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Mehmet Novan

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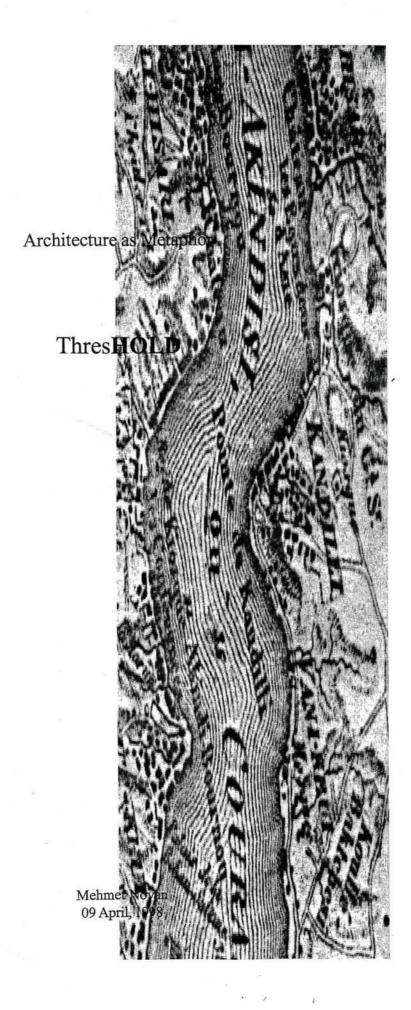




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THESIS PROPOSITION

1- Introduction

Bosphorus: also spelled BOSPORUS, Turkish ISTANBUL BOGAZI, KARADENIZ BOGAZI, or BOGAZIÇI, strait (bogaz, "throat") uniting the Black Sea and the Sea of Marmara and separating parts of Asian Turkey (Anatolia) from European Turkey.

The Bosporus is 19 miles (30 km) long, with a maximum width of 2.3 miles (3.7 km) at the northern entrance and a minimum width of 2,450 feet (750 m) In its centre a rapid current flows from the Black Sea to the Sea of Marmara, but a countercurrent below the surface carries water of greater salinity from the Sea of Marmara to the Black Sea.

The Bosphorus's specific location within the city, Istanbul acquires a dual reading: "European side or Asian Side", "the other side", but that location also forms Istanbul as it is: one city. This ambiguous reading of Istanbul makes the Bosphorus a threshold: It unifies and separates at the same time. This same situation is also valid at larger scale; the Bosphorus separates and unify the Black Sea from the Aegean Sea. Therefore it becomes a "dual threshold".

The aim of my thesis is through a metaphor of the Bosphorus to explore architecture as threshold. This thesis is going to manifest itself in a series of ferry terminal all along the Bosphorus. Only one is going to be selected and developed. Yet can architecture be understood as threshold? Can it be understood as a piece that can unify/separate at the same time? How is the metaphor constructed?

The definition of threshold becomes important at this point:

Threshold:".. the piece of timber or stone under the door of a building; doorway, entrance; the place or point of beginning; the point, limit at which a psychological or psychological experience begins".

The definition of threshold with these terms isn't so clear. I propose for the clarity of the thesis to reinterpret the word by decomposing it into two words: unify - separate.

Unify: "...to make it into one; to make consistent. Antonyms: separate, split". This implies the existence of at least two pieces.

Separate: ".. to divide, part; to sever; to disconnect; to set apart..."..

This implies the beginning of one piece and the end of an other piece.

Threshold is reinterpreted, in this thesis, as being both unifier or separator simultaneously. This quality will be clarified through comparisons, interpretation, questions and the Bosphorus's historical evolution.



A-"Human Condition I" as interpretation of the Bosphorus

The use of the painting Human Condition I will be used to understand the interpretation of the Bosphorus. In other words it will help further clarify the ambiguity of its character. Finally the painting will generate questions about the Bosphorus.

1-what the painting is about:

Magritte tried to limit/outline in his painting, within a single picture, the ambiguity existing between a real object, one's mental image of it and the painted representation.

In the human condition I, the idea of painting as "window on reality" is contraposed. Is the landscape painted on the canvas inside the room, or is it outside the window? Magritte describes the sequence as follow:

"in front of a window seen from inside a room, I placed a painting representing exactly that portion of the landscape covered by the painting. Thus the tree in the picture the tree behind it, outside the room. For the spectator, it was both inside the room within the painting and outside in the real landscape. This simultaneous existence in two different spaces is like living simultaneously in the past and in the present, as in cases of deja-vu".

2- Landscapes - Istanbul

This painting can not be translated literally as Istanbul, what can be teinterpreted is the dialogue, through the window, of the 2 landscapes, and what the painting is. * The two landscapes can be read as separate, the one outside the window and the painted one in the room, or read as one when looked at the painting as a whole. Similarly Istanbul can be reinterpret as being separated as two, European side or the Asian side, or read as one: Istanbul.

3- Window-Time-Bosphorus

The window inside the painting is the reason of this reading, it becomes literally a threshold. At a certain point in time: it separates the landscapes, the one inside the room and the one outside the room, but it also at one time unifies them, into one. Now the viewer asks the question as which one the painting is: the one inside the room? The one outside? Does the painting represent reality? Does it become a window? Or does it deny it as window? Is it a painting within a painting?

Time is an important player in terms of understanding the window. The threshold is metaphorically represented through time. The window is the tool that shows it. They are interdependent. It was only at a certain in time that the painting inside corre-

sponded exactly to the "landscape" outside, forming one.

Similarly the Bosphorus can be understood as being a threshold. It will unify the city according to the way it is experienced. By walking on the shore one understands it as separator, but when one is on a it, one understands it as a unifier.

These arguments about threshold generates a series of questions as to what the Bosphorus is:

Is it an edge? Or not? Or both at the same time? Is it a street? When is it understood as such?

Is it bridge? An obstacle? Both?

Does it unify or separate? Both?

The arguments presented above, depicts the dual readings that the Bosphorus implies. One could argue that it is a threshold. It unifies and separates at the same time.

B- Interpretations-Heidegger and Simmel

In this section, through the description that Heidegger and Simmel make of the *bridge* and its relation to the river banks, I will further elaborate the interpretation of the Bosphorus as a threshold, most importantly it will determine/frame the character of the project. I believe that these descriptions and their interpretation are relevant, since the ferry and the ferry terminal form a bridge/connection/road at the same time.

The ideas will be conveyed through quotes, which's interpretation help read the actual site (the Bosphorus). It is key to think of the city with and without the bridge. Do we need bridges to link the city? Isn't it already understood as one before the bridge? What does the bridge do with its presence? Do we have a greater understanding of the side we are on? Does it further enhance or understanding of the other side or the city?

So I purpose at first to talk of unity and separation in the city without any *bridges* the second part will include them.

"transformation put everything into relation to everything else and make all singularities into one cosmos"

Georg Simmel, "Bridge and Door". Lotus International, pp52.

1-No bridge.

a. One city:

As such the <u>Bosphorus</u> as an element in nature, literally separates the banks. Yet both pieces in order to exist at the same time have to be interdependent: the earth must be "split" so that the stream can exist and vice versa. This relation, earth to stream and stream to earth, enables us to understand them as one.

If we talk of <u>Istanbul</u>: the city is read as one when commuting from one side to the other during the day. What is in between is not of any relevance yet distances and time are. The presence of the sea is erased/ignored/ forgotten. The city is not two anymore. For example, when commuting from home (European side) to work (Turkish side) the presence of the Bosphorus, as separator, is not important however the time one takes to get to work is.

AS. M.

b. ...the Bosphorus is in between:

As Simmel puts it

"...if we did not link them in our imagination and needs our concept of separation would have no meaning"

Thereupon separation is understood only when one needs to cross to get to the other bank. As such, the example I've given about commuting shows the separation of Istanbul into two parts as well: people leaving on the European Side have to reach the Turkish Side to go to work (yet the word "side" has a unity implication: a large area that combines both sides).

The previous lines, described the understanding of the city without bridges. The threshold idea is realized in the *mind* of the people of Istanbul. The following lines are useful for me to comprehend the impact of a physical linking: they will introduce the road and the bridge. If a bridge is understood as a link, what does it link? Both banks? The people? What does it mean to unify? Or to separate? Is the character of the Bosphorus the same as the river that runs between two countries?

2-With Bridges

a-The road:

"...the will to connection had become the Forms of things, forms offered to the will for each repetition, without this being dependent any longer on its scarcity or frequency"

Georg Simmel, "Bridge and Door". Lotus International, pp52.

Along the Bosphorus the first settlements were fishing villages. They were distant from one an other. Commuting was mainly done along the Bosphorus by boat, yet with the maturation of Istanbul, theses settlement were connected to the center (Istambol) by road. If we go back to Simmel's earlier quote, essentially, the villages were already linked to each other, in the inhabitants mind. These villages were to expand and join each other with time.

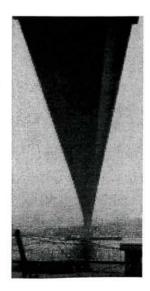
b-The bridge:

"the banks emerge as banks only as the bridge crosses the stream. The bridge designedly causes them to lie across from each other. One side is set off against the other by the bridge".

Martin Heidegger. "Building Dwelling Thinking". Poetry, Language, Thought.

The speed of traveling with the car, and the need to cross the Bosphorus without losing time necessitated the design of two bridges. They unified yet they marked, as Heidegger points out, the separation that the Bosphorus creates. Yet unlike Heidegger's stone bridge:

"..the location is not already there before the bridge. Before the bridge stands, there are of course many spots along the stream that can be occupied by something. One of them proves to be a location, and does so because of the bridge"



...these two concrete automobile bridges in one way deny the location in the way Heidegger describes, since it's purpose is a continues circulation (*location* here is the *point* the car reaches the other shore, Heidegger was referring to old stone bridges), but in an other way, by their presence they mark their location (location here is referred to as being both points where the bridges touch the shores or around the "legs" only).

Doesn't that same presence underline, as it hovers from one side to the other, the Bosphorus, and its relation with the city. Like the sculpture "Running Fence", where Christo makes the familiar (the everyday present) visible.

And finally as Simmel puts it: the simple dynamic of movement, in the reality of which the purpose of the bridge is exhausted from time to time, have become something visibly enduring...



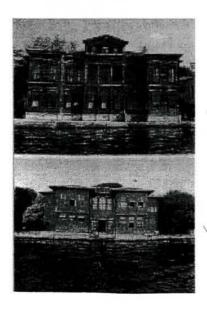
C-Similarity and difference

The previous two sections have dealt with the idea of unifying/separating, first in our mind, and then with its physical manifestation: the bridge, where its purpose was again under question. Yet if the bridges are the results of necessities for travelling in the city. Then this is one manifestation in understanding the city as one, what are the other ones? Similarities? Differences? How do we understand the Bosphorus as a unifying condition? Is it similar reactions to it? Are both sides the same?

My purpose is not to answer all these questions, but to start an identification of the building types, and their language. Similarity is an important player in comprehending the city as one, it does also sets the criteria for understanding difference (which by its nature becomes object).

In the following lines, I will set the character of the major building types along the Bosphorus (all of them are either at the edge or walking distance away from the Bosphorus):

Water Front Villas or Yali:



- -facades facing the Bosphorus are parallel to the shore. The openings are vertical, since the buildings were mainly of classical style. Only a few buildings have horizontal openings (by Sedat Hakki Eldem)
- -material: wood (it was used till the 1940's) then changed to concrete. But the majority of the character on the Bosphorus is still mainly wood.
- -plans: There's a central axis. At the center (usually) is a central space and bedrooms around it. In some plans the central space faces the Bosphorus.
- -the scale: double story or triple stories. Around 10-15m high.

The Palaces or Saray:

- -facade facing the Bosphorus: paralel to the shore.
- -plans: rectangular, the long side (where the main facade is facing the shore) runs parallel to the Bosphorus. The sequence inside is parallel to the Bosphorus: a long corridor connects all the rooms.
- -materials: wood or stone.
- -scale: a few meters higher then the villas.



The mosques:



- -material: stone
- -typical plan (square) and elevation
- -scale: as high as the villas

Scale, material, plan, the relation of the facade with the Bosphorus and the internal sequence, are I believe what unifies the both shores. Similarity is a unifier.

2- Site History

Through the site history, the idea of the threshold will be shown as a fact that existed through the city's history. The strategy for the architectural intervention will be better understood with this base in mind.

A-Istanbul

1-From Byzantium to Constantinople

Today's Istanbul is the creation of many centuries. The first city established in what is now Istanbul was situated on the south end of the Bosphorus, is the city of Byzantium, founded by the Greeks of Megara in 193 AD. In 324, under the Roman empire, it became the capital of the Eastern Roman Empire: Constantinople. Both cities were constructed and existed on this site for mainly a similar reason; it is at a crossroads, and has a potential for commerce and trade. It's situated at the point where Europe meets Asia, and the Black Sea opens to the Mediterranean.



Evolution since Byzantium

Constantinople, grew rapidly, and expanded above its wall to the golden horn (Sykae) and the along the Bosphorus. As a rival to Rome, Constantinople (which is also lo-

cated on 7 hills) was re-planned along a central axis, starting from the fortifications, where the public institutions were located and finishing at the palace, located on top of the hill looking to the Bosphorus (originally the acropolis under Byzantium). Classical greco-roman traditions were gradually obliterated as the empire's christian and greek culture took hold, the emperor finally showed his intention of breaking the ties of the Greek Christian state with Rome by renaming its empire Byzance.



The capital became the largest city in the world under Justinian (527-565). In the following centuries the capital was first devastated by the plague (745-747). Having lost most of its population, Greeks (from mainland), Armenians and Jews were brought to Constantinople to rebuilt the city. Then in 1204, during the 4th Crusade, the city was sacked, churches pillaged and relics stolen and sent back to the West.



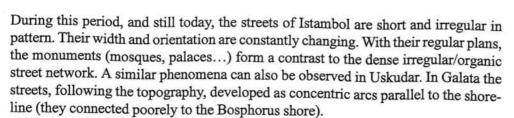
By 1452, the Ottoman Empire had conquered most of Anatolia (Turkey today) and reached southern Europe. Weak and reduced to Constantinople the Byzantine Empire joined the catholic church to get Rome's support in case the Turks would attack. However the city surrendered to the Ottoman Empire in 1453.

2-Ottoman Constantinople: Istambol* (or Old Istanbul)

This change of control is a new era of building activities to create an economic, administrative, cultural and religious center for the Ottoman Empire. Untill the beginning of the 18c. architecture mainly serves religion. The 7 hills were now occupied with mosques.

In the 18c. Istambol embraces European life style and architectural fashions (especially Paris and Vienna). Fascinated by the royal settings the Ottoman court undertook a new repertoir of palaces, mosques and gardens. The displacement of the sultan's residence (Topkapi Palace) from Istambol to the "west" on the Bosphorus shore, foretold the future of this strip as the main focus of imperial settings.

In mid 19c. Istambol consisted of 3 main concentrations separated from each other by water: Istambol, Galata (on the European side) and Uskudar (on the Asian side) where the last two are major suburbs (several settlements also appeared along the Golden Horn shore and on both sides of the Bosphorus). These 3 places were mostly inhabited by muslims, greeks, jews and armenians. Pera (located above Galata) was a more upper class European quarter.

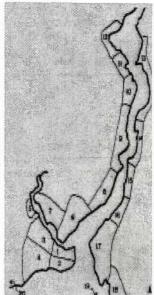




3-Urban intervention during the Tanzimat till today.

During 1839-1878 (the Tanzimat period), a westernization of the society began. Modern European society was seen as superior to Ottoman society. This resulted in an urban intervention influenced by Paris, Vienna and London (most of them stayed on paper). Due to wooden residential construction Istambol and Galata lost more than half of the their urban fabric. With the new regulations and codes, streets width and construction material (stone) were re-determined. The idea of reaching western urban standards resulted in the Bosphorus shore, becoming a residence for ambassadors, the upper class and the emperial court. These urban standards occured with the "cleaning" of dilapidated buildings (often shacks) and the opening of wide embankments that linked the Bosphorus back to Galata, Pera and Istambol. Within the same periods and region, street lighting, horse drawn tramways and water transportation were developed. Many bridge and tunnel projects were developed to link uskudar and Istambol (today's Eminonu), but none were realized.

Today's Istanbul, spread many kilometers past the borders of the 19th century city. Two bridges, constructed in the mid 20th century cross the Bosphorus. The construction of a tunnel is planned. The shore has remained the same. The tramways on the Bosphorus were replaced by the automobile and the sea transportation has developed since.





* I chose to use Istambol instead of Istanbul to avoid the confusion with today's Istanbul which contains Galata, Istambol (Constantinople was named Istambol right after the Turks took the city), Uskudar, Pera and much more.

B-Lost and founds on the Bosphorus

This section describes the architectures on the Bosphorus. I chose them because they can provide a list of attitudes generated by the Bosphorus's character.

-Anadolu hisari / Rumeli hisari: two fortifications set across from each other. Used during the 1400's as Ottoman settlement before attacking Constantinople.



- -Anadolu Feneri / Rumeli feneri: two light house set at the North ends on either side of the Bosphorus. By there location they also act as gateways at the Black sea.
- -Emperial Palaces: Ciragan, Dolmabahce (both on the European side), Beylerbeyi Palace (Asian side) are the summer locations for the Sultans. They were build after the 19c. with influence of the French urbanisation movement of the 1700's.

-The walkways on the Bosphorus: it experiences the Bosphorus as edge.

-Water front villas: On the Bosphorus there is a collection of wooden villas set across from each other. They were mainly developed after 1790. Increasing rapidly in number they connected the villages along the Bosphorus.

-Naval transportation: The ships, ferries, oil tankers and fishing boats are the ones that experience the Bosphorus as a street. One experiences the inbetween

-Chains: During the reign of the **Masmille** empire a chair Crossed the Bosphorus from Emmonu to the tower of Laender to keep enemy ships at distance from the city fortifications.

-Tunnel: A literal unification of both sides of the Bosphorus through a subway system that would run underneath it (Strom, Lindman and Hilliker's proposal).

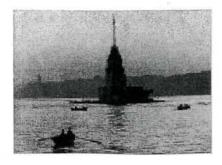
-Bridges: Literal connection between both sides of the shore.

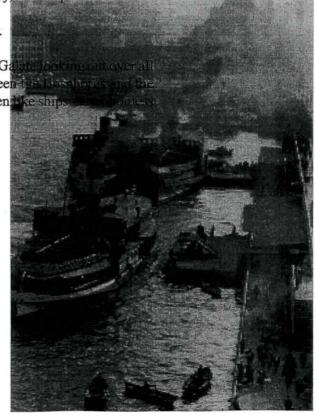
-At this moment I decided to put some description of the city from the Bosphorus.....

"....Before dark Istanbul could be seen ahead, and it is true that it must look more splendid than one comes to by sea. Even father Chantry-Pigg, who did not think that Constantine's city and the Byzantine capital ought to have had all those those mosque-domes and the minarets built on its old Byzantine shape, of which he had engravings in a book, even he thought the famous outline climbing above the Bosphorus and the sea of Marmara, with all its domes and minarets poised against the evening sky, was stupendous...."

.....And looking of the Bosphorus from the city.

Gustave Flaubert "....from the top of the tower at Galata looking the houses and all the mosques (beside and between the Ross too Golden Horn, both full of ship), the houses too seen the ships fleet with the minarets as masts..."





3-Sites selection-program

A-Strategies

The Bosphorus as described earlier is a double threshold. It is a threshold in scale of the continents (scale 1) as well as in the scale of the city (scale 2). The understanding of threshold at scale 2 is basically the use the passage from the terminal to the vessel/ferry. To understand threshold at scale1 it is necessary to put several terminal all along the Bosphorus. How many does one need?

The following lines, are a list of 4 strategies to determine site locations. Each are related to the Bosphorus's character. None of the strategies is more important than the other one, since they reflect all the same subject. So the final sites will emerge through the cancellation of sites at proximity of each other.

1. Using the already existing docks (pragmatic-bridge)

Istanbul already has a functioning ferry system. Most of the terminal location are based purely on pragmatic reasons, like the bridge: they are the shortest lines between two close points. Their location were determined according to their proximity to habitation centers along the shore. Most of them have a terminal building.



2. The sea:

These are basically the depth, the currents, the wind, change in water level.

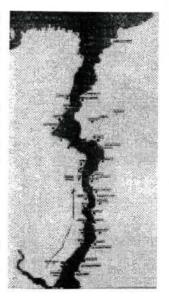
3. Bosphorus with settlements and as nature (similarities):

As described earlier the idea of Istanbul as one city, is understood by similarities (the reaction to the Bosphorus) and differences. So in order to reveal this character the location of the terminal will be where this interpretation is possible. For example on the location where the Yali stands.

As we move out of the center (Istambol), towards the Black Sea the city become less dense (after the Kavaks) as the vegetation gets denser, yet it is still one city. The high hills, the forest, the sea, the large distance between the banks...this all becomes more important then the settlements around. So site selection, at this point will talk about a less settled Bosphorus.

4. Scale 1:

Since the Bosphorus marks the entrance/exit to the Black Sea and the entrance/exit to the Aegean Sea. The two edges will be occupied by terminals set across from each other. The typology can be the one of gate.



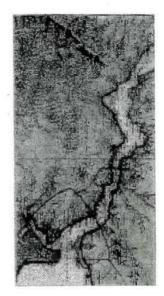
B- Program analysis

1-The episode:

This section describes the relation between each terminal. How are they understood as one? How do they relate to the Bosphorus?

To construct unity at scale1, I propose an episodic relation between each Terminal, yet the reading is a non-linear one, in other words we don't have to go through each terminal after the other one to understand them as one system. Such as we don't have to walk all around Istanbul to understand it as one city. Each episode is separable from the whole, yet it is a constituent of it. So each terminal is responsible of an episode, making each terminal less contextual. Yet is important to construct the metaphor of the Bosphorus's character.

<u>In order</u> to understand the episodes as one I propose that a ferry runs and stops along each of them for tourists (mainly) and commuters and that also regular ferries uses them as well. So there will be one immediate understanding of the project, and one that continues through the years as the inhabitant of Istanbul uses the ferry mainly to commute not necessarily to discover the Bosphorus.



2- The terminal

The difficulty in this section is to find a precedent to analyze a ferry terminal, since there is no real typology. Yet to determine the basic requirement (size, equipment, codes) of a terminal in terms of its functioning as one, I used a research done in the 80's: Functional Design of Ferry Systems. The research is a result of an analysis done of ferry terminals in Vancouver, NY City, Seattle and San Francisco.

The intention behind each terminal is to convey the idea of threshold. It's through the terminal that one will experience the passage from one place to another. People pass from the boat to the terminal and from the terminal to land and vice-versa. It's only at a given *time* that one realizes the separation and the unification: the terminal in those terms becomes an *event* (Event1,2,3,4....).

The episodic aspect of the terminals will be understood through their sequence (from the boat to the terminal to land or the opposite), the layers, circulation, the orientation of the facade...

These aspects will reveal themselves as one proceed from the exterior space, to the terminal to the boat (or vice-versa):

- -Departing passenger arrival area (by taxi, car, walking..)
- -Entrance space (where the people line up ether to get ticket or to pass through the turn still)
- -The holding area (this space includes the restrooms, control office, café, seats)
- -The embarkation area (including the docking, and space for people to gather and leave or enter the vessel)
- -The vessel.

3-The vessel:

Its choice is important in terms of understanding the change of place. To realize alteration, first I propose a single bottom hull, low speed (around 10 to 15 mph) vessel, to experience the tangling motion of the sea. Second, I suggest a modification on the sides and or back of the vessel in order for the passenger to understand the unification/separation as the vessel docks.

The vessel will hold 175 person, it's size, volumetrically, is close to the terminals.



4- Square footage:

+Basic requirement for each terminal:

-parking	A.R.
-Entrance area	1600s.f(150m2)
-ticket sale	320s.f(30m2)
- holding area (interior)	1600s.f. (150m2)
- embarkation/holding area (exterior)	1600s.f (150m2)
- restroom	400s.f (37m2)
- boat docking (1boat)	A.R.
- Mechanical	A.R.
- Control Office	400s.f. (37m2)
-Total:	5320s.f. (500m2)

+Additional functions depending on the terminal (some terminal according to their location on the Bosphorus will have the listed as well).

- Bookstore	400s.f. (37m2)
-Tourist Information	170s.f. (16m2)
-Café/restaurant	400s.f (37m2)

-Total: 6900s.f(645m2)

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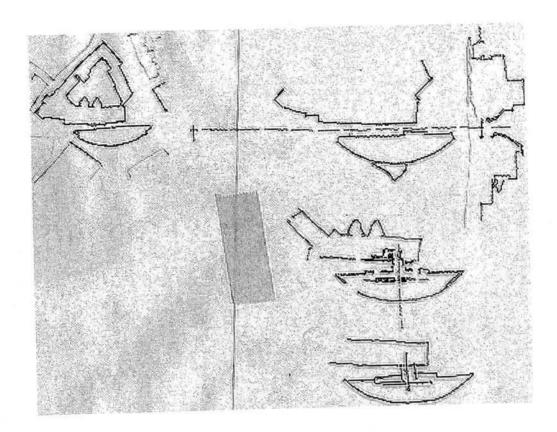
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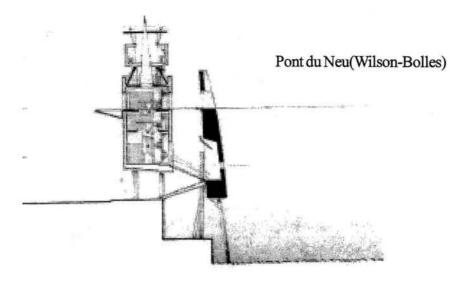
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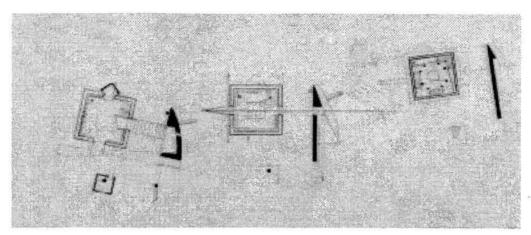
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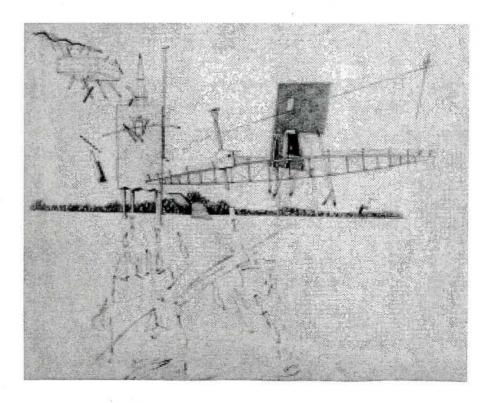
6- Architectural Analysis

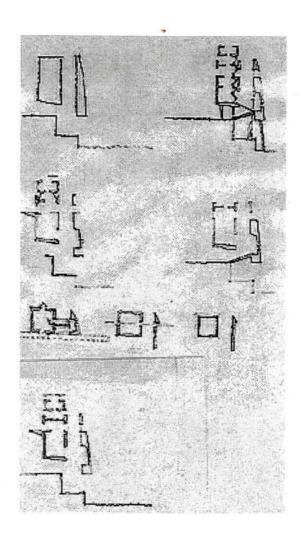


The Munster Library-Bolles-wilson

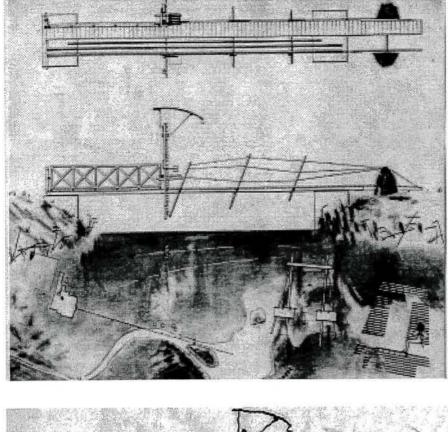


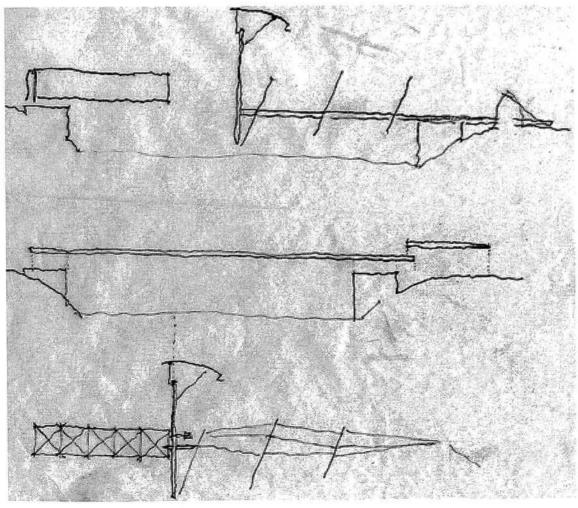


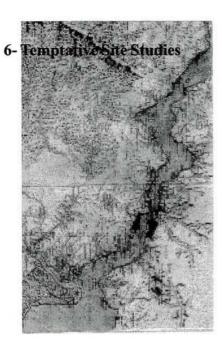






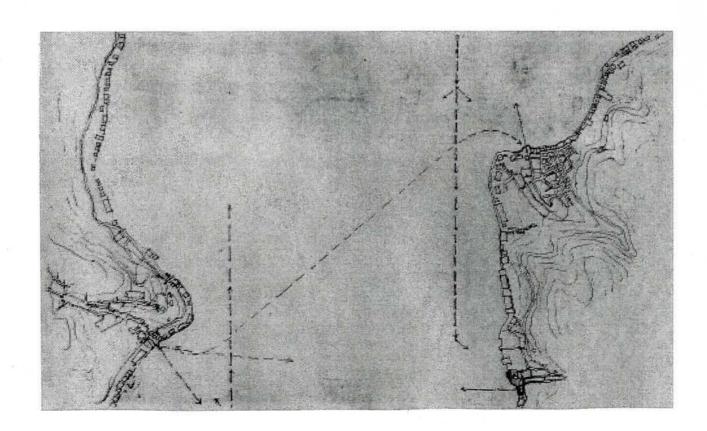






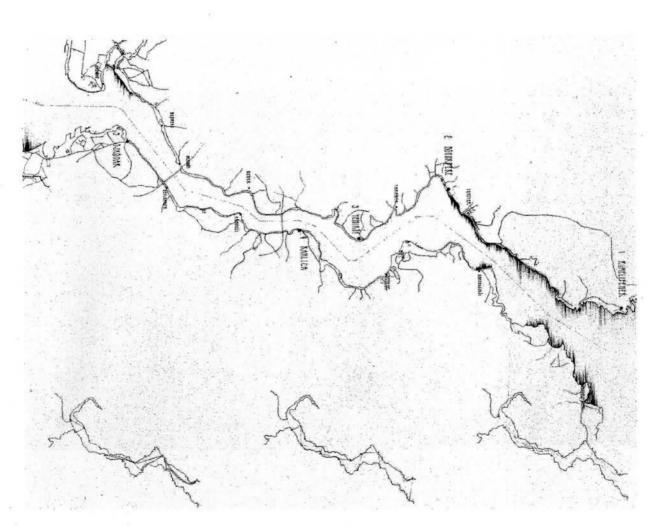
Potential two Tersminal Sites:

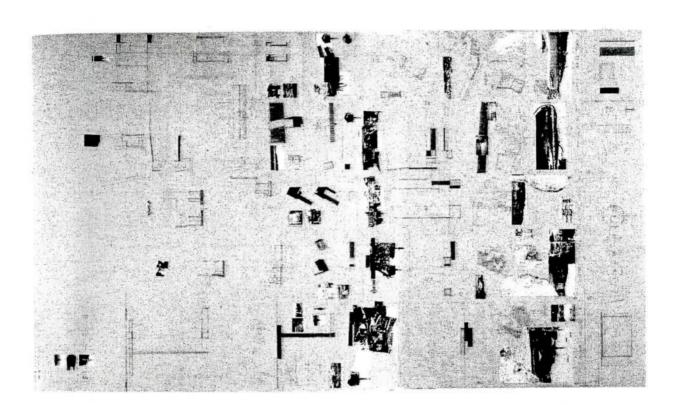
Bebek (European Side) and Kandilli (Turkish Side)



ARCHITECTURE AS METAPHOR THRESHOLD

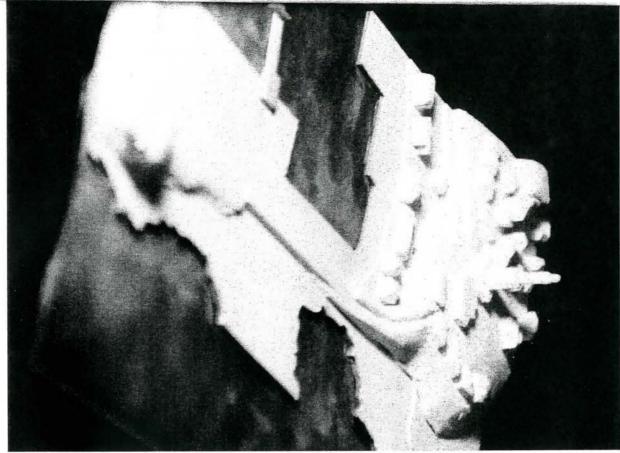
(5 SITES, 5 FERRY STATIONS ON THE BOSPHORUS)

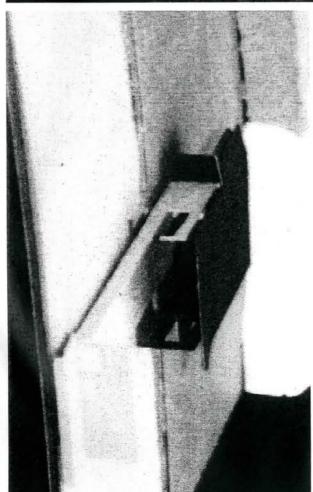




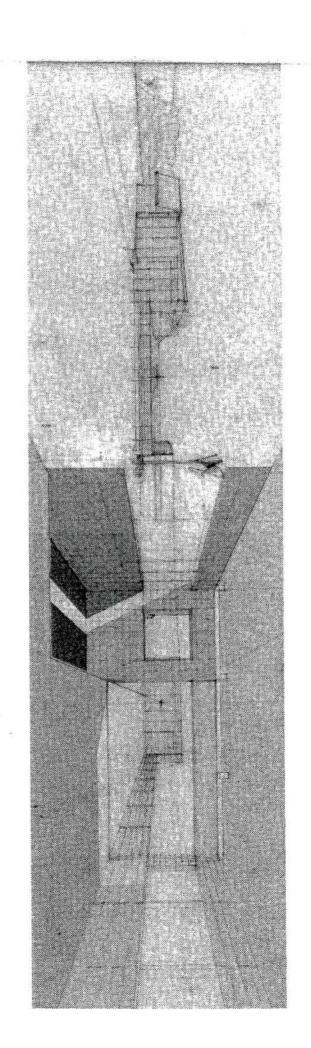
SITE 1 - RUMELI FENERI SITE DEAWINGS

MEHMET NOYAN - FALL 1998 THESIS SYRACUSE UNIVERSITY - SCHOOL OF ARCHITECTURE





SITE 1 - RUMELI FENERI



SITE 1 - RUMELI FENERI
PERSPECTIVE

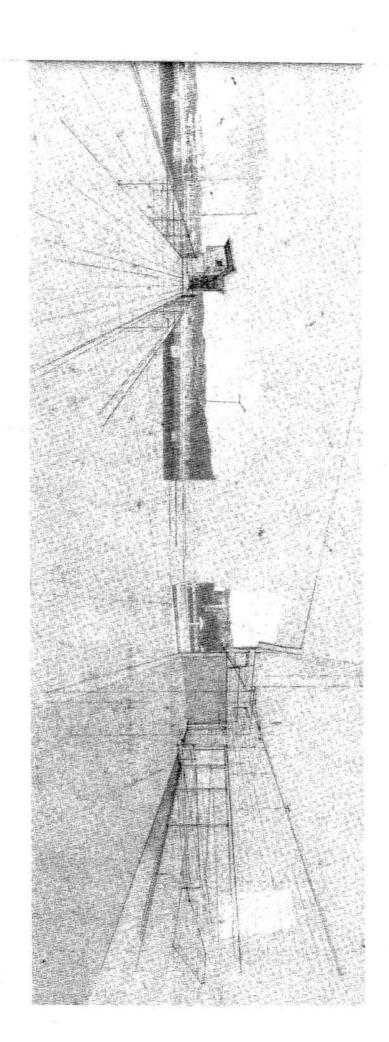
SITE DRAWINGS

SITE 2 - BUYUKDERE - DETAIL STUDY

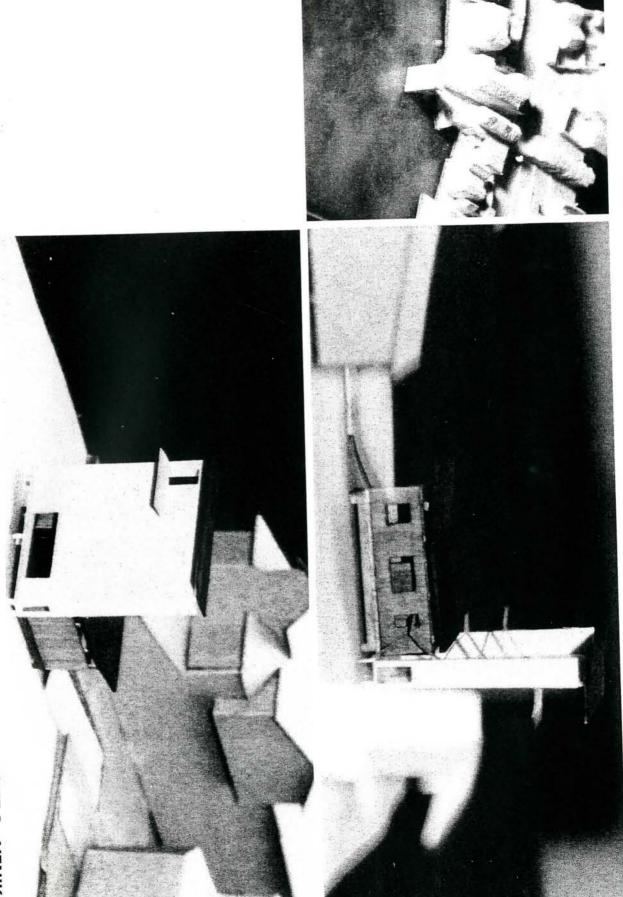
SECTION - PLAN

MEHIMET NOYAN - FALL 1998 THESIS

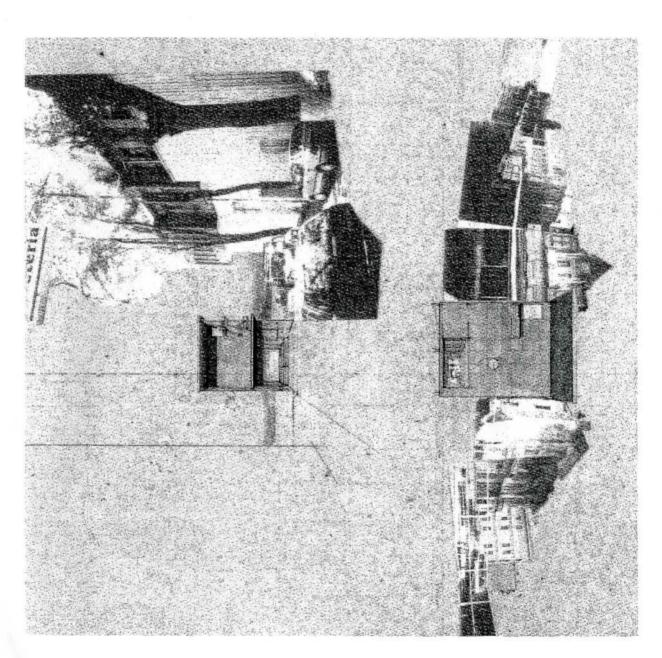
SYRACUSE UNIVERSITY - SCHOOL OF ARCHITECTURE



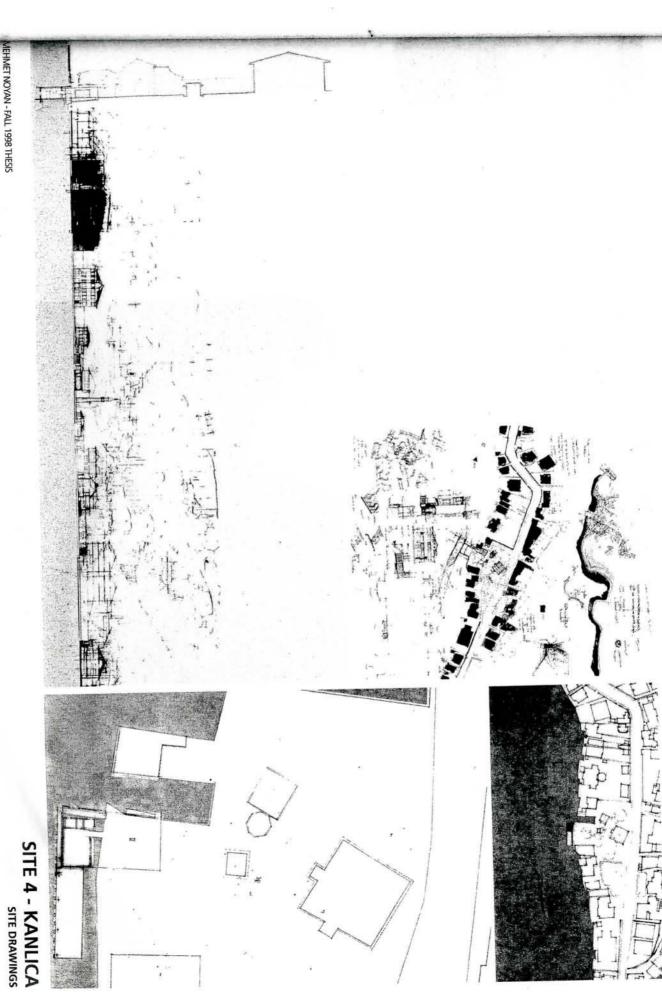
SITE 2 - BUYUKDERE - DETAIL STUDY
PERSPECTIVE



SITE 3 - YENIKOY
FINAL MODELS

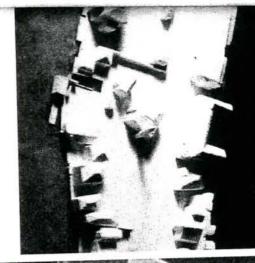


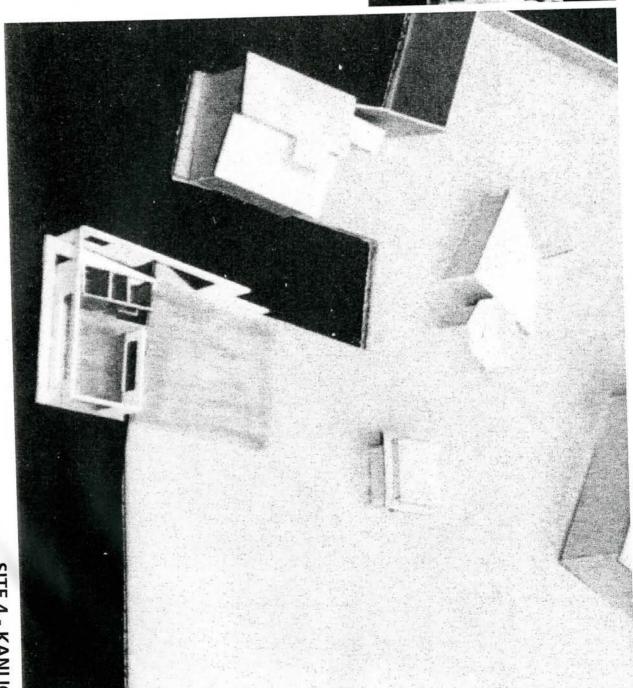
SITE 3 - YENIKOY
PERSPECTIVE



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SITE 4 - KANLICA
FINAL MODELS

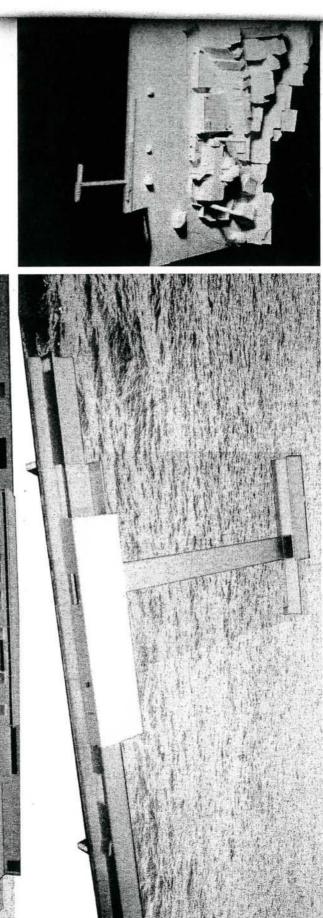
WEHMET NOYAN - FALL 1998 THESIS
SYRACUSE UNIVERSITY - SCHOOL OF ARCHITECTURE

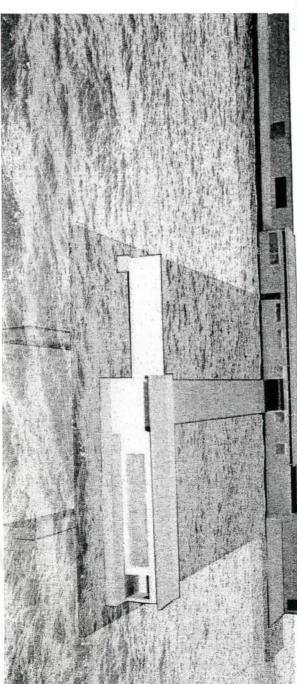
SITE 4 - KANLICA
PERSPECTIVE

NEHMET NOYAN - FALL 1998 THESIS

YRACUSE UNIVERSITY - SCHOOL OF ARCHITECTURE

SITE 5 - USKUDAR - DETAIL STUDY
SITE DRAWINGS





SITE 5 - USKUDAR - DETAIL STUDY