills of the city had acquired some monumental definition. The first was crowned with Hagia Sophia and the Hippodrome, the second by Constantine's forum, the third had Theodosius' Forum; and the fourth the church of the Holy Apostles. Under Justinian, the city continued to acquire important structures such as the rebuilt Hagia Sophia, St. Erien, Sts Sergius and Bacchus Churches, as well as other secular monuments which remain important landmarks even today.

By the eleventh century, foreign communities had grown in importance and obtained territorial concessions in Constantinople. The first, the Amalfians, settled in 922 in Eminonu. By 944, the Venetians, Pisans and Genoans had settlements, one next to the other to the west of the Amalfians. Jews, on the other hand, were not allowed to settle inside the city and lived in Galata or outside the sea walls in Eminonu. Hence the structure of ethnically based quarters of the Ottoman city was set in Byzantine times.

With respect to the house typology of the city, again the Byzantine house, developed by the tenth century, formed the base of the Turkish house with its central hall formation and upper storey projections.

There is no doubt, therefore, that the Byzantine city form set the pattern for the growth and development of the city in later centuries, be it in its fabric and organization, open spaces (the Forums and the gardens), or in the location of the major monuments in the city.

THE OTTOMAN CITY: ISTANBUL.

The Ottomans, or the Osmanli Turks, emerged as a power in Anatolia in the latter part of the 13th century. They established their first capital in Bursa in 1326 AD, but continued to grow westwards. In May 1453 AD, the fifth Sultan of the dynasty, Mehmet II, entered Constantinople, victorious after a long siege of the city, thus earning the title "Fatih" (the conqueror).

Mehmet II started to rebuild and restore the city, recognizing its

beauty and potential as a city on an important strategic location. He began by converting the Hagia Sophia into a mosque and building a mausoleum for Ebu Eyup El-Ensari, the Prophet's flagbearer, who had fallen in 668 A.D during the first Arab siege of Constantinople.

He also set up thirteen quarters (Nahiyes) similar to Constantine's division of the city, all developed around complexes (kulliye) built by him and his court officials. (His own, The Mehmet II Kulliye , was built on the site of the Church of the Holy Apostles , on the fourth hill of the city.). These quarters thus allowed Muslims to live separate from the indigenous population so as to practice their own way of life. When Fatih declared the city as his capital , all efforts were made to convert it into a "Muslim" city. Its name had also changed by then. The Turks called it 'Stamboul', their version of the Greek 'Stin-Poli' meaning 'in or to the City', "City" being so capitalized because in those days it was indeed beyond compare. ⁴ A number of theologians and administrators from the East immigrated to Istanbul to help form the new capital. The two main groups that eased this transition were the Akis (artisans and merchants' guilds), and the Ulema (Muslim jurists and theologians.). ⁵

At the center of the Imperial complexes (Kulliye) was the mosque, surrounded by various charitable institutions like Medreses (theology schools), hospitals, kitchens, libraries etc.. These confirmed the values of collective life . The funding of the complex was through the waqf system, where the benefactor usually made an endowment in two sections, one for the building of the complex and

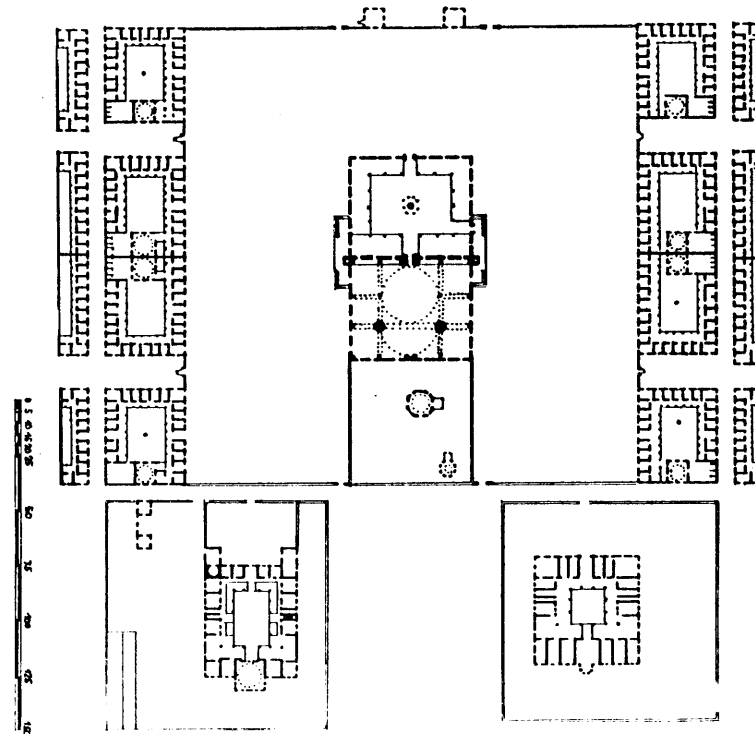


Fig.9. Plan of Mehmet II complex.

the other for its upkeep. Also several commercial buildings such as Hammams, Khans etc...were built within the complex to help support the funding of other services. By the sixteenth century, there were 157 "Great" Hammams among a total of 4536 Hammams in the city. The waqf system of prescribed piety in Islam thus insured the distribution of wealth and funding by those who could afford it for the benefit of the most needy segment of society. Hence it depended on the strength of capitalism and the upper class. By the seventeenth century, eleven of these Kulliyes had been built throughout Istanbul and its suburbs. The Kulliyes were the architectural expression of the waqf system and the two basic notions in Islam of prayer and charity.

Hence one could say that the Ulema, with their organizing influence, also shaped the environment and the form of the city with the urban form of the Kulliyes, their mosques and colleges, minarets and domes shaping its skyline for all time. ⁶

The Muslim and Christian predisposition towards the mysticism attached to holy places and objects was a continuing facet of Turkish life. Thus the mystical orders of Islam, the dervishes, were loved and considered by the people as saintly. This led to several Mahallahs or sub-units of the quarter being centered around their shrines and tombs, and the creation of a special type of architecture for these buildings called the Turbe.

The development of the Ottoman city was also dependent on the co-opting of non-Muslim groups into the Ottoman economy, bringing it financial benefit through the payment of tributes.

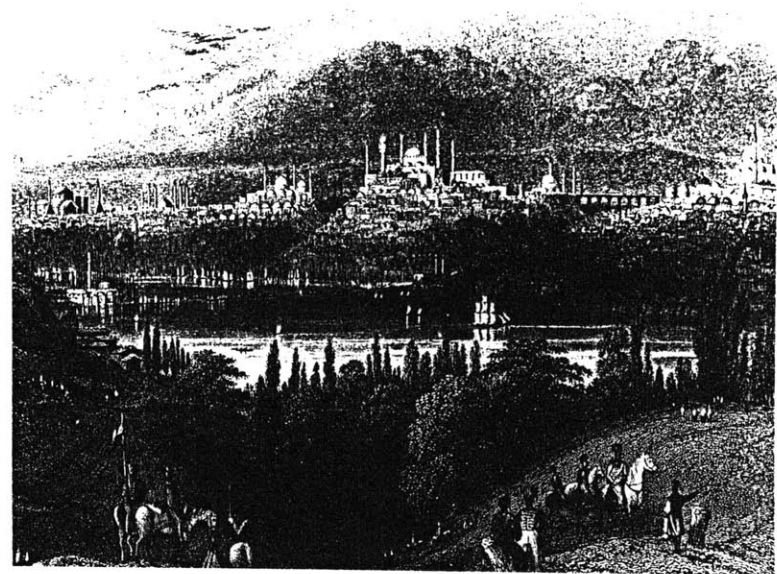


Fig.10. 19thc etching showing the city from Asia.

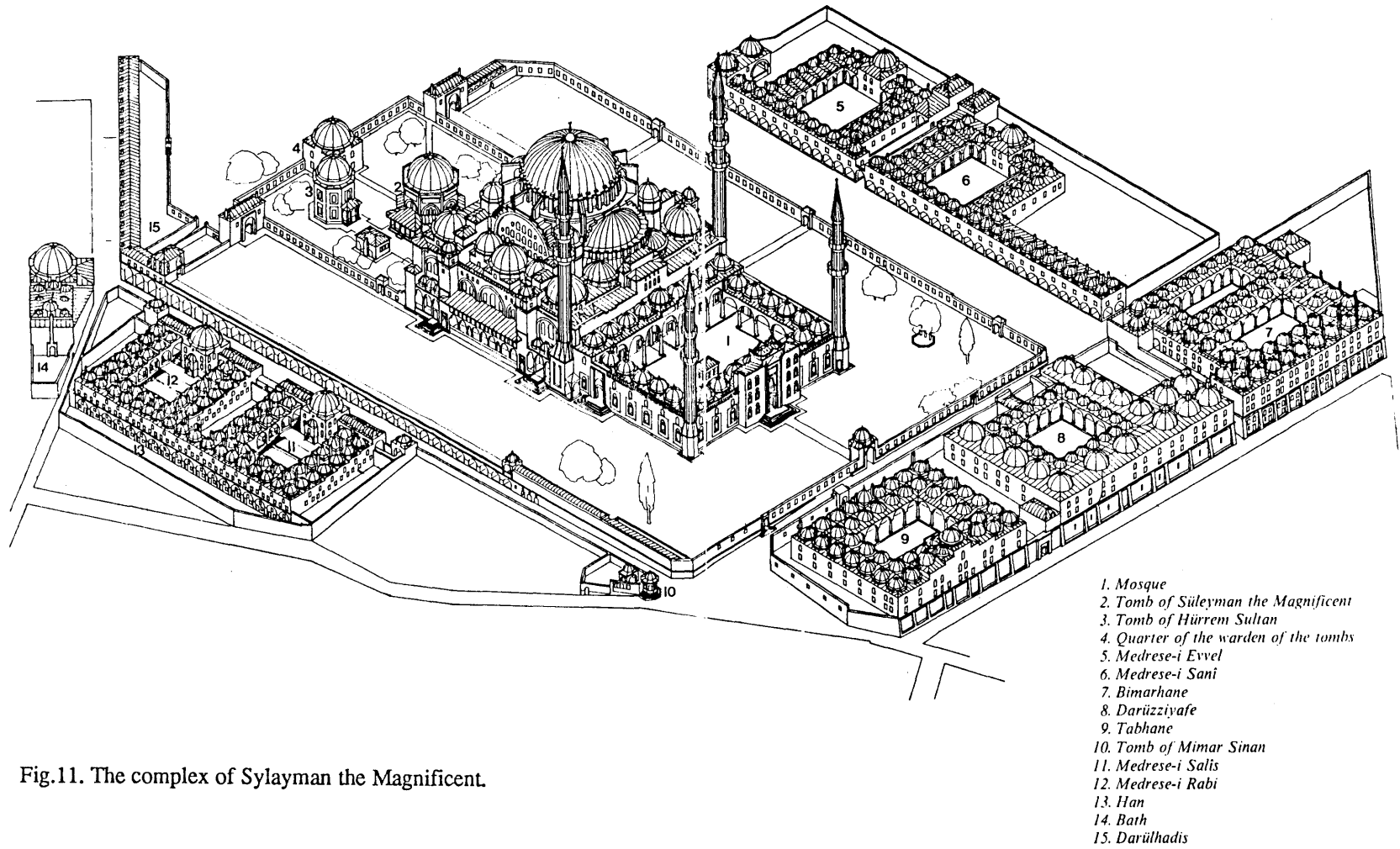


Fig.11. The complex of Süleyman the Magnificent.

Istanbul retained its religious importance as the headquarters of the Greek Orthodox Church.

The city's wealth, however, was mainly dependent on the Ottoman military conquests and trade. Istanbul developed into a successful center of inter-regional and international commerce. The development of the Grand Bazaar, built by Mehmet the Conqueror, into a main city center was therefore inevitable. The other center remained the Hagia Sophia Mosque. The two areas were linked by the only remaining avenue, the original Mese of the Byzantine city.⁷

The rest of the city fabric, however, gradually lost its arteries and open spaces as incremental growth from the central nodes of the Kulliyes continued. *"The most enduring buildings erected by the Turks in Istanbul were those destined for the service of God. The rest of the fabric continued to be built of timber and other perishable materials."*⁸ The sixteenth century saw a rapid increase in the population and was a time of great building activity, especially under Suleyman the Magnificent and his master architect, Sinan. (1490-1580). Three hundred works throughout the Empire, one hundred and twenty of them in Istanbul are attributed to him. Sinan brought the style of the Empire to a peak with his exploration of volumetric and spatial qualities, using the rationale of structure and mathematics. His masterpiece in the city is reckoned by many to be the Kulliye of his patron Suleyman I. He himself is buried in a corner of the composition; as one Turkish writer puts it, *"He wished to sign his masterwork humbly in the margin."*



Fig.12. Aerial view of the Süleymaniye complex showing it within the fabric

In the seventeenth century, the city continued to develop along the same lines without a substantial increase in population (800,000). Hence it remained a low density city, enclosed but with large open spaces, gardens and parks, and timber-framed houses. Two monuments were added at this period-the Ahmet I Kulliye (1616) and the Valide Sultan Mosque in Eminonu.(1597-1663). Fire ,however,plagued the seventeenth century city . Because houses were built close together on small plots on narrow streets with long timber roofs, the city "*burnt like a candle*".⁹.

Hence, by the beginning of the eighteenth century, the Ottoman city of Istanbul was made up of permanently changing, loose residential fabric , centered around Kulliyes built of permanent materials.

The eighteenth century was a turning point in the Empire's history . Successive military defeats, loss of territory and increased pressure from the industrialized nations of Europe meant that the self-sufficient closed Ottoman system had to open out and search for new ways to catch up with the world. The treasury was empty, and life was expensive due to deteriorating economic conditions and the fluctuating value of the currency. The people of the city were unhappy; the Ulemas did not like the changes being introduced, the guild members and merchants were unhappy with the high taxes and bad economic situation, and the Janissaries were a functionless, parasitic, aggressive group. Life was insecure and the gap between the people and the court became larger. "*On one side are the burnt*

houses of Istanbul and on the other, the beautiful konaks, kiosks, and seraiys staging wasteful luxury."¹⁰

While burnt-down houses were rebuilt in the seventeenth century, a lack of human energy and economic means in the 18th century left the damage untouched. Consequently people moved out of the city. Hence we find that the main urban development trend at the time was the integration of the Bosphorous and the Golden Horn shores within the capital city complex as they became major pull centers for the population. The little villages along the Bosphorous grew, eating away the gardens and vineyards and filling in the space with mansions and new residential quarters

This new urban tissue lacked cohesion, with the streets underplayed and houses individually highlighted. Nature became an important element, with kiosks in large open spaces and low fragile structures in and around the great outdoors such as gardens, water pools, cascades, parks and cemeteries. Grand Viziers also built numerous seraiys, pavilions and parks to employ unskilled labour in the city. The Royal taste expressed in these structures is clearly influenced by Renaissance, Baroque and Safavid styles of architecture. However, the old city itself, was still a city of pedestrians with nondefined land-uses, inadequate housing and insufficient infrastructure. "*Ironically enough, the walls of the old city cannot provide protection any more. On the contrary, they symbolise a highly insecure and hostile environment.*"¹¹

Galata, on the other hand, although incorporated into Ottoman

rule by Mehmet II, remained a cosmopolitan harbour town, and a fairly dense commercial area. Further up the hill in Pera, was a high-class residential district developed for ambassadors and upper-class notables, distinctly European in its fabric.

THE CITY IN THE NINETEENTH CENTURY:

During the nineteenth century, efforts were made to transform Istanbul into a modern, western-style capital as part of a policy to try and save the empire by reforming its traditional institutions. Hence a 'new page' was written in the history of the city with the implanting of Western-inspired urban concepts that have not stopped since. *"Istanbul underwent a conscious break with its Turkish Islamic heritage."*¹² However, because of the bankruptcy of economy, the scale of building was limited and piecemeal. The "regularization" of the fabric, a concept connected to modernization in the minds of the Ottoman elite, occurred only in certain areas. Three major fires, Aksaray (1896), Hocasasu (1865), and Pera (1870), allowed the rebuilding according to well-proportioned, rectangular grids as topography permitted. Thus the "regularization" of the fabric remained patchy and disconnected. Improvements in the communication network, though, connected Eminonu to Beyazit to Divanyolu to Hagia Sophia Square. Concern with communication is also evident in the planning regulations drawn up in 1848 which dealt exclusively with that subject.

In 1839, a new system, "The Tanzimat", was drawn up. This

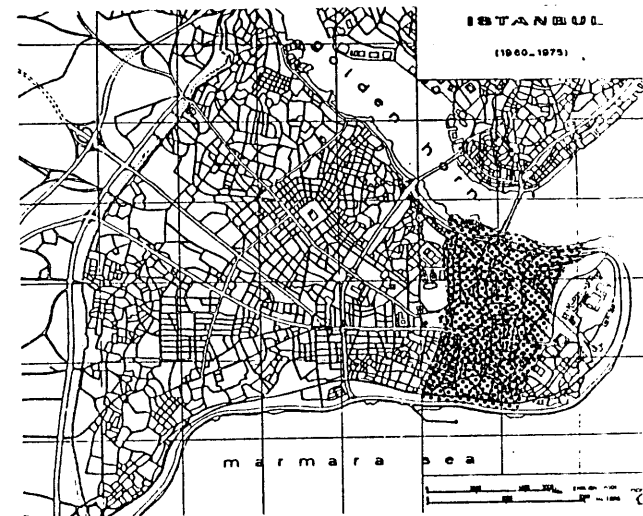


Fig.13. Map of Istanbul showing the extent of the Hocasasu fire.

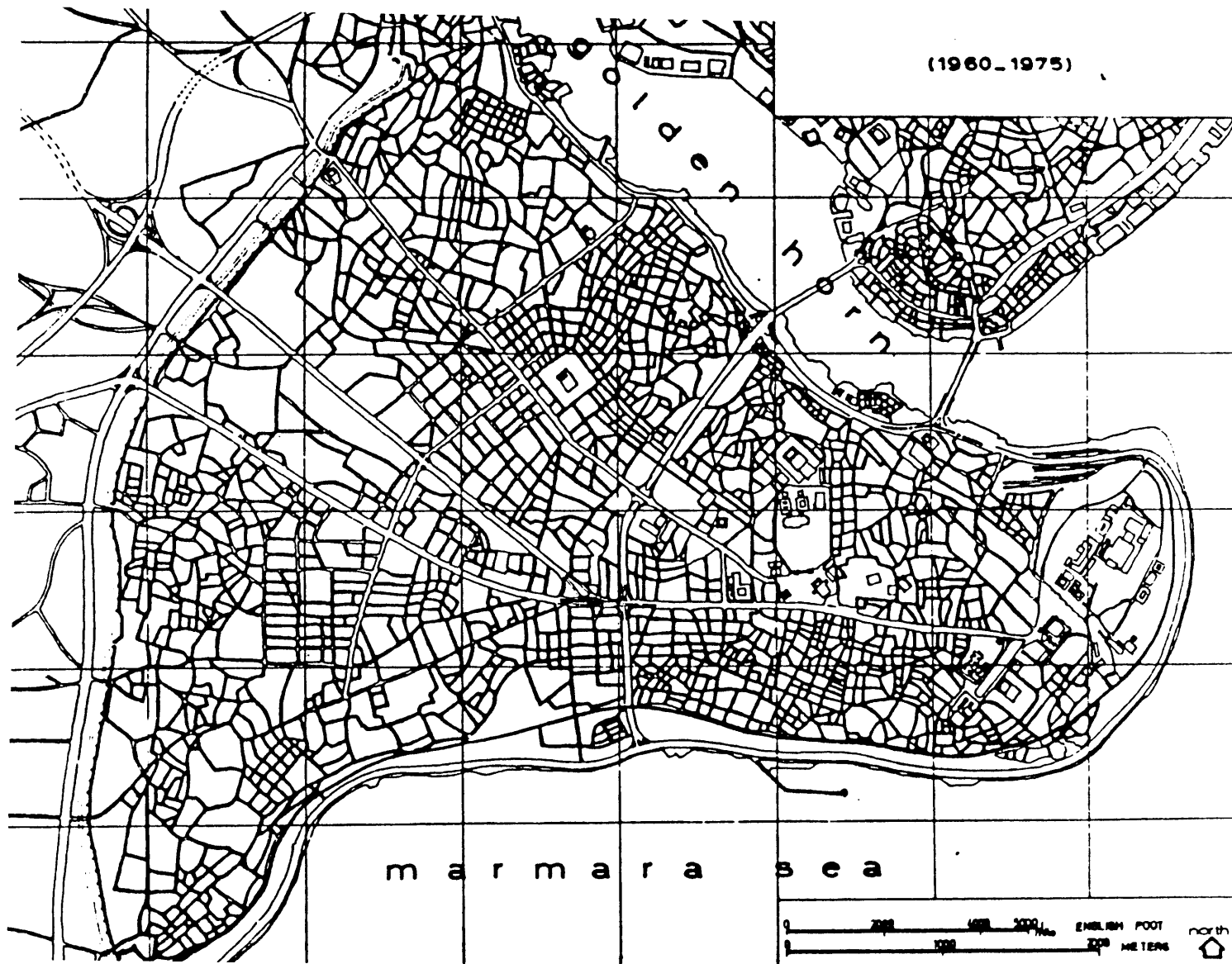


Fig.14. Map of Istanbul showing the new boulevards cutting through the fabric.

expanded the duties of the centralised government to cover all aspects of life. Hence the old traditional, Ottoman system of organization, with neighbourhoods organised under religious heads (Imams) and judges, organizing for their own public works needs was abandoned. The lifestyle, however, remained traditional in the walled city. However, Galata on the northern shore of the Golden Horn, prospered and grew, acquiring symbols of modern living like hotels, offices, and theaters. Hence the city expanded mainly towards the north of the Golden Horn and the Bosphorous as the dominance of the West increased. ¹³

THE TWENTIETH CENTURY CITY:

The Allied occupation (1919-1922) did not help the city; moreover the transfer of the capital to Ankara in 1923 was followed by a conscious neglect on the part of the authorities of the "capital of the Old Ottoman Empire". The population went down from 1.1 million in 1914 to 0.7 million in the nineteen twenties. However, the old city survived the change and remained the industrial and commercial center of Turkey. Hence, in 1930, efforts at rehabilitation were made with plans drawn up by various people including the French planner, Henri Proust. The priority of the plan, however, remained the control of traffic. A network of well organised main roads were planned, including the Ataturk Boulevard, two main roads from Beyazit Camii to Akasaray, and an embankment road along the Marmara and part of the Golden Horn. Taksim square and the archeological zone,

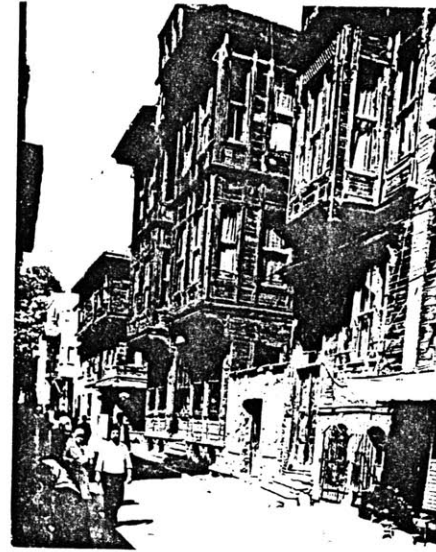


Fig.15. The traditional timber houses of Istanbul.



Fig.16. 1910's apartment blocks that have picked elements from the traditional fabric.

however, were also created. Segments of this plan were implemented before the Second World War, and other parts of it in the 1960's. Where the fabric allowed, alignment plans were implemented. ¹⁴

As the streets were widened, timber houses and gardens disappeared and were replaced by apartment buildings. However, until the nineteenth twenties, these five-to six-storey buildings had retained the same character as the old fabric v/v bay windows, overhanging roofs, corniced first floors etc....¹⁵

In the 1950's, industrialization was accelerated, leading to a dramatic increase in the population of the city due to migration. The city spread into the Thracian Plain beyond the land walls and well into Asia because of the building of the bridge across the Bosphorous. Moreover, the Golden Horn attracted industry because of its accessibility by water which polluted it heavily and consequently led to the cleaning of this zone and the formation of the project area.

CHAPTER TWO

HISTORY OF THE GOLDEN HORN

In order to understand the area of the project it is important to look at the role of the of the Golden Horn in the life of the city. The Golden Horn (Halic) is a safe, protected inlet from the sea of Marmara. It is a water body with two banks. However, throughout history the term "Golden Horn" has referred either to the waterbody itself or to its southern bank outside the city walls as they developed, it will be used as such here.

ANTIQUITY:

In ancient times the inlet was called Keras, after Io's daughter, Kerossa. According to Greek mythology, she was the mother of Byzas, the legendary founder of Byzantium who is said to have been born at the top of the hill between the two rivers that form the Halic. The ancient city was encircled by a wall along its three sides. Dionysius, a writer of the time, described the Halic as basically unbuilt, with its shores covered with forests and meadows. The main harbour of the city was in the small bay of Bosphorion, with small fishing harbours fostered in its other small bays. Several important buildings were also situated along its shores such as the temple of Athena, in a fishing bay below the Suleymaniyah complex, and the temple of Zeus in a small bay at Unkapani etc... However, the main center of the city, the Acropolis, was situated on the first hill overlooking the Marmara sea . ¹

From the little we know, it seems that the Golden Horn played a role in the life of the city as a center of trade the main preoccupation of its inhabitants- and an element of myth related to the origins of the city. However, the Golden Horn remained outside the city walls and outside its domain

THE BYZANTINE PERIOD:

By the time of Theodosius in the 5th century, although the city remained encircled by walls, the Bosphorian port along the Halic prospered into an important center of commerce. The Golden Horn became an important link in the north-south and east-west trade land routes. Italians, mainly Venetians, Germans and Jews settled between Eminonu and Unkapani establishing their own separate quarters in this prosperous commercial zone. This area also provided transportation to Galata on the Northern side, hence becoming a link between the various parts of the settlement. More over, if we were to look at the road map of the city at that time, we can clearly see that the main roads followed the coast lines of both the Marmara Sea and the Horn. Thus, a certain constant distance was maintained between the Horn and the main artery of the town.

Several monasteries and churches were built along the Halic-the Pantokratoros in Zeyrek built in the 12th century, the Porepostes Monastery built in the 11th century, (now the mosque of Eshi Imaret), the Orthodox Patriarchate built in the 12th century at Fener, and the Blachernae shrine and Palace. The entrance to the latter was

through the Imperial port at Balat. This, in turn, developed into a high-class residential area for the statesmen of Byzantium (hence its name, "Balat" meaning "mansion"). However, although these religious buildings were located in relation to the Halic, all were built within the walls of the city, none directly on the waterfront. Similarly on the northern side, the city of Galata, a Genoese colony, was surrounded by a wall. The only other development on that side was of army storehouses, and the Monastery of Ponteleimon. ²

Moreover, the center of civic and religious life still remained on the site of the Acropolis, in the Hippodrome and the Hagia Sophia, with the main Byzantine palace on the site of the Acropolis overlooking the sea of Marmara.

"Procopius, court chronicler in the reign of Justinian the Great, in the mid- 6th century described his beloved city as being surrounded by a garland of waters.." ³. Hence in the Byzantine city, we see the Golden Horn playing a greater role in its life. It now had been developed into a center of commerce, and a linking element in the city. Finally, the chain that was strung across its entrance (See Ch.1) is significant in that it shows the way in which the inhabitants of the city saw it; the Golden Horn was theirs, their backdrop and their backyard, so to speak. The Byzantine walled city nevertheless clearly looked towards the Sea of Marmara with the water edges remaining outside the city walls.

Hence, although the Golden Horn in the Byzantine period was an ordering element in the city because of its importance as a source of

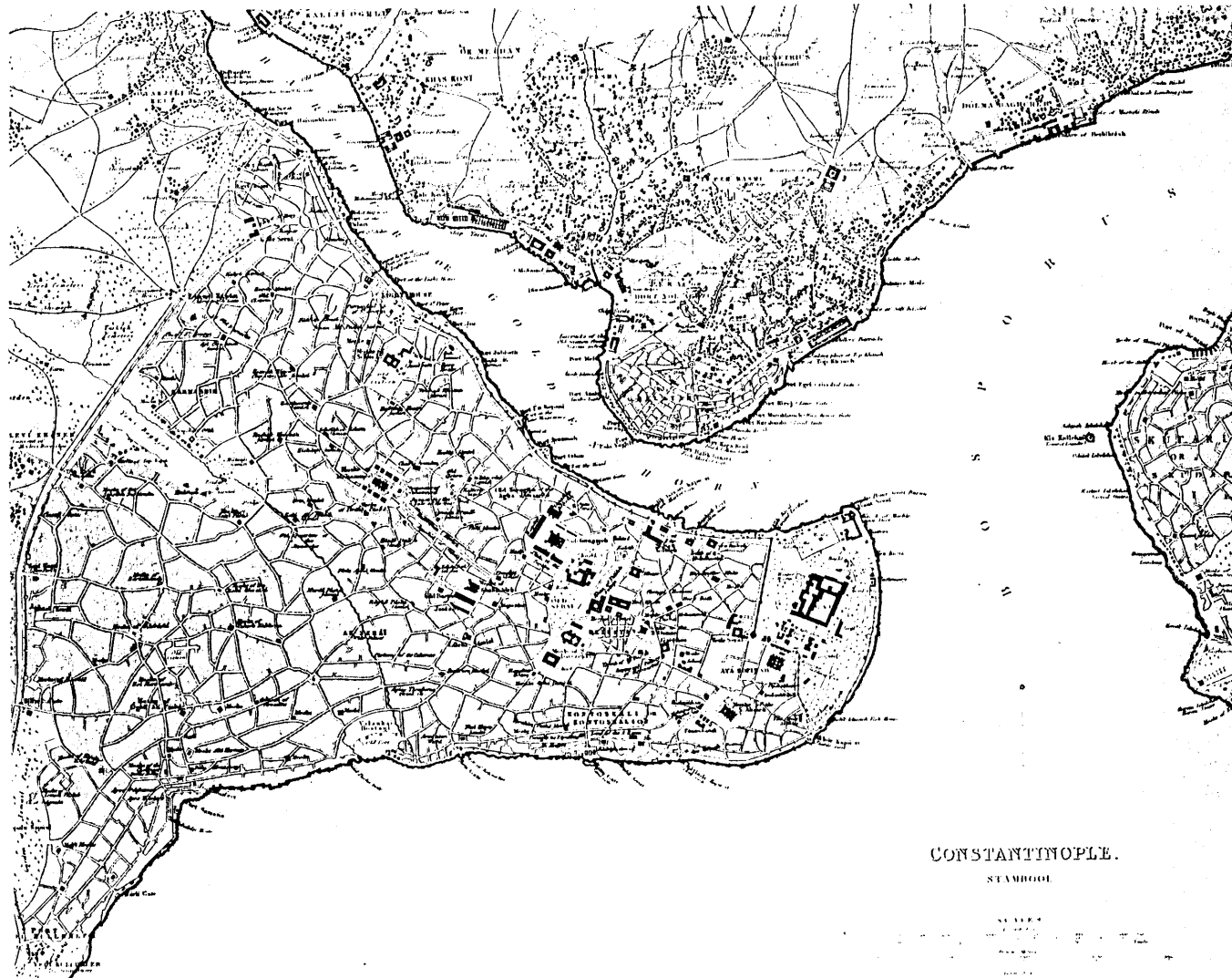


Fig.19. The Ottoman city with its landings along the Golden Horn and the High Admiralty building on the opposite shore

together with the enormous number of merchant vessels lying in the midst of the city on the Golden Horn, afforded the most astonishing mercantile panorama in the world. " 4.

Due to the nature of the Ottoman city, run according to Muslim law, the fabric of the settlement soon took on an organic form with encroachments occurring frequently over streets and thoroughfares. This made communication very difficult. Therefore, goods got transported by sea. Hence a series of landing places developed along the Horn, eating away at the sea wall and gates, with fountains, cafes and sometimes mosques related to them especially in the later period. The port of Unkapani, in the 19th century had the mosque of Suleyman Subasi, the fountain of Ahmet Aga, and a cafe.

The northern coast, on the other hand, quickly developed into an important military zone. Dockyards were built at the Kasim Pasa creek, which became the center of the Ottoman Navy at the time of Sultan Suleiman the Magnificent (1520-1566) with the establishment of the High Admiralty, Naval Ministry and Audience Hall. A naval shipyard consequently evolved between Galata and Haskoy.

Further up the northern shore, in Karaagac and Kagithane, royal mansions and villas within large gardens were built, such as kasr-i Humayun (the Imperial pavilion), Aynali Kavali Kasri, and Saadabad. This latter Imperial Palace was built on the upper-most part of the Horn between its two rivers. Because of the non-saline nature of the water, this was a lush, green area. Called the Sweet Waters of

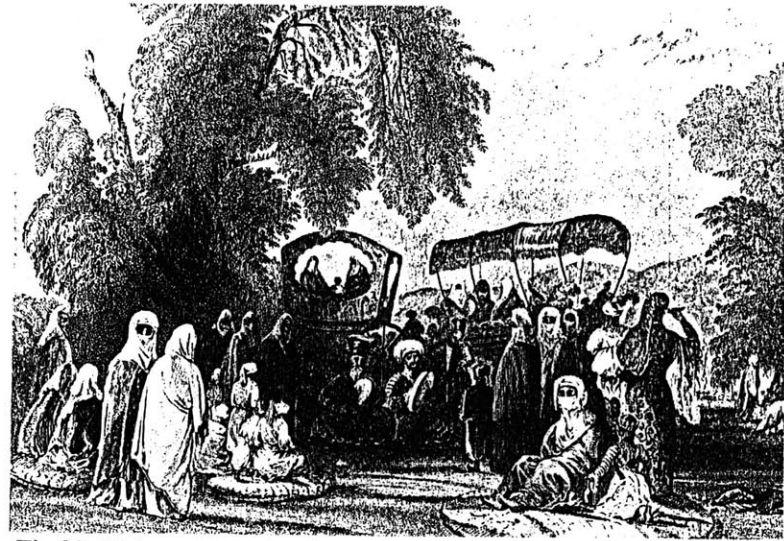


Fig.22. 19thc etching showing the Sweet Water's of Europe.

wealth, and a part of its territory, it was the "backyard" outside the walls to be used as need be.

THE OTTOMAN PERIOD:

Sultan Mehmet the Conquerer (See Ch. 1) finally conquered the city by getting into the Golden Horn. He rolled his ships across the hills and entered the protected area. Soon the sea walls gave and the Sultan entered his city victorious. In order to rebuild it, Sultan Mehmet started its repopulation. He settled captured prisoners with their families, along with migrants from the Black Sea coastal towns, on the shores of the city harbour, the Halic. This further signifies the "backyard" character of the Golden Horn.

The Ottoman city developed as a series of self-sufficient communities with the ethnic groups settled along the Halic. The two main elements linking the Ottoman city together, were the Halic itself and the Divanyolu street that was part of the original Mese (See Ch. 1). This is not surprising, as both were the commercial centers of the city. On the Horn there was a series of markets called Kapans, developed to receive imported goods such as oil, honey, fruit, and flour. Eminonu, the original Bosphorian commercial area was developed as a proper customs port. Soon the slopes between the Horn and the Bazaar (See Ch.1) were covered by commercial installations such as caravanserais, shops, and warehouses. Along the coast, commercial activity also spread all the way to Cibali ".....while the extent of the quays, warehouses and factories ,

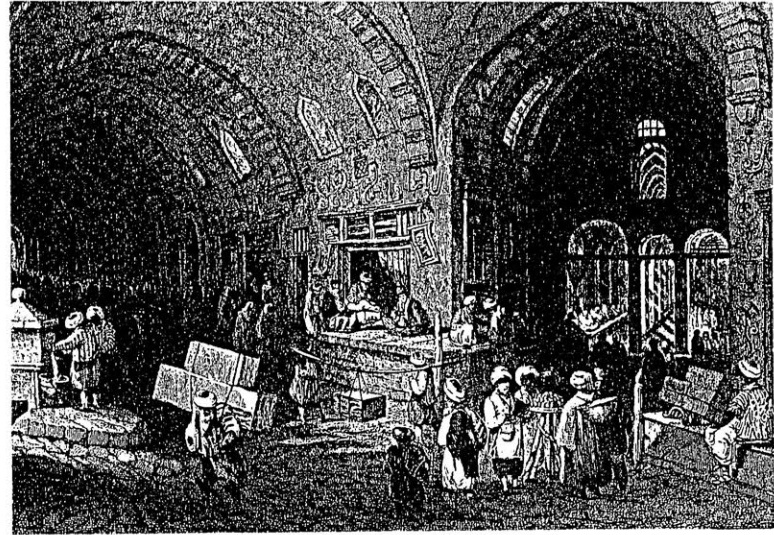


Fig.20. The grand Bazaar.

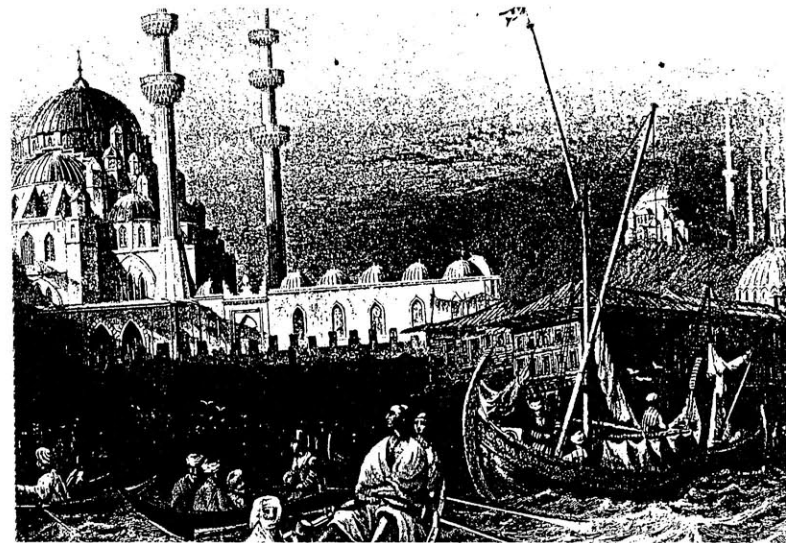


Fig.21. Eminonu. The commercial port of the city.

Europe, it had always been, and continued to be, an important recreational zone for the citizens of Istanbul (See Ch. 4). *"The Golden Horn and the Sweet Waters were literally covered with caiques filled with women and children on their way to the charming valleys, where they are wont to congregate on the afternoon of their Sunday. The caiques were so frail and showed so little above the water, that to one standing above and looking down on them, their passengers had the appearance of sitting on water and gliding over it as swans might do."* ⁵

Fishing continued to prosper all along the Horn. Greeks were allowed to fish for a certain sum of money, or if they hunted dolphins for the Sultan's medicine. One travel account mentions 150 fishing nets from Topkapi to Eyup.⁶ The security of the ports and the Horn was maintained by a patrol of Bostanci-bashi, the commandants of the Palace gardens.

Other secondary functions that took place on the Horn were festivities and celebrations. The Ottoman Sultans carried on the tradition of being inaugurated outside the city in Eyup. A whole procession would leave the palace and proceed to the shrine in boats. On the day of Nevruz (vernal equinox), the Sultan, enthroned in one of the seaside mansions at Topkapi, reviewed the Ottoman navy as it sailed down the Horn. Similarly the Bairam ceremony (similar to the hand kissing ceremony in Spain), performed the last three days of Ramadan, also involves a procession across the Horn. *"...Despite the early hour, the Golden Horn, and the large basin which expands at*



Fig.23. Detail from an engraving for Comte de Choiseul-Gouffier, showing Sulaymanya in the Background and the animated water of the Golden Horn.



Fig.24. The first bridge across the Golden Horn between Unkapani and Azakapi.(1836)

its entrance, presented a most animated scene. All the vessels were decorated with many coloured flags and streamers, from boom to truck. A vast number of gilded boats, decorated with superb carpets or tapestries and manned by vigorous oarsmen, flew across the rose-tinted water, and these boats, laden with pashas, viziers, beys and other dignitaries, were all directing their course towards Serai Bournon." ⁷ Royal circumcision celebrations were also held at Saadabad with spectacular fireworks, processions, music and dancing. The Ottomans exploited the scenic side of their waterfronts to impress foreign dignitaries. A reception held in 1653 for the Moghul emperor was described by the historiographer Naima thus : "*...These receptions were held in world-adorning palaces and in heart-delighting waterside pavilions , so as to show him the strange and wondrous sights of Istanbul"*. ⁸ The exact location of these pavilions is not clear but was, most probably, on the upper reaches of the horn.

By the 18th century, overcrowdedness in the city forced the upper-classes to move out. Several mansions, seraiys and kiosks were built outside the city walls along the shores of the Horn, especially in Fener by the wealthy Greek aristocracy. These stone mansions did not face the Horn, but had their gardens overlooking the water. ⁹

" With a feeling of jubilation and power after the conquest, an expanding sense of landscape that had been exploited at Bursa, the Sultans proceeded to develop the landscape spectacle of the Golden HornWithin two centuries , the scene along the Golden Horn had

been transformed from a fortress into a free and prosperous city." ¹⁰

Within the Ottoman period the Golden Horn continued to develop along the lines of the Byzantine city. However, the center of the city remained inside its walls, with the main mosques adorning the hilltops rather than the water edge. Again, no formal treatment or definition was given to this area, it was developed as the need arose.

THE NINETEENTH CENTURY.

The main expansion of Istanbul did not occur until the 19th century. With the advent of technology, the combination of steam boats, railways and industrialization pushed the upper class residential areas out to the Bosphorous. By 1829, the industrialization of the Horn had been initiated by Royal decree in an attempt to modernise the empire (See Ch.1). The first factory built on the Golden Horn is between Eyup and Ayavansaray, for the production of the fez. By the mid 19th century, even the palaces in Karaagac and Kagithane were replaced by industry.¹¹

The growing importance of the Horn as a communication system was established with the first regular steam boat service in 1851. This was to serve high-ranking bureaucrats and Europeans on the Bosphorous. Its focal point was Eminonu, serving Galata, the Bosphorous and the villages on the Horn. By 1881, the network had grown into a transportation system for the masses. The growing importance of transportation also led to the building of bridges across

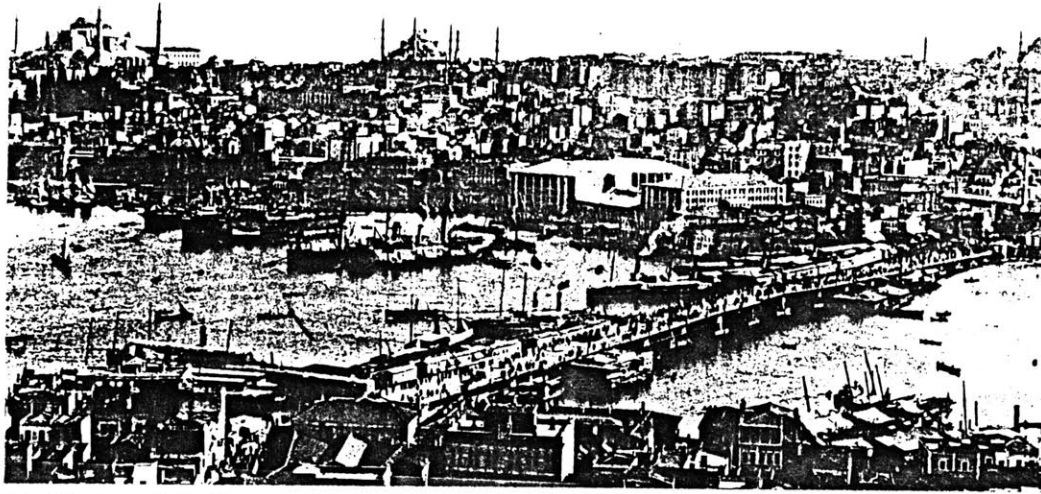


Fig.25. Ataturk Bridge, early 20thc.



Fig.26. The Golden Horn along the edge of the old city. Early 20thc.

the Golden Horn. The first bridge design is said to have been made by Leonardo De Vinci at the beginning of the 16th century. However, the first bridge to be built was in 1836 between Unkapani and Azapkapi, connecting the Imperial shipyards to the old city. The growing importance of Galata as a commercial area after 1838 led to the building of the second bridge across the Horn in 1845, between Eminonu and Karakoy. ¹²

"and at hand the watery bosom of the Golden Horn cuts into the densest portion of the city and disputes possession with the land" ¹³

This description of the Golden Horn, written in the latter part of the 19th century, gives an idea of the state of affairs then. The increase in sea traffic, and public concern over unsanitary conditions and the image of the city led to an attempt to regularize and clear the waterfront. For the order conscious Ottoman elite for whom beauty meant regularity, the waterfront was too chaotic and dirty. Quays were rebuilt and flanked by warehouses and shops. However this was not the first time an attempt had been made to improve and protect the Golden Horn. Mehmet the Conqueror had passed legislation in the 16th century prohibiting the cutting of trees and vegetation so as to stop the erosion of the banks and the silting of the Halic. ¹⁴

THE TWENTIETH CENTURY:

In the 20th century with the increase in industrialization, both banks of the Halic became a focus for industrial growth. The Halic was proposed as an industrial zone by the French planner, Proust, which

soon turned it into a cesspool. Industry blocked the water from the rest of the city and invaded even its upper reaches. Several studies were done by foreign and local experts, but nothing was implemented. It was only in May 1984 when Mayor Dalan's project was approved by the Municipality Council that the clearing of the Halic was initiated. (See Introduction). Hence for the first time in its history, the Golden Horn and its northern bank were looked at as one area with policies drawn up for its clearance, improvement, and transformation into a public amenity.

Today the Horn is quietly waiting for life to return to its shores as it lies there clean, green, but in most of its sections, empty.

CHAPTER THREE

THE GOLDEN HORN RE-DEVELOPMENT-THE ISSUES.

A. THE GOLDEN HORN TODAY.

Planners , architects and intellectuals ¹ in the city are clearly worried and disturbed with the situation created by the cleaning operation of the Golden Horn. They agree that what was there was an unhealthy environment affecting the whole city,however there is a sense of trepidation as to what might be built on the Golden Horn.

In a way their worries are well founded and not simply based on nostalgia. The growth and development of the Horn , when viewed across history (See Ch.2),has been informal, incremental and slow. In just two years all this has gone the Golden Horn that grew over 20 centuries was cleared in two years. The intellectuals worry that it will be built up in an equally short time and are hence pessimistic about the careful integration of the new development on the Golden Horn into their complex,old city.

The general approach to the Golden Horn project has been one of a grand gesture; this was probably needed in this situation to clear the area out. However, another approach could have been a detailed study of the area that would have allowed a more selective approach, opening out spaces within the built environment where appropriate and rehabilitating what was worthwhile while replacing what was beyond rehabilitation . Such an approach could have produced a very rich and multilayered environment in keeping with this great city.



Fig.27. The "parks" along the Golden Horn.

However, probably for economic and political reasons, the operation took an overall view of the issue and dealt with it in a rather dramatic way.

1. Hiatus in the logic of history:

A major change from the way the Golden Horn has been traditionally perceived has occurred. Today the actions of the Mayor of Istanbul has put this area ,as one unit, on the map so to speak. Never before has any public policy or approach given this area any significance as land bordering the water. Note, for example, that the Ottomans, given the features of hills and water on their site, chose to celebrate the former. The Yeni Camii, the only important public building near the water, had a wall seperating it from the water's edge. Clearly the water played no role in the formal design of the mosque. The only buildings that relate truly to the water are 19th century examples on the Bosphorous that have clear European influence.

The Golden Horn up until the nineteenth century has been developed spontaneously, without a masterplan, maximizing on the potential of its differing zones. Note that even today the Golden Horn still belongs to five district municipalities.

Moreover the Horn has also always been perceived as a one-sided piece of water. Through historical writings, the term "Golden Horn" either refers to the water body itself or the southern shore bordering the old walled city. Galata, Eyup, The Naval docyards and its upper reaches are mentioned separately. Its northern shore has been inaccessible because of its Naval docks for at least the past three

centuries.

However today all these different areas are being homogenized into one zone in the spirit of a cooperative intervention. The danger from this approach is that it produces monolithic solutions detrimental to the environment because of their lack of complexity and human interest. The question today, however, is: how do we approach the "building " of the Golden Horn?

2. The parks:

The first thing that strikes the visitor to the city today with respect to the Golden Horn are the "parks". These endless "wall to wall" lawns seem artificial and out of place in this vibrant, complex, multilayered city. This stems from their monotony and scale which makes them seem arbitrary, thus reinforcing their status as a separate entity.

The second striking feature of the Golden Horn today is the stillness of the water. While looking at etchings and photographs of the place through history, one is struck by the liveliness of the water with the numerous and varied types of vessels sailing up and down it. Today hardly anything stirs. The sociologist A. Oncu notes that there were always stories and talk of "Galis full of gold" in the bottom of the Golden Horn. These stories, however, seem to have stopped for the past two years.

Of course this is an intermediary stage; however, it epitamizes what could go wrong in the development of the Golden Horn.

The main problem with the parks is their lack of a sense of

46 place. They are anonymous and could be anywhere-London, Paris or NewYork. Hence they, in a sense, stop Istanbul from connecting with the water, as they create a foreign world in between. This is contrary to the whole argument for the removal of industry to clean the area and give it back to the city.

It is this risk of discontinuity that is the biggest danger we face in the development of the Golden Horn. Therefore any development that creates a "foreign" environment, be it in terms of form, scale, use or user, is in danger of weakening the whole city and robbing it from its water edge. Moreover, the continuity of the city to the water's edge is a moral obligation as it is the spirit of Istanbul that attracts the visitors and makes its inhabitants love it. Hence anything that is created in this area should keep this goal in mind.

There is no doubt that the area has tremendous potential for enhancing the city of Istanbul both in terms of answering its needs and highlighting this unique waterbody in its midst. However the needs of the city are multiple and complex and in certain instances conflicting.

3. The complexity of the social and urban fabric.

In looking at the past, we must never forget that the fabric and the environment we see today were built and supported by a certain economic, social and political structure that has disappeared. The introduction of Western models of government and economy were bound to affect the environment. The change in the political system of the country at the abolition of the Empire brought with it new laws,

new means of economic growth, which had a definite effect on the social structure of society and the environment.

Today Turkey has a mixed economy, with the National Product shared by the public and private sectors. Although the economy is still heavily agricultural (in 1980, 64% of the Turkish working population was involved in this sector), the industrialization of the country initiated in the 19th century was encouraged as part of the process of modernization of the empire. Although the "Kemaliste" doctrine tried to conserve a balance between rural and urban life, after the death of Ataturk industrialization was accelerated to the detriment of rural development. This policy was in full swing even as late as 1977.

Industrialization, especially in the last thirty years, has led to rapid urbanization of the country. Migration from the rural areas to the cities has characterized the development of the Turkish population for the past hundred years. The causes of this migration can be divided into push and pull factors. Push factors include low revenue from agriculture, structure of land ownership, mechanization, and a general lack of work opportunities and low income. Pull factors include accessibility of cities, industrialisation, and hence access to jobs and better facilities. A direct result of this industrialization policy was the rapid growth in urban centers. *"After 1950, the urban population began to grow at a rate more than double that of the national total."*²

Istanbul itself attracted a large number of migrants, as it was an important industrial, commercial and transactional center. *"More than*

three-fifths of Turkey's industry is located either in the city itself or nearby...." .³ Major industries in the city include textiles and furniture. In 1977, Istanbul handled 75% of the national imports and 50% of the national exports; it also had 40% of the nation's organised industrial labour force.

Hence it is not surprising to know that Istanbul's population grew from 800,000 in 1940 to 3.2 million in 1975, and has reached 6 million today. This obviously created tremendous pressure on the city and its infrastructure.

The city suffers from a serious shortage of housing, and it is estimated that 42% of its population live in squatter housing.⁴ Moreover with the increase in density especially in the walled city, overcrowdedness and lack of open spaces are now more of a pressure than before.

The level of unemployment in the city is also very high. The national rate is said to vary between 15%-20%, and the increase in the number of unemployed has risen by 420% in the last six years. The estimated number of people out of work today in the country is 4 million, half of whom are primary school graduates.⁵ Note 50% of the population are under the age of fifteen, which implies that the problem of unemployment is a problem for the future.

However, industry is now deemed unviable as a way of combating unemployment.

"The grand design now is to halt the city's industrialisation and make it once again a financial, commercial, and transit centre for the whole surrounding region. In the 1970's Istanbul lost a golden

opportunity to fill the vacuum created by the collapse of Beirut. The Turks were not looking outwards then for economic opportunities. Now the mood has changed. The Ozal government has given Turkey a liberalised economic regime; foreign banks have been thrusting into Istanbul and its hopes of becoming a great regional financial center no longer look chimerical."⁶

Similarly with tourism-the government has already invested capital in the tourist industry for its promotion both at home and abroad. Turkey's kilometers of sea-shore and its wealth in heritage are seen as its main asset and attraction. Hence, Istanbul will again play a main role. *"Tourism is this ancient city's other great commercial asset. From 420,000 visitors in 1980 the tourist intake had risen by last year to around 750,000."⁷*

However, such ventures bring about major development pressures on the city, be it for the provision of office space, hotels, or the upgrading of the communication network. Although these might be employment generators, they introduce and cater for new users in the city. These users (especially v\w the financial center) tend to be large multinational conglomerates which demand large-scale developments and have an "international corporative" image that they import into which ever country they go to. Furthermore, the dynamics of today's economy and the immense resources of modern technology makes large scale development possible.

The location and prestige of the Golden Horn site would no doubt be attractive for corporations. The price of development and

its maintenance on the Golden Horn due to the technical issues involved is bound to be high and could be out of reach of the small local firms.⁸ Hence the prestige of this historic location and financial considerations are bound to make the Golden Horn a target for development by large multi-national firms.

What this means is the introduction of a new type of user to the Horn, alien to the city and what exists in the neighbouring areas with a new sense of scale and sensibility introducing new buildings that don't relate to the existing social groups. Hence the Golden Horn would be in danger of being developed as if it were part of New York or Hong Kong. Thus we are back to our anonymous, foreign world, but this time in built form.

The repercussions of such developments would be many, and would be felt at various levels.

Cities are the result of a whole set of complementary and conflicting interests that live together in one form or the other. They are also living organisms that change with time, accommodating the various forces in society as one takes precedence over the others. The beauty of traditional cities is that they are multilayered and thus exhibit the complexity of man's co-habitation with his fellow man. This makes them more interesting to unravel, as they tell several stories of conflicts and struggles and bear witness to man's ability to adjust and cohabitate in various forms and conditions. This rich complexity is no more apparent than in the city of Istanbul.

When the history of the city is studied (See Ch. 1), it is clear that the context we are dealing with is part of the international

heritage. In a sense therefore, this city does not just belong to its inhabitants. It is a responsibility that has been handed down to us to be passed on to others after us. Thus a broader perspective needs to be maintained both in context and in time. Indeed it becomes a moral obligation to retain and preserve the character of the city. The central location and the importance of the Golden Horn in Istanbul makes this area crucial to this issue.

4. The Implications of rapid development.

We must never forget that the context we are working with is also a context of development. Any project on the Horn will affect development elsewhere, in the city be it by pulling capital in and away from other areas or by affecting the land values within the neighbourhood overlooking the Horn. In San Francisco, a hard lesson was learnt in developing waterfronts with respect to draining development from other parts of the city. In Oakland, the original core suffered because a development of offices and commercial activity on the waterfront was too near it. Consequently, the initial plans for the development of Mission Bay waterfront into office blocks and a high density residential area were opposed by the existing financial district because that, too, was deemed too close.⁹

Development itself can create its own pressures on the infrastructure and the inhabitants of the city. Congestion of streets, parking, and economic inaccessibility by the local people all separate the development from the city.

A transport study by The Istanbul Rail Tunnel Consultants, (a

consortium of American consultants) is already under way, looking at the various options available to Istanbul; however, plans from the Municipality (presented at our meeting with the Chamber of Architects Jan. '87) already show a road network which includes the building of a fourth bridge across the Golden Horn.

Similarly, public access to the water, physical and economic, can conflict with certain types of development such as housing, marinas, and industry. This could mean a division of the city from the water with the old city wall becoming a divider of classes .

Any development must also have an effect on the inhabitants. The increase in land value in the areas bordering the Horn is inevitable. This could lead to the disruption of those communities, and their relocation as they are forced out of their homes due to economic pressure. Furthermore, conflict between those communities and the new users could appear due to differences in social backgrounds. Tourist developments, for example, are a classic case where the privacy of the inhabitants is threatened, producing friction and hostility on both sides.

Therefore, the risk we face in developing the Golden Horn is of disrupting not just the area immediately bordering the Horn but the city at large. Hence the continuity of Istanbul with its character, scale and user is not simply a moral obligation, but a practical issue for the preservation of the city as a whole, in its fabric, way of life, and balance.

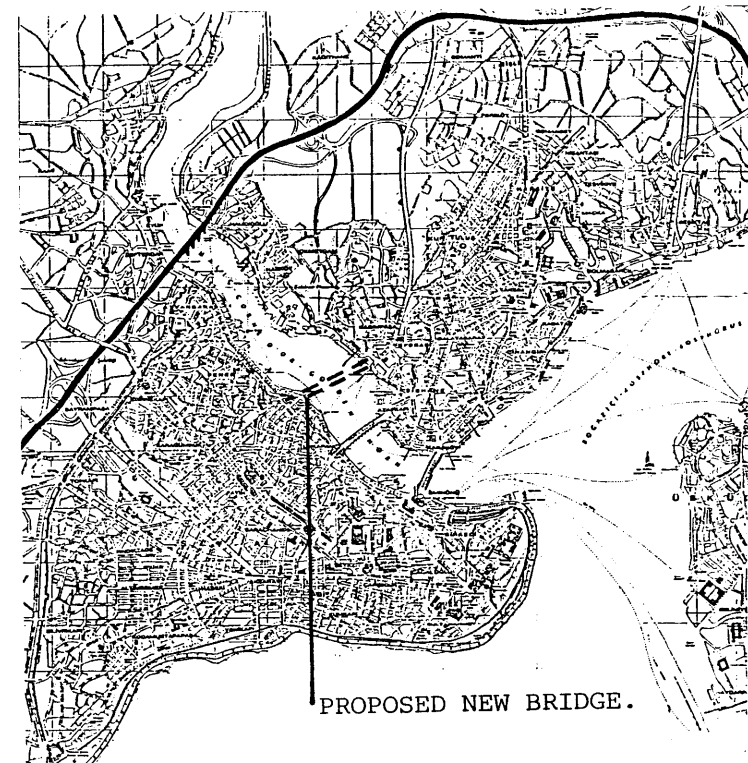


Fig.28. The map of Istanbul showing the proposed location of the fourth bridge across the Golden Horn.

5. The implication of a policy of emphasizing continuity.

Continuity should therefore be concerned with formal, social, and economic issues in integrating the development into the city.

How does one create an environment that is based on continuity? The question should first be asked: what exactly is continuity? And what are its various components?

Continuity has two dimensions-time and place. The dimension of time encompasses the continuation of the role the Golden Horn has played in the city and the way it has been perceived. The dimension of place implies the existence of a certain value in the environment that we want to continue. In this sense our site is a challenge to the concept, as what was on it before the clearing operation was obviously undesirable. Hence what we are talking about is the continuity of the city behind to the water's edge. In this sense, therefore, continuity is the mediator between the city and the water. Therefore continuity is the continuity of the character of the city with its scale, morphology, and so forth and the continuity of access from the city via user, functions etc...

6. Conclusion- The type of intervention.

There is no doubt that the Golden Horn is a unique development opportunity for the city of Istanbul. The issue though is that of cost. If the thread we take from history is that of the Golden Horn answering the needs of the city, then we can envisage a number of uses for this area. However the needs of a complex city like Istanbul

are complicated and conflicting. So how can we develop this area, maximizing on its potential but reducing the risk of discontinuity?

The sheer size of the Horn is a problem if looked at as one monolithic zone. However, it is, in a way, a saving grace, as the Golden Horn could solve a lot of the city's problems if considered in sections, each with its own attribute and hence approach. This is probably the strongest point to extrapolate from its history. The way to look at the Horn needs to take in its complexity and that of its context. The Horn can provide the city with its park, and yet also have housing, offices, hotels, marinas and commercial activities. The issue then becomes the type of facilities in terms of scale and the user. and where on the Golden Horn to insure the integration of the area back into the city.

B. THE INTEGRATION OF THE GOLDEN HORN INTO THE CITY OF ISTANBUL. (Reduce the cost and maximize the gains.)

It is vital that any intervention proposed must take into account its context and give something back to the people near it to try and integrate it into the life of the city. The development potential of the Horn area is twofold : land use and water. Both could generate income and employment for the inhabitants of the city. Water can be used for leisure purposes and for transport both money-making devices

1. Employment:

The main cause of overcrowdedness and migration to Istanbul is the attraction of job opportunities. Herbert defines developments that create employment in the Third world as being manufacturing, construction, small scale retailing, intense agriculture and transportation. *"Small scale- retailing, even down to the scale of street vending, is a relatively unexplored territory for public support, even though it is a large employer in most urban economics."* ¹⁰

The public supports needed in this case, he emphasizes, are simply dry paved areas, a public water supply, basic night lighting and adequate refuse collection. Similarly the traditional transportation sector, he argues, is worthy of consideration as it is labour intensive and improves the efficiency of the system which has productivity repercussions on the local economy. In the case of Istanbul, both these areas of development can be implemented easily on the Golden Horn. The strengthening of the water transport system (now reduced to a few row boats between the two shores of the Horn) will help ease the serious congestion problem in the city tremendously, and revive a traditional and pleasant way of moving around. Similarly, the reintroduction of a tram system along the Horn and to the center will link the area to inland areas of the city, providing public transport that does not add to the burden on the roads. The revitalization of boat building and fishing related industries such as carpentry, metalwork, sail and rope manufacturing will also provide employment to the locals originally working in that field. Of course this type of industry might need subsidies to start off with,

and an economic study of the boating industry in Istanbul might need to be carried out to assess the feasibility of such a venture. This proposal is based on the fact that such industries did exist on the Horn before its clearance and have not been replaced yet elsewhere. In principle though any development that seeks to create employment must study the work force available and capitalize on their skills.

2. The scale of intervention.

Another aspect of integration has to do with scale. *"With multiple landownership on a relatively small scale, development is piecemeal, incremental and subject to many levels of control."* ¹¹

In the case of the Golden Horn, the land is in public ownership. This as a principle must be maintained due to the importance of the area to the whole city. Hence, a land-leasing system that would subdivide the land, allow the level of complexity that we seek and yet retain the area in public ownership is more appropriate. In Santa Fey in California, land was leased for a period of 60 years to private developers. The original government investment of 36 million dollars, yielded a 360 million dollar return. ¹²

3. The range of user.

From a feasibility point of view, the measure of the success of development is if it makes money. However, in this context no value can be placed on a development that would save the city from disruption. However, if the development correlates closely with answering the needs of the market to insure maximum financial

return, this has to be tempered by a critical issue, the range of the market. The wider the range of user both in terms of income and age, the more integrated the development in the life of the city. This, then, implies that a balance must be sought between the tourist and city market, and the local market. Therefore a flexibility in zoning should allow compatible multi-functions to exist with a mix of formal and informal uses catering for all sections of society.

4. Social Context: protecting what is there.

The main issue concerning the local users and inhabitants bordering the Golden Horn, is ensuring their protection for their continued existence in these areas. In this case, the argument for continuity is indisputable from a humanitarian point of view. However, whatever is built on the Golden Horn, there is no doubt that it will affect land values in those areas. In a study conducted by the Municipality on the Suleymanyah quarter, it was found that 83% of the inhabitants were tenants; 95% of the houses were privately owned. Moreover, the owners neglect their property when it is a traditional timber house so that they are permitted to tear it down. Hence, as the price of their land goes up, the landowners would be more tempted than ever to evict their tenants, rebuild, or sell it off. Therefore a rigorous system of protection must be introduced to deter landowners from selling out and evicting their present tenants. This, of course, requires a study of Turkish law to see what provisions exist for protecting the tenant. The issue is further complicated by the fact that the tenants, in this case, are rural migrants. The neglect by the



Fig.29. One of the drawings done by the Municipality showing the state of the houses in the old city.

landowners of their property creates bad living conditions; therefore the migrant will remain in the city until he is able economically to move out to a better area and to buy land for himself. This seems to be the general trend. However in the old quarters of the city, the existing communities seem to have settled there at least 35 years ago. Nevertheless, they are still vulnerable, and the area is in need of upgrading. Hence any development on the strip must be accompanied by careful study and a program of upgrading for the neighbourhoods to insure their continuity.

5. The provision of services.

Employment is not the only way to integrate a development in the city. The inhabitants near the Horn are in need of services and recreational spaces. The size of the development and its scope can easily support the developer's profitability and cost and allow for a careful balancing of profitability v\ services, thus insuring the financing of one from the success of the other. In Boston, developers who build office accommodation in the downtown districts are asked by the city to finance and build housing in South Boston where it is badly needed. Also in the U.S.A , in Baltimore, the National Aquarium attracts 1.5 million visitors /year. The financial success of this in turn supports research . This notion is not foreign to our context. The Waqf system did just that in the Ottoman city. Large complexes of mosques, kitchens, and hospitals were built and financed by rich patrons for the benefit of the poorer segments of society. Also commercial developments frequently bordered religious

institutions, and their income was used for the support and maintenance of the latter.

The provision of housing could also be viewed as a service. However, housing could restrict public access to the water and attract a higher income user than those found in the neighbouring areas. This will make the Golden Horn an exclusive area separating it from the city. Any housing provided on the Horn therefore, should be in keeping with the housing in the areas behind and cater for public access to the water.

Many ¹³ argue that for a city of six million the Golden Horn area could be its last chance to acquire a "green lung". However, as we see today, such an area could look foreign and dislocated from the rest of the city. With parks and public gardens the issue of integration is also raised, as there seems to be a cultural difference in their use that needs to be understood. In general the use and development of nature are in themselves culturally linked. This philosophical issue will be discussed in a separate section because of the importance of understanding it in creating an approach for the whole development. From a pragmatic point of view, the user should be able to relate to what is given; hence the cultural dimension becomes a serious issue, as it relates to the way people see and use the environment. This matter is a very delicate aspect of any design as it can literally determine its success or failure. Taksim Park in Beygolu, was abolished because it became a dangerous, rundown area. Parks(in the English sense of the word), the sociologist, Prof. Oncu, said, are against the psychology of the Turkish people. Open spaces used



Fig.30. A Turkish Coffee-House in Istanbul. 1854.

tend to be either gardens or forests, where whole family outings can take place, the family is still a very strong element in Turkish society as a whole. When the cultural history is examined, one finds a strong tradition of camping and picnicking. Families sit together under the trees, chatting, cooking, eating and enjoying nature as their setting. Hence the design of a park must accommodate not just the solitary walker with a dog but take into account the simultaneous multiplicity of use by the various age groups over a longer time phase. Hence environmental aspects take on a more significant role-shade, protection from wind- as well as a mix of activity areas.

Similarly the success of a park is also a question of its integration in the life of the city. It is vital that the park becomes implanted in the consciousness of the people. In the U.S.A, waterfront parks were developed with the help of schools and the involvement of the children, thus achieving a continuity of awareness over future generations.¹⁴ In Istanbul this phenomenon has already happened. Instigated by the architect and poet Cengiz Bektas, a community park was created by organizing the children in his neighbourhood in Bektas and getting them to paint huge murals and structures. The project was a great success, adding to community spirit and awareness of the environment.

Another way of integrating parks is the introduction of another great recreational tradition in Turkish society: the coffee house. The first was established in 1555 by a man from Aleppo. These shops became so popular that the Imams and the Muezzins claimed that people were addicted to them. The Ulema declared them "Houses of

evil deeds" and had the religious head of the community declare coffee "unlawful," based on the fact that it was carbonized. These shops were the meeting place of idlers, pleasure seekers, men of letters, literati, professors and judges. Chatting, reading books and poetry, writing as well as the playing of chess and backgammon, all took place in coffee houses.¹⁵ This tradition still remains in Turkey today to the extent that when politicians go to canvass an area for voting they usually head straight to these centers of life. The coffee house is embedded in the consciousness of Turkish people of all classes and ages.

Of course the greatest potential and attraction of the Golden Horn is the water. Here again, the cultural and philosophical aspect will be discussed later, but from a pragmatic point of view we need to understand how water is used. The use of water for leisure is generally restricted in Istanbul to fishing for low income groups. They do not use the water very much for bathing, and not at all for sailing. Even fishing tends to take place along the Bosphorous. This is not surprising as the Golden Horn has been very polluted and blocked off from the city by industry for the last century thus compounding the problem of user relation on the Golden Horn. There is, therefore, a need to reintroduce the Golden Horn to the inhabitants of the city and somehow help them to relate to it as a water body. This may mean re-educating people on the Golden Horn and its potential. (This phenomenon was also encountered in the U.S.A where it was found that people needed to be brought to the waterfront in the city to get them involved and excited about this

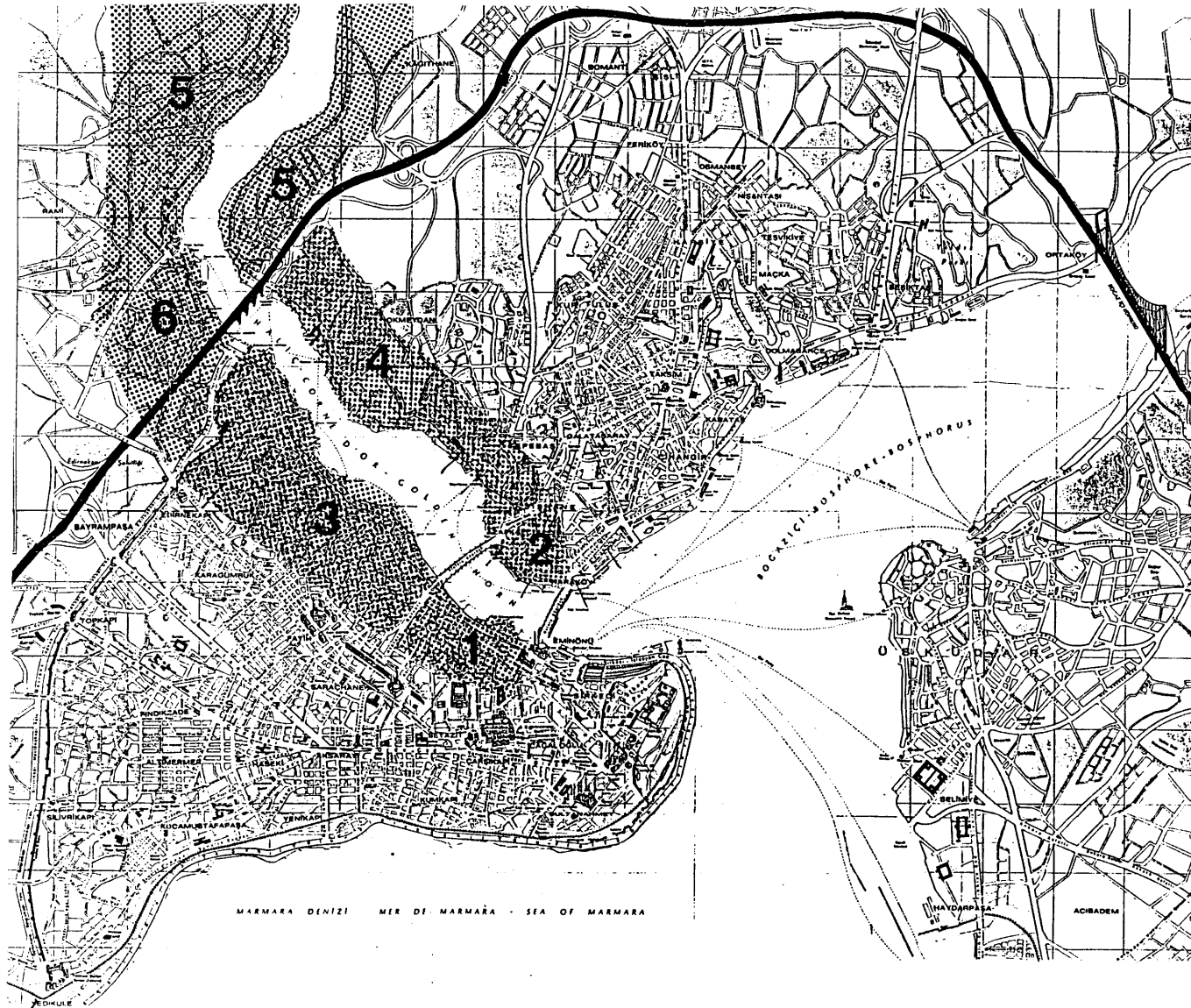


Fig.31. Map of the city showing the proposed areas of study.

unique feature in their own backyard so to speak. It was found that a lot of people had never actually been to the water's edge before fairs and other events were organised. A main element used in this education process were journalists and editors, who then took up the issue of the waterfront and its development with the rest of the city.)¹⁶

6. Dividing the intervention into zones, regions, and quarters.

The Golden Horn is bordered by a variety of areas with different characteristics and needs. In keeping with the logic of history, the development of the Golden Horn must be approached by looking at it in sections, each with its own needs and potential thus achieving the complexity this city demands.

a. Areas 1 and 2.

At the mouth of the Horn we find two of the oldest and major commercial centers of the city, Eminonu in the old city and Galata opposite on the northern shore. Although the character and morphology of the two areas differ, both are major transportation nodes linking marine to land transport. These two areas have always been the center of Istanbul throughout its history. In Eminonu, we find the railway station terminal for the whole city, along with the main ferry landing points serving the whole of Istanbul. On the Galata side we find the subway terminal that connects it back to the Northern regions of the city and consequently the Bosphorous and

Asian shore. This makes both these areas congested during the day, but, since there is hardly any residential development, dead by night.

The character of the commercial developments, however, are different. Eminonu in the old city caters to local needs. Before the clearing operation of the Golden Horn, it used to have the city's main vegetable market. It was said to have employed ten to fifteen thousand people mainly living in the old city. The market was moved outside the city in 1974-75. However, even today, Eminonu is still a retail and wholesale trade center for food, clothing, paper and construction material. The fabric behind the strip in that region is full of commercial structures, Khans, Caravanserais, warehouses both old and new, such as the famous Egyptian market next to the Yeni Camii.

On the Galata side, the type of development is more at an international level as it was the foreign trade center in the Ottoman period, Galata grew and prospered in the 19th century (See Ch 1) acquiring a series of hotels, a financial district consisting of a street of major banks, a new port etc....(Note: Galata is outside planning restrictions, and is shown blotted out in the master plan of the Horn without a specified use.)

Connecting the two is the Galata bridge. Built in 1912, it has intense pedestrian movement with several bus stops connecting to the various parts of the city. Restaurants and shops on a lower deck add further life to it during office hours. According to the information we have available, the new bridge will not have these added amenities.¹⁷

Because of the location of the nodes of transport, both these areas are frequented by both locals and tourists. The latter go through on their way from the historic city to their hotels on the Galata side, hence this potential should be capitalised on. Therefore the continuation of these two areas as mainly commercial, with shops, offices, hotels, restaurants etc..., would be feasible and in keeping with their historic development. However, each area should be developed according to its own character and scale, as the extension of the area behind, but always acknowledging the water. The amenities lost through the replacement of the bridge can also find a home on the water's edge such as restaurants, fish hook shops, and fishing itself. Furthermore, because Eminonu has been the gate into the city for centuries, this must be marked by a city museum that will tell the history of this magnificent city. Also the famous square in front of Yeni Camii must be preserved.

In Galata, a more international type of development can take place. However Galata's own character and image must be reinforced in the scale, topography and morphology of any development that must avoid becoming a dead area by night. The beautiful views from this site could be exploited for hotels and high-class residential accommodation, along with recreational facilities such as a national theater, concert hall, restaurants, casinos etc...

b. Area 3.

The neighbourhoods bordering the site, inside the old city especially are low-income quarters inhabited by rural immigrants who

flooded into the city mainly thirty-five years ago. Originally these quarters were semi-autonomous areas inhabited by the ethnic minorities in the Ottoman city. Cibali was a Muslim quarter, Fener Greek Orthodox, Balat Jewish, and Ayanvansaray Muslim.

The socio-economic situation in these quarters today can be looked at in a variety of ways for a variety of reasons. One cannot isolate socio-economic factors to one area in the city or to the city itself for that matter. Added to this, no study at that level and scale exists in English. However, we do know that the population of these quarters has changed dramatically in the last 50 years. The original inhabitants moved out in the thirties as industry moved in along the Horn. Derelict and badly maintained, these areas became a reception area for migrants. According to a study conducted by the Municipality on a similar area called the Sulaymanyeh, families lived one per room, and were mainly involved with transient types of work. The level of unemployment is reckoned to be particularly bad.

The social structure of these communities tends to echo what they had in the village. Religiously conservative, the base of the network is the family with the father acting as head. The community spirit of those quarters is further strengthened by being independent "Mahallahs" run by a Muhtar, elected by the inhabitants for a four year period, and helped by a Council of Elders. They represent the locals with the central administration and vice versa. ¹⁸

The need for services in these areas is not exactly known, but there is a high illiteracy rate and a lack of social services. This needs to be studied in detail. However, it is evident that the need for open,

recreational spaces also exists as even the "wall-to-wall" lawn gets used. However, the design of the gardens and open spaces should be more culturally and climatically relevant, integrated into the society through community centers that provide adult education, services, activity for the children, coffee shops, aquariums and museums that would educate the people about their culture and bring in income. Income could also be generated through small scale industries such as boat maintenance especially in the Balat area where land and the man power are probably available. Moreover, the Fener district has potential as a special touristic attraction. The Patriarchate is visited by Greek tourist regularly from within the city and abroad who also come to see the residential area of Fener.

c. Area 4

On the opposite shore of the Golden Horn we have the naval dockyards. One interesting area is Kasim Pasa, designated a high rise zone. The price of land has consequently shot up and the high rises have already began trickling down towards the water's edge. It is imperative that no high rise building should be allowed on the Golden Horn or on the hills opposite the old city because of the conflict that would occur with its skyline. The skyline is the pride and symbol of Istanbul and it should be maintained and protected from all the angles from which it is seen. Nothing on the opposite shore should compete with it as it will kill the magnificent view one gets of the city as one approaches it by water from Asia. Whether the Naval Docks will move or not is still not clear. Furthermore, no

information is available on the areas behind them. Therefore a study needs to be made of this area if the land does ever become available. However if the Navy does move out, its presence through history must be commemorated by a Naval museum that will exhibit its history in the city.

d. Area 5.

After the New Bridge, we begin to encounter squatter settlements behind industry that still exists along the shore. This land remained empty up to the mid-60's. Squatting started in 1947 and is on public land. Today there are an estimated 1.5 million people in that region with virtually no facilities.¹⁹ If and when the industry is removed from this area, this region of the Golden Horn must be used to provide facilities for the squatter settlements behind including housing, training centers, etc, but it must also capitalize on the non-saline nature of the water that allows vegetation to grow and prosper. The renewal of the old tradition of the "Sweet Waters of Europe" could be introduced through a botanical garden in this region commemorating the "Tulip period" and Saadabad.

e. Area 6.

The region of Eyup is a very special district. During the Ottoman conquest, Sultan Mehmet the conqueror had a dream that the tomb of the Prophet's flag bearer was in that location. Consequently he built the first Kulliyeh, along with a shrine. The area soon became a center of learning and culture, with Dervishes playing



Fig.32. 19thc etching of the district of Eyup by Melling.

traditional music to attract the visitors. It became renowned for its cemetery where Sultans, Viziers, and Palace officials were buried under great plane and cypress trees. This area has a major significance for Muslims all over Turkey, with its mosque, trees, gardens, music, children and birds. A study recently submitted, March '86, by the municipality of the Eyup district for U.N.E.S.C.O called for its upgrading and regeneration.

Because of the requirement of circumcision, in Islamic law, Eyup is frequented by children, and had once a wooden toy industry. Now replaced by plastic imports, this industry is sadly dying. It is, however, part of the culture of Istanbul and must be preserved and revived, as its market is still there. Because of the importance of Eyup for the city at large, this region of the Golden Horn must be developed as a recreation area with gardens, cafes, and museums to cater for the visitors to this shrine. Hence an arts and crafts museum and center could be envisaged in this location, reviving the area as a center of culture. Moreover a children's or toy museum could be incorporated in the existing, derelict slaughterhouse across the water, after its renovation, with a boat service taking the children across. Just outside Eyup lies the very first factory ever built in Turkey. The structure of this building is still standing and it might also be made into a science museum exhibiting the latest technology.

Hence it is quite clear that the Golden Horn borders very different areas in character, needs and potential and no proposal could achieve proper integration without the careful study of the areas behind. All the land uses proposed, including public buildings and

7. Control

From a developer's point of view, financial success is vital for the generation of money, employment and services. The issue is, however, for whom and at what expense are these provided in terms of the quality of the environment (pollution, density, traffic, access etc....). In other words, there is the question of control and balance. It might be said that the underlying principles behind control might be the traditional Islamic notions of Adl (justice) and Itidal (moderation) within the public realm to insure a proper balance between the social aspects of the development and economic success. Therefore there is a need to develop an overall, rational approach taking into account the complex, multilayered context of this development. This might happen through an independent advisory committee that would instigate studies were needed and correlate the need of the different user groups involved. ²⁰

However, people's needs and aspirations change over time. If the public realm is to play a real and important role in determining their environment, public participation is a vital tool. As opposed to social studies and statistics, both of which are expensive to undertake and of limited life, public participation is a dynamic way of assessing the situation. It reflects the change in society and allows a more comprehensive spread of control and responsibility. It forces the user to be more aware of the environment, and the designer to acknowledge the user. Hence at an intermediate stage in the design process, proposals should be submitted to the advisory committee

process, proposals should be submitted to the advisory committee and user groups to get feedback and input. This will force the designer to express ideas clearly and in a tangible manner so that they can be comprehended by the lay person.

Public participation mechanisms will also take into account the problem of the multiplicity of users by including academics, designers, historians, sociologists along with the immediate neighbours of the development. This will then insure a balanced, long term view of the situation being maintained.

This system has been in operation in many parts of the Western world and there is a strong argument for adopting it in the Third world. The usual answer to such a suggestion is that people don't know what they want and are not visually educated enough to deal with this. Although I dispute this especially in a country like Turkey and a city like Istanbul, still, if this is so, then it is time we educate them to take more interest in their environment by giving them a say in the matter. Public participation can have a political dimension which is found unacceptable in many Third world countries thus sadly inhibiting its use. However, if we are serious about the issue of context, we need feedback from the user in terms of his needs, and aspiration. The notion of control should not be a list of "Thou Shalt Nots" dealing with strictly with form, but a network that allows development, ensuring its suitability and acknowledging the complexity of the matter at hand. Therefore an early involvement in the process is vital for it to maximize the benefits of public participation. Unfortunately, in Istanbul there are no legal bodies of

such a type, but we were very encouraged to see the spontaneous growth of such a community group already (in the Tepebasi area) fighting for the preservation of their area of the city. Such a group should be congratulated on its efforts, as it is only through the involvement of the people that any development will encompass both balance and democracy.

C.CONCLUSION

However, at the end of the day, many argue that what happens at the Golden Horn is not the real problem; the issue is what it looks like. I disagree with this approach totally, for the reasons previously mentioned and I would argue that what must be pursued is a continuity of both form and life. What I have therefore proposed is an approach to the development of the Golden Horn through a performance specification that would insure the continuity of the logic of the city of Istanbul, multiplicity, while maintaining a balance necessary for the survival of the fragile fabric of the city as a whole.

I do recognize though that the issue does have a formal aspect to it. As an architect this is the area I could probably contribute most too to try and achieve the notion of continuity and integration. Hence the final chapter of this thesis will concentrate on this issue.

CHAPTER FOUR

FORMAL ISSUES:

As I have indicated in the previous chapter, context has to do with a whole set of layers, be it with respect to the users, their social aspects, cultural notions-the site and its history, or contemporary technological and other particular needs of that city. Hence formal issues must never be taken in isolation but must repond to the total context in all its complexity.

A. AIMS:

Because of the importance and uniqueness of our context. The main aim underlying any approach, even at the formal level must be integration and continuity. As mentioned in the previous chapter, continuity as a concept mediating between the city and the water is the key to moderation and balance that will enable us to develop the Golden Horn to its maximum potential as a central region in Istanbul.

B. THE DILEMMA

Formally there is in a sense no precedent for an "architecture" on this water. Its fabric, before the growth of industry, was simply an extension of the city's fabric from behind the wall. (See Appendix A)

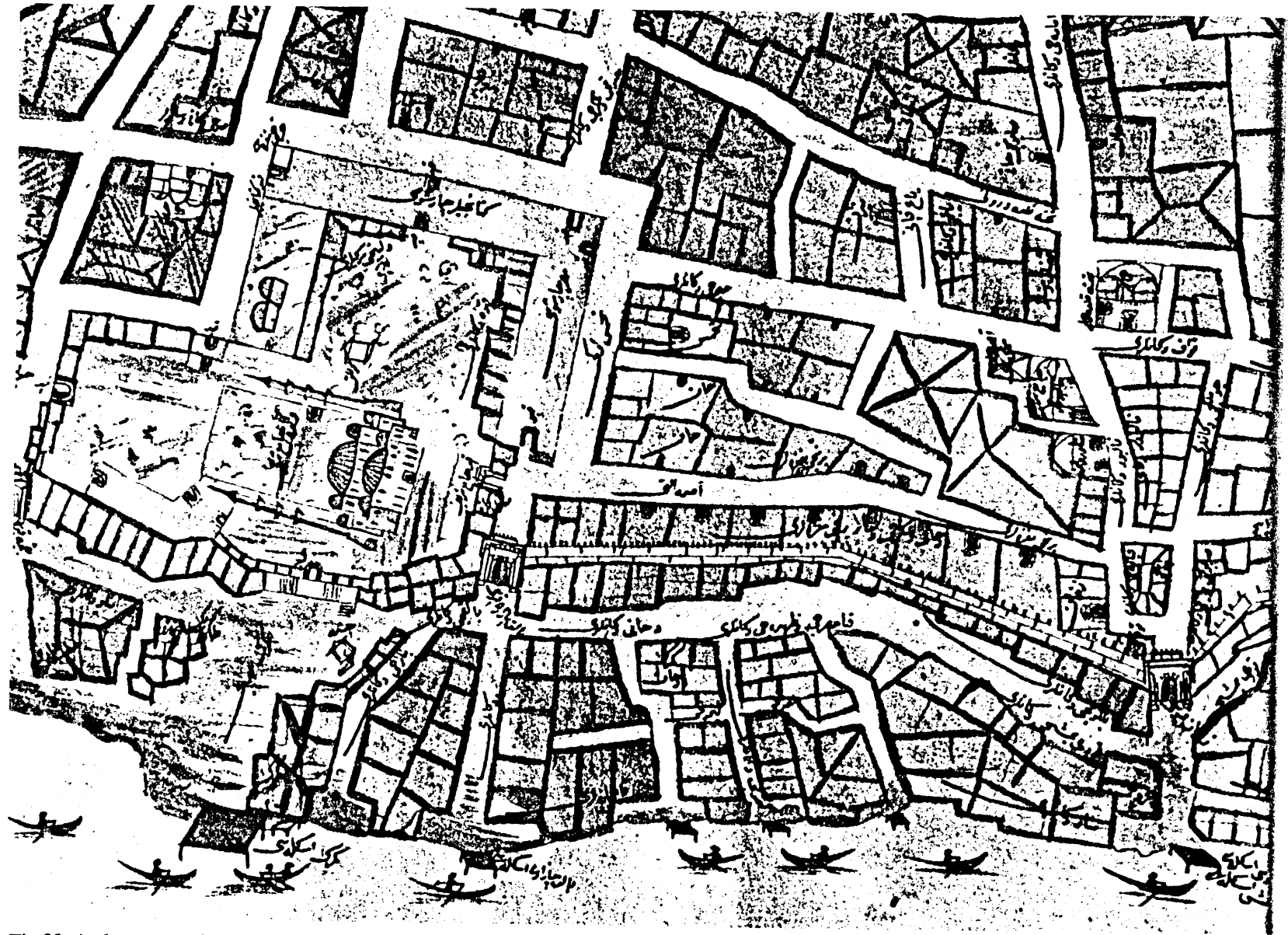


Fig.33. A plan prepared around 1800 showing how the fabric extended to the water's edge.

There was no celebration of the water in the architecture except in a few palaces and mansions known as Yalis. These were built mainly on the Bosphorous, with a few existing on the Golden Horn. (See Appendix B) However, the difference in character and role in the city between the two makes the precedent of the Bosphorous questionable. The language and formal context of the rest of the city -on the other hand, be it in its skyline or the kulliey complexes-is very clear. But how relevant is that precedent to the water's edge?

C. PRECEDENTS:

According to the Webster's Dictionary, precedent is: "*An instance, case or decision that may serve as an example or justification for a later similar one.*"

This definition raises three main points: "an instance", a "case" or "decision" are all in the singular, "justification" implies its use after the fact, "similar", rather than "the same" implies a certain degree of flexibility as to what is deemed to be a precedent. Hence the point about precedent, especially in architecture, is that it involves a subjective choice. Precedents tend to be used as justification of the act or for the amplification of a point in discussion by the theorists. In the writings of Corb or Venturi, one finds the use of precedents in this manner. When looked at more carefully the precedents used bear little genuine relevance to the situation as they are taken out of their social and economic framework. Of course historians, especially of the older generation, tend to do that in general with respect to the study of buildings as a whole. ¹

The value of precedent for the practising architect is as a source of inspiration and a point of departure

A comparative study between law and architecture, conducted by Collins, brings out a significant point of difference between the two professional attitudes to history. Collins points out that whereas lawyers clearly differentiate between the history and precedent, disregarding the former, architects still are confused in their attitudes to history and its use. In law lawyers use precedents as their main tool for building the argument. However their definition of the term is clear and relates to the relevance of the case. Hence, in law, an integral notion of precedent is again that of context.

D. AN APPROACH TO PRECEDENT: THE PRINCIPLES.

Lord Mansfield, we are told by Collins, clarified the point about precedents further in his dictum: "*Precedents only serve to illustrate principles and give them fixed authority*" Thus even at a formal level the approach must transcend the "patterns" and forms of the fabric and look at the principles involved. This, then, points the way to the correct use and value of precedents. In Istanbul the strength of the visual language of the historic city makes the danger of imitation and the use of elements out of context, and in an ad-hoc manner, very real. Such an approach would produce thin, pastiche imitations of the real thing that would be detrimental to the image of the city.

E. THE PERCEPTION OF SPACE IN THE CITY:

Looking at the language of the city, many would argue that there is no formal language of urban space in Istanbul. Many would also argue that, apart from Isphahan, the notion of urban design does not exist in the Islamic city as a whole. Underlying such a statement are the presumptions that design is a preconceived, planned activity, and that the term 'urban' refers to spaces strictly outside buildings. If, however, we reconsider the definition carefully, we see that there are designed, public, open spaces in Islamic cities which actually form the focal point of the community. The courtyards of mosques are a case in point. Talking about the Great Mosque of Damascus, Abdulac describes it as: *"....with its roofed and open areas-the center of the public, social, cultural and scientific life, not just for the local Muslim community, but for the whole Empire."*² Hence the point raised is the definition of "outside". In the Muslim context, the integration of the architecture with the outdoors is far more soft and subtle. Similarly, in Istanbul we see a further refinement of this concept in the Kullieys. (These will be discussed in full in a later section). If, on the other hand, we reject the notion of design as a preconceived plan, then again we find urban design in the fabric of those cities. Far more subtle, this attitude to urban design is also directly affiliated with the cultural attitude to the environment. Informal spaces, usually with a tree or a water point as the focus, are found all over the fabric. These "left over" spaces are seen and used as public places, the focal points of the community. Hence we can say that they represent a notion of urban design. These are true

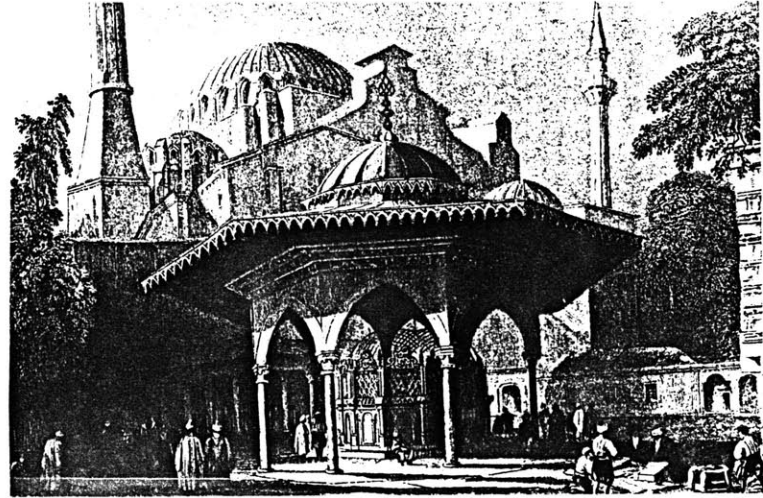


Fig.34. The court of Hagia Sophia Mosque.

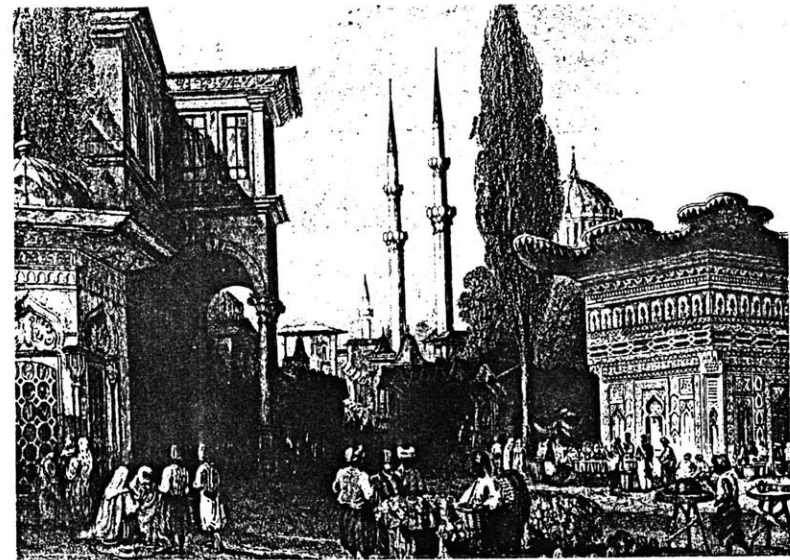


Fig.35. An urban place. The fountain and market at Tophane.

"people-determined environments", as Porter claims urban design should be.

Hence, if we want to create continuity, we need to understand the way people perceive and use their environment. This certainly is a case in point. One of the major problems in the Third world is that designers and others pick up terms and their definition lock, stock and barrel. They reject or change their context accordingly. This trend must be reversed if a truly contextual attitude is to be developed. Instead of accepting what urban design is deemed to be, we need to understand what it means for us and redefine it to explain our context. Hence any definition that is absolute and does not take into account the element of the user and his perception is totally wrong to start with as it eliminates the framework of the context.

"I think what I call city design is skill in creating proposals for the form and management of the extended spatial and temporal environment, judging it particularly for its effects on the everyday lives of its inhabitants and seeking to enhance their daily experience and their development as persons." ³

Lynch's definition introduces the user in the positive sense and, with him, the notion of management. If we recognize that urban design has to do primarily with people we inherently accept the element of change and its coordination. It is also clear that what we need to understand is not simply the formal precedent but the question of perception if we want to somehow create a continuity. Hence the issue of precedents is not simply a formal matter but an understanding of an attitude that creates a language.

F: THE CULTURAL ATTITUDE TO NATURE IN ISLAM:

One of the main elements to be considered and understood in a development in any built environment must be the culture of its people. Especially with respect to elements like water and nature, so central to man's psyche, an understanding of cultural interpretations is vital. One of the main elements of continuity in an environment is, to my mind, the user's ability to relate to it and understand it. Hence a comprehension of the culture and its relationship to nature is crucial for the success of any intervention.

A major principle underlying culture in the Middle East, including Turkey, is Islam. A way of life rather than a religion, Islam governs all aspects of life of a believer. It has therefore played a major role in shaping life in the cities, their development and evolution.

The central principle of Islam is the notion of "Tawhid". Difficult to translate exactly, it is the concept of the unity of God that governs all actions and phenomena. All is there to serve and acknowledge Him

"For the Muslim ethic, the concept of Tawhid is indispensable. Whether the issue be ecological, economic or merely technical, the application of the principle of Tawhid, the assertion of God's unity, by reminding one of the ultimate goal of every human effort, ethicises the issue. Tawhid is thus the very process of Islamization by which the natural world is brought under moral control; nature

and ethics are integrated and the unity of intent and action, purpose and goal, means and ends is achieved." ⁴

Hence, with respect to nature and the environment, man is simply a servant of God, acting as his trustee over it.

"The entire rationale of an Islamic environmental ethics is based on the Quranic concept of Khilafa: man's viceregency or trusteeship. Gaia is an Amanah a trust from God and man is the trustee who has the responsibility of looking after the vast panorama of God's creation. Man can use the trust for his benefit, but has no absolute right to anything: the trust must be preserved and handed back to its rightful owner. Man is accountable for the misuse of his trust and is liable to pay a price both in this world and the Akhrah hereafter." ⁵

Two concepts were used to control development in the environment; Halal (that which is beneficial) and Haram (that which is harmful). The extent of harm covers the individual, his physical, mental and spiritual life and the environment, both immediate and at large. The principle of *Tawhid* (unity), *Khilafa* (trusteeship), *Halal* (beneficial), and *Haram* (harm) seek to create *itidal* (balanced) and *adl* (just) in the environment that strives for *Istihsan* (improvement) for the *Istislah*. (public welfare). This, then, is the framework of the environmental ethics of Islam that was translated into the the *Shariah*, a value centered system of laws.

The main points of interest from this is on one level the ultimate sanctity of the environment v/v the transient nature of man, and on another the notion of justice and balance in the use of the

environment and between men themselves. The first notion translated becomes a question of preserving the delicate ecological balance and taking a long-term view of the situation, as well as responding to the environment "as sand dunes respond to wind." The second notion translated gives priority to the public realm and introduces a notion of equality and participation in the control of the development.

Interestingly enough, main, invaluable resources such as water cannot be privately owned or monopolised under Islamic law. The Prophet established inviolate zones around water courses and utilities prohibiting development. He also introduced elements of control, prohibiting the cutting of any tree in the desert as it provides shade or sustenance to either man or beast. He established state reserves around Mecca and Madinah where no trees were cut or game hunted. Moreover, he went beyond pure conservation aspect and towards improvement when he declared the fructifying of earth as a profoundly moral and ethical act. ⁶

"If anyone revives dead land for him is a reward in it and whatever any creature seeking food eats of it shall be reckoned as charity from him." ⁷

This, of course, is not surprising in the context of the desert oasis environment in which Islam was first revealed, where the cultivation of the environment is essential for human survival

This same desert environment also played a major role in the formation of man-made nature (the Islamic garden). Ettinghausen explained the extensive spread and popularity of the garden in the Muslim world in both its actual form and as images in the art (carpets

and Ottoman pottery) as due to three factors. Firstly, The notion of paradise as a garden mentioned in the Quran:

"And as for those who believe and do righteous works, We will cause them to enter gardens underneath which river flows, to dwell therein eternally; they shall have purified companions and We will cause them to enter abundant shade," ⁸

Secondly, the existence of a pre-Islamic secular tradition of pleasure gardens, especially in Iran, and finally the underlying factor behind the first two—the nature of the environment, "formless and hostile"—made man create a garden as a relief and a refuge. It is therefore not surprising to find that the Islamic garden is an enclosed environment behind high walls. Shimmel notes that the image of paradise also reflects this phenomenon as there is a mention of its gate in the Quran. ⁹

"Indeed one can understand neither the Islamic garden nor the attitude of the Muslim toward his garden until one realizes that the terrestrial garden is considered a reflection or rather an anticipation of Paradise." ¹⁰ One of the most important elements of the gardens of paradise is water. Fountains are mentioned frequently and only matched in importance by the mention of rivers. Shimmel tells us that the expression "Gardens underneath which river flows" is mentioned more than thirty times in the Quran.¹¹ Sura 47:16 ff: talks about four rivers, one of water, one of milk, one of honey and one of wine. Whether it is because of that image or merely as a historical precedent, the Char-Bagh garden of Persia developed into the prototypical garden plan of Islam that spread all over the Muslim

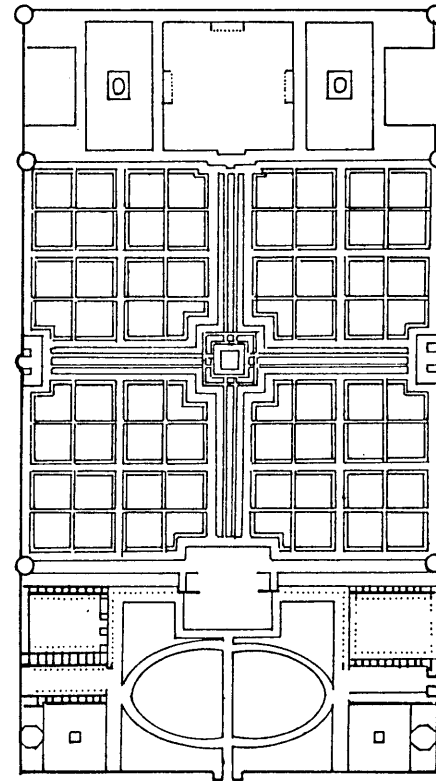


Fig.36. The plan of the Taj Mahal. An example of a Char-bagh form of garden.

dichotomy in the cultural attitude to nature. On the one hand man is only a trustee over nature, using it carefully but always ensuring its continuity. On the other hand, we see man in the garden regulating and controlling nature with strict geometry. It is at this point that we can clearly see the difference between the Islamic garden and the European tradition of formal gardens. The geometry in the Islamic garden is an ordering element. Although there is a hierarchy in the arrangement of plants, with the most formal being at the water's edge and the controlling axes, the plants themselves retain their individuality. They are allowed to grow in freedom rather than being arranged into "beds", creating patches of colour in the overall design. The order of the garden therefore, reflects the inner order of nature.

"Nature has therefore been created both orderly and knowable. Were it not so, were it unruly, capricious and erratic, it would be a "ship of fools" where morality is not possible..... Nay, both the orderliness of nature and its amenability to rational enquiry are essential for morality." 15

Similarly, views are carefully regulated along the axis, be it in relation to the points of entry or in the location of the viewing structures and pavilions. Ibn-Lugun tells us to locate our houses on an elevated site for reasons of vigilance and layout, and to place the sitting pavilion in the center with views on all sides. This raises the issue of use of the Islamic garden

"The Islamic garden is first of all a life sustaining oasis, benefitting humans, birds, and animals. It is an orchard garden, growing fruit and often aromatic herbs for human consumption. Its

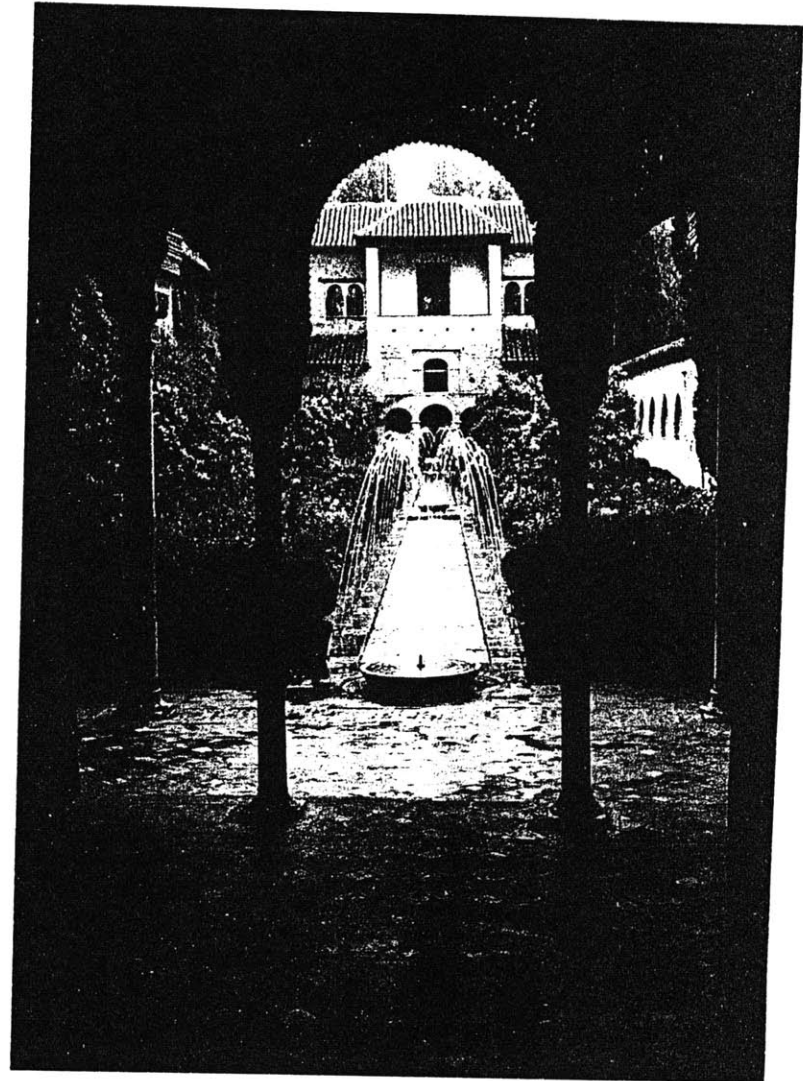


Fig.39. The Generalife. Granada. Axis regulating the points of entry and the view.

trees provide food, water, and nesting for birds; its walls may contain dovescotes; it provides water for all kinds of creaturesIt is as useful and beneficial as it is beautiful." ¹⁶

The garden was also designed as a "setting for life itself". According to several accounts of travellers and chronicles, camping was almost a tradition all over the Muslim world. Hence the extensive use of pavilions, arcades, iwans (an alveol that opens onto the courtyard or main space through a large, arched opening) and courts that integrate the interior and the exterior, allowing the enjoyment of the garden at leisure. Nevertheless, the experience of these gardens was static-to be looked at and contemplated upon.

When Islam reached the less hostile environments of Spain and India, the contemplative nature of the garden activity extended to the outside. Timidly the gardens looked out onto nature to admire it through window openings and pavillions thus establishing a very subtle relationship between the two. In the latter stage of development of the Mughal gardens, especially in Kashmir, this opening up to nature is visible. In the Shalamar garden, Lake Dal is integrated into the the design by having it as the main approach to the scheme. Hence a quiet, slow boat takes you across the lake and into the connecting canal of the garden making it an inseperable part of the whole design. ¹⁷

This delicate balance between garden and nature is again seen in Isfahan. The highly geometric and regular gardens stop short of the river, with only the bridge extending over into the landscape. However, the bridge was not only built for crossing but was a

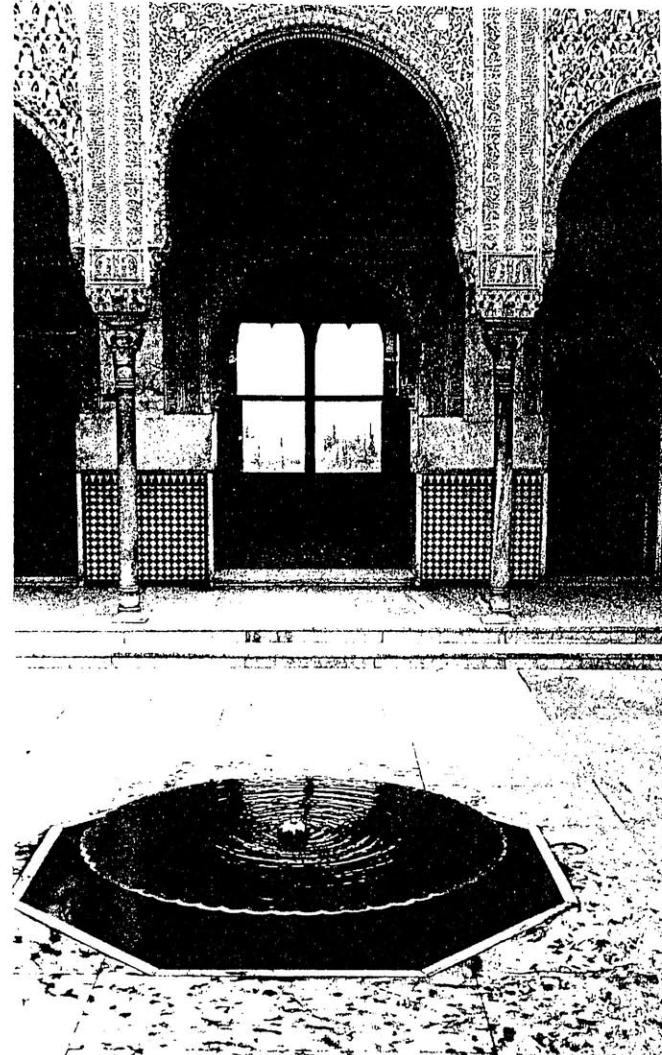


Fig.40. The courtyards and gardens begin to open onto the landscape through windows.



Fig.41. The garden as a setting for life. Note the fountain in the middle and the tent at the top.

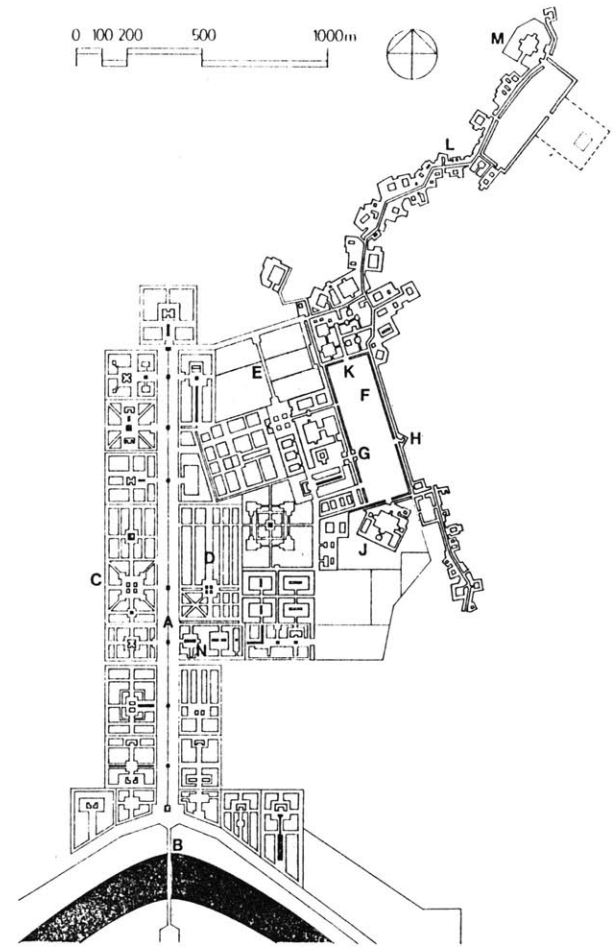


Fig.42. A plan of Ispahan. Note the geometry of the gardens does not interfere with river.

celebration of nature. It became a place of gathering for the enjoyment of the water, the breeze and the contemplation of nature. Like the Chahar gardens, the bridge was once the evening resort of the citizens of Isfahan where they were served coffee and enjoyed smoking. ¹⁸

Hence, even when structures were built to deal with nature, they were done with a sensibility and appreciation reminding man of its order and beauty. Nature's beauty and supremacy was thus acknowledged through the provision of opportunities for its contemplation. Similarly, the aim in the gardens is to appreciate the complexity and marvel of nature through the contemplation of its elements and underlying order through geometry

"There is within the spiritual universe of Islam a dimension which may be called "Abrahamic Pythagoreanism", or a way of seeing numbers and figures as keys to the structure of the cosmos and as symbols of the archetypal world....." ¹⁹

Therefore the gardens were not man's attempt to tame nature: nor were they a way of emulating nature. They could be seen as a vehicle of appreciation and understanding of the natural world and thus the understanding of God.

"The fact that the high points of garden development appear as early as the 11th century , to continue till the 19th century and are found in similar forms in Spain, Iran, Central Asia and India, speaks not only for an identical reaction to the environment, but underlines the universality of Islamic art." ²⁰

Hence the Islamic garden, although man-made, and ordered

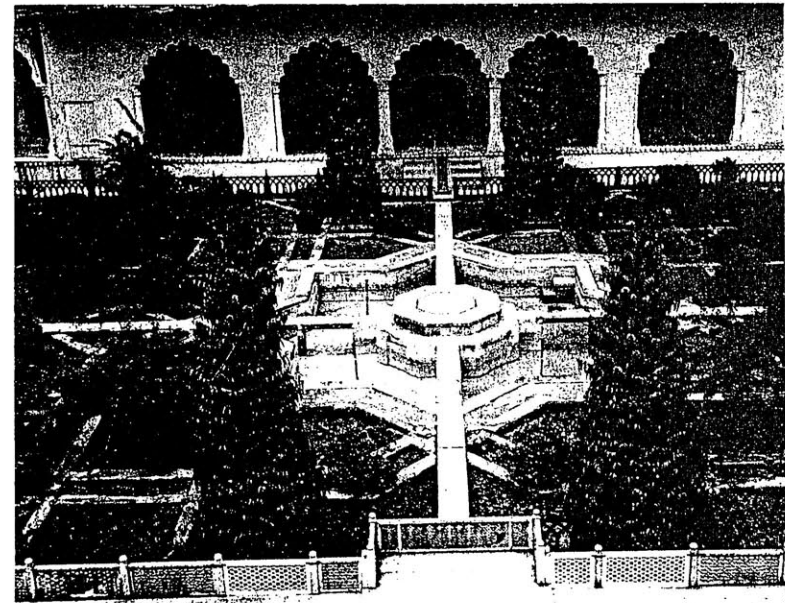


Fig.43. Jaipur in India. The "order" of the garden.

reaffirms the main concept in Islam; Tawhid.

This attitude of understanding and reverence towards nature underlies most Islamic cultures in the Middle East .

Its form and manifestation, however, is affected by regional differences due to the various influences that affect those cultures separately.

G. THE CULTURAL ATTITUDE OF THE OTTOMANS TO NATURE:

1. The underlying principles:

The history and culture of Ottoman Turkey is made up of many, very complex layers of influences and developments. Broadly speaking, apart from Islam, the Ottomans absorbed a great deal from Byzantine culture. They themselves, however, were a nomadic people from Anatolia.

The love and enjoyment of nature is evident in all forms of Ottoman art. This intense relationship is attributed to their nomadic origins. The custom of summer residences in the countryside has been, and is still is, very popular and widespread. Similarly, family picnics and out-door camping are an old tradition. The obsession with views and the attention to the landscape can also be noted, both in the buildings themselves and, according to written accounts, in the constructor's or client's specifications \v\v the position and orientation of a structure. However, nature again was looked at and admired with a minimum amount of transformation with an un-questioned acceptance of its pre-existing forms. This 'nature-cult ' is found in

rituals and the literary traditions connected with building and the transformation of nature, where it is depicted as the 'rape' of the natural world. This " esthetic and cultural approach " was firmly established in Epirus, Central South Balkans, and West Anatolia where urban culture grew and flourished. Developed earlier than the Byzantine era, this attitude produced an informality \v\v open spaces and nature that is clearly evident in both the Muslim and Christian architecture of that region. ²¹

Trees:

Within this Anatolian and Balkan tradition, due to the luciousness of their landscape, natural elements like trees, rivers and springs are not elements to be used according to artistic or divine will. They are forces in their own right, and hence evaluated positively and accepted in their own form. Therefore it is not surprising to see that the tree has a special significance in Ottoman Turkish culture.

The worship of trees is common to many cultures and the symbol of the "Tree of Life" is, of course, well known. This phenomenon, however, is very prominent in Indian culture.

" Besides the astounding variety of tree myths and traditions, there is in India a general feeling of respect and veneration, trees are treated like living beings in a manner which is reminiscent of the popular esteem accorded to wise old men." ²²

Pieper attributes this to the climate of India where, in the monsoon, the trees offer shelter and shade from the sun, and in the drought their roots hold the ground water.

It is interesting to note, however, the similarity between the Indian tradition and the Turkish. In the latter, the tree appears as a recurring theme in their myths and literature, with superstitions surrounding their cutting down, uprooting and burning. This, according to Cerasi, probably saved a lot of the trees we still see standing in cities where monuments suffer degradation. Moreover, when the tree appears on the urban scene, it seems to command its own space. *"Villages, indeed, might have two centers, the mosque and the great tree under which the men still meet to discuss local affairs."* ²³ Frequently coffee houses grew in these locations becoming the center of life of the community.

Water:

Similarly with water; although it plays a major role in the Ottoman open space, it does so in its natural form ie.as a spring, river or sea. It is only in the 18th century under Persian and Western influence that basins and canals are used in open spaces. Both in open spaces and urbanization layouts, there is an unquestioned acceptance of pre-existing forms.

Similarly, in the historical development of the Horn, we find an understanding of the natural and physical context of the water body. Therefore we see a differing use and even form, from the section of the Horn that had salty water and that with non-saline water. Also erosion of the banks of its upper reaches was a main concern vvv its development through-out its history.



Fig.44. The residential quarters in the old city of Istanbul. Note the abundance of trees.

2. The City and Its Organization:

In the design of their cities, or rather their Ottomanization of cities, the Ottomans love of nature is also evident. *"Where possible, the Ottomans built their towns on a hillside or slope so that each house might enjoy a view,* ²⁴

This was further reinforced by law that prohibited any building that blocked the view of an existing habitat. Further-more, they located their monuments frequently on hilltops, both as a gesture of grandeur and to look over onto the landscape. This phenomenon is clear in their early capital, Bursa where each sultan built his own complex on the spurs of the mountains. In Istanbul, of course, this concept gave rise to the renowned skyline of the city, the image that stays with any visitor to the city forever.

Underlying this majestic skyline, one can detect what one might call an "order". This order has to do with the use and amplification of natural features. Nature was therefore not only looked at but reinforced in the location and design of the city's monuments.

3. Texture of the city.

Coming down to the urban scale, the imprint of Ottoman town planning is still very clear on their cities in Turkey even today. An amorphous, loose, soft, ever-renewing housing tissue with little open space is punctuated with the crystalized forms of the permanent, stone, public building complex or Kulliyehs.

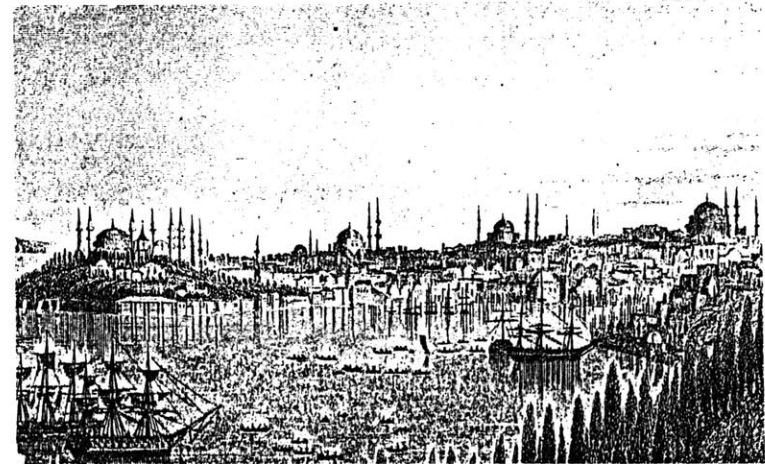


Fig.45. The majestic skyline crowns the city like a tiara.

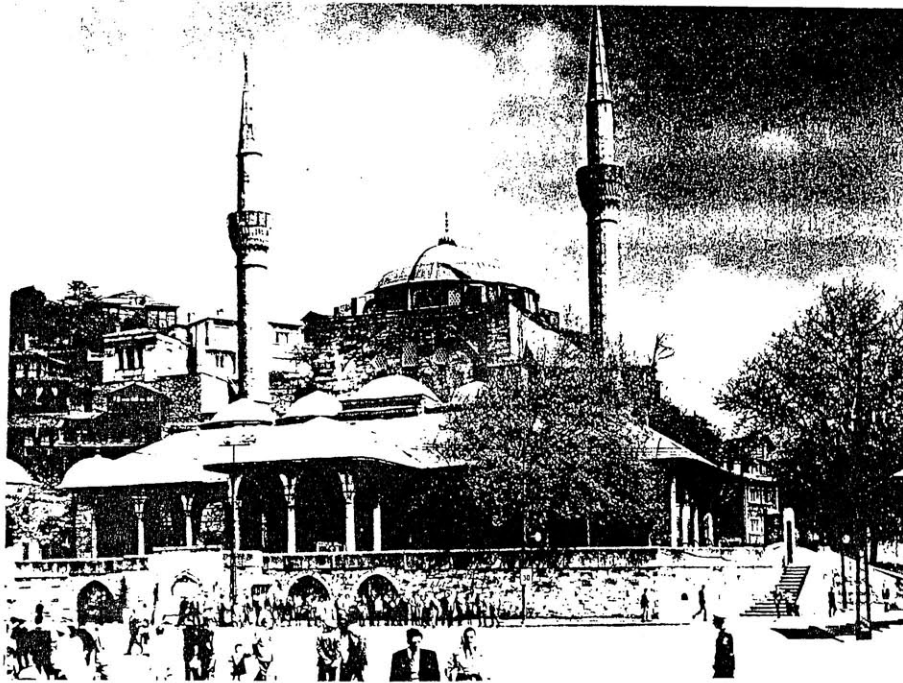


Fig.46. Mihrimah Mosque with its "soft" exterior edge of arcade and fountain

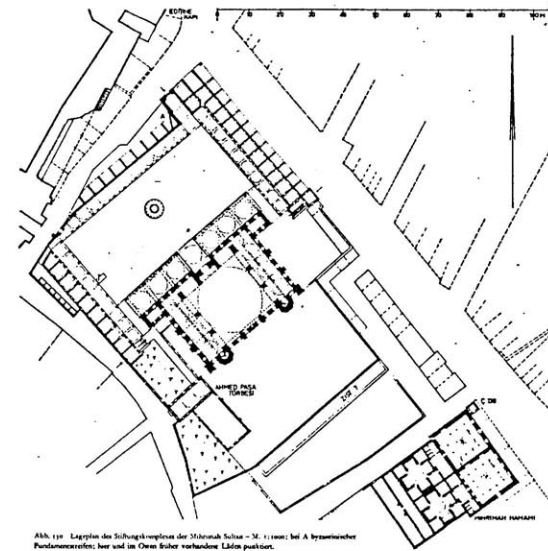


Abb. 118. Lageplan des Stiftungskomplexes der Mihrimah Schah - M. 1:1000; bei A byzantinischer Fundamentresten, hier und im Osten früher vorhandener Läden positioniert.

Fig.47. The plan of the Mihrimah mosque fitting into the morphology of the city.

4. The Kulliyes.

"The greatest Ottoman contribution to the Islamic urban structure was perhaps the Kulliyeh. It is sometimes also called an Imaret, it consists of a group of socially oriented buildings. [religious and secular alike-supported by a waqf (pious foundation)]. 25

These complexes, independent of their surroundings, are ordered and composed but do not impose their order on the urban tissue. No lines of vistas or other such links are projected from them out onto the existing fabric. On the contrary they adapt to their own site, following and maintaining the existing road patterns. Hence even here, priority is given to the natural environment. Thus there are subtle breaks in the symmetry with no linkage to an urban perspective. Moreover, the transition between the building and the outside was also very subtly handled. The edge between the two was softened by the use of balconies, arcades and projections that introduced a transition zone between the outside and the inside of the building. The edge between the courtyard and the road is also softened by the introduction of windows in the parameter walls, allowing visual links between the two areas.

5.The fabric.

On the whole, even the houses in the city respect the topography and achieve regularity of rooms on the upper floors through projections and bays. Hence houses as well as Monuments sit within the fabric maintaining and extending its morphology and

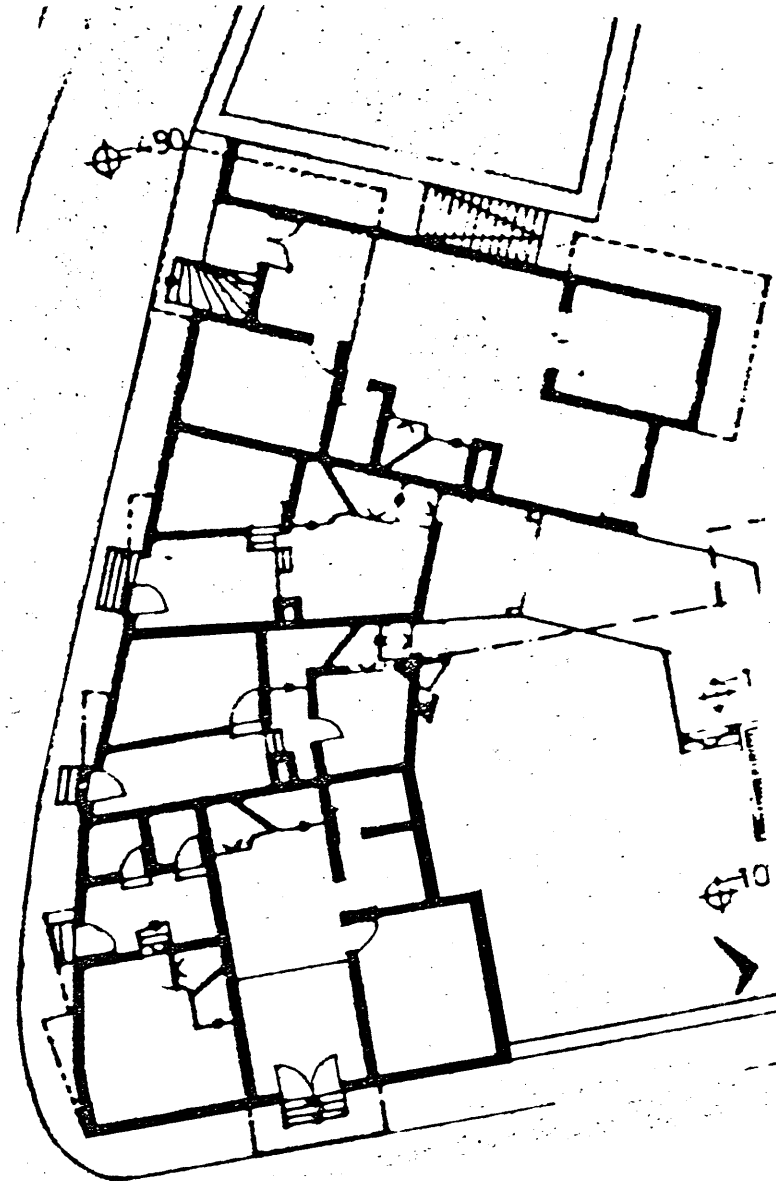


Fig.48. Houses in the old city. Note the upper level projections, indicated by the dotted line, regularizing the form of the rooms.

repecting their surroundings. Another clear attitude that we perceive in the city is continuity. Monuments pick up both the bay or plot size from the fabric as a governing order for the articulation of their composition. Similarly features like window sizes and proportions are also reflected in the largest, as well as the smallest buildings in the city. This phenomenon was maintained by the "guilds". These organizations preserved traditions and formed the link between the monuments and houses through various generations. They were dissolved in 1840; many claim that the degeneration of the architectural cohesion of the city can be traced to that date. ²⁶

On the whole, the Ottoman city is a green city. Apart from the number of public gardens or picnic grounds, nearly every house had its own garden. Usually for growing fruits and vegetables, this feature opened up the fabric of the city and gave it a lushness that even Corb noted back in the 20's. Ottoman gardens are walled, with shaded fountains and trees concentrated on the edges. They are informal in their layout, functional in their approach, and ornamental in their conception. Each tree and plant is placed on its own, maintaining its formal value. Hence the garden, in this case, was not a recreation of nature because both of its elements and composition are considered already established. Roofs, kiosks, porches, etc..were introduced only in the 17th century to enhance the interpretation of nature. Hence, even the house opened out onto nature, extending its space into it and embracing it.

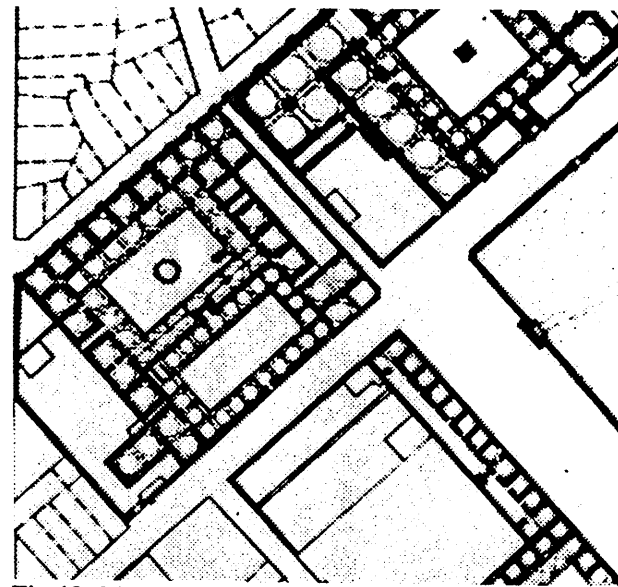


Fig.49. Plan of one of the medreses in the Sulaymanyah complex that shows the size of its bays responding to the size of the plots opposite.

6. Open Areas in the City:

Many historians have persistently judged the Ottoman open space in the cities as formless and unorganised. Indeed, no geometric quality can be detected in the urban forms except in the Kulliyeh complexes of the imperial builders.

The lack of a formal space was explained by some as due to the lack of a strong public life. This is quickly refuted by the numerous accounts of the varied and picturesque open life of Ottoman towns. The open public areas in the Ottoman towns consist of mosque courtyards, streets, informal squares, meydans, namazyah, mesire and cemeteries.

7. Streets

Analysed by Prof. A Gulgonen, the road system was found to follow the topography with a natural flow form. Roads normally meet in three, like branches of a tree or flowing streams.

8. Squares

Small, informal, open areas exist in the fabric usually at road junctions with either a tree or a fountain as a focus, (Note that the building of fountains really took off in the 18th century due to Western influence). These quickly become the center of life of the quarter. However, nothing like the European town square ever existed. As in other Islamic cities, this is because civic life is held in the mosque while the commercial life occurs in the bazaar and streets. Moreover since public buildings were sponsored by the



Fig.50. 19thc engraving of a square in the fabric.

Waqf, public squares were not seen as necessary. People felt they belonged to their quarters and guilds rather than the city at large. Although the Waqf is a large institution, its approach to building was piecemeal without an overall view or program ²⁷

Hence the second ordering notion in Istanbul therefore, is the way nature and its topography are used as a governing force in the layout of street and thus buildings.

9. The Meydan and Mesirs

The meydan are like larger, undesigned fairgrounds with casual margins, sometimes enhanced by a monument. The namazyah are regular, open praying platforms similar to the Greek open altar. The mesir, however, are the core of the open air system. They are picnic grounds, also called cagir (green, meadow), and were widely used in the 18th century for walks and promenades. However, although it is termed walks, the activity that took place in them is better described as picnicking. *"Whole families and group of friends occupy a given space for hours and sometimes for days, putting tents, eating and singing."* ²⁸ Open air cafes, under pergolas or an old tree were also found in those meadows. There wrestling, equestrian games and shadow theaters were held. These gardens were frequented by all classes of society. Istanbul was famous for its gardens and promenades and orchards even during the Byzantine era. The historian Evliya lists a dozen of these mainly outside the walls of the city. eg: The Tersane Gardens (Shipyards garden) on the Golden Horn, The Uskudar Gardens on the Bosphorous, The Aqueduct



Fig.51. 19thc etchings of the public gardens. Note the tents in the background of the lower etching.

Promenade, etc..... These areas larger than an architectural complex did not have a form as they were considered part of nature. However some were designed by architects, including the great Sinan." *The charm of the Ottoman garden is wholly built up on the tension between a few geometric elements and the evidency of the individual plant materials and of water, the flow of which is an indispensable factor in identifying a place as a potential garden or recreation area*" 29

Their maintenance was the responsibility of a team called the Bostancis, trained, young Christians responsible for the guarding of Palace property as well as being the navigators of the imperial boats. At one point the Bostancis are said to have totalled 80,000 in number.

The most important gardens were, of course, for Imperial use, such as the Has Bahce on the site of the Topkapi Saray, and the Kagithane promenade. However, both were open to the public and very popular especially the Kagithane or Sweet waters of Europe at the source of the Golden Horn. This site was frequented by the Byzantine population of Constantinople. However, in 1721, at the height of the Tulip period, the Sultan Ahmet the third built on it a palace, canal and mosque, turning it into an aristocratic park. The members of the court followed suit, building a total of 60 kiosks. The complex known as Saadabad was rebuilt in 1740. Its design shows a toned down influence from France, China and Europe. However, the style of the design is definitely Ottoman in the way the formal elements are used. The complexity in the compositional axes

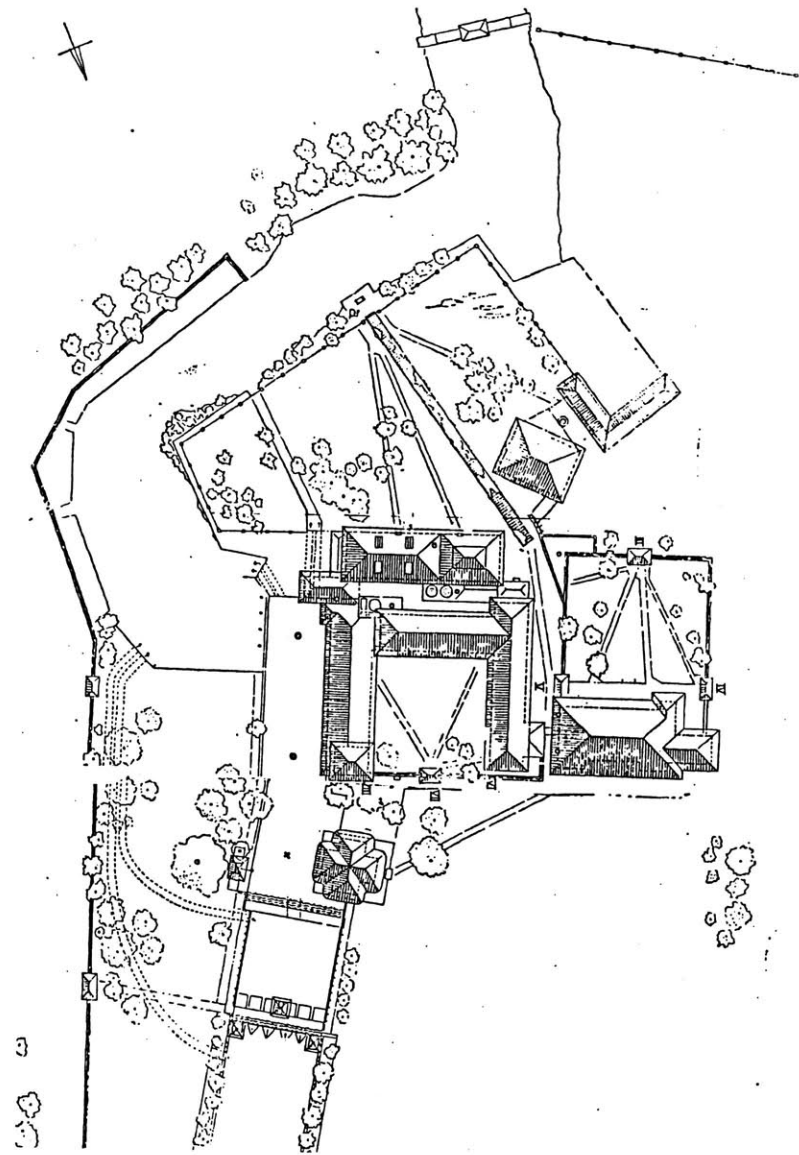


Fig.52. The plan of the palace and grounds of Saadabad.

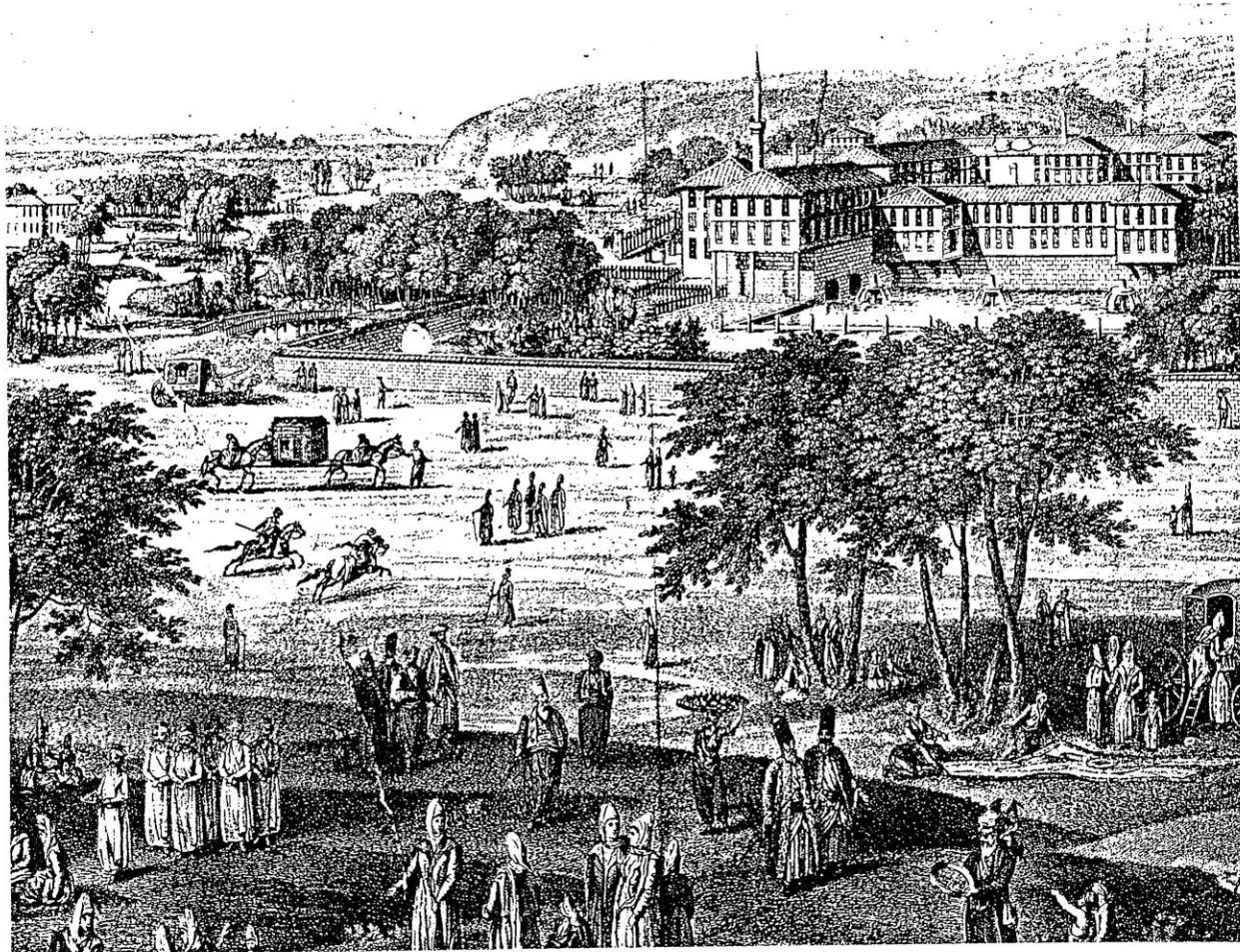


Fig.53. Sadabad park.

softens the rigid axiality of French and Persian gardens.

"The spatiality established was suggested rather than shaped, defined by few architectural margins, barely standing out from nature and the landscape." 30

10. The Cemeteries:

Finally, the cemeteries. Found in urban fringe areas, they soon got engulfed by the city thus occupying central locations. They became part of the image, punctuating the Ottoman urban fabric. The Turkish attitude to death is different from that in Islam. *"The concept of a life extended beyond death through immortality via a good burial has its roots in Central Asia."* 31

Hence, care was given to the design of the cemeteries with each grave being given a cypress tree to dispel pestilential vapours. The cemeteries therefore became cypress groves used as parks. *"The cemeteries of Istanbul are so situated and so much used as pleasure grounds by the people that there is little melancholy or sadness connected with them....Here Turks smoke and cows feed, children play here while hundreds of doves are softly cooing, and many who pass up and down the hill find it a convenient resting place."* 32 According to Goodwin, the Ottoman love of crowds extended to the graveyards and cemeteries. From this one can gather that again the use of the park was a family / group activity.

Hence, in the Ottoman tradition we see a great love and openness to nature. It plays an important role in their thinking about the environment, and its influence is felt at all the various levels of their



Fig.54. A Turkish cemetery in Istanbul full of cypress trees.

planning . Their buildings accommodated it "on the ground" and invited it in through the views. However, their understanding of its "order" is softened by their West Anatolian tradition. *"The reticence of having recourse to geometry in compositions which stretch over great distances and spaces or at least the introduction of some element that interrupts the great geometric affirmation is so common as to bring to mind a complex , well-rooted ideological -aesthetic question that cannot be deciphered in terms of mere taste."* ³³ Natural elements, therefore, are left undisturbed with compositions created by a few, well-placed geometric features that creates the necessary tension to hold the whole thing together.

" Gurlitt shows many photographs of Istanbul at the end of the 19th century in which a huge tree stands majestically in a courtyard or in a square .Indeed , sometimes a majestic-looking tree in the open countryside or on a river bank , combined with a fountain or a platform, forms the measure of human intervention, creates a sort of "urbanity" which is conceivable only within the framework of an urban culture that intermingles nature with what is built" ³⁴

H. CONCLUSION.

Hence, from the analysis of the attitude of the culture to nature and the city itself, the following " orders" can be deduced.

The First Order:

Nature in the Islamic and Ottoman culture is approached with reverence, respecting its permanence as opposed to the transient nature

of man. Hence the ecological balance of nature is maintained with an unquestioned acceptance of the natural forms. This implies that the fragile nature of the Golden Horn must always be kept in mind when development is proposed for this area. The valley form of this region, for example, makes it susceptible to stagnation and hence pollution. This should be a serious constraint on the development, especially with respect to the size and capacity of the road going along it. Furthermore the proposal of the fourth bridge across the Golden Horn in the position indicated on the Municipality plans must be reconsidered, as it will dissect the fabric of the historic city further, leading to its degeneration. Should the bridge be necessary than a better location of it would be alongside the existing new bridge that does not go through the city. Similarly, the erosion of the banks of the Golden Horn must also be kept in mind as it is still a problem we face today.

Moreover, the microclimate of the region must be taken into account in the design of both buildings and open areas. The cool N-E winds bring rain in the summer, and the North and S-W winds bring storms in winter. Planners at the beginning of this century , we are told, proposed limited size gardens(not more than 500 m.sq.) because of infrequent rains that cannot sustain larger green areas. ³⁵

The Second Order:

The highlighting of nature, as an "order" gave rise to the skyline in the city. Hence, on the Horn this notion should be adopted with, in this case, water being our natural feature. That is to say that

buildings of any significance, on the city scale, must relate and celebrate water with their form. Water as a reflecting medium adds an extra dimension to the architecture in terms of depth and movement. It also has a psychological dimension creating a sense of unreality and ambiguity as to what is solid and what is not. Added to that are the sensuous experiences of water, sound and touch. Hence direct access to the water through a waterside walkway must be incorporated into the design maximizing on the experience of the place.

The Third Order:

Topography in the city orders open spaces, and buildings determining their form and boundaries. On the Horn the land formation shows a clear rhythm of land jutting out and bays. This again can be picked up as one of the ordering elements of the site and highlighted in built form or open space. This then helps us determine the siting of buildings and the punctuation of the whole strip creating a rhythm for the development.

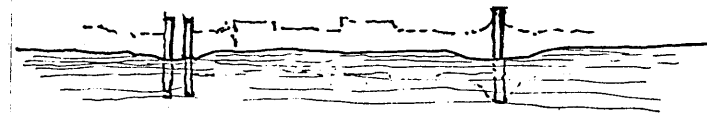
The Fourth Order:

Moreover, the points jutting out into the water were the landing stages of the city and are therefore, the foot prints of history on the fabric. When the sea wall was still intact, these points were also marked by gates. Today only one of these gates exists but their memory on the road pattern of the city is still there. Hence their celebration would further reinforce the rhythm of the site defining the

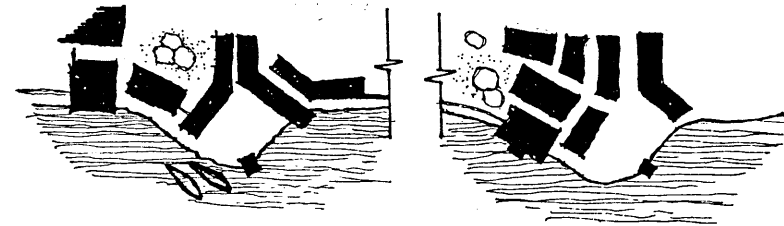
SECOND ORDER: HIGHLIGHTING NATURAL FEATURES



REFLECTION OF THE WATER



THIRD ORDER: TOPOGRAPHY OF THE GOLDEN HORN



FOURTH ORDER: CELEBRATING HISTORY, REMEMBERING THE GATES

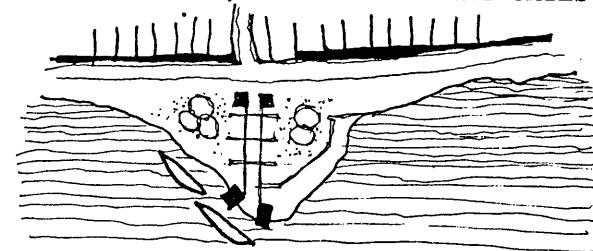


Fig.55. Diagrams of the "orders" in the city and their application on the project area.

more public areas along the strip.

The Fifth Order:

Continuity between monuments, and fabric that share the same window proportions and bay sizes gives the traditional city a sense of harmony. On the Golden Horn these proportions must also be incorporated but the concept of continuity should also be stretched across the Golden Horn. Certain public buildings would relate to each other creating a dialogue across the water. This dialogue should not just stop at the formal level but extend to the physical level via a boat service animating the water further. Hence our approach to the design of the Golden Horn should not be linear but curvilinear across the water keeping in mind the vistas across as you approach it from the Bosphorous.

The scale of the Golden Horn and the city must always be kept in mind in any development on the Horn. Therefore a model of the area into which proposals could be placed and looked at, will aid in the evaluation procedure of any development. The model will immediately show the scale of the proposals and allow it's viewing from all possible angles of view.

CONCLUSION:

Waterfront developments are a unique opportunity for the cities that possess them. Water as a natural feature is exciting and special. However, like water itself, developments on the waterfronts must take the shape of their context not only in terms of form but also in terms of the range of users and functions allowing multiplicity and complexity. The irony is that waterfronts are in danger of being considered too valuable for such uses. Their development is thus restricted to either a certain section of society or a certain type of use. This has the effect of dividing and ruining not just the development itself but the context it is in. Waterfronts are urban places. Although peripheral in location, they are, in many cases, becoming very much central in life of their cities. Hence, it is vital that the city itself, with all its various components, be allowed to connect to its water edge. Because there is no celebration of the water's edge in the culture of Islam, it is imperative that people be introduced to its advantages through the introduction of a variety of uses that will make it accessible and part of everyone's lives.

APPENDIX A.

This appendix consists of a visual analysis of the edge of the Golden Horn as it existed in the nineteenth century. It is based on the drawings from S.H. Eldem's book "Istanbul Anilari. Reminiscences of Istanbul". In this analysis it becomes clear that the Golden Horn is an urban water body of salty water. Hence we find that the edge is hard with little vegetation. When gardens do exist we find them protected either by a wall or a screen. Also this analysis reminds us that waterbodies are a public zone in the city similar to streets. Hence where there are private uses such as housing, access from the water is restricted and controlled. The projections that we notice on the buildings are typical of those found elsewhere in the city. Basically the water's edge on the Golden Horn was simply an extension of the city in its morphology, typology, scale and character with no celebration of the element of water.



Fig.57. Eminonu. 1800.

NOTES: Fabric made up of blocks and streets, irrelevant to the water's edge.
Squares at the water's edge are an enlargement of the lateral streets
along the water. The main squares relate to the gates behind in the wall.

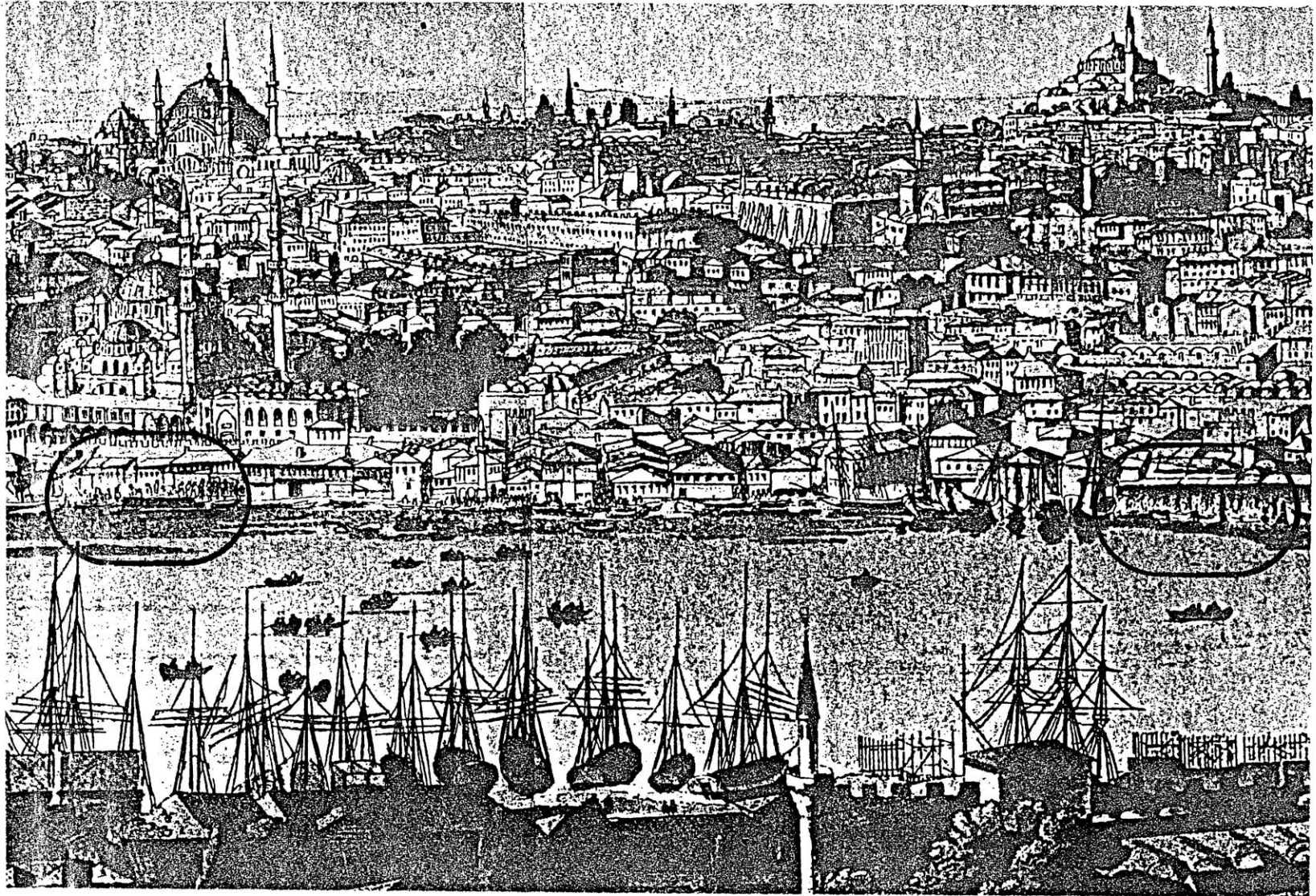


Fig.59. Eminonu 1813.

NOTES: Fabric made up of larger buildings (commercial) but only two floors high, with streets coming through. Open areas: Linear along the water with in some cases canopies.



Fig.60. Unkapani 1813.

NOTES: Fabric a continious wall of domestic scaled buildings 2/3 floors with projectins over the water. Open areas, amorphous with a few trees and a hard edge along the water.

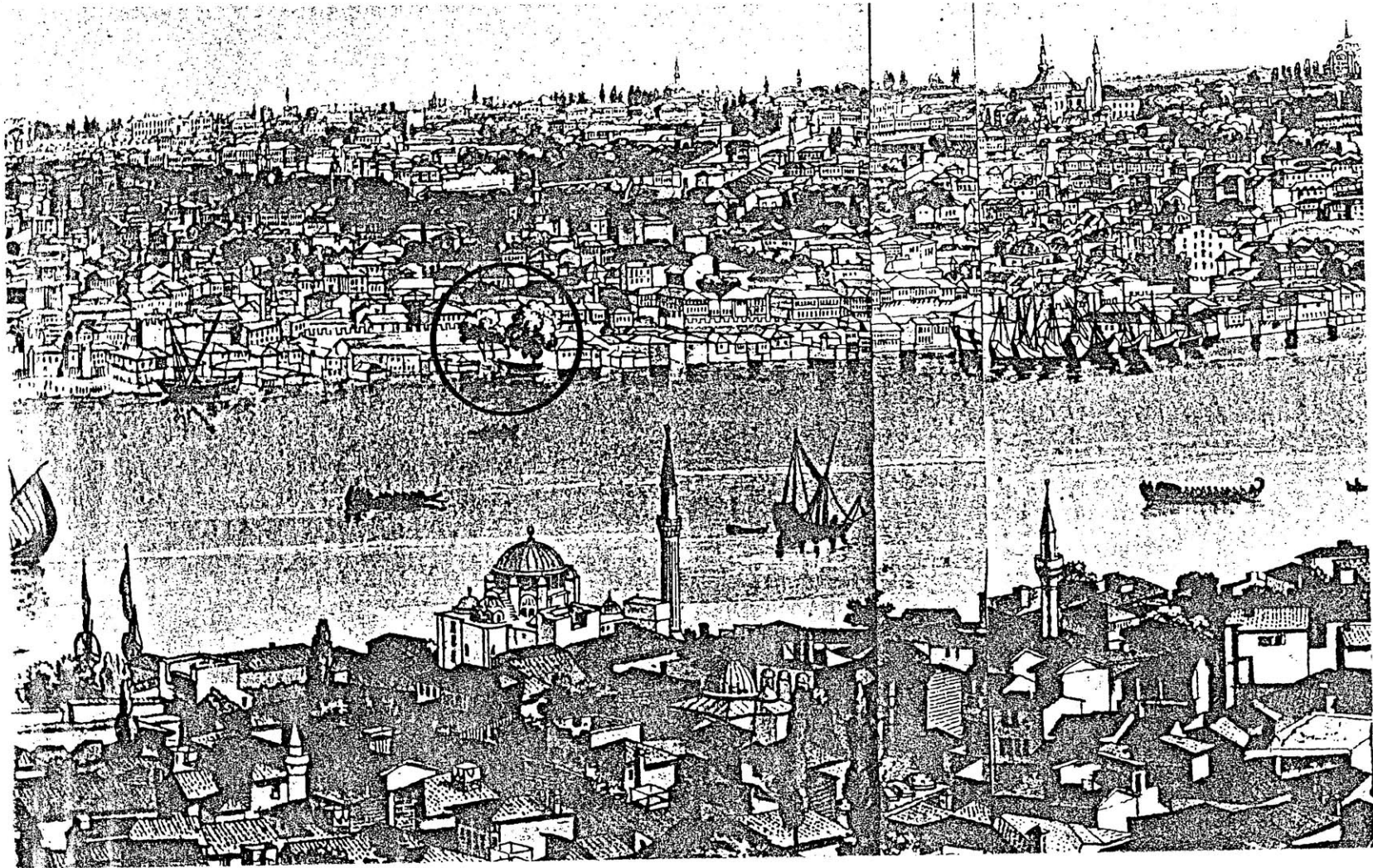


Fig.61. Balat and Fener

NOTES: Domestic scale buildings 2/3 floors with intact pitched roofs and projections over the water.
Open areas, amorphous with trees and a hard edge to the water.

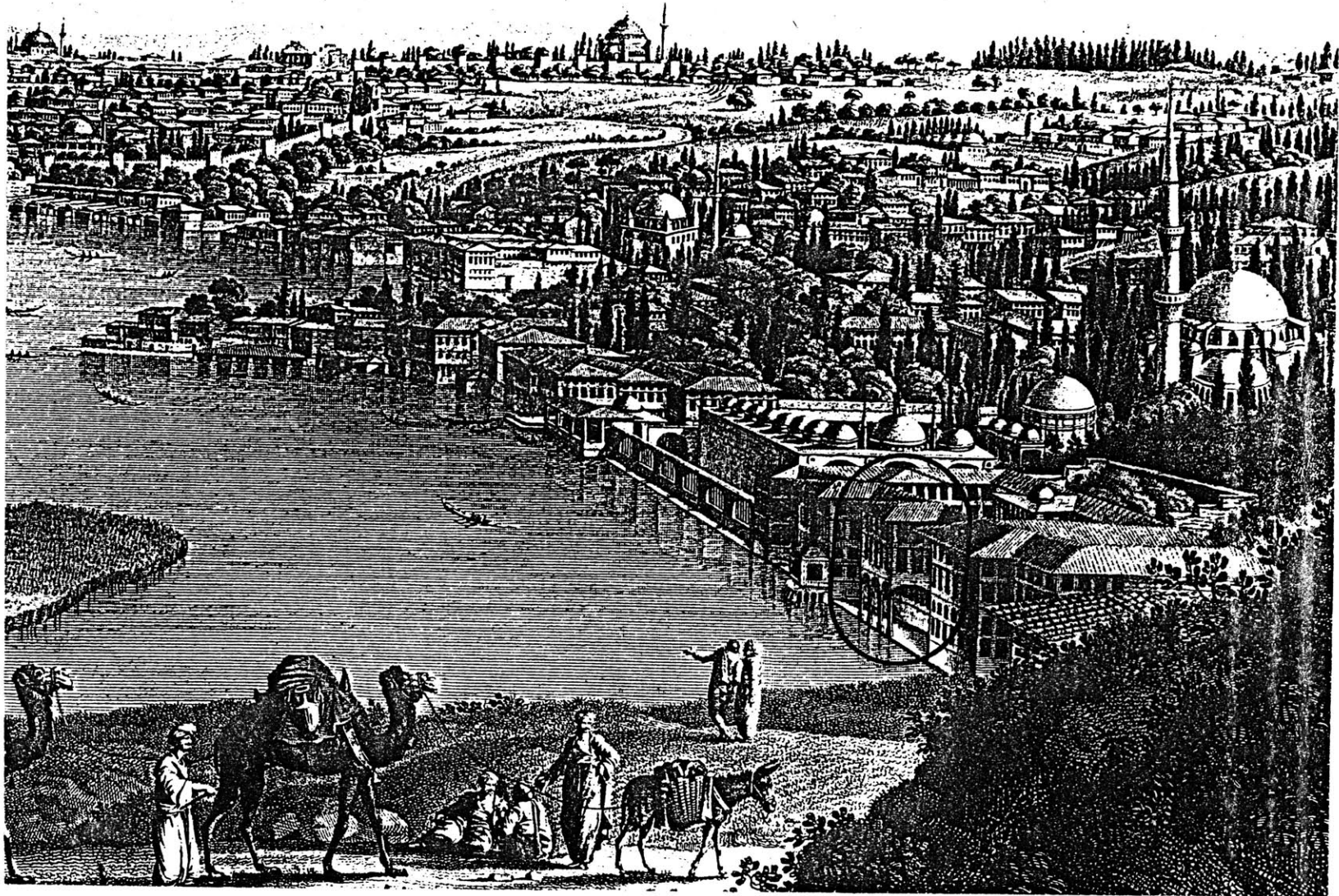


Fig.62. Eyup by Melling 1790.

NOTES: An area of public buildings, 4/5 stories high with a formal, hard edge to the water using screens, arcades, and balconies to regularize the edge.

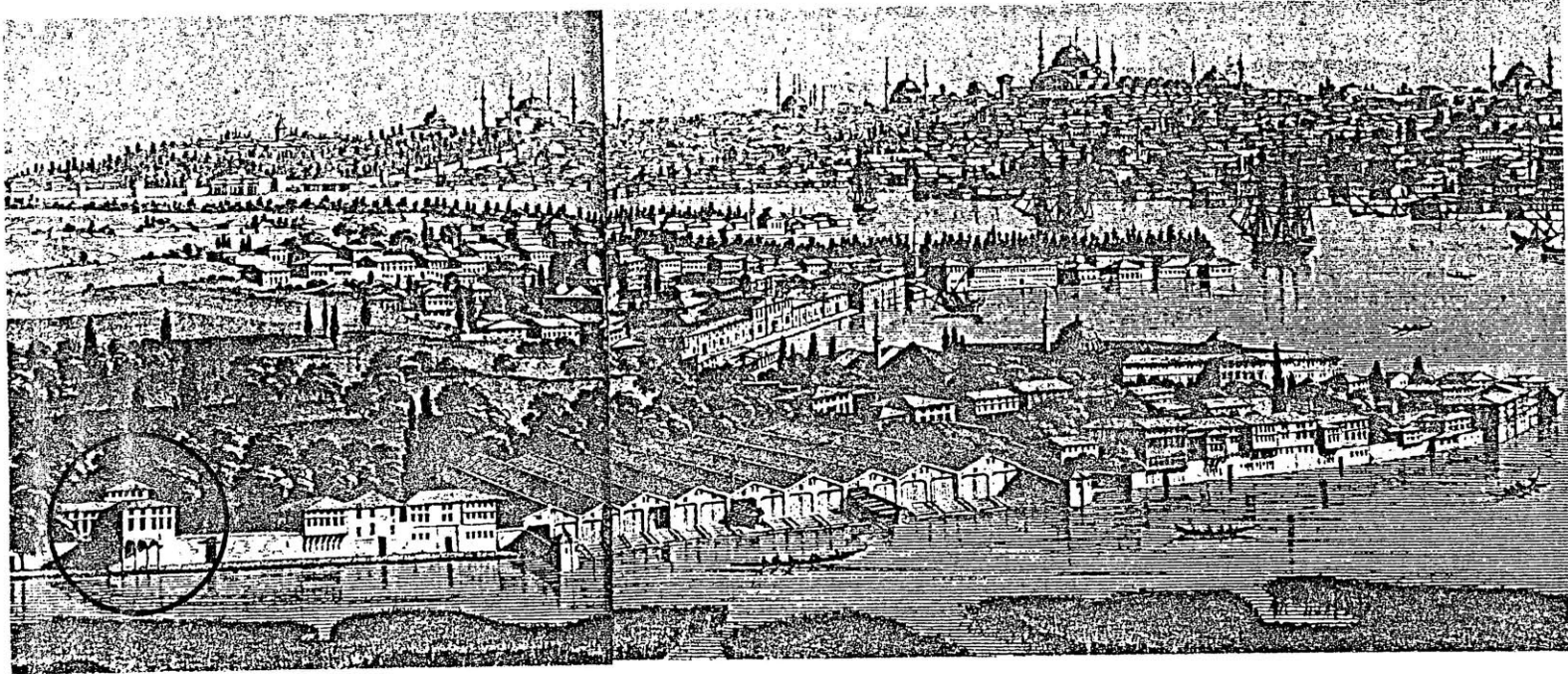


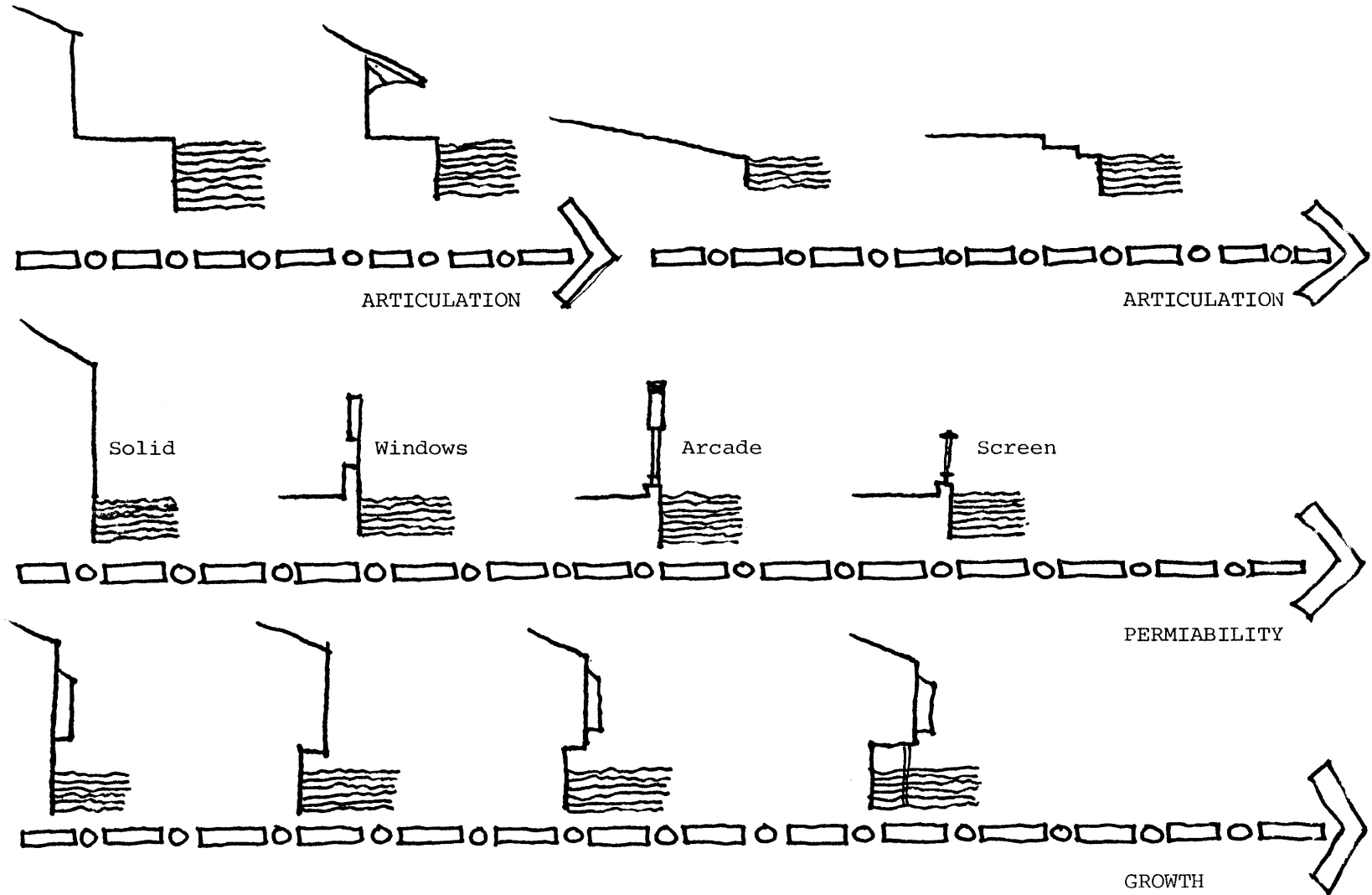
Fig. 63.

HASKOY & KARAAGAC: 1790. Melling

NOTES: Fabric a continuous wall along the water with nature behind the wall (water still salty in this region) with a narrow walkway. Note the repeat of the four column arcade from across the water in Eyup.

Fig. 64.

VARIETIES ON THE EDGE: THE GOLDEN HORN



APPENDIX B

The Yali:

The Yali is a house built on the edge of the water. Its plan closely follows the 'quasi-religious' Cinili kiosk with a central domed hall and rooms projecting along its axes. Hence it is a court turned inside out with rooms looking outwards.

The origin of the Yali according to Esin, in his article "An Eighteenth Century Yali Viewed in the Line of Development of Related Forms in Turkish Architecture." is the domed Turkish tent which figured as a royal symbol in Turkish and Mongol dynasties. These were made up of two sections, a pliable wooden frame that stands like a cylinder, and a lid that formed the copula. The entrances were orientated towards the cardinal points with awnings acting as parasols. The cross axial orientation is also found in Buddhism in the Mandala form. Esin tells us that like other Inner-Asians, the Turks of the tenth and eleventh century described the earth as a square floating on four cosmic oceans. This appears in Turkish-Buddhist art and the earliest princely dwelling of the Turks imitating the Chinese kiosk. After the acceptance of Islam the form lost its meaning but the kiosk beside water remained an architectural tradition. The Seljuks therefore built their mansions within a protected enclosure of a park with water elements where each king built a kiosk in the Chinese style or a single, domed room imitating the Turkish tent.

Hence the kiosk and the Yali are a direct evolution of the ceremonial tent.

Up to the eighteenth century, the Yalis were light weight timber structures, built on massive blind stone walls that were punctuated with a gate over a jetty. The latter were considered, according to an unwritten rule, as public domain used by linesmen and fishermen.

The Yali was no more than a summer house or a hunting lodge along the water with a garden behind, but in the eighteenth century they were used more and more as residences. Hence they were enlarged either by being built larger or by the addition of wings. Under European influence, some acquired pediments and columns with wood being replaced by stone and marble.

Even as late as the nineteenth century, distant Yalis were approached only by sea.. They each had their own boat house under the harem allowing the ladies of the house to get in and out in privacy. The ground floor also contained the service areas with the proper living quarters on the first floor. The harem and selamlik were in two buildings seperated by a court yard or a garden.

The Yali was open on all four sides with low sofas aligned along the windows allowing the contemplation of nature in all directions and through out the diurnal and nocturnal course of the sun and moon. Moreover the main rooms were painted with colours that reflect nature outside. Hence those on the sea side were either blue or yellow, and those on the garden side, green or rose.

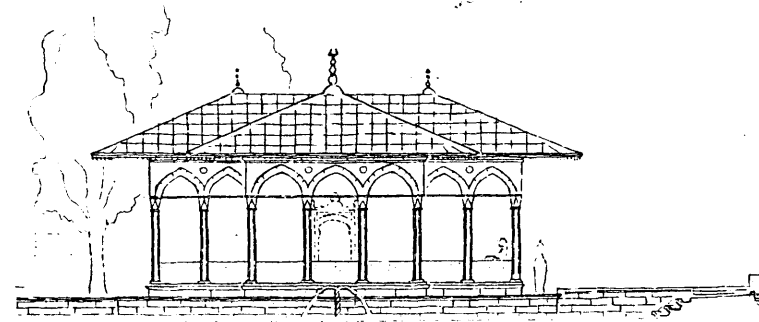
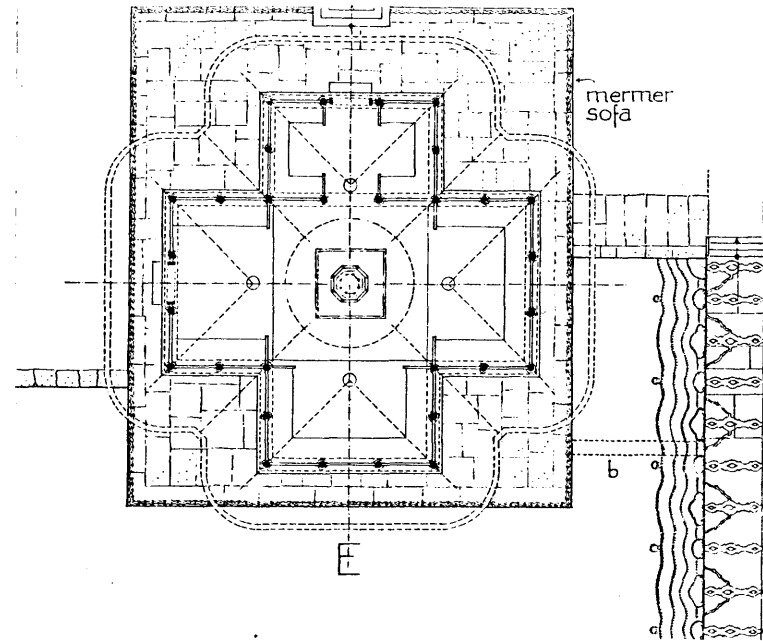


Fig. 65. Kiosk on the water in Sadabad.

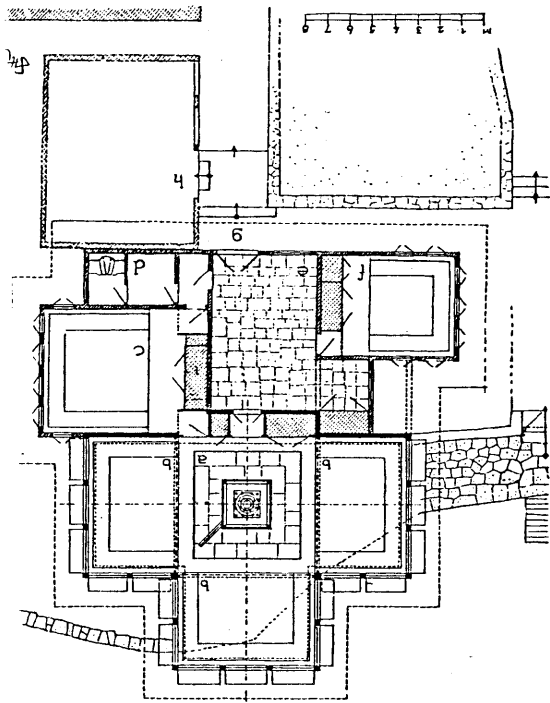
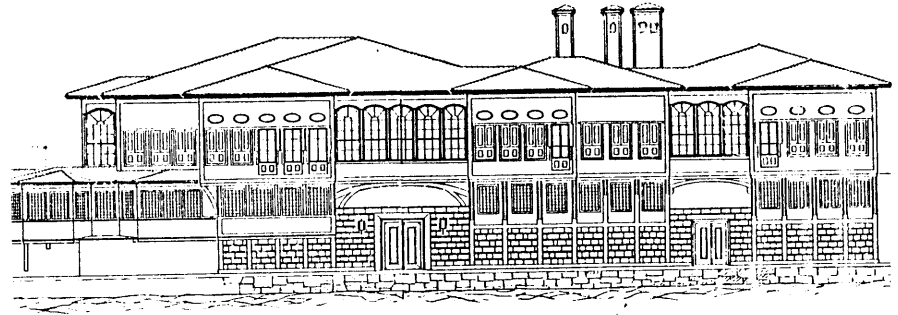
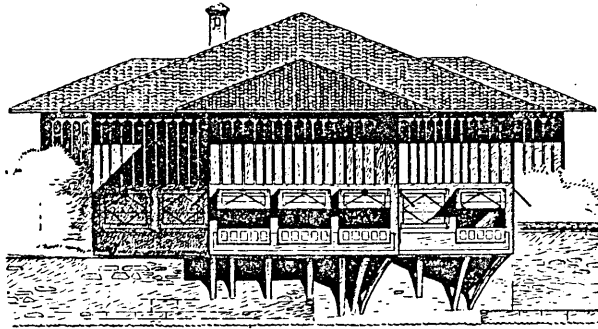


Fig.66. Seventeenth Century Yali.

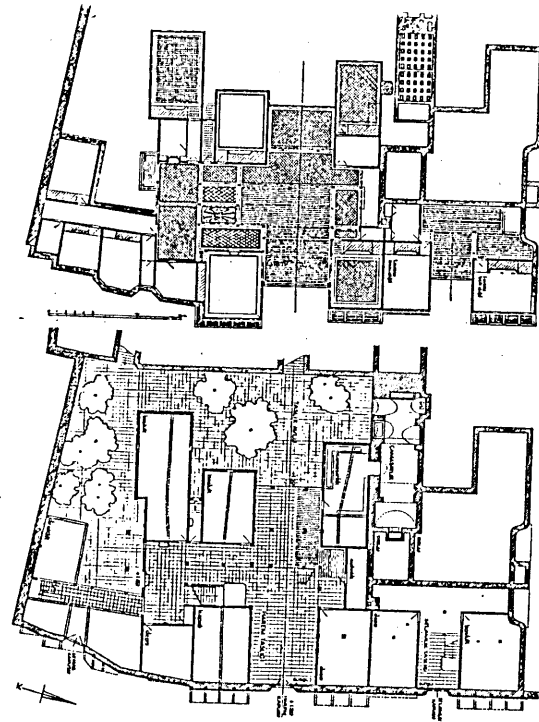


Fig.67. Eighteenth Century Yali.

Due to the extreme number of windows and their shutters, The Yalis looked like bird cages. Being in full public view from the sea side, a great deal of care was spent on their appearance lit at night by lanterns and torches and competing with each other for attention.

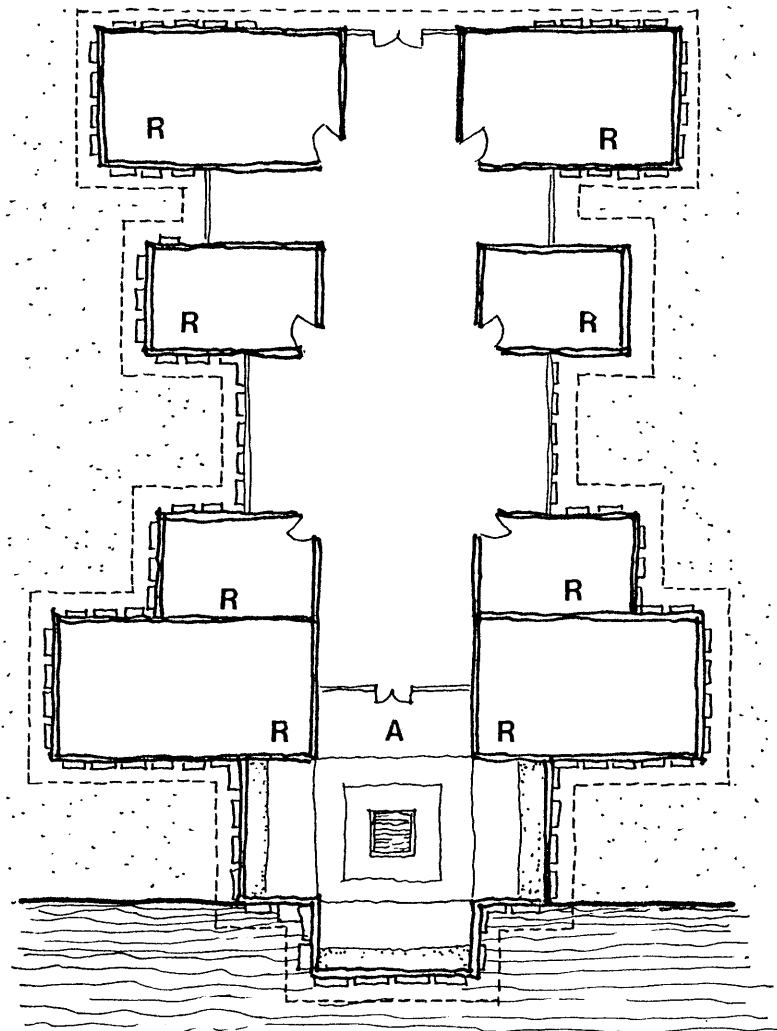


Fig.68.

THE YALI:

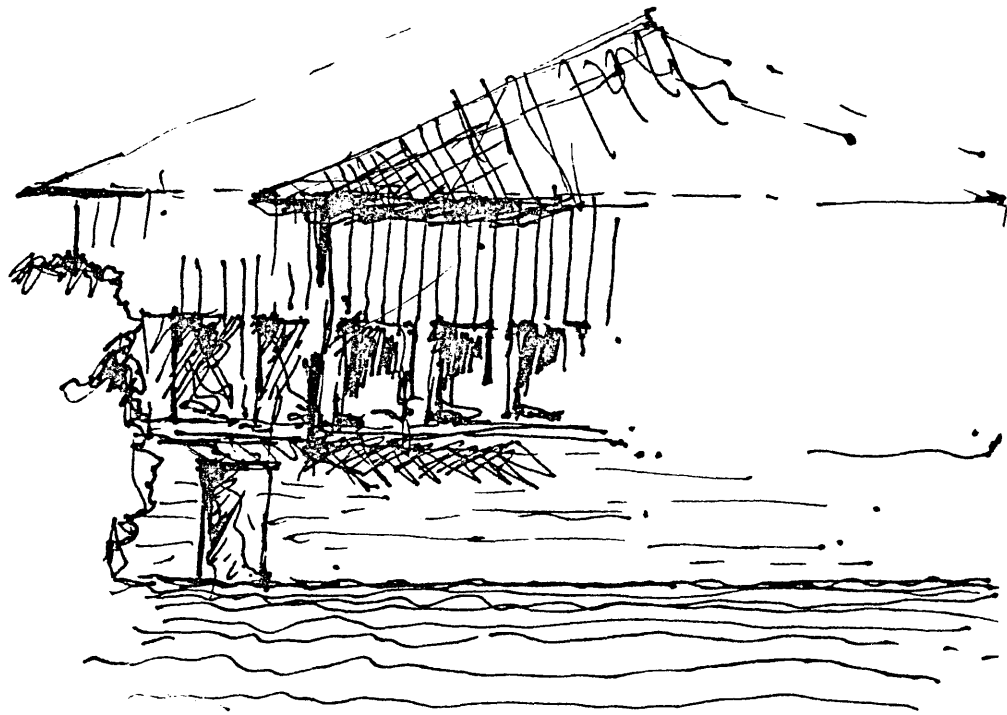
THE PLAN.

PAVILLIONS IN A GARDEN.

The plan of the Yali is made up of two components:

R: Regular rooms
and left over space.

A: is a special room that celebrates
the water. It has a crucifix form
with low iwans on three sides for
seating and a fountain in the middle.



THE YALI:
THE ELEVATION.

ROOFS:

Prominent.

Intact, never punctured

PIANO NOBILI: Living area.

Strip elevation of a light
weight skin that opens out.

Ground Floor: Service area

Solid. Restricts entrance.

Fig. 69.

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ILLUSTRATIONS:

Fig.1-28-31-56. Base map, Istanbul City map by N.E.T.

Fig.2-3. Golden Horn of the Past, Golden Horn of Today, Golden Horn of Tomorrow. Municipality of Istanbul.

Fig.4. Municipality of Istanbul.

Fig.5-13-14-25-26-27. Yenal.E

Fig.7-11-44-49. Ozcay. M. Istanbul. The Aga Khan Award for Architecture. 1983

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Fig.29. Municipality Study of the Sulaymanyah District.

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Fig.47. Muller-Wiener. Bildlexikon zur Topographie.Istanbuls.

Fig.48. Municipality Study of the Zeyrek Area.

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Fig.55-64-68-69. Personal Diagrams.

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