

# A PROGRAMMING ARCHITECTURE: DESIGNING ALONG THE PORSUK RIVER

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**Abstract:** This design work was introduced so as to explain and rediscover the designographic qualities along Porsuk riverside and its inbetween space within the city of Eskişehir. Besides designing and explaining architecture in a conventional way, “space” was experienced with arguing a return back in an archaic way of ‘artificialization’ process. Tools used for destroying the current structures of architecture toward “programme” and “construction”, and the content of their continuing urban dispositions.

**Keywords:** Architectural programme, aprogramming, urban dispositions, riverside developments, porsuk river

## 1. INTRODUCTION

This design work has been produced as the graduation project given by Osmangazi University Department of Architecture, Eskişehir in 1999, and awarded by Archiprix Turkey. Later on, the designographic ideas were discussed on the basis of aprogramming and urban dispositioning. The theme was selected so as to reintegrate the riverside along the city while discussing the potential architectural programmes within the selected design area on conceptual and contextual arguments. As the design problem was given for the first time, to argue on the urban scale in continuity with the design problem was inevitable. With the beginning of the design process, it was aimed to reveal the designographic characters of the Porsuk River running across the city and the design area within the city boundaries. As being the most important context element, Porsuk River, cannot make the spatial and urban relationships with its neighborhood. Waterfront and its spatiality, has never been taught or designed as a katalyst to the development of the city. So, the architectural

fragments that form *architectural space* such as the programme, construction, form, action; and that form *urban space* such as building codes, population density and geographical datas, should be questioned. This design problem in a whole is, an inquiry of urban and architectutral spatialities in continuity with this inbetween space: The architectural thresholds—a place related to other places but with no place of its own [1] (Figure 1).

Recent building codes and regulations effect the city grow in a way which is nonidentified and have low space qualities. The outcome of these regulations are these city spaces which are same and homogeneous, and have equalized characters in comparison. There are no quality differences in context of citizens’ living quality and relationships with its surroundings. In this framework, urban and spatial inquiry in this design process, covers city fabric analysis and how these regulation-imposed spaces can be redesigned in a way.

The designwork process is studied in 3 steps. First step was an analytical search and reading from the city, between Adalar and Köprübaşı districts. Second step was the discovery of the design tools and fragments to gather spatiality. Third step was



**Figure 1.** Aerial map: City of Eskişehir (Photo from the archive of Chamber of Architects)

how these fragments were used to design the inbetween space, and what was achieved.

## 2. ANALYSIS: READING FROM THE CITY

Eskişehir is a rapidly growing city, with the universities and industrialization, so that urban development has not been completed yet. It has been observed that, focusing on the usual urban character of riverside cities, urban growth is not depending on the water and not seeking for a spatial relationship at all. This situation can be seen in Eskişehir as well. In this case, besides one specific part of the riverside, spatial qualities are not satisfactory. With this one specific site, a new debate on waterfronts is especially important in this case. Between ‘locomotive factory’ and ‘old bus station’ (Figure 1), the site is analyzed and readings have been made in order to understand the dense city tissue. In this specific site where the city was read, the Porsuk River running along the city center divides the city in two districts (Figure 2), northern side called ‘Koprubasi’ and southern side called ‘Adalar’; and both districts contain commercial and recreational structures, archaeological remains (Figure 3), business centers, shopping malls, night clubs, cafes and restaurants etc. that all citizens use densely. The riverside, as an urban spine, is important since it explains city and river relations in a programmatic way. In today’s conditions, although the river becomes a structure to act differently in different points, especially in the particular site analyzed, it forms specific urban and architectural qualities. In this manner, action oriented spatial structures put important contribution to the city. With this analysis, the design suggestions and the possible development phases of the city will be brought together in a realistic manner (Figure 4-5).



**Figure 2.** Overview of downtown riverside (Photo from the archive of Osmangazi University)



**Figure 3.** Archaeological remains: Lighting towers (Photo from the archive of O.U)

### 2.1. Antimall

From the analysis in the district of Adalar/Köprübaşı, it was derived that as an antithesis to the box programmes (such as supermarkets), ‘antimall’ concept and its spaces were developed. These antimall concept related structures, are volumetric contents derived from the structure of architecture. These spaces, in general manner, can be identified as empty spaces, and considering river-city relations they can serve all kinds of action oriented design.

### 2.2. Scale[d]

The second important data derived from the analysis is the concept of ‘scale’. Although the scale of ‘Eskişehir’ is h:24 m. as a result of building codes and regulations, it is aimed to achieve an imaginary scale for the city with the design work process. As a result of that just as vertical block orders, this time horizontally structured Porsuk River is defined as an anarchist to the architectural order. (the flow direction of the river is defined as a horizontal axis)

### 2.3. Connectors

The designed bridges inbetween locomotive factory and old bus station are nor city nor directly river connected platforms. With this artificial platforms the river regains its imaginary quality, the bridges are perceived as architectural and structural replica of these images.

## 3. DESIGN TOOLS FOR CREATING SPACES – ARCHITECTURAL AND URBAN FRAGMENTS

Design ideas were shaped around two main questions:

- What are the *structural* pieces used for creating an architectural location? (architectural artificializations: surfaces, grounds, floors, construction, programme)
- What are the *architectural* pieces that create the architectural or urban location? (Building decisions, geographical characteristics linked to the context, cultural and identification values)

The *architectural pieces*, situated at different locational alternatives in the “inbetween space” that has been formed, are used for improving the relation toward the program with two most important structures of design: the *river* and the *city* as the source of

architectural relations. These pieces have a content that sometimes opens and sometimes limits the inbetween space design both to the river/water (Figure 5) and to the city/city-dweller. Consequently, the design arranges the relations between the city and the river in its own space and it provides various locational alternatives.

The locational variety that is discussed by the design, is based on the terms “architectural programme” and “construction” which lay at the basis of discussions about architectural location. In this regard, being “multi-programmed” or “aprogrammed” along with the “architectural artificialization” suggested different ways of creating a location, when creating or consciously destroying a location with this design. The point of view that belongs to the programme (being aprogrammed) is intended to be achieved by the concepts of “construction” or “artificialization” as the creation policy of architecture in the continuity of this design. Consequently, this design with this point of view aims at discussing alternative languages or ways of creating the architecture in relation with the city, architecture and location.

The principals of such a discussion are based on the analysis of the tools belonging to the “context” and “location” used in creating the architectural location. It’s important to know what these pieces are and what kind of a locational diversity they provide in the whole of the proposed design and in the continuity of the two questions asked at the beginning. These pieces, used for creating the localization of the design, are divided into two groups within the framework of this study’s design language. These are as follows:

**“Programme” oriented pieces in the design** (pieces in defining any architectural program, independent of a programme) [6,7,8] (Figure 9):

- Surfaces: Variety of walls
- Ground pieces: Piers, platforms, floors, terraces (land piers), amphispis, specialized grounds for an architectural action
- Floors/ types of coverage: Eaves, arcades,
- Construction structures defining the program: Columns
- Programmed empty locations

Architectural action definitions in being multi-programmed or aprogrammed: sitting, wandering around, staying near

something, being in front of or behind something, staying below something, looking, passing over something, getting in contact, passing through something, watching, just standing somewhere.

**Pieces toward “construction” and creating urban and architectural integrity in design**  
(Horizontal or vertical abstraction of the river)

- Structures of border; Mega construction, columns, terraces – horizontal abstraction of the river
- Lighting towers (aprogramming structures and the structures that keep the high in the forefront at which the production language is important): landmarks, urban signs, visual images for the night
- Bridges- vertical abstraction of the river



**Figure 5.** City fabric around the design area:  
Bridges (Photo by the author)

These pieces are obtained from the general results of urban analysis which form the basis of urban reading discussed in current architectural discussions. They structure the “inbetween space” created in the proposed design. They are also used as the tools for destroying the current structures of architecture toward “programme” and “construction”, and the content of their continuing urban dispositions. In this way it’s intended to create new locations that urban disposition imposes, and to increase the programmatic characteristics of the design space. These programmatic contents are against the programming studies which are made more and more complicated by architecture every time. It’s aimed to remind the simple ways of action at the origin of these programs instead of shopping centers, culture and sports complexes behind urban transformations and to create a new transformation through these simple actions. This study provides main human actions, being outside and the urban transformation itself, instead of the

programmatic intensity and introvert formations formed by mixed programs.

### 3. DESIGNING INBETWEEN

Architectural structures and information obtained from urban reading [2,3] have formed the basis for information infrastructure and architectural location for some design issues. In this context, the definition of location in the design space is important for this study. In order to achieve this, design uses two basic approaches under the names of programme and construction in defining its own view (Figure 6). With the view made towards programme and construction, disruption of the locational structure is intended; and with this disruption, creation of new locations is intended. The pieces that form the architectural location are the pieces that come together without any restriction and form the ultimate location. The volumetricity that comes in view with the continuity of the ground, the surface and constructive pieces that cover them, defines the location when described as action. However, in this design, each one of the pieces tries to form its own locational structure, apart from the integrity of the location and distinct from its role within that integrity.



**Figure 6.** Preliminary sketches of the design idea.

It's predicted that the architectural pieces previously described; the wall, eaves or the column may have a potential spatialism (at least) as much as the spatialism that a desolate volume has. Structural and locational characteristics of each piece and the content of the design are intended to be described. This design for example discusses the location where a wall is structured. The wall comes out as an urban surface or a coastal image directed at the city or the river. In structuring the locations that belong to these pieces, the locational characteristics as programme and construction can be described.

### 3.1. Program

The idea of programme does not come out as the description of previously modified action or its attachment to the location. This situation is the creation process of a space where multi-programming and aprogramming [5] overlap each other. In this regard, the main focus point of the study is that the description of the relation between architectural & urban pieces and the body around the piece which is more than the volume, and around the relation of that piece with the other. The relation between the location and body is intended to be slid towards the relation between the architectural piece and the body, with the aim of creating the new definition of location in this space. This kind of architectural pieces are defined as an expression of meaning by themselves, and the new situations formed by their combination may constitute locational contents that no-one could have thought beforehand and that were not familiar with the design space. Consequently on the basis of this study, the actions of the architecture in structuring the location are described as the tools in the negligence of locational integrity. For example, actions like eating, standing, walking, looking, speaking, watching, touching are identified with the architectural pieces [4]. A wall is only for leaning against and looking at something, a pier is only for standing on and touching the water, an eave is only for sitting there. Structure and action is for revealing the primitive and original state of the relation between architecture and program (Figure 7). Forming the definition or way of existence of urban and architectural location only heeds the combination of the pieces. This combination is

not made by a fixed program whose content is already modified, but by the mentioned architectural and urban structures that shelter different actions. The urban and architectural location is studied for possibilities whose forms of action may be unlimited, not for the characteristics already registered and the location already defined by actions. This is the creation process of a space which has a discontinuous structure and an unsteady possibility of unfolding with the structural powers of the pieces that form the location and the relation of users with these pieces, more than the constancy of the program or the location. In this way, it's suggested to form an area in the continuity of urban life for the ways of action rather than designing the formal and structural characteristics of previously named programs. In the continuity of this design space, the necessities of architectural and urban programs will be defined with the actions and needs of the users of that space, their daily lives and ways of life. And this definition cannot be made in an argument that can be guessed beforehand. So, this situation for example, cannot be that the architect structured a cafeteria or a footpath for city-dwellers or for their existence. This space is independent of action. The pieces that form the architectural location and their ways of combination present a possibility point for every possible program. The walls for example, should be positioned for linking all kinds of actions, not for forming the borders of a program; grounds are used for any action by anyone, it doesn't belong to one place or one action. These kinds of relations are intended to be improved by different combinations in the continuity of all design spaces. Consequently, as a result towards the program, this design doesn't suggest a certain urban or architectural program while defining the space it tries to form, but defines the unforeseeable actions of the city-dwellers and the individuals that may use this space, as its own architectural program (Figure 8).

### 3.2. Construction

The concept of construction, which is defined as the way of creation or combination, forms an infrastructure for two basic ideas. The first one is forming the content of architectural pieces that are conceptually identified with the river, and the second one is defining the possible location that is created by the materials and manufacturing technique of all

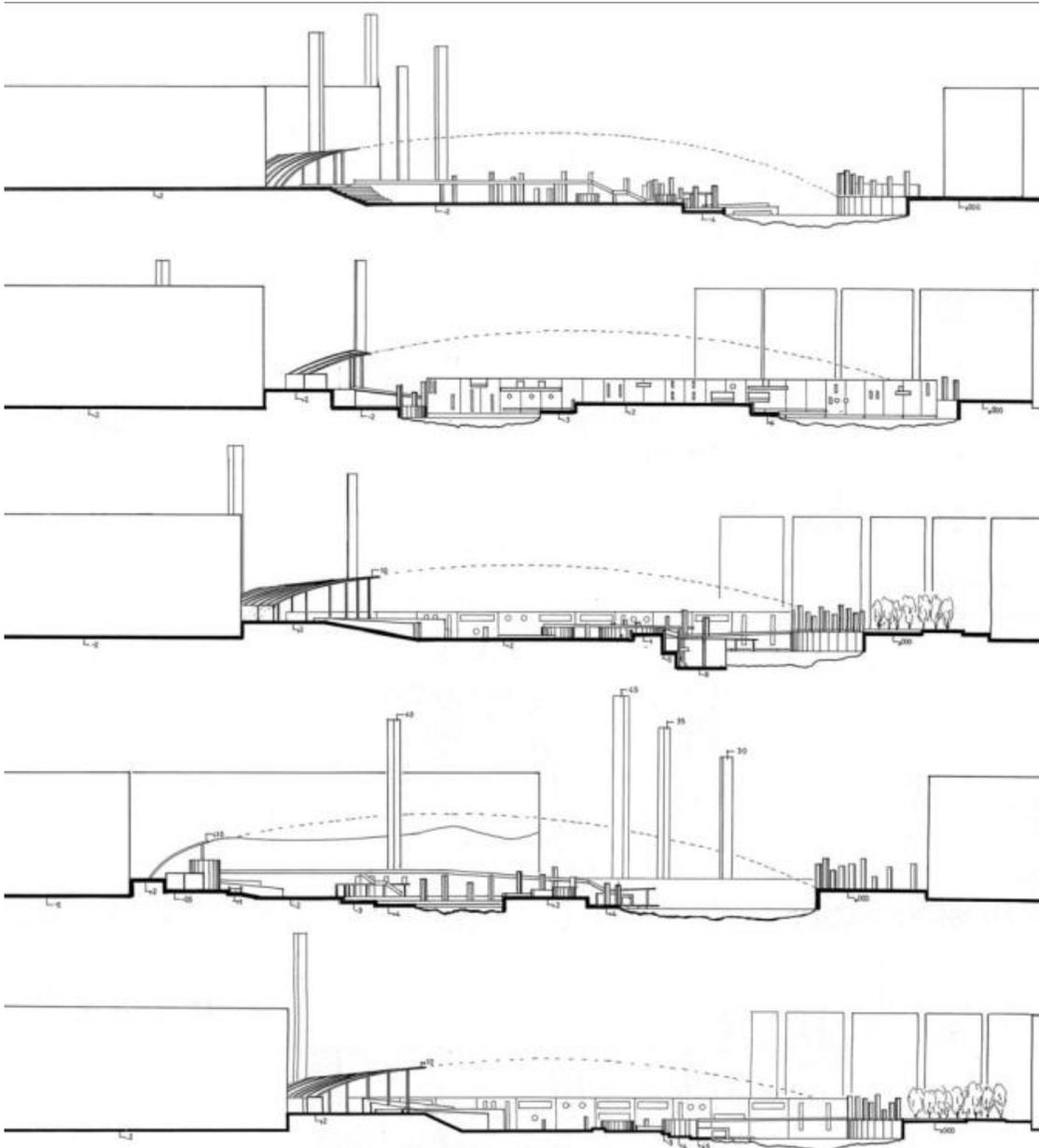


Figure 7. Design sections

kinds of architectural pieces that call the inbetween space into being.

The structures that identify the concept of construction with the river, the bridges, are mega construction and lighting towers that form the border of the inbetween space. In these three architectural pieces which require a manufacturing language, the mega construction is an abstraction of a physical border and a horizontal river that are made against the probability of the city's occupying This border space is positioned along the pre-

designed urban residential area. This construction where the first contact between the inbetween space and urban residential area is made, does not suggest any location belonging to either the city nor the designed space. These units, which are intended to be constructed on a minimum area, consist of shopping units, locations where some people exhibit their production, sell their food- drink- second hand books or whatever location that the city-dweller needs. The locations where possible necessities are suggested will be



**Figure 8.** Model of the proposed design

(Photo by the author)

positioned in this designed space, according to the varying needs of the city-dweller. This construction, positioned on a higher place than the river, is a suggestion of size that shows the continuity of the city for the dwellers near the river, and that defines or refers to the river for

the dweller away from it. The river can be represented in the developing continuity of the city by the extension of this construction. Identification is the combination of the architectural and natural things by artificiality. The artificial one is the river, and the representative is the mega construction. In this context, the construction that goes parallel with the river, is positioned as an important architectural piece in defining the inbetween space (Figure 9-10).

#### 4. CONCLUSION

This study was a research of programmatic-constructive and formative solutions to a architectural problematic. Besides designing and explaining architecture in a conventional way, 'space' was experienced with archaic methods. It argues a return back in an archaic way of 'artificialization' process. Actions such as 'digging', 'putting side by side', developing the way of 'doing', 'walking', 'eating', 'seeing', 'watching' were argued only in the content of actions in order to organize spatiality. The architectural problem as the trigger for urban transformations in means of artificialization and action was deconstructed space, programme, urban fabric and form. The final design, is neutral as it contains all archaic situations of architecture. This neutralization is equipped to argue ongoing processes with contents of city and architecture.



**Figure 10.** Site plan of proposed design

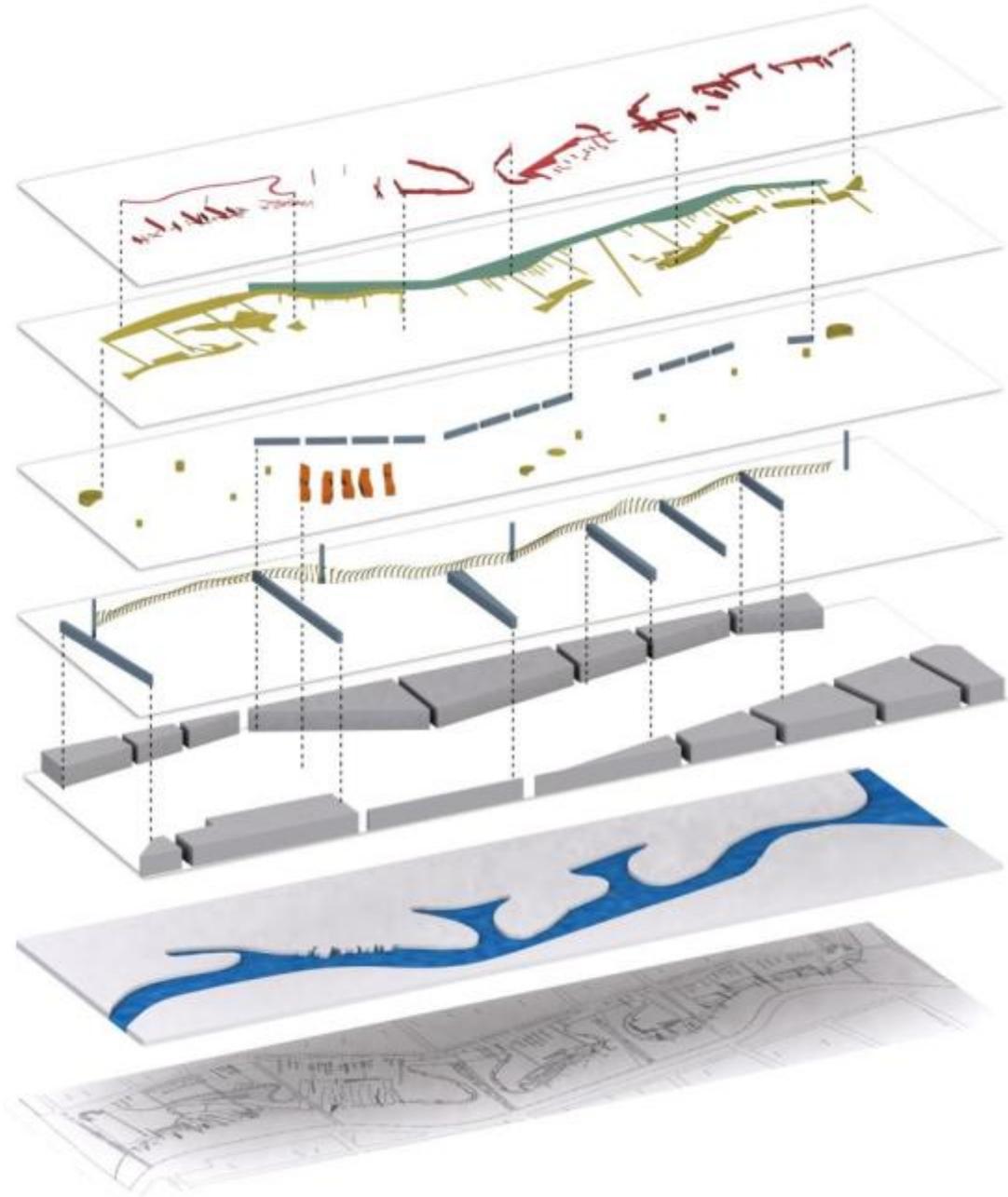


Figure 9. Schematic diagram of the layers of architectural fragments.

## 5. REFERENCES

- [1] GROSZ, E., *Architecture from the Outside*, Essays on Virtual and the Real Space, MIT Press, Cambridge, p. 92, 2001.
- [2] BALA, A.H., "Konut Alanlarında Kentsel Arayüzlerin Düzenlenmesine Yönelik Analitik Bir Çerçeve", Doktora Tezi, *Selçuk Üniversitesi Fen Bilimleri Enstitüsü*, Konya,

2003.

- [3] ULUG, M. M., "Mimarlığın varlık koşulu olarak mekan ve irdelenmesi", Doktora Tezi, *Gazi Üniversitesi Fen Bilimleri Enstitüsü*, Ankara, 1996.

- [4] LEFEBVRE, H., *A Critique of Everyday Life - Foundations for a Sociology of the Everyday*, Verso, 2002.

- [5] TSCHUMİ, B., *Architecture and Disjunction*, The MIT Press, Cambridge,

Massachusetts, Londra, s. 23, 1997.

[6] SEMPER, G., *Der Stil in den Technischen and Tektonischen, Kunsten*, Mittenwald, 1: 231, 1977.

[7] ECK, V., CAROLINE, A., "Figuration, tectonics and animism in Semper's Der Stil", *The Journal of Architecture*, 14 (3): 325-329, 332, 334-337, 2009.

[8] HARTOONIAN, G., "The Fabric of Fabrication", *Textile*, 4(3):, 271, 272-291, 2006.