

DOI: [10.38027/ICCAUA2022EN0187](https://doi.org/10.38027/ICCAUA2022EN0187)

The Evaluation of The Identity Features / Characteristics at Urban Waterfront Zones; The Case of Terme

*Nur Çelik Nalbant ¹, Assoc.Prof. Bora Yerliyurt ²

Yildiz Technical University, Faculty of Architecture, Istanbul, Turkey ¹

Yildiz Technical University, Faculty of Architecture, Istanbul, Turkey ²

E-mail ¹: clknur@outlook.com, E-mail ²: byerli@yildiz.edu.tr

Abstract

Coastal settlements generally have various geographical features compared to other settlements. The social and spatial change of the coast in such settlements is related to the "land use strategy" of this environment. These changes guide the settlements and bring them to be dynamic in the architecture and urban space during the historical process. This study is "obtained from the thesis named The Evaluation of The Identity Features /Characteristics at Urban Waterfront zones; The Case of Terme". In this study, the role of the coastal zone, which acts as a border and threshold in the formation of urban identity, is discussed through the town of Terme, which has a stream running through it and has a coastline also. The survey study conducted in the area is analyzed with the Kruskal Wallis test. Along with these analyze, the effect of the coast on the urban identity was emphasized.

Keywords: Coast, Identity, Stream, Urban Identity, Terme

1. Introduction

"Water is a source of life, strength, comfort, and pleasure, a universal symbol of purification and renewal. Like a primitive magnet, water attracts a primitive and deep-rooted part of human nature. More than any other element besides trees and gardens, water has the greatest potential to form an emotional connection between man and nature in the city (Spirn, 1984)."

All living things, most notably humans, who have a role in the construction of civilizations, have always been in an inner connection with water. This relationship between water (oceans, seas, lakes, streams) and settlements has been in existence since ancient civilizations. When we look at water resources, 'flowing waters' such as streams have a distinctive place in terms of transportation, security, energy, agriculture, trade, and recreation as they are the life source of many cities (Nia & Suleiman, 2017). Water is one of the most basic human needs. For this reason, it is seen that the birth and rooting, and growth of many civilizations took place in coastal areas. The coastal settlement, which first started to meet the basic needs, continues to reinforce its importance with the effect of the dynamics that have changed over time. With the use of coastal areas for economic, aesthetic, functional, and social reasons, it has been seen that the city has developed in these areas. The water element, which is seen as an important factor in cities' development and planning process, has been seen as the most important social, economic, and aesthetic resource from past to present. These resources primarily provided economic benefits to the city, and then supported its aesthetic development. At the same time, the city's water areas create the city's social living spaces due to human nature's longing for water and the desire to establish a relationship with water.

The existence of the coast; is seen as an important natural identity component in terms of the development of the city and the formation of its identity. The usage patterns of coastal spaces determine the spatial setup, perception, and meaning of cities (Demiralp, 1998). It is possible to classify the cities settled by the water as formal cities and in this type of city; borders, slope, water features, vegetation, and geological forms seem to play a role in identity (Çöl, 1998).

In the social ecosystem, the individual has tried to search for his own space from the moment person interacts with the community and to create a place where the person can rebuild his existence and identity to ensure its continuity (Cresswell, 2004). The definition of a 'space' as a 'city' took place over a long period. In this process, the geographical content, cultural level, architecture, local traditions, lifestyle, and historical past of the city are the elements that form and shape the city (Suher, 2006). Many variables distinguish cities from others and enable them to be defined and named with their unique characteristics. Lynch (1981) states that these features that differentiate cities form the identity of the city. Coastal areas, which play an important role in the formation of urban identities, contribute greatly to the preservation of urban identity, architecture, and culture-specific in the region. In addition, this contribution positively affects urban development, livability, and the economy. The coast is an important boundary for settlements, as well as an interaction belt. Coasts are dynamic environments where settlements open out, interaction takes place, and land and water are geographically separated from each other. As an image of the city, Karabey (1978) discussed the coast over its geographical formation and formation process

and defined it as "a priority area of action where consumption and losses occur the most, production relations are determined, and which has a potential that creates high and rapid yields".

2. Material and Methods

within the scope of the study, in line with the examination of the 'identity element in coastal settlements' proposed, a two-stage study (theoretical and practical) was carried out. In the first stage of the study, research was conducted on the literature and analysis methods to provide the theoretical and conceptual infrastructure. Urban identity and coastal concepts form the conceptual framework of the study.

This study is aimed to analyze the physical structure of the stream coastal areas in the sample area in an analytical and theoretical framework, based on the effects of the space on human behavior, and to discuss it through the concepts of identity and coast.

In the study, the water element is primarily discussed and the importance of the water element has been emphasized since the beginning of the formation of cities. When the development processes of the cities are examined, it is seen that the water element has great importance for the cities and is an important component of their identities. For this reason, the concepts of coastal zone and urban waterfront are discussed.

In this context, the sample area of the study is the city of Terme, which has rich features in terms of the water element and at the same time, the stream passes through the city center and divides the city into two parts. Within the scope of the study seeks an answer to the problem of identity created by the stream in coastal settlements and the integration of the stream in the city. This constitutes the second phase of the study. At this practical stage, a field study was conducted by preparing survey questions on the concepts of coastal and urban identity. Along with the survey study, the relationship of the coast with the city was examined by taking the opinions of the citizens, and evaluations were made on the identity element in the coastal settlements.

Social data analyses that were obtained through a survey study, were first conducted in the city of Terme, which is the research area. The survey study was carried out in two stages. The first stage consisted of a survey conducted with people living in the region, who lived and experienced the part of their lives. The second stage covers the survey study with the determined focus group, which constitutes the supporting study. This determined focus group consisted of people who lived in Terme at a certain period of their lives but are not living now.

Through the concept of identity of urban coastal areas, it has been evaluated with assumptions such as "Coastal areas are urban public spaces that are important for the citizens" and "Urban morphology affects the use of the coast". As a hypothesis, it was determined that "the strong establishment of the city-shore relationship makes the coast a dominant element in the identity of that city".

Within the scope of the study, answers to the following research questions are sought:

- To what extent is the public use potential of the coasts covered?
- What are the criteria to be used in the identification of coastal areas?
- What is the level of interaction of the cities developing around the stream with water?

3. The Identity Features / Characteristics at Urban Waterfront Zones

'Identity'

According to Lynch, identity is defined as all the features created by nature or by humans to distinguish all beings from similar ones, but it also expresses the difference and originality of an entity from other entities.

Hall argues that identity is a process and "not a fixed point, but also the relation of the other to oneself and vice versa" (Hall, 1989). This expresses the reflexive nature of identity; therefore, the meaning of identity can be expressed and understood with the "concept of reflection" (Williams, 1989, p. 72). Ertürk also expresses the concept of identity as 'the state of being unique (Ertürk, 1996).

When considered with the place, the concept of identity can be defined as a basic feature that is affected by these experiences that affect people's experiences. Proshansky (1978) defines place identity as a complex pattern that combines the identity of place and person in its structure as determined by the preferences, expectations, feelings, values, and beliefs of people in their relations with the natural and structured environment, the physical world and other people. The needs that serve the purpose of the place, as well as the tastes and preferences of the people have great importance in the emergence of the identity of a place (Proshansky, H.M., Fabian, A.K., And Kaminoff, R., 1995).

'Urban Identity'

With the increasing rate of urbanization worldwide, raising awareness about the importance, difference, and meaning of urban identity becomes an important issue. Talking about the concept of urban identity, Proshansky (1983) uses the following expressions: The built environment has great importance on how the people living in the city express themselves in the society. After all, place identity is part of self-identity. Place identity arises from direct experience with the physical environment. Therefore, it reflects the social, cultural, and ethnic

aspects of the place. It is also central to one's well-being, as it helps preserve self-identity and facilitate adaptation to changing circumstances. Nevertheless, urban identity is defined by various shapes and means that show the dynamism of this phenomenon (Cheshmehzangi, 2012).

While Canter (1977) and Punter (1991) express the components of place identity that make urban spaces successful and effective as activities, physical environment, and perception; Montgomery (1998) elaborates on these parameters and mentions the existence of paradigms that form the identity of a place through their relations with each other.

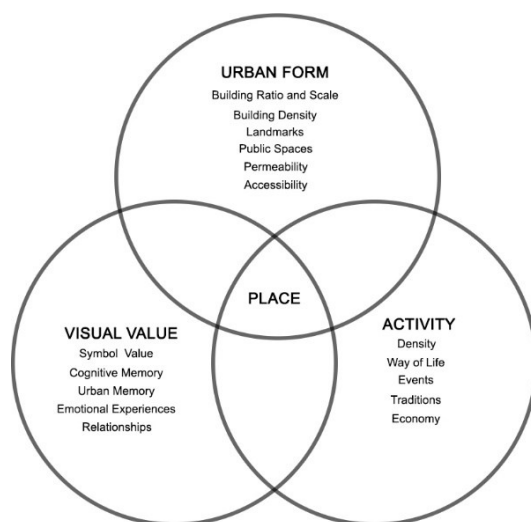


Figure 1. Identity Components of Place (Montgomery, 1998).

'The Concept of The Coast and The Relationship of Identity'

Throughout history, the coasts have functioned as a social and economic interaction area for people; It has been one of the basic geographical elements that shaped the settlements and influenced the lifestyle.

The existence of the coast; is an important natural identity component in the development of the city and the formation of its identity. The usage patterns of the coastal space determine the spatial setup, perception, and meaning of the cities (Demiralp, 1998).

Coasts have been one of the important physical factors for humanity and urbanization throughout history. The coasts have always positively affected the cities they are connected to, whether in terms of making social and economic contributions to the city, providing recreational opportunities, and meeting the secondary needs of people due to their aesthetic values (Erkmen, 2015).

Historical, cultural, and natural values form the characteristic settlement form and identity of the city together with the surrounding spaces on the city scale. It is possible to express the factors that primarily affect the identity formation of cities as topography, having a natural harbor and coast, cultural structure, and historical past. The urban functions and the structure of the city, which are formed depending on these elements, contribute to the formation of the identity of that city. When the identity elements originating from the natural environment are examined, it is seen that the water element is one of the important elements that make up the urban identity. Due to its natural structure, many cities form their structures with the water element they contain, and these structures are reflected in the identity of the city.

4. The Case of Terme

In this part of the study, the analysis of the sustainability of the urban identity in terms of coastal areas was carried out over the city of Terme, which was chosen as the sample area. To be able to evaluate the Terme settlement, primarily the data obtained by literature research and analyses about the location of the city, its natural features, historical development, physical, demographic and economic structure were compiled.

'Location and General Features of Terme City'

Terme district is located within the borders of Samsun province. Samsun province, which is located in the middle of the Black Sea coastline between the deltas where Yeşilirmak and Kızılırmak streams flow into the Black Sea, has a surface area of 9,083 km². Geographically, it is between 40° 50' - 41° 51' north latitudes, 37° 08' and 34° 25' east longitudes. The province of Samsun, where the Black Sea is located in the north, is surrounded by Ordu in the east, Sinop in the west, Tokat and Amasya in the south, and Çorum in the south-west.

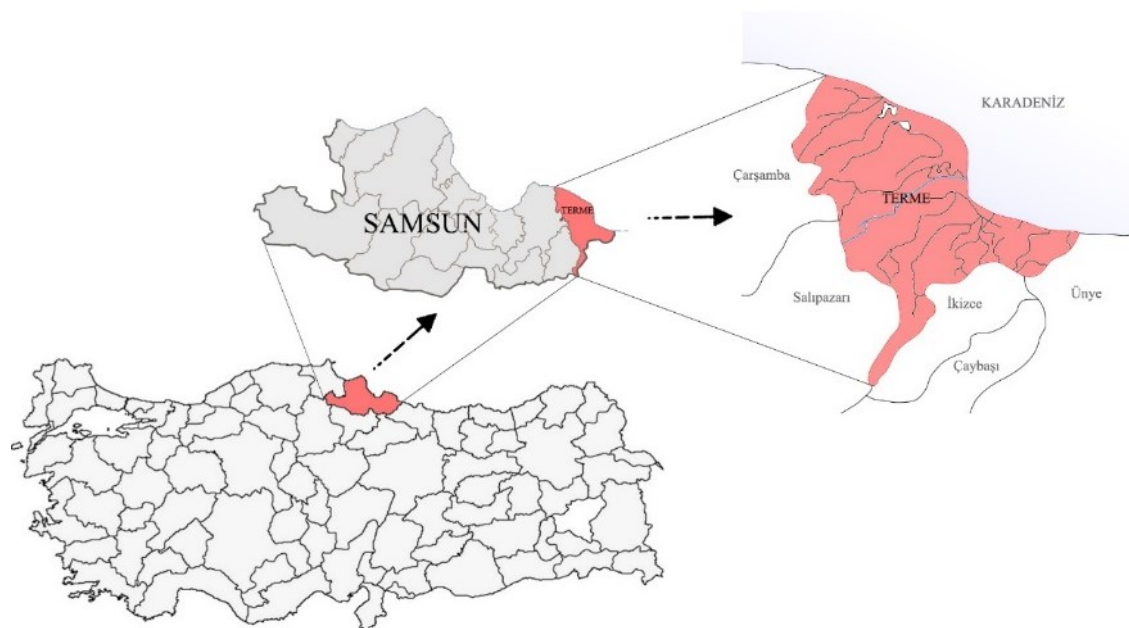


Figure 2. Location Map of Terme City (Developed by Author).

Terme is in the Central Black Sea part of the Black Sea Region, 3-5 km from the sea. It is a district of Samsun province established inside. Its distance to Samsun is 58 km. There are the Black Sea in the North of the district, Ünye and İkizce in the East, Akkuş in the South, and Salıpazarı and Çarşamba Districts in the West. The coastal plain stretches in the north, the Canik Mountains are in the south, and its highest point is 450 meters. The Terme Stream, which originates from the Black Forest, divides the district into two in the middle and flows into the Black Sea. Akgöl and Simenit lakes, which are connected by natural channels, are located in the area close to the sea between the Black Sea and Terme district. Terme is the district of Samsun with the longest coastline.

'Terme Coastal Settlement'

Terme has a very rich structure in terms of hydrological elements and water. There are many lakes, streams, and canals in the district of Terme, which run through the Terme Stream, which irrigates the paddy fields. Simenit Lake, Akgöl, and Terme Stream are expressed as the most important hydrological elements. Hydrological elements in Terme's current plan; It is possible to list two drying channels, swamps, and Terme Stream. Considering these data, 0.5% (6Ha) of the center is canals, 1.6% (19Ha) is marsh and 1% (11Ha) is Terme Stream. Considering the positions of the swamps, it is seen that they are very close to the settlement.

When the close surroundings of Terme and the Terme Stream Basin are examined; The most important hydrological elements of the region; are the Black Sea, Terme Stream, Kocaman Stream, Simenlik Lake, and Akgöl. In this study, Terme Stream and its surroundings are discussed.

When Terme Stream and its surroundings are considered in terms of their relationship with the water element, it is possible to express them as disconnected spaces in the city where the citizens can interact. It is possible to state that the main reason for this is that this area does not have integrated planning with the city and the flood problem has not been resolved. Flood events occur as a result of effective precipitation in a short time. Floods, which occur mostly in summer, cause many casualties but also cause great damage to agricultural areas and cultivated products, workplaces, residences, and roads. Due to these reasons, it is possible to say that the coastal connection could not be established in and around the Terme Stream.

5. Terme Coastal Settlement in the Context of User Perception

In the light of the data obtained as a result of the literature review on the field, a survey was conducted with the people in the field. With these interviews, the awareness of the participants about the coastal areas in the city was determined, and inferences were made about the effect of the stream element on the urban identity and the sustainability of this identity.

Qualitative and quantitative research methods were used in this study. Field research and literature review constitutes the qualitative method of the study, and the statistical results obtained with the questionnaire applied in the study area constitute the quantitative method.

With these analyzes and survey work, the awareness of the users about the coastal and water element in the city was examined and the effect of the water element, which is an important element in the identity of the city, was investigated.

'Survey Work'

In line with the concepts of coast and identity examined in the research, the survey questions are grouped and addressed. With the grouped survey questions, survey questions were designed with the indicators planned to be determined and the components obtained, specific to the study area.

The survey was carried out at the points indicated on the map. These points were built around the market area and the square, together with the two sides of the stream.



Figure 3. Terme stream and surveyed areas (Developed by Author).

Within the scope of the study, questions were prepared to express the effect of the use of the coast on the identity of the city and the awareness of the stream on the user in the city of Terme, which was determined as the sampling area. These question groups are as follows;

- Understanding User Profile (Demographic Structure)
- Coastal Perception
- Terme Coastal Areas
- Concept of Identity
- Perception of Space

First of all, physical analyzes made in the study area are included. The stream and its surroundings are handled spatially and the relationship between the stream bank and its surroundings is revealed in the section analysis.

Secondly, in the research studies, in line with the statistical information of the survey results in the study area and the hypotheses of the study, the inferences for testing the statistically significant difference for the determined groups were evaluated with the help of the Kruskal Wallis test, relations and group difference analysis. The evaluation of the results of the survey study was also carried out in two stages.

The research is a cross-sectional type of research. The data obtained through the questionnaire were analyzed in a computer environment using IBM SPSS Statistics version 25.0. In the study, the level of significance was taken as $\alpha = 0.05$.

At this stage, an answer is sought to the question of whether the answers given for "Living in Terme" and "Not Living in Terme" are significantly different, and therefore, a difference analysis has been put forward. Firstly, frequency (frequency) and percentage distribution information are given for demographic and general information about the participants in the survey. To test the hypotheses and to determine which test is suitable for this, it was tested whether the distribution of the data was normal. Kolmogorov-Smirnov and Shapiro-Wilk normal distribution tests, which are included in the SPSS program, were performed. As a result of these tests, since the dimensions of

the items obtained from the scales were not normally distributed ($p < 0.05$), non-parametric methods that did not require normal distribution were used in the analyses.

- The expression "People Living in Terme" refers to individuals still living in Terme.
- The expression "those who do not live in Terme" refers to individuals who have lived in Terme at a certain period of their life and have experienced the area.

'Results'

5.1 Group Difference Test Results by Frequency and Percentage Distribution of Demographic Characteristics and by Participant Group

In this section, the frequency and percentage distribution of demographic characteristics and the results of the group difference test according to the participant group were examined.

Table 1. Questions About the Concept of Demographic Characteristics and Statistical Data

	Participant Group			
	Those Who Do Not Live in Terme		People Living in Terme	
	n	%	n	%
Age				
18-29 years	13	19,7	124	32,6
30-45 years	24	36,4	166	43,7
age 46 and over	29	43,9	90	23,7
Gender				
Woman	25	37,9	174	45,8
Boy	41	62,1	206	54,2
Educational Status				
Primary education	1	1,5	67	17,6
High school	14	21,2	206	54,2
University	38	57,6	99	26,1
graduate	13	19,7	8	2,1
Job				
Private sector	19	28,8	93	24,5
Public	16	24,2	36	9,5
Independent	5	7,6	34	8,9
Housewife	11	16,7	83	21,8
Student	3	4,5	68	17,9
Retired	10	15,2	43	11,3
Unemployed	2	3,0	23	6,1
What is your reason for being in Terme?				
Residence	39	59,1	-	-
work	3	4,5	-	-
Visit	24	36,4	-	-
How often do you visit Terme?				
Every week	9	13,6	-	-
1 time per month	14	21,2	-	-
1 time per year	40	60,6	-	-
more than 1 year	3	4,5	-	-
How long have you been living in Terme?				
1-5 years	-	-	4	1,1
5-10 years	-	-	9	2,4
10-20 years	-	-	92	24,2
20 years and above	-	-	275	72,4
Where do you reside?				
Bahcelievler District	-	-	45	11,8
Cay District	-	-	128	33,7
Fenk District	-	-	88	23,2

Yali District	-	-	34	8,9
New Neighborhood	-	-	85	22,4

- While the majority of the participants in the “those who do not live in Terme” are in the age group of 46 and over with a rate of 43.9%, the majority of the participants in the “People Living in Terme” are in the age group of 30-45 with a rate of 43.7%.
- The majority of the participants in the “those who do not live in Terme” and “People Living in Terme” are male.
- The majority of the participants in the “those who do not live in Terme” have a university education with a rate of 57.6%, and the majority of the participants in the “People Living in Terme” have a high school education with a rate of 54.2%.
- The majority of the participants in the “those who do not live in Terme” work in the private sector, with a rate of 28.8%, and the majority of the participants in the “People Living in Terme” with a rate of 24.5%.
- The majority of the participants in the People Living in Terme group reside in Terme with a rate of 59.1%. The majority of the participants in the “those who do not live in Terme” visit Terme once a year with a rate of 60.6%.
- The majority of the participants in the “those who do not live in Terme” have been living in Terme for 20 years or more, with a rate of 72.4%. The majority of the participants in the “People Living in Terme” reside in Çay Mahallesi with a rate of 33.7%.

5.2 Frequency and Percentage Distributions for the First Part Questions of Coastal Perception and Group Difference Test Results by Participant Group

In this section, the frequency and percentage distribution results of the first part of questions on the coastal perception and group difference test results by participant groups are examined.

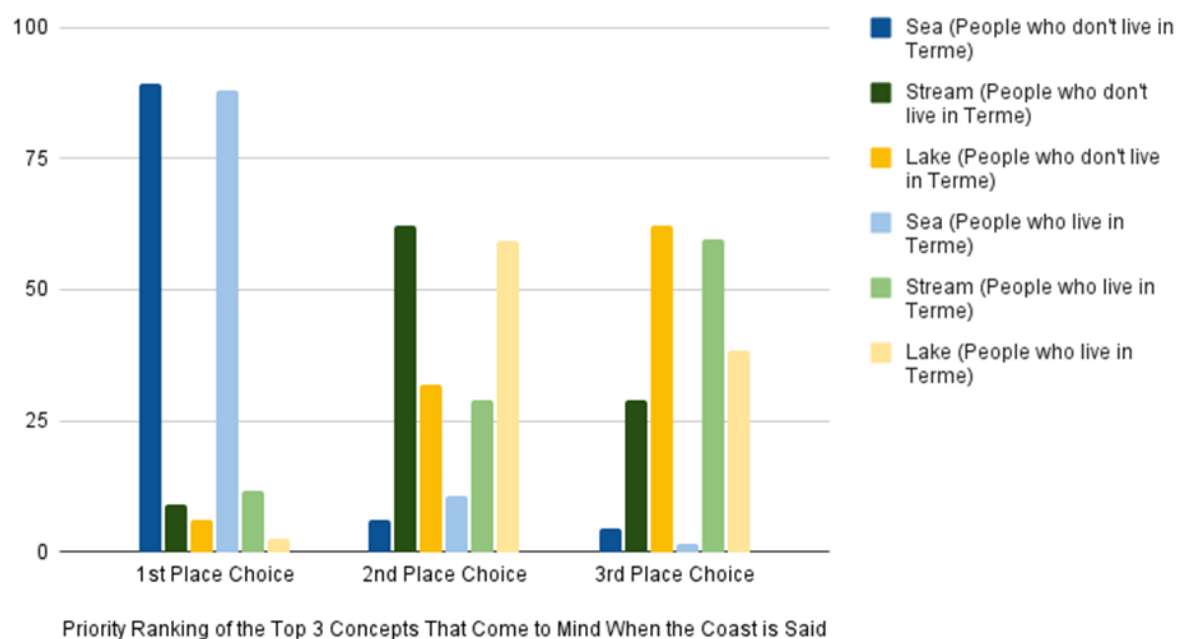


Figure 4. Priority Ranking of The Top 3 Concepts That Come To Mind When The Coast is Said (Developed by Author).

- When the coast is mentioned, 89.4% of the participants in the "Do Not Live in Terme" group think of the sea first, 62.1% think of the stream in the second place, and 62.1% of them think of the lake in the third place.
- When the coast is mentioned, 87.9% of the participants in the "Living in Terme" group think of the sea in the first place, 59.5% of them think of the stream in the third place, and 59.2% of them think of the lake in the second place. The priority order of the stream and lake concepts shows a significant difference between the participant groups.

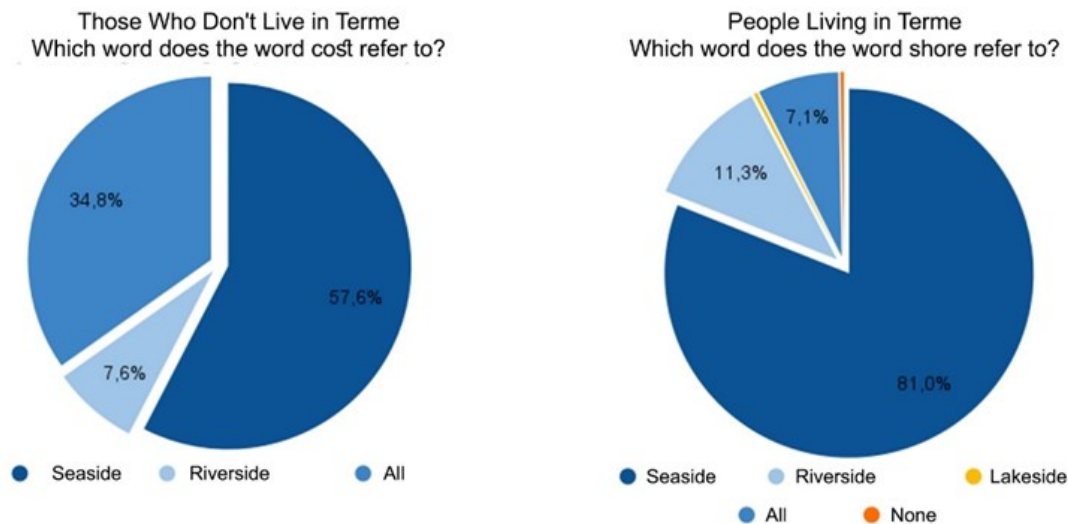


Figure 5. Those Who Don't Live in Terme Which Word does Coast Refer To? (Developed by Author).

- The word 'coast' refers to the seaside for both groups. The expression of the word coast shows a significant difference between the participant groups.

5.3 Frequency and Percentage Distributions for the Second Part Questions of Coastal Perception of Terme and Group Difference Test Results by Participant Group

In this section, the frequency and percentage distribution of the terme coastal perception of the second part questions and group difference test results by participant groups are examined.

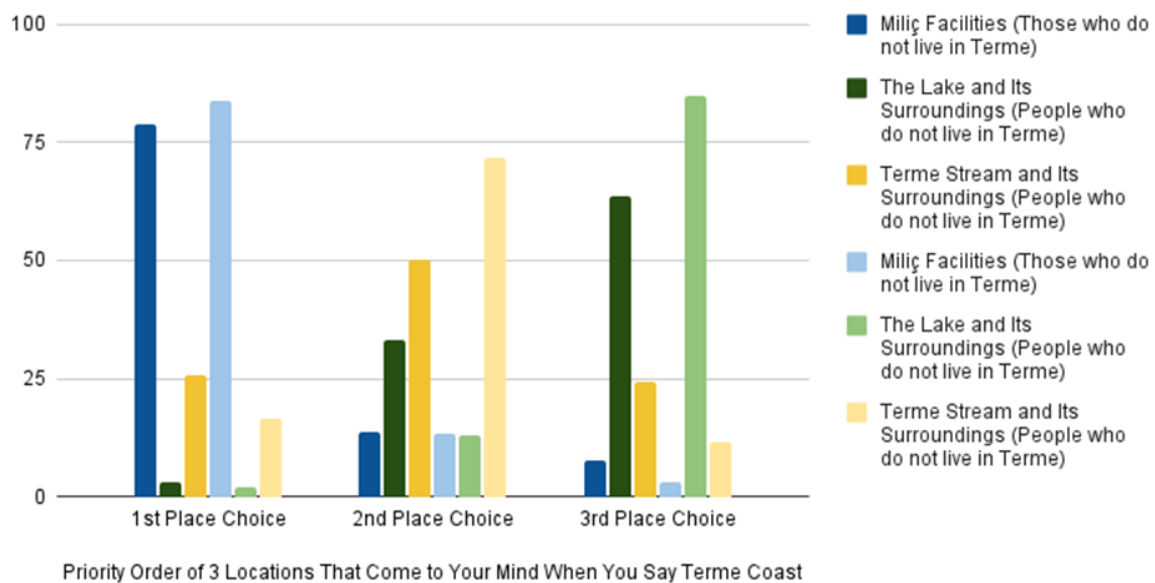


Figure 6. Priority Order of 3 Locations That Come to Your Mind When You Say Terme Coast (Developed by Author).

- When the 'Terme coast' is mentioned, miliç facilities (seaside) come to mind for the participants in both groups. The expression of the word coast shows a significant difference between the participant groups.

5.4 Frequency and Percentage Distributions for Identity Concept Questions and Group Difference Test Results by Participant Group

In this section, frequency and percentage distributions for identity concept questions and group difference test results by participant group results are examined.

Table 2. Questions About the Concept Of Identity And Statistical Data

	Participant Group				p
	Those Who Do Not Live in Terme		People Living in Terme		
	n	%	n	%	
Order of priority of the most prominent and striking places of Terme					
Square					
1st place preference	26	39,4	159	41,8	0,065
2nd place preference	19	28,8	170	44,7	
3rd place preference	10	15,2	29	7,6	
4th place preference	9	13,6	16	4,2	
5th place preference	2	3,0	6	1,6	
Terme Stream and Its Surroundings					
1st place preference	19	28,8	40	10,5	0,000*
2nd place preference	30	45,5	84	22,1	
3rd place preference	8	12,1	230	60,5	
4th place preference	3	4,5	17	4,5	
5th place preference	6	9,1	9	2,4	
Seaside					
1st place preference	23	34,8	197	51,8	0,001*
2nd place preference	14	21,2	98	25,8	
3rd place preference	19	28,8	53	13,9	
4th place preference	9	13,6	29	7,6	
5th place preference	1	1,5	3	0,8	
Forests					
1st place preference	4	6,1	12	3,2	0,000*
2nd place preference	4	6,1	21	5,5	
3rd place preference	22	33,3	26	6,8	
4th place preference	18	27,3	82	21,6	
5th place preference	18	27,3	239	62,9	
Market place					
1st place preference	3	4,5	11	2,9	0,000*
2nd place preference	11	16,7	17	4,5	
3rd place preference	14	21,2	39	10,3	
4th place preference	29	43,9	230	60,5	
5th place preference	9	13,6	83	21,8	
Why do these places grab your attention?					
To be central					
Yes	40	60,6	202	53,2	0,263
No	26	39,4	178	46,8	
Being Reachable					
Yes	9	13,6	212	55,8	0,000*
No	57	86,4	168	44,2	
Yes	16	24,2	67	17,6	0,203
No	50	75,8	313	82,4	
Being Active and Intense					
Yes	1	1,5	39	10,3	0,022*
No	65	98,5	341	89,7	
Where are the places/areas/regions where you spend most of your time in Terme?					
Square	23	34,8	181	47,6	0,456
Terme Stream and Its Surroundings	15	22,7	32	8,4	

Seaside	19	28,8	25	6,6	
Cafes	5	7,6	34	8,9	
Market place	4	6,1	88	23,2	
None (I'm spending time at home)	-	-	20	5,3	
What is the reason you spend most of your time in these areas?					
to be central	27	40,9	136	35,8	0,027*
Being Reachable	14	21,2	77	20,3	
Being Calm and Peaceful	22	33,3	57	15,0	
Being Active and Intense	3	4,5	46	12,1	
Shopping	-	-	58	15,3	
Child park	-	-	6	1,6	

- One of the most prominent and most striking places in Terme, the square was placed in the first place by 39.4% of the participants in the group of those who do not live in Terme, and 44.7% of the participants in the group of those living in Terme, in the second place.
- One of the most prominent and striking places in Terme, Terme Stream and its surroundings were placed in the second place by 45.5% of the participants in the Non-Terme group, and by 60.5% of the participants in the Terme-Living group in the third place.
- The priority order of Terme Stream and its surroundings shows a significant difference between the participant groups.
- The seaside, one of the most prominent and most striking places in Terme, was placed in the first place by 34.8% of the participants in the group of those who do not live in Terme, and 51.8% of the participants in the group of those living in Terme. The priority order of the seaside shows a significant difference between the participant groups.
- Forests, one of the most prominent and most striking places in Terme, were placed in the third place by 33.3% of the participants in the group of those who do not live in Terme, and 62.9% of the participants in the group of those living in Terme in the fifth place. The priority order of forests shows a significant difference between the participant groups.
- One of the most prominent and most striking places in Terme, 43.9% of the participants in the group of those who do not live in Terme placed the marketplace in the fourth place, and 60.5% of the participants in the group of those who live in Terme placed it in the fourth place. The priority order of the marketplace shows a significant difference between the participant groups.
- The majority of those who do not live in Terme and the majority of the participants in the priority group say that these places attract their attention because they are central. While the majority of the participants in the group of those who do not live in Terme say that these places do not attract their attention because of their accessibility, the majority of the priority group says that they attract their attention because they are accessible. The reason why it is "accessible" shows a significant difference between the participant groups. The majority of the participants in those who do not live in Terme and their priority groups stated that the reason why these places attract their attention is not that they are quiet and peaceful. The majority of the participants in the People Who Don't Live in Terme and Those Who Live in Terme stated that the reason why these places attracted their attention was not because of their mobility and density. The reason for "it is active and busy" shows a significant difference between the participant groups. Participants in the group of those who do not live in Terme spend most of their time in the square with a rate of 34.8%, and those in the group of those living in Terme with a rate of 47.6%. 40.9% of the participants in the group of those who do not live in Terme and 35.8% of the participants in the priority group spend their time in these places; since they are the most central. The reason for spending the most time shows a significant difference between the participant groups.

5.5 Frequency and Percentage Distributions for Space Perception Questions and Group Difference Test Results by Participant Group

In this section, frequency and percentage distribution of space perception questions and group difference test results by participant group were examined.

Table 3. Questions About Space Perception and Statistical Data

	Participant Group				p
	Those Who Do Not Live in Terme		People Living in Terme		
	n	%	n	%	
Terme is a settlement with the identity of a coastal city.					
I strongly disagree	3	4,5	14	3,7	0,093
I do not agree	15	22,7	142	37,4	
I'm undecided	12	18,2	34	8,9	
I agree	29	43,9	176	46,3	
Absolutely I agree	7	10,6	14	3,7	
Terme Stream passing through your city creates the identity of the city.					
I strongly disagree	-	-	4	1,1	0,000*
I do not agree	3	4,5	91	23,9	
I'm undecided	7	10,6	63	16,6	
I agree	38	57,6	191	50,3	
Absolutely I agree	18	27,3	31	8,2	
How much time do you spend in the coastal area of Terme Stream, which runs through your city?					
A few minutes	9	13,6	47	12,4	0,024*
less than half an hour	16	24,2	112	29,5	
Half an hour	18	27,3	179	47,1	
over an hour	23	34,8	42	11,1	
Terme Stream, is stream an important factor when you come to the coastal area?					
Yes	38	57,6	81	21,3	0,000*
No	28	42,4	299	78,7	
Terme Stream and its surroundings passing through your city do not appeal enough to the users in terms of functional diversity.					
I strongly disagree	4	6,1	8	2,1	0,002*
I do not agree	4	6,1	19	5,0	
I'm undecided	5	7,6	9	2,4	
I agree	20	30,3	83	21,8	
Absolutely I agree	33	50,0	261	68,7	
The Terme Stream and its surroundings, passing through your city, have an arrangement in the socio-cultural context (the water culture that the stream brings to the citizens (fishing, walking habits by the stream, the habit of using the riverside for rest and sightseeing purposes.. etc.) that the citizens of the city will fully benefit from.					
I strongly disagree	19	28,8	183	48,2	0,000*
I do not agree	24	36,4	146	38,4	
I'm undecided	15	22,7	19	5,0	
I agree	7	10,6	22	5,8	
Absolutely I agree	1	1,5	10	2,6	
Terme coastal area has sufficient features in terms of spatial characteristics.					

I strongly disagree	25	37,9	143	37,6	0,445
I do not agree	28	42,4	199	52,4	
I'm undecided	9	13,6	17	4,5	
I agree	3	4,5	14	3,7	
Absolutely I agree	1	1,5	7	1,8	

- “Terme is a settlement with the identity of a coastal city.” While the participants of the People Who Don't Live in Terme group gave the most "I agree" answers with 43.9%, the participants of the People Living in Terme group gave the most "I agree" answers with 46.3%.
- “Terme Stream passing through your city creates the identity of the city.” While the participants of the People Who Don't Live in Terme group gave the most "I agree" answer with 57.6%, the participants of the People Living in Terme group gave the most "I agree" answer with 50.3%. “The Terme Stream, which runs through your city, creates the identity of the city.” The answers to the proposition show a significant difference between the participant groups.
- “How much time do you spend in the coastal area of Terme Stream, which runs through your city?” While those who do not live in the Terme group gave the most the answer "More than one hour" with 34.8%, the participants of the group living in Terme gave the most answer "Between half an hour" with a rate of 47.1%. “How much time do you spend in the coastal area of Terme Stream, which runs through your city?” The answers to the proposition show a significant difference between the participant groups.
- “Terme Stream, is stream an important factor when you come to the coastal area?” While the participants of the People Who Don't Live in Terme group gave the most "Yes" answer with 57.6%, the participants of the People Living in Terme group gave the most "no" answer with 78.7%. “Terme Stream, is tea an important factor in your coming to the coastal area?” The answers to the proposition show a significant difference between the participant groups.
- “Terme Stream and its surroundings passing through your city do not appeal enough to the users in terms of functional diversity.” While the participants of the People Who Don't Live in Terme group gave the most "Strongly Agree" answer with 50%, the participants of the People Living in Terme group gave the most "Strongly Agree" answer with 68.7%. “The Terme Stream and its surroundings passing through your city do not appeal to the users enough in terms of functional diversity.” The answers to the proposition show a significant difference between the participant groups.
- “The Terme Stream and its surroundings, passing through your city, have an arrangement in the socio-cultural context (the water culture that the stream brings to the citizens (fishing, walking habits by the stream, the habit of using the riverside for rest and sightseeing purposes.. etc.) that the citizens of the city will fully benefit from.” While the participants of the People Who Don't Live in Terme group gave the most “I Disagree” answers with 36.4%, the participants of the People Living in Terme group gave the most “Strongly Disagree” answers with 48.2%. In the socio-cultural context (the water culture that the stream brings to the citizens (fishing, walking habits by the stream, the habit of using the riverside for rest and sightseeing purposes, etc.) it has an arrangement that the citizens can fully benefit from.” There is a significant difference between the participant groups. shows.
- “Terme coastal area has sufficient features in terms of spatial characteristics.” While the participants of the People Who Don't Live in Terme group gave the most "Disagree" answers with 42.4%, the participants of the People Living in Terme group gave the most "Disagree" answers with 52.4%.

5. Conclusions

From the past to the present, the phenomenon of water has been seen as an important factor in the development of the city in terms of its contribution to the development of residential areas, and the visual, economic, and cultural values it adds to the city. Cities settled on the coast benefited from water as an element that shaped their identity, economic structure, and mode of transportation.

It is possible to express the city of Terme as a city with rich resources in terms of water elements. These water elements appear as important identity elements of the city. However, it is seen that these areas cannot be used effectively as a result of wrong construction and planning. The awareness of the citizens about that place is gradually decreasing. It is stated that cities with high natural resource potential such as Terme will make significant contributions to the city and the people of the city in terms of economic and social life. At this point, institutions should take decisions primarily on the point of establishing the relationship of the stream with the city and its inhabitants. With these decisions to be made for the Terme stream and its surroundings, negative uses should be prevented and measures should be taken to increase the contribution value of the city.

One of the biggest problems of the stream and its surroundings is the lack of continuity and suitable usage conditions. In addition to these, the use of the coast is low, there are idle areas and the coastline cannot be used uninterruptedly. Although Terme Stream is a remarkable element for the city, it cannot establish a relationship with the citizens. In the studies to be carried out on the area, solutions should be brought to these points as a priority. It is foreseen that the easy access to the stream coastal area will increase the perceptual value of the area by enlarging the user profile and establishing relations. Changing the viewpoint of the citizens to the area is possible with the increase of usage areas and effective planning. With these planning studies, the aims are;

- Reducing flood damages
- Protecting the buffer zone on the riverbank
- Preventing water quality and transport of fertile soils
- Connecting the citizens with the natural elements along the stream and its surroundings.
- Ecosystem protection: Conservation of natural vegetation and aquatic habitat and improvement of degraded areas,
- Ensuring the protection of cultural landscape values: Protecting areas with historical and social values,
- Rehabilitation of misused resources: Improving water quality, stopping inappropriate behavior such as littering, and establishing a program for replanting.
- Recreation: Determination of current and potential recreation areas and activities,
- Linear pathways: Sorting the walking and cycling pathway networks that connect to the activity areas of the city along the stream, determining the main lines of the passages for situations such as street intersections in this connection,
- Outline of landscape design: laying out standards for building techniques, vehicle entrance, parking lots, stream structures, park furniture, and determining planting techniques, should be in shape.

Acknowledgements

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Conflict of Interests

The authors declare no conflict of interest.

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