Article

Involvement of riverfront as a natural artifact into urban public life: eskisehir Porsuk Case

KAÇAR Ayşe Duygu *,ÇELEN ÖZTÜRK Ayşen BURNAK Terane***, ÖNAL KETİZMEN Gökçe**** DÜLGER Hatice*******

Eshisehir, Turkey

Abstract

All human settlements have different characteristics from each other. These differences grow out of natural environmental conditions, as well as the socio-economic and cultural circumstances gained in historical development process. Each settlement has its own characteristics such as geological position, geographical location, evolution in historical development process, etc. Although the commercial, industrial, cultural and demographical analyses introduce important data to define the structure of the city, it is not possible to understand the singularity (the singular, unique nature of a city) with this kind of data. In order to lay out the singularity, a study that is concentrated on a single city, one should specify the properties that make it different from other modern cities. Two significant artifacts shape Eskisehir's urban structure: One of these is a natural artifact, the Porsuk River and the other one is the railway. These artifacts shifted the city's development in an eastward-westward direction. The paper takes Aldo Rossis artifact theory in order to locate a theoretical framework in wich to define the singularity and identify the Porsuk River as a natural artifact. Within this scope, the student works, analyses and designs, which borrow elements from the urban image theory of Kevin Lynch, in the Urban Design Studio of Eskisehir Osmangazi University in 2013-2014 (Fall Semester) will be discussed.

Keywords: Water, city, natural artifact, public life, Eskisehir, Porsuk River

*duygukacar@hotmail.com , **acozturk@gmail.com, ***teranem@gmail.com, ****gokceonal07@gmail.com, *****htcdlgr@gmail.com; Eskisehir Osmangazi University, Department of Architecture, Eskisehir, Turkey

1. INTRODUCTION:

Rossi considers the city as an architecture built over time, underlying the fact that this process makes the city a locus of collective memory. A city's character develops over time, rendering its architecture as a source of a contrast between the singular and the collective. This contrast illuminates how "each part of the city should be seen as a singular place, as a locus solus" (Rossi, 2006, 2). Singular urban artifacts bear genetic codes between the past and the future. Rossi recognizes that urban architecture, as a form, summarizes urban artifacts' characters and their origins (Rossi, 1989, 32). According to Rossi, a building's singularity depends more on its form shaped through time and space rather than its material. Rossi also indicates how some values and functions of an urban artifact would endure, such as its moral value and its place at our collective memory; whereas other properties of an urban artifact would change in time (Rossi, 1989, 29). Consequently, one of the most important properties of urban artifacts is that they lead us to one single memory.

The cities are the collective memories of its society. Collective memory affects the transformation of the urban space. Memory is the guide to the complex structure of the city, helping us to grasp the physical conformation and the architecture. The totality of memory forms the identity of that city. The artifacts, as images within memory, gain a different significance.

... each situation, each incident kept as a memory on the mind, would have an architectural response; either from the public space or from the tangible, personal, private life, there is a sign that concretize every happening. Space enables every architecture to acquire its development conditions and capacitates the individual to obtain his /her [sic] dimension, which is necessary for the city go gain its identity (Moneo, 1984, 24).

Moneo considers contemporary urban designs as unsuccessful, criticizing them for not taking architecture into any consideration. Moneo points out that "contemplation about city should start from contemplating about how the urban form shapes the city (Moneo, 1984, 24)". Within this context, an assessment will be driven by analyzing both Eskisehir's natural structure and its urban artifacts, which shape the city's identity and the city's collective memory. The notion of "natural artifacts", represents the urban elements that play a determining role in the physical formation of the city. This notion also signifies the holistic, genetic coding of the city. Consequently, the present study aims to analyze the presence of Porsuk River in the past and discuss how it can be transferred to the future with the urban renewal works.

Similar to Rossi's and Moneo's arguments, Kevin Lynch also considers reorganization of the environment as a problem. As a solution to this problem, Lynch proposes discovering, protecting and resolving cognitive challenges of city's powerful images; as well as unveiling

city's covert structure and identity (Lynch, 2012, 127). Lynch states that "Past experiences and rich exemplary of urban design should no longer be employed; one should operate in a totally different scale of time and space (ibid, 128)". These two arguments both emphasize that even though city's core values remain the same, the city's alteration is inevitable. A re-evaluation of the city's relation with water has been effectuated in our Urban Design Studio by basing research on these arguments. The aim of this re-evaluation is to asses a re-interpretation of Eskisehir's identity. In order to re-interpret Eskisehir's identity, first, the importance of Porsuk River will be analyzed. Secondly, Porsuk River's role in urban renewal works and its role in the genetic coding of the city will be emphazised. Subsequently, suggestions attained by the readings of Lynch's analysis over paths, edges, districts, nodes and landmarks, will be discussed.

PORSUK RIVER AS A NATURAL ARTIFACT OF ESKISEHIR

Natural structure is one of the most important factors for a citiy to gain identity. Topography, climate and geographical properties effect settlement city development. Porsuk River, which comes into being at the adjunction of the Bayatcik Stream, which runs through the North of Aksu Mountain and the Kiziltas Stream that runs through the North of Murat Mountain, flowing into the Sakarya River while passing through the champaign and the city of Eskisehir. Porsuk became one of the evident factors that define the macroform and the development of Eskisehir (which is a riverside settlement). As seen in Image 1, Matrakci Nasuh portrayed the city as positioned between the river and the city walls. The city of Eskisehir is divided into two by Porsuk, in an eastward-westward direction. The city was founded at the skirts of the hill in South that is described as "upper part". The North part has the hot spring and was developed as the market place.

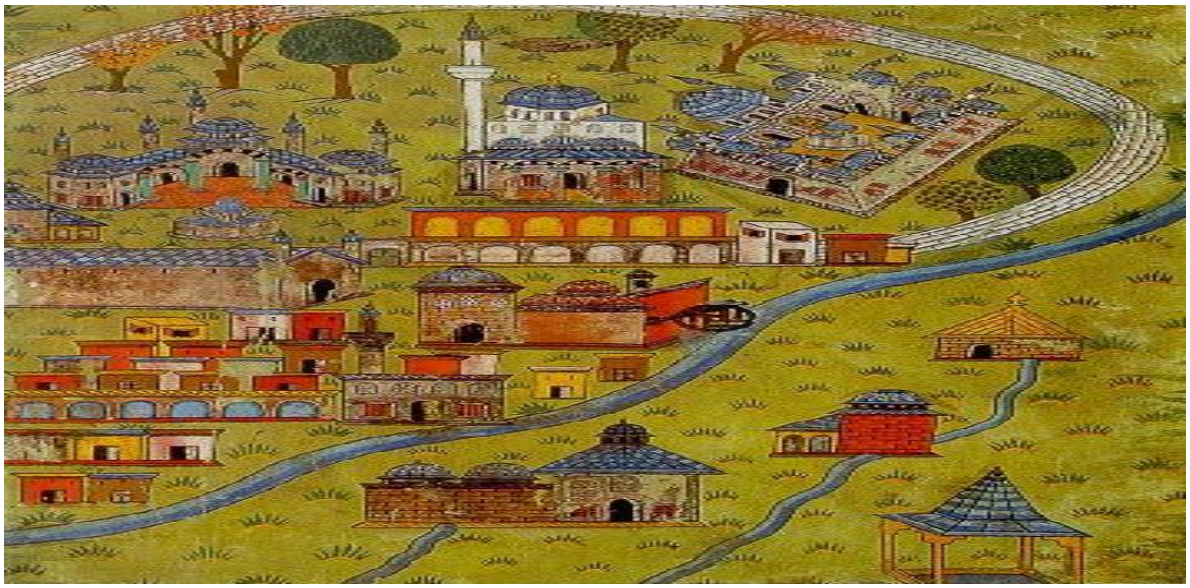


Image 1. Miniature of Eskisehir, by Matrakçı Nasuh (1536) (Acar, 2009)

The city of Eskisehir is a junction that connects the East to West for centuries. From the fifteenth century to 1890, the city was rich in vinery, orchard and grain. It is known that the Greeks and Armenians lived in Eskisehir in the mentioned period. Before the railway came to the city, the minorities took part in the economic life, playing an important role in the physical formation of the city. To Landa, Eskisehir was a city that "was nourished by solar energy (agriculture) and gravitational energy (water)".



Image 2.-3. Porsuk in the past (Kılıç, 1997)

Miller's trade was an important source of income in Eskisehir in the first quarter of 20th centuary: the city turned became a cereal depot. The reason for this was the Porsuk River, as the water source and the production of grain by the peasants. Artifacts (such as the river), allow us understand the city, which is continuously developing: from the past, the present and towards the future.



Image 4.-5. Porsuk in the past (Kılıç, 1997)

In the above pictures and memories, the past, waterside houses, wharfs and boats can be seen on Porsuk River are depicted. The River is perceived as a natural artifact in urban life in all seasons. In the past, there had been several floods during the rainy season. These floods covered the champaign of Eskisehir, damaging various settlements in the city harming several crops on the crops on the champaign. On June 1972, one of the first dams of Turkey was built on Porsuk River, preventing harmful floods (Özel, 2012).

The city's market place has been built on "Akar Stream" (a small branch of Porsuk River). The relation with this stream, which runs down from Hamamyolu Street, had been established via the wooden bridges constructed on the river. However, the stream had been considered as a source of pollution, so a part of this was covered towards the end of 1970s. Finally during 1990s, this stream was totally covered.



Image 6.-7. Hamamyolu street and Akar stream (Acar, 2009)

During the industrialization process, most of the factories and enterprises were established on Porsuk, causing pollution (especially the print cloth factory, which transformed the color of the river, according to dye color). The part that ran through the city center was rehabilitated by the State Hydraulic Works (DSI) and the natural water course was transformed into concrete reservoir in order to control the pollution while the population was increasing. After 1970, the law of common hold caused a barrier between the River and the inner parts of the city.

For a long period of time, the presence of the River was not perceived as a passive artifact and was tended to be forgotten. In the latest urban renewal works, the presence of Porsuk River became important for the city, especially as "the riverfront and the city" plans commenced. In 2010, the Eskisehir Municipality established a new relation between the city and the water by improving Porsuk River's flow through the city. This improvement, which is about 10 km long, was financed by both the European Investment Bank and equities of the municipality itself. These improvements aimed to prevent any risk of flood, to increase the safety precautions against earthquakes and to meet the needs of transportation and passage along the river. Currently, the Posuk riverbed, which passes through the urban area, has been put above a concrete basin in order to enable on-river transportation. Likewise, for this purpose, wharfs and new bridges have been constructed on the river. Short trip itineraries have been patterned for touristic Venetian style gondolas and Amsterdam boats

WATER AND THE CITY: READING ESKISEHIR THROUGH WATER

> Looking at the cities can give a special pleasure, however commonplace the sight be. Like a piece of architecture, the city is a construction in space, but one of vast scale, a thing perceived only in the course of long spans of time. City design is therefore a temporal art, but it can rarely use the controlled and limited sequence of other temporal art like music. On different occasions and for different people, the sequences are reversed, interrupted, abandoned, cut across. It is seen in all lights and weathers…
>
> Kevin Lynch, The Image of the City

The city offers a visually incomplete, ever evolving and indecisive palette of intertwined sharing opportunities and alluring (endless) options. It describes itself through a written and spoken dialectic. According to Gur "Any discussion must start directly with accepting that each city is original, because every city is a unique case for existing and transforming in primal realities of geography, history and cultures (2009, 12)." Elements in the city function by reflecting and refering other elements, in a variety of structural simulacrum. “The form and content of the architectural contour emerge and take form in the morphing and shifting fiction of projectional and associational meanings as references to the surrounding cultural, social, communal, sensory, spiritual and intellectual codes (Alemdar, 2010, 284).” Lynch indicates that “There is no time for little individual forces to slowly adapt to form. Thus, we should trust more to cognizant and sensual designs (Lynch, 2012, 128)." Likewise, Lynch underlines that main target of the urban design is to ascertain “enduring nature of the image”; therefore, teaching the observer *how to look* at the city is crucial (Lynch, 2012, 129). Knowing how to look at the city would enable the observer to examine the liaison amongst urban elements in order to ameliorate the city’s image. Within this scope, during the 2013-2014 Fall Semester, our Urban Design Studio, as a part of “Water and the City” theme, the problem of reanalyzing Eskisehir through water is examined. The main aim of this examination is to focus on re-defining Eskisehir by concentrating on the notion of water.

3.1. Aim, Method and Scope of Urban Design Studio

The course is a part of the first semester of the fourth-grade curriculum; and its main purpose is to create a studio where the awareness of urban problems would be increased through the analyses, discussions and suggestions. Students were expected to distinguish between various layers of the city and detect possible problems and finally propose conceivable solutions to these possible problems. The analyses in the studio have been made on the basis of Kevin Lynch’s arguments over borders, paths, edges, districts, nodes, codes and lifestyles. These analyses had the main purpose to unveil Eskisehir’s important natural artifacts, awareness and energy. Analyses about the area are performed by each group on the basis of the criteria listed below:

- **PATHS** : Channels in which people travel. Streets, sidewalks, trails, railways, public transport routes.
- **EDGES** : Coastlines, railways, development zone boundaries and walls; junctions separating and combining zones.
- **DISTRICTS** : 2-dimenson areas; medium-to-large scale sections of the city.
- **NODES** **:** Symbols, nodes, strategic foci.
- **LANDMARKS** **:** Reference points, a building, a sign post, a shop, a mountain, etc.
- **USER / LIFESTYLE ANALYSIS** **:** Determining user profiles/ condensation.

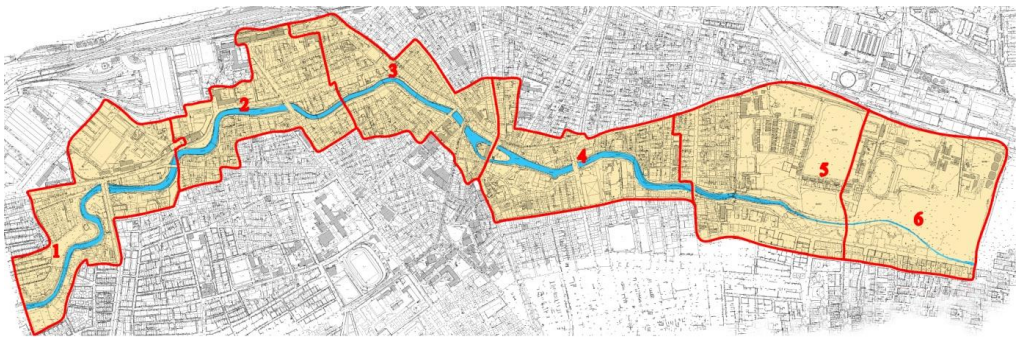


Image 8. Porsuk River and the city center.

The course was planned and performed as a group project. As seen in the image, the water axis of the Porsuk River, which is located between Sazova Park in the west and Kent Park in the east, was analyzed: new urban planning suggestions were proposed for this area. Considering the extent of the area that Porsuk River covers in the city center, 6 sections were analyzed. Project development processes were finalized by the elaboration of proposals by the groups on the basis of an architectural design scale, for the area that each group has selected for themselves. To illustrate the project development process, 3 critical group works have been illustrated.

Project Samples

FIRST GROUP: (Ramin RASULZADE, Nursima ALADAG, Buket PILAN)

As seen via the analyses on Images 9 and 10, several paths, borders, focal points and nodes have been proposed for the area in between Turkey Locomotive, Engine Industry Inc. (TULOMSAS) and the entry of Kizilcikli Mahmut Pehlivan Street.

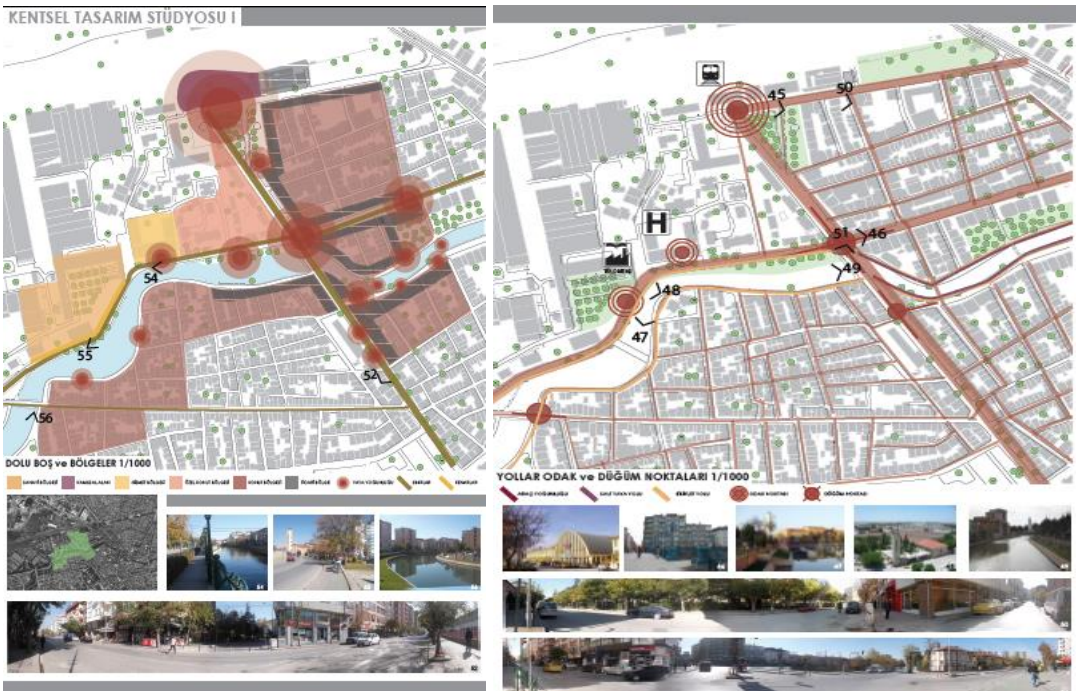
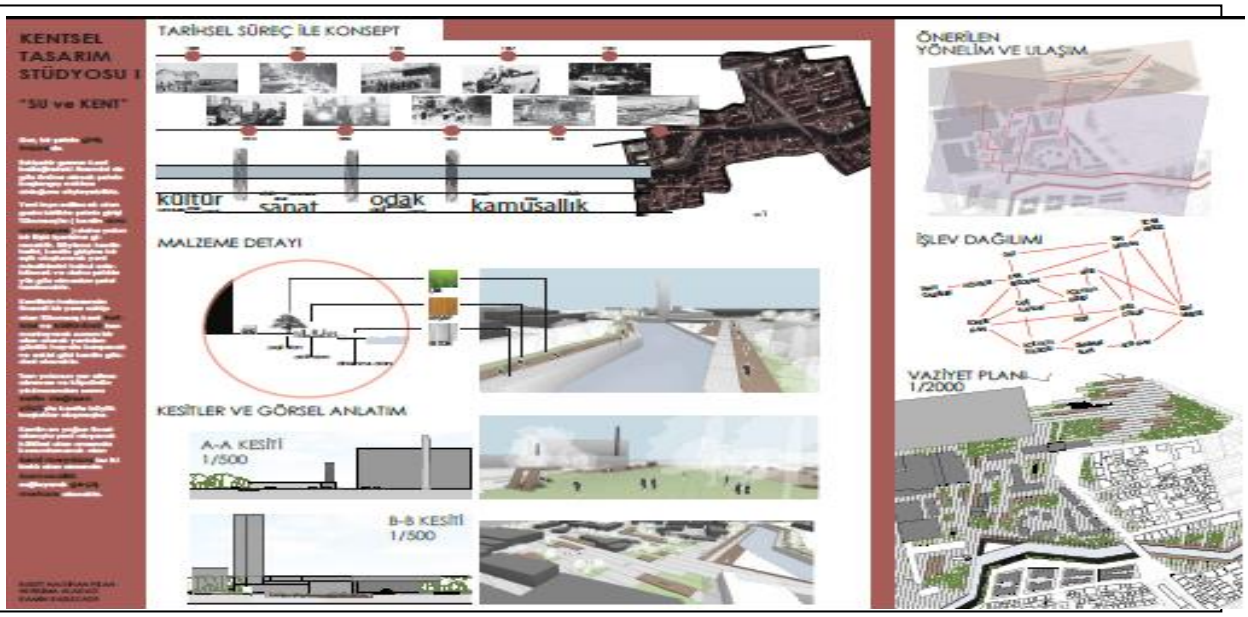


Image 9.-10. Urban Analyses of the area.



The analyses have pointed out that city's multi-layer formation has diminished the perception of water and its public use. To improve perception, the group proposed converting holistic ground arrangements and roads crossing the river into pathways; especially in places where a concentration of the population is high, such as the Train Station. Water and its surrounding are evaluated from a recreational perspective and a new urban programmatic is proposed.



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This group analyzed the part of Porsuk River which lies between the residential area of Kırmızı Toprak district and TULOMSAS. The group proposed reviving the coastline in this area by erecting new wharfs, bridges, over-under bridge pragmatics and energizing the coastline by embedding various coastal sections. The perception of the riverfront in relation to the water has been taken into consideration while preparing these ground suggestions.



Image 13. – 14. Urban analyses and conceptual overviews for the selected area.

This project group proposed relocating TULOMSAS locomotive enterprises to another part of the city in the near future. In this case, the production buildings are envisaged to continue their urban life asan industrial-archeological area. The walls that surround TULOMSAS and its borders are planned to be removed in order to enable public space to accommodate public acess within the industrial area. Coastal renovation continues all along Porsuk River, creating a unique language in the city appertaining to water. According to this group's project Porsuk would no longer be a borderline that divides the city but a recreational area where people can find peace away from the noise of the city.

THIRD GROUP (Ezgi TOPDAGI, Kübra ALVER, Çiçek ALTINER): RIVERFRONT DISCUSSIONS

The third group analyzed the river section that runs along city's market place (Koprubasi district). They concluded that the two regulators close to the old bus depot area cause a differentiation in the river's elevations and profile.

The market place which is situated on the northern part of the Porsuk River, include adjoining high buildings that were constructed after the 1970s. These high buildings create a wall effect that reduces the ability to perceive of water. Likewise, the makeshift shops which exist on the façade of the buildings, faccing the coastline also reduce perception of the riverfront.

The Yasin Cakir Flour factory, which is located on the south of Koprubasi market axle, was founded in 1938, but then in 2002 was relocated in an organized industrial zone. Old buildings left along the riverfront wait to be utilized by new investment oppertunites. While the factory was functioning near Porsuk River, it blocked the water from interacting with the city. The settlements in the area reduced the perception of the water to the insignificant; it only represents itself by the bridges built above it. The analyses have underlined the fact that almost all the buildings on both sides of Porsuk River face backwards to the river. This creates an effect of a wall along the river.

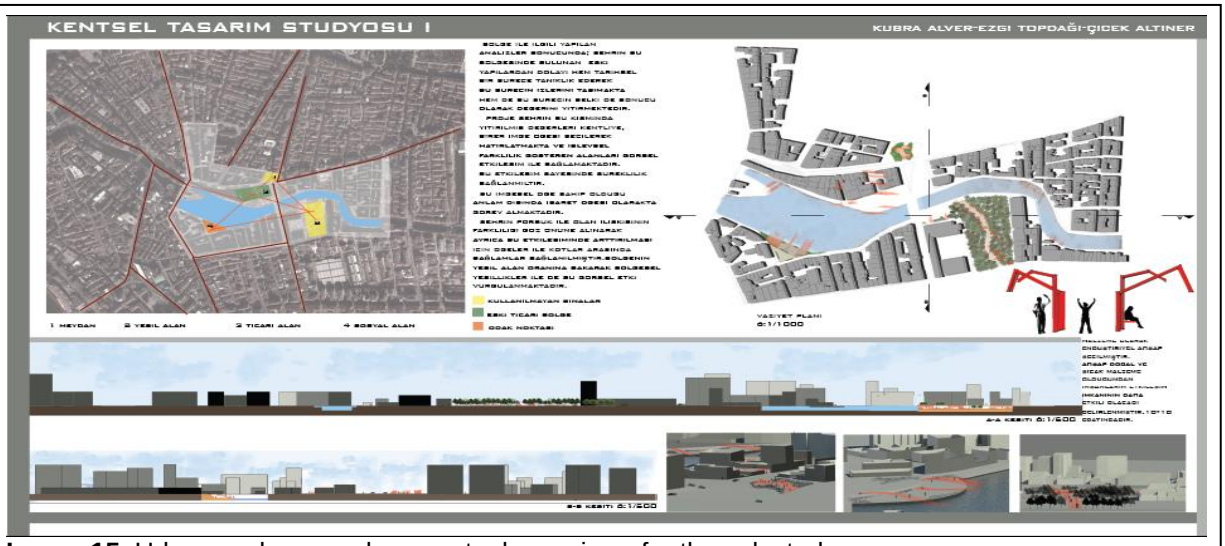


Image 15. Urban analyses and conceptual overviews for the selected area.

The group obtained a wider perspective of the Porsuk River in their designs by eliminating all the settlements that create the wall effect along the river. The notion of riverfront, that reinforces the image of water, is to be created on different section and elevations. A construction proposal is promoted for the riverfront. According to this proposal, there will be several constructions along the riverfront. These constructions will have different densities and heights that will reinforce the perception of water. Inhabitants will be able perceive the existence of water by intuition in the constructed spaces, without even actually seeing the water.

All these three groups' works criticize the current use of Porsuk River that flows through the city center. According to all three groups, the city could utilize the riverfront more effectively and they all propose designs which would increase the publicity of the water, by utilizing the riverfront in a way which develops the relation between the city and the water. It is an intellectual platform for urban designers, artists and scientists. When this intellectual platform is supported by political decisions, riverfronts can be transformed into centers of attraction for cultural development.

2. CONCLUSION

Natural artifacts are urban elements that hold data - as a complete texture – relating to urban identity, having a role in physically shaping the city. It can be said that these elements carry the genetic codes of the city. With all the special features they have, urban artifacts should be protected and they should be passed on vis-a-vis future generations. In this study, the past existence of River Porsuk is analyzed with the aim to find possibilities on how to develop the riverfront during urban renovation work.

In Turkey, during the current era, cities are in a quick transformation process. In this process, many artifacts defining the singularity of the city are vanishing or becoming ordinary through transformation. Porsuk River, which is a socio-culturally and economically important natural artifact in Eskisehir's, should therefore be carefully reexamined in the process of urban transformation. The concept "riverfront" is one that defines the space for water-citizen relation, needs to be understood as a space for increased public participation. The need for local government projects to be established, taking the citizens' discourses into consideration, allowing for the transformation of water into a center of attraction. Looking at the riverfront from the context of genetic coding should lead to discussion.

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