

# RE-READING OF PUBLIC LIFE AND URBAN-ARCHITECTURE IN AYVALIK THROUGH NETS OF WATER

M.Cetin, S.Doyduk

**Abstract**— The urban fabric of Ayvalik, which has a unique Aegean identity, displays one of the rare examples of water-town relationship in Turkey. The urban history of Ayvalik, like many other waterfront towns, is associated with the story of water, i.e. Aegean Sea. The local culture, which is based on water in Ayvalik, has also been the major determinant of social life. The physical reflection of this social fabric is easily read on the urban structure as well as in the waterworks. This whole can enable us to follow the traces of a morphological formation, which is a reminiscent of a “net” constituted by waterworks. Today, a gap can be observed in the relationship between Ayvalik and water. This relationship has been limited to the waterfront level by the impact of tourism. The vehicular road lying along the coast and the serving buildings, which altogether exhibits a wall effect, seem to have caused the *nodes* of above-mentioned network, in other words, the *points* where waterfront is connected to the water elements within the city, to break up from each other. However, the path lying along the coast has always been a coastal line emphasizing the connection rather than being an obstacle. Identifying the connection between coastal water and inner water elements, their clarification and revitalisation in daily life could be a preliminary step in the renewal of urban and water culture in the town. Should such a network and its nodes could be re-interpreted in connection with the historical, urban and architectural characteristics; it would contribute to the unique urban tissue. Such a re-interpretation should focus on the concept of “net” and its “nodes”, which can be accepted as a metaphor to complete the urban tissue. In this study, the waterworks, which act as the generators of urban regeneration proposal are analysed with specific reference to *Ayazma* building. The contribution of these buildings to physical and social stock, their location within the projected network, and their physical relationship with each other are scrutinised. Nets of building, life and water are reconciled with the proposed scheme in Ayvalik.

## I. INTRODUCTION

Under the light of debates on the *rhizomatic* nature of the universe [1] and non-linear evolution of the all physical and social phenomena [2], the urban context can be conceived in terms of integrated networks. Therefore, the ‘fish-net’ is taken as a metaphor for re-reading of a coastal town in regard to its morphological and sociological aspects. Thus, the transformations of the urban form and urban life are traced through the ‘nets of water’ in the case of Ayvalik. The urban fabric of Ayvalik, which has a unique Aegean identity, displays one of the rare examples of water-town relationship amongst the various urban settlements in Turkey. The local culture, which is based on the sea in Ayvalik, has also been one of the major determinants of social life. The physical reflection of this social fabric is easily read on the urban structure as well as in the waterworks. Besides, the relationship between water & social fabric reveals itself through a morphological differentiation within the urban structure. This differentiation displays the hints of a morphological formation that is reminiscent of a kind of web, in other words a network particularly when examined retrospectively. The traces of such a “net” are pointed out within the wider area between the Aegean Sea and Nikita River (Map 1). This “net” can be defined as the “*continuity of relationships*” which is constituted by *natural* and *artificial elements of water* such as; Ayazma, fountains, cisterns, wells, arcs, river basins, etc. This “net” is formed by; *points*, *lines* and *planes*. *Points* refer to cisterns, fountains and wells, while *lines* refer to canals, arcs, and streams. *Planes*, on the other hand, define the areas where the wells are distributed. These planes might also be conceived as the projection of underground water layers. Generally, individual *points*, *linear* and *planar* elements of water are evenly distributed over the above-defined zone, and it can also be stated that *points* exhibit some sort of continuity through *linear* elements (Figure 1). Therefore, one can presume that this “net” of water elements may form a system that connects Ayvalik Port and Nikita River. It can be assumed that such a wide water-based network may have undoubtedly determined the social life until when the settlement density and technological progress have reached a certain point of saturation. Today, however, the relationship between the network and the sea appear to have lost its continuity with the existing settlement tissue particularly because of the vehicular road lying on the coast. Thus, the relationship of Ayvalik with water is reduced to

Murat Cetin is with the Yeditepe University, Dept. of Architecture, 26 August Campus, Kayisdagi, Istanbul TURKEY (phone: +90-533-344-9003; fax: +90-216-578-0569; e-mail: [murat.cetin0001@gmail.com](mailto:murat.cetin0001@gmail.com)).

Senem Doyduk is with Dogus University, Dept. of Architecture, Uzuncayir Cad. Hasanpasa, Istanbul TURKEY.

coastal level with the influence of tourism. The relationship with water has been reduced to the use of a few cafeterias, restaurants and tea gardens. The physical relationship with water is mainly realised by a group of fisherman. Two-way vehicular road, which was opened in the middle of the twentieth century, and the wall-like group of buildings that provide service to this road, appear to have caused the “nodes” of the “water-net” to disconnect. However, this path lying along the coastal line, has never been an obstacle, on the contrary, it has been a line accentuating the coastal periphery.

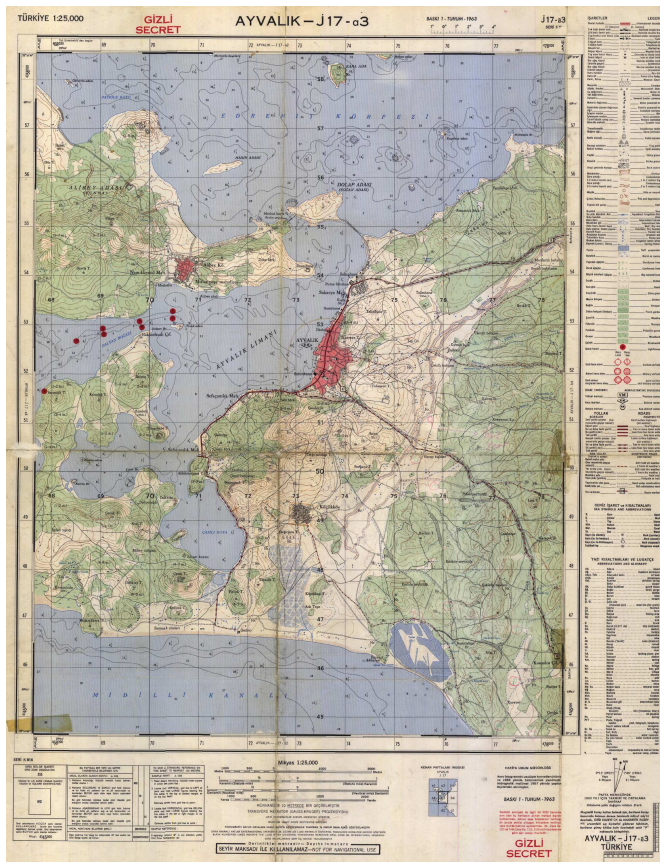


Fig. 1. Map of Ayvalik

This line has not only established its own connection with the sea, but also served as an intersection tying up the urban fabric and the system of “water-net”, that is accommodated behind it. The components, which are required for this function to take place, can be grouped as *natural* and *artificial elements of water*. Natural Elements will be elucidated under the title of *Topography*, whereas the Artificial Elements will be investigated under the title *Town Centre*.

### Topography

At this point, it would be appropriate to define the physical characteristics of the above mentioned area between Ayvalik Port and Nikita River. Along this route, firstly, the topographical formation of the site will be examined.

Steep hills of middle height, sea and streams lying perpendicular to the coast altogether constitute the topographical character of Ayvalik town centre. The hills are located on the East of the town. In historical perspective, the town has developed towards the sea on the West starting from the hills on the East along the river basins lying perpendicular to the coastal line (Figure 2). Town centre is delimited by two hills located on North-East and South-East. Ayvalik Port forms the Western boundary of the town centre. Sea is the most significant ingredient of the urban life in Ayvalik. Sea, which has also influenced the history, physical structuring and culture of the town, comprises the most essential component of the “water-net” in Ayvalik. Nevertheless, interventions at different time periods resulted in the dissolution of the physical and visual interaction between the sea and the town, paving the path towards the decline of the relationship with the Aegean Sea. Along with the opening of the two-way vehicular coastal traffic road, the communication of the citizens with the sea has almost been totally lost. Moreover, disposal of the wastes from factories and plants have also lead to the pollution of the sea. Another element of the topographical character of Ayvalik is the river basins lying perpendicular to Aegean Sea. While Nikita River lies outside and along the East of the town, various rivers that are directed into the town for reaching to Ayvalik Port, have also influenced the formation of the urban form. They have been the major determining force in the formation of major axes and arteries in town centre. The main rivers are Madra Stream and Karakoç River. The links of these two waterways with the transportation network, their references will be explained in the next section.

### Town Centre

After the section in which the wider hinterland comprising Ayvalik town centre is tackled, the physical character of the town centre will be handled in this section. Here, also, the phases of transformation through which this physical structure is gone will briefly be put forward.

### General Layout

During the riots in 1821, town was damaged to a great extent. Thus, the oldest buildings in town centre can be dated back to 1820. One can easily suggest that the majority of remaining building stock was built either at the beginning or around the middle of the nineteenth century, and that buildings and pieces of art built prior to that date was either disappeared or reconstructed through various phases of renewal [3]. Settlement form displays the image of an amphitheatre lying along the surfaces of the hills. Ayvalik macroform is subdivided into different zones through the major arteries. Although these zones can be differentiated according to their topographical properties, the functions and the states of preservation of the buildings also vary as one move towards the top on the hills on the East. The ratio of the new buildings decline on the upper parts and the number of buildings of higher quality seem to increase in the middle zones of the town. Like the buildings, the quantity and authenticity of the fountains also arise towards the upper levels.

Ayvalik Town Centre is divided into four districts via major axes. The roads, which form these axes, are located in two different positions as; *parallel* and *perpendicular* to the coast.

4 major arteries of the town centre are (Figure 3);

- *Coastal Road*: First major axis parallel to the coast,
- *Sefa Street*: Second major axis parallel to the coast,
- *Altinova Street*: Third major axis parallel to the coast,
- *Dereboyu Street*: First major axis perpendicular to the coast.

4 districts of the town centre are (Figure 4);

- *Coastal Zone* : The area remaining between the coast and Sefa Street,
- *Middle Zone* : The area defined by two churches in the North and South, Sefa Street in the West and Altinova Street in the East,
- *Hill Zone 1*: The area delimited by Dereboyu Street in the South and Sefa Street in the West,
- *Hill Zone 2*: The area bounded by Altinova Street in the West, and hill and pine forests in the East.

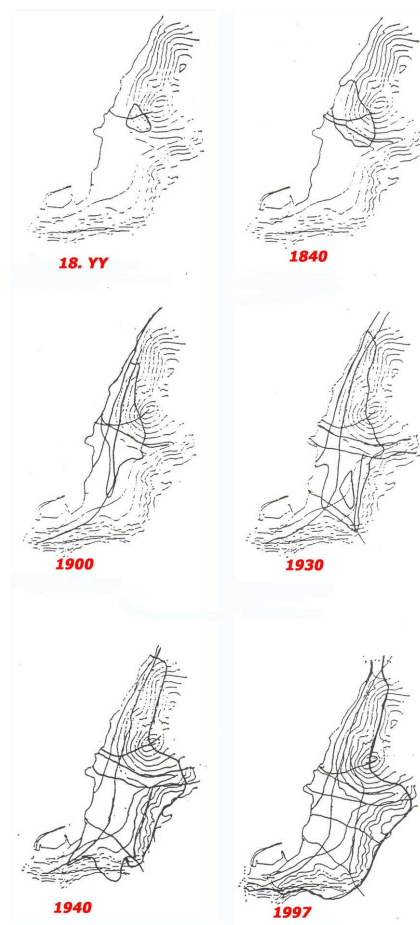


Fig. 2. Historical Evolution of Ayvalik Town Centre (Demir,1997)

In the scope of this paper, Coastal Zone and Middle Zone are accentuated. Ayazma (Faneromeni Church) among the water related buildings as well as various fountains and wells

are concentrated particularly in the Middle Zone. The locations of artesian wells are illustrated in historical maps. However, underground water wells are left beneath the buildings during the building boom. Coastal zone is of interest particularly from the viewpoint of the relation between town and the sea.

### Coastal Zone

It is one of the most exhilarating hubs of Ayvalık. The area bounded between the coastal strip and Sefa Street, is the area where the urban transformation has been intensely experienced, and the one where unplanned and uncontrolled transformation has the most damaging impacts throughout the whole town. The Coastal strip is a long (146 km) and vibrant band with its projections and recessions. While the industrial chimneys constitute the coastal silhouette, the cape is formed by typical Aegean facades (Figure 1). Along the coastal road, coastal facades have been quite narrow due to the significance of the coast. Nevertheless, the numbers of these buildings, which date back to the past era, have been declined causing the general character of the Coastal Zone to change [4].

### Middle Zone

In addition to Faneromeni Church (*Ayazma*), fountains and wells, the middle part of the town centre accommodates two churches, which are currently used as mosques. Besides, the Bazaar, which forms another significant urban void, like Cumhuriyet Square in Coastal zone, also takes place in this part of the town.

Regarding the matter of roads separating the above-mentioned zones, one can suggest the following; two of the major axes are positioned perpendicular to the sea. The first axis parallel to the coast is Coastal road with its problematic state, while the second axis parallel to the coast is Sefa Street which has always been the major artery of the town throughout the history. It connects the two poles in the North and South of the town centre. Therefore, it is a transitional and cohesive element both with its function and direction. The major and secondary axes lying perpendicular to the coast provide the access of people to coast and intrusion of wind. Sefa Street and Coastal Road are connected via these secondary channels.

The interaction between the coast and the town has been weakened after the opening of Coastal Vehicular Road in 1950, causing the town to turn into an *inner city* rather than a *waterfront town*. Marine transportation and trade have gradually lost their significance, and these activities started to be conducted through the motorway. The dense traffic over this new vehicular road has unavoidably interrupted the accessibility of the citizens to the coast. Additionally, the buildings that are recently built along this road have created a wall-effect along the coast accentuating the splitting up between the town and the sea.

As can be seen, the physical “*network*” constituted by; subdivisions of the town centre, and the connecting road system, has been a parallel formation to the “*water-net*” until when the Coastal Road is opened. It is obvious that the relationship has been impaired following this opening. In this



context, it is particular importance to elucidate the relation between the town and the water.

## II. RELATIONSHIP BETWEEN TOWN AND WATER

This relationship will be tackled under three headings; while the first part handles the relation between the topographical



Fig. 3. Major Arteries (Cadde) of Ayvalik Centre (Kiyak, 1997)

formation and the water, the issues examined under the second heading focus on the role of water in social life throughout the history. The last title will emphasise the buildings of waterworks as the determining components of the *water-life network*, which is assumed to regulate the social life at the time.

### Water and Topography

As can be seen in Figure 1, the density of the water elements outside the periphery of the town centre is as dominant as the one in town centre. Arcs, wells, fountains, cisterns can be named among these elements. These elements are basically distributed along a kind of grid system composed of a series of rivers lying perpendicular to the coast in between the hills.

It must be emphasised that; all these points, linear and planar elements of water exhibit the character of an infrastructure for the physical network, which is examined above under the heading of Town Centre. Thus, “Network of Buildings” is united with the “Water Network” to draw the framework of “Social Network”.

### Water and History

The relationship between the water and Ayvalık, has always been of primary importance throughout history. Water, not only influences the climate of Ayvalık, it also determines the commercial life in the city predominantly through its port. The need for water has mainly been fulfilled via rain water collected through cisterns and wells located almost in each household [5]. Drinking water has been obtained from “Yedi Kuyular” (Seven Wells) in the South-West of the town, while wells are utilised for the daily use of water. When the water was insufficient, “Deve Boğazı” Wells along the Old Kozak Road, and “Sarı Su” around the park were also utilised. Drinking water was kept in cylindrical wooden barrels and sold around the streets in tin cans to meet the needs of the houses. In 1953, regular water was provided for Ayvalık with transfer of water from the wells of Altınova via an infrastructure for the first time [6]. Following this significant development, the daily life of the citizens had profoundly changed. This change was a significant inflection point in the transition of the town towards the contemporary living standards. This process has been finalised with the “transformation of the water-net into a construction”, and integration of the “Network of Buildings” with the “Network of Water” in the town.

### Water and Buildings

The relation between the coastal strip and the building elements which accommodate the content of water, such as wells, cisterns, fountains, and Ayazma, has been disintegrated. The “Nets of water-life-buildings”, which is assumed to be united in the past, has been dissolved (Figure 5). The components that appeared to be independent categories after this disintegration process can be grouped as below;

- *Fountains*; although they have reached today with their original states, they require surface treatment.
- *Wells*; they have remained beneath the new building layers during the unplanned building boom, although they constitute the major elements of the water-net with their immense multitude.
- *Ayazma*; it is located on a road opening up to Sefa Street. The building that is believed to accommodate the holy water is originally built as the Faneromeni Church. There have been harmful interventions since the building was used as a olive-oil production plant for a long period of time.

### Disconnected Net

In this section, “Nets of Water” and “Nets of Life” that are broken apart will be examined, the inflection points of this break up as well as the reasons behind it will be emphasised. It is intended that the results of this section will pave the foundations of the proposal for reuniting and revitalising these nets. As discussed above, policies of urban development under the pressure of socio-economic activities in the history of town have damaged the “net” particularly at its nodes where it is connected to the sea. The “net”, which has eventually lost its continuity between the Aegean Sea and Nikita River, unavoidably started to disappear. Urban life, therefore, has been pushed beyond the Coastal Road and been imprisoned to

the Coastal strip. Particularly, with the impact of state-incited tourism activity, this isolated social life has been reduced to the use of a group of tourists and accompanying small group of citizens serving this sector in the town (Figure 6).

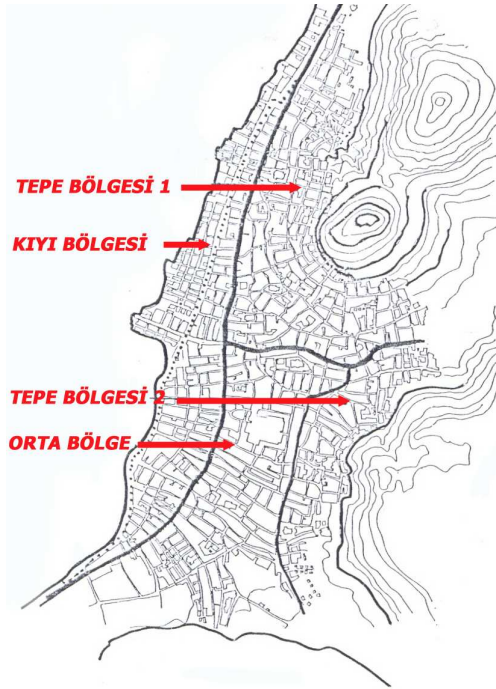


Fig. 4. Map 4; Historical Zones (Bolge) of Ayvalik Centre (Kiyak, 1997)

### Repaired Net

The restoration of the broken nodes of the above-defined nodes appears as an appropriate solution for establishing the continuity of interactions within the town. The continuity of the unity of *water-people*, in addition to the continuity of water, should be essential in this reconstruction process. In this framework, calming of the traffic for the better use of Coastal road by pedestrians will reinforce the interaction between the town and the coast.

### III. CONCLUSION

In this study, whereby the “*metaphor of water-net*” is derived as an analytical tool to establish a basis for the proposals to be developed for the solution of problems with which Ayvalik is faced, the relation between *urban fabric-daily lives* is founded on the links of both elements with *water*. Identifying the connection between coastal water and inner water elements, their clarification and revitalisation in daily life could be a preliminary step in the renewal of urban and water culture in the town. Should such a network and its nodes could be re-interpreted in connection with the historical, urban and architectural characteristics; it would contribute to the unique urban tissue of Ayvalik. Such a re-interpretation should focus on the concept of “net” and its “nodes”, which can be accepted as a metaphor to complete the urban tissue.

Ayazma building, amongst the waterworks which are considered as the generators of the urban regeneration

proposal based on the assumed “net”, holds a specific position since it is the only element of water at building scale. Therefore, Ayazma building must have a central position in the proposal which will be developed in regard to the contribution of these buildings to physical and social stock, their location within the projected network, and their physical relationship with each other. Thus, it would be possible to *reconcile* the once-broken “*nets of building, life and water*” with the proposed scheme in Ayvalik.

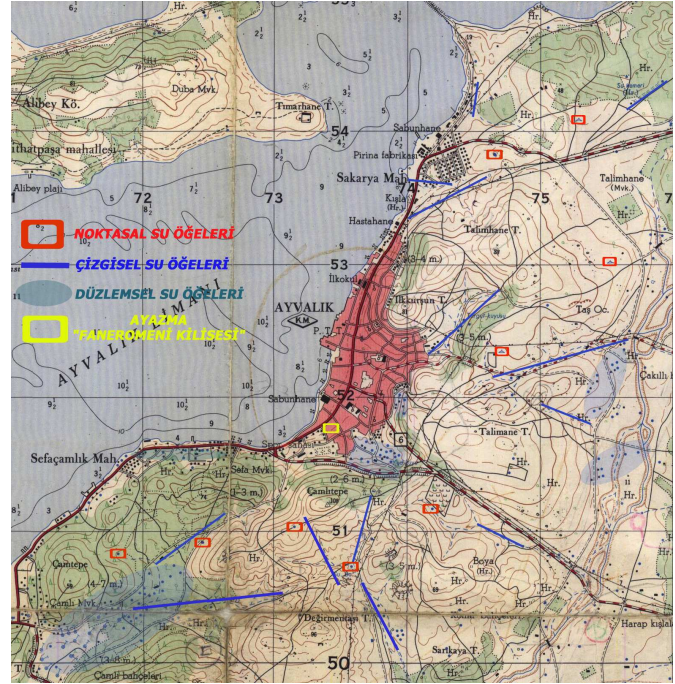


Fig. 5. Water Net of Ayvalik

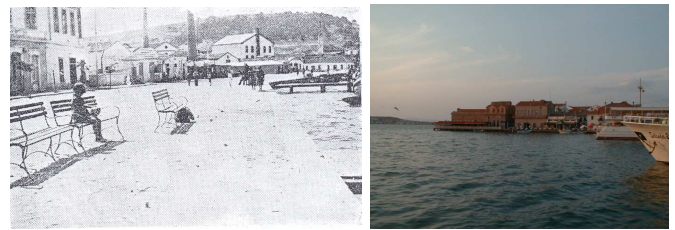


Fig. 6. a) Ayvalik coast (Aka, 1944) b) Ayvalik coast (M.Cetin Archive)

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**Murat Cetin** was born in 1969 in Ankara, Turkey. He studied architecture at Middle East Technical University where he received his B.Arch and M.Arch degrees. He received his PhD degree from University of Sheffield where he was awarded a governmental scholarship.

He worked as assistant professor in Balikesir University and Yeditepe University in Turkey. He conducted various design projects some of which are awarded and funded research projects besides his teaching duties both on conservation and design theory as well as design studios. He directed various international workshops. He published various articles, papers and book chapters. He did teach in KFUPM in Dhahran in Saudi Arabia between 2009-2011. His current research interests include urban morphology, urban transformation, urban conservation and history and theory of urban design. He is currently teaching as an Associate Prof. at Yeditepe University Dept. of Architecture.

Assoc.Prof.Dr.M. Cetin is a member of the Chamber of Architect (UIA).

**Senem Doyduk** studied architecture at Trakya University. She received her Master Degree from 9 Eylul University and her PhD degree from Yildiz Technical University in the field of restoration and conservation.

She worked as a research assistant at Balikesir University and Yildiz Technical University. Then she was appointed as an assistant professor at Dogus University where she taught various courses. She published various papers, took part in various research projects and in various workshops. She is currently teaching as an Assistant Prof. at Dogus University Dept. of Architecture.

Asst.Prof.Dr. S.Doyduk is also a member of the Chamber of Architect (UIA).