

RESEARCH ARTICLE

Role of public space design on the perception of historical environment: A pilot study in Amasya

Emel Birer ^a, Pınar Çalışır Adem ^{b,*}

^a Department of Architecture, İstanbul Kültür University, İstanbul, Turkey

^b Department of Architecture, Yeditepe University, İstanbul, Turkey

Received 24 April 2021; received in revised form 22 September 2021; accepted 24 September 2021



KEYWORDS

Historical environment;
Public space;
Perception;
Conservation

Abstract The experience, perception, awareness, and appreciation of the environment created by public spaces are important elements of urban design. In this context, a strong link exists between perception, public spaces, and historical cities. Amasya is one of the multilayered historical cities in Anatolia. Amasya's holistic urban texture, close relationship with the river, and public spaces are associated with both the Iris River and the historical texture. This pilot study examines the Yalıboyu Promenade, a contemporary open public space designed along the river and across the historical texture in Amasya in Turkey to reveal how it affects people's perception of the historical environment. The study uses the mixed method approach, which includes qualitative and quantitative data. Following the theoretical discussion, the study investigates the context of the promenade. The survey results revealed how the first-time visitors had perceived the historical texture of the promenade based on Rapoport's method of using environmental signs. The results were interpreted by jointly evaluating qualitative and survey data. Furthermore, although some aspects need improvement, the promenade solidifies the perception of the historical environment. Overall, when the public space is integrated with the historical environment and public life, it offers multidimensional contributions that cannot be ignored. Therefore, examining the promenade from perceptual aspects and offering a design approach to promote integration with the historical environment may help to establish a precedent case for future initiatives.

© 2021 Higher Education Press Limited Company. Publishing services by Elsevier B.V. on behalf of KeAi Communications Co. Ltd. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

* Corresponding author.

E-mail addresses: e.duzgunbirer@iku.edu.tr (E. Birer), pinarrcalisir@gmail.com, pinar.adem@yeditepe.edu.tr (P. Çalışır Adem).
Peer review under responsibility of Southeast University.

1. Introduction

The city has been an object of curiosity for a long time. Many approaches have been proposed to conceptualize, investigate and describe a city. According to one of the definitions, a city is a historic artefact (Rapoport, 1977). As historic artefacts, cities are in constant transformation from the day they had first emerged. Since the 1950s, rapid transformation has caused permanent changes to the unique characteristics of historic urban spaces (Jacobs, 1992). To prevent the deterioration of historical environments, authorities have implemented various conservation solutions. The authenticity of space, social and physiological implications, politics, ideology, and economics are among the various motives of conservation activities (Ashworth and Tunbridge, 2000). As a common feature of most cities, buildings and public spaces (the two components constituting a historical setting) are integrated and connected, implying that interventions should also include public spaces in conservation processes. Historical texture and public spaces have a mutual relationship and should not be considered independent elements (Lang, 2005). The public space is extremely important that most users of the city portray not only the buildings but also the spaces surrounding them (Ford, 2000). The public demand for entertainment, leisure, socialization, and relaxation (Banerjee, 2001) is actualized in public spaces. Public life, which is inseparable from the idea of "public sphere" (Habermas, 1989), is sustained by the mutual interaction between urban elements and people.

The contribution of public space may be evaluated from different angles. Public spaces bring people together, generate social connections, maintain physical interactions between people and the environment, and augment the quality of urban life. Public spaces can enhance the creation and presentation of an urban image. In addition to the regular conservation agenda of local municipalities, social consciousness and awareness also play a great part in the protection of historical areas. The "promotion of historic cities through heritage" (Savvides, 2012, p. 661) is best achieved in areas where public life is alive and constant. Thus, presenting and connecting historic heritage with public spaces are essential. Even though the impact of tourism on the historical cities is debatable (Torres Out3n, 2019; Imon, 2017; Pinheiro, 2017; Zanini, 2017), the public spaces, which offer a well-preserved city and a vibrant life, provide economic income for city dwellers, thus motivating local municipalities to preserve the historical texture. Consequently, the issue of how historical texture is experienced and perceived in public spaces has gained importance. In this regard, the power of public space is intertwined with the perception of historical texture in terms of senses and experiences.

On the basis of the framework discussed above, the aim of this research is to reveal how first-time visitors perceive the historical environment with respect to the Yaliboyu Promenade, including the riverbank across the historical texture of Amasya. The public space design in historical environments should engage all senses to ensure a holistic perception. The strong perception of historical fabric of a public space and the diversity of urban experiences may

increase the interest of city dwellers and tourists towards the historical areas. Subsequently, the importance of the historical environment for the city may improve, and correlatively, this process may support the local economy by increasing touristic activities. In accordance with the aim to strengthen tourism through heritage, the waterfront areas facing the historical fabric have undergone various interventions. Presently, the Yaliboyu Promenade has become an integral part of public life. In this regard, the process of how the physical, performative, and experiential features of the promenade affect the perception of the historical environment will be discussed. The mixed method of combining context analysis and survey can help to examine the promenade and reveal the perception towards the promenade based on Rapoport's environmental signs.

2. Theoretical background

The theoretical background of the study is based on the exploration of the literature related to conservation practice, perception, and public space.

2.1. Production of public space in the historical city

Public spaces are common areas where functional and ritual activities and daily life routines are actualized. According to Carr et al. (1992), the three cultural forces that form public life are the social force related to social life, the functional force containing the basic needs of societies, and the symbolic force generating a collective meaning of places and creating connections among people. As these forces are dynamic and constantly changing depending on culture, public life may need new spaces and functions. Incidentally, as this constant change has caused a deterioration of the historical texture of cities, the public spaces in old areas are presently the subject of urban redevelopment and revitalization projects (Roberts, 2000). These projects are long-term processes comprising different initiatives, such as preserving the essence of a city's identity, improving the physical environment, and revitalizing the economy. Public spaces that are not used sufficiently in historical centers need to be revived and redesigned on the basis of strategies suitable for both the user and the historical context. In this process, public spaces may be transformed into a tool for defining, protecting, and conveying cultural meanings, consequently supporting the diversity of public life (Cooper Marcus and Francis, 1998).

Ashworth and Tunbridge (2000, p. 138) describe "preservation" as a planning and designing activity that focuses on "building survival," while they relate "conservation" to an activity that includes "historical areas and districts." Similarly, according to the ICOMOS Charter (2008), the meaning of "conservation" covers not only structural improvements but also the explanation and presentation of cultural heritage assets to the people in various ways. Thus, creating a visually pleasing historical landscape through conservation is vital. The concept of "conservation for the sake of conservation" has shifted to a process in which history serves as an asset, and its representation is offered to its consumers (Strange, 1997). The reconstruction of a cultural heritage representing a specific part of history

through conservation and the presentation of historical texture through public spaces have become increasingly crucial, as these spaces have an impact on the growth and development of cities.

History and heritage are opposing terms but often used interchangeably. While heritage borrows and revives sections from historical studies, it does not question the past or attempt to know what categorically happened in the past. “Heritage clarifies pasts to infuse them with present purposes” (Lowenthal, 1998, p. xv). By contrast, history explores and explains the past that has become more lucid over time (Lowenthal, 1998, p. xv), but it depends on viewpoints peculiar to various times and places (Lowenthal, 1998, p. 105). According to Ashworth and Larkham (1994), “history, which pertains to occurrences of the past, is widely used to fulfil a number of modern functions, one of which is for shaping socio-cultural place identities to support particular state structures” (p. 2). In the modern era, history has many different uses. For instance, history can be used as a tool for place–identity expression or for meeting the psychological needs of individuals and societies. History can also be used for educational purposes (e.g., museums) or for socialization to convey the norms and standards of societies to the new generation. Similarly, history can be used to justify a particular group’s own existence or dominance over the others. Recently, economic arguments have been added to the above arguments (Ashworth and Larkham, 1994). While history can be used as a resource in all the aforementioned processes, heritage can be transformed into a tool to fulfil these purposes (Cardoso and Brites, 2017). Consequently, history can be used for cultural, political, and economic purposes, further suggesting these uses can create a rapidly growing heritage industry (Ashworth et al., 2007).

Heritage studies do not directly engage the past (Lowenthal, 1998; Ashworth et al., 2007; Levy, 2014). On the contrary, the content, interpretation, and representation of heritage are chosen according to the demands of the present and the imagined future. Therefore, meanings and representations are as important as tangible and intangible heritage sources (Ashworth et al., 2007). These identity-based representations and meanings give heritage its cultural and financial value. Similar to identity being a dynamic entity, meanings and representation of heritage vary from one culture to another and from one period to another. Thus, heritage should be considered as a concept based on the present day, but it is updatable and changeable because social conflicts are also represented.

In this context, historical landscapes—the multilayered landscapes of time (Skogheima et al., 2018) at the intersection of history, heritage, and identity—are “illustrative of the evolution of human society and settlement over time, under the influence of the physical constraints and/or opportunities presented by their natural environment and of successive social, economic, and cultural forces, both external and internal” (UNESCO World Heritage Center 2017). Public space is one of the tangible elements of the historic urban landscape where the memories of scenery and small elements of townscape create the background of its activities. Besides, a public space representing “the scenery of the city” is essential (Siririsak, 2007, p. 5), as it enhances “the spirit of the place” and supports the memories of the

people (Siririsak, 2007, p. 3). In conservation studies, “presentation” refers to “the carefully planned communication of interpretive content through the arrangement of interpretive information, physical access, and interpretive infrastructure at a cultural heritage site” (Siririsak, 2007, p. 3). Presentation may take the form of a variety of technical means, including information panels, museum-like displays, formalized walking tours, lectures, guided tours, multimedia applications and websites, and so on (ICOMOS Charter, 2008). The public space, as a tool for presentation and a contemporary physical intervention in historical cities for recreational purposes, can create an emotional connection between human beings and their environment, signaling a sense of belongingness to the place while presenting the historical texture, further increasing the quality of public life and contributing to the economic success of a city in terms of social and cultural vitality (Vienna Memorandum, 2005).

The built environment and public spaces with experiential, social, and historical values create the appearance of historical cities and affect urban life. The quality of people’s interaction with this environment determines the importance and the meaning they attribute to the heritage items (van der Hoeven, 2020). In other words, the use of heritage sites for leisure helps to revitalize these areas, spread urban identity elements, and raise awareness about the importance and conservation of historical heritage sites among residents (Pinassi et al., 2017). If conservation is properly achieved, then the presentation of facilities that have been preserved can support the continuance of conservation (Baker, 1999), and the public space can create and display the ambiance of a preserved city. Meanwhile, cities that preserve their unique textures and offer actively used public spaces inevitably may enhance the quality of urban life. Presently, conservation is understood as a process—starting at a moment, a place is attributable to cultural values and is distinguishable from others for protection. This process can include any action designed to preserve the cultural significance of a heritage object or place (De La Torre, 2013). Designing public spaces may serve as a tool in conservation processes. In fact, even when indirectly pursued and the results will not be observed immediately, designed public spaces can increase the value of the city in the long term and provide motivation and economic support to the conservation efforts.

2.2. Perception of historical environment with respect to public spaces

A cultural heritage site is specific to a place, and it must be protected by law owing to its historical and cultural values (ICOMOS Charter, 2008). Meanwhile, a historical environment reflects a more specialized area of the environment. It covers all aspects of the past along with both buildings and sites rather than individual monuments in cities. Intangible elements (memories, stories, festivals, or celebrations) and tangible elements (specific areas, structures, or landscape), which contribute greatly to the formation of the spirit of the space, are parts of the historical environment (Erder, 2018). The sense of place is related to how urban residents perceive their surroundings and how their personal experiences occur in urban spaces.

Perception, a concept in which the cognitive and concrete worlds meet, is an active and purposeful procedure of acquiring data from and about an environment (Neisser 1977). Perception occurs by establishing a direct relationship with the environment, and it depends on experience and action in space. People's perceptions may differ on the basis of age, gender, social status, educational level, knowledge of a particular subject, and past experiences and the cultural, religious, and economical structures of a person. According to Lynch (1960), the images generating the urban environment create two-way processes that operate between the city and the urbanite. The users of the city select, organize, and make sense of what they see following their adaptability and goals. The factors affecting people's perception of an urban space involve speed, point of view, and distance (Gehl et al., 2006; Ittelson, 1960).

According to Rapoport (1977), the built environment is formed by organizing spaces that include human activities and meanings; it communicates with its users and organizes their perceptions of time. The environment and its users may entail nonverbal communication, as represented by signs related to the environment (Table 1). Therefore, an appreciation of the signs related to the context of the historical city and the perception of the historical environment with respect to the public space are crucial in maintaining the unique essence of historical cities. Lang (1987) proposes three theories to explain perception: gestalt, transactional, and ecological theories. Transactional theory describes perception as a mutual process between the person and the environment and emphasizes the role of experience, whereas ecological theory describes the senses as "perceptual systems" (Lang, 1987, p. 90). People unravel and make sense of the environment by perceiving environmental details through their bodies and senses; more importantly, an action always affects the body and senses. On this basis, Rapoport's (1990) environmental signs incorporate both transactional and ecological theories, as they include both experiences and senses.

In recent years, the importance of the relationship of historical textures with their surroundings has increased the number of studies that investigate how people value and become attached to their surroundings (van der Hoeven, 2020). Pinassi et al. (2017) attempted to elicit the perception of cultural heritage and recreation areas among older adults. Kiruthiga and Thirumaran (2017) evaluated how the elements of the built environment affect the visual perception of an old Indian town. Darabi et al. (2020) investigated how buffer zones created for the integrity of heritage sites are defined through local perception. Azhari and Mohamed (2012) attempted to reveal the awareness of people of the importance of Malaysian heritage and conservation studies by examining public perception. Ferreira et al. (2018) examined the evaluation of local perception and "community engagement" in determining the elements of historical texture. van der Hoeven (2020) generated a heritage website as a common ground for evaluating how citizens perceive a unique historical urban environment and subsequently attempted to reveal the value attributed to it.

While environmental perception expresses a cognitive process, the image resulting from this process is the perceived environment. In other words, the product that emerges at the end of the environmental perception process is the perceived environment. Understanding and interpreting the environment can manifest through the emergence of signs in the perceived environment. The meaning and perception of these signs (Table 1) as revealed by the environment may differ from person to person or from group to group. In conclusion, environmental data—or the "signs" referred to by Rapoport—help us perceive and make sense of different environments.

3. Methodology

The methodology (Fig. 1) adopted in this study was the mixed method approach (Creswell, 2009; Groat and Wang, 2013) and included both qualitative data obtained from

Table 1 Signs that may influence the meaning and perception of the environment (summarized from Rapoport (1990: 106-107 and 1977: 229-230)).

Theme	Sub-Theme	Examples
Physical Elements	Sight	Form
		Features of spaces
		Light and shadow
		Greenery
		Age
Social Elements	Sound	Order
		Perceived density
		Protection and maintenance
		Topography
		Place, Location
Temporal Differences of Various Kinds	Sound	Quality and changes of sound
		Quality and changes of scent
		People
		Activities and Uses
		Objects
	Long Term Changes	Density, transportation; functions
		Signs, advertisements, cuisines
	Short Term Changes	Change, continuity and stability
		Type of uses (day and night, days of week), intensity of use over time, rhythms of activities

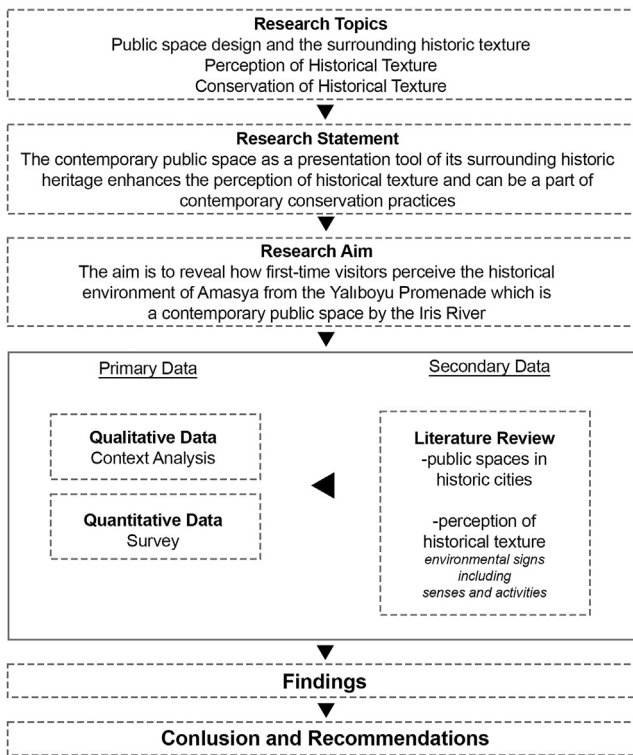


Fig. 1 Methodological framework.

context analysis and quantitative data via a survey supported with a theoretical background. Data collection was performed sequentially, and qualitative data were collected first. The literature about the importance of public spaces in historical cities and the evaluation method of perceptions towards historical fabrics was extensively reviewed. Context analysis was conducted to investigate a specific public space, namely, the Yalıboyu Promenade as the historical city of Amasya, to reveal its formation, evolution, and interaction with both the historical texture and the larger part of the city. The goal of the survey was to reveal how users would perceive the historical texture of Amasya from three different locations on the Yalıboyu Promenade based on Rapoport's environmental signs. The data were collected from official maps and the cultural inventory book (Özdemir et al., 2007) of Amasya Municipality (it contains spatial information about the historical texture), photographs taken during the field trips, and a survey.

The study focused on a particular phenomenon with a site-specific issue. The Yalıboyu Promenade, which is the most important pedestrian road in the city center from where one can observe the Yalıboyu houses, Harşena Mountain, Pontic Tombs, the ruins of the Ottoman Palace, and the fortification walls along the river, was selected as the single case. In the context analysis, a comprehensive description and an analysis of the historical evolution of the case area, including the chronology of conservation interventions, was carried out through the literature review and information gathering using maps, thematic drawings, and photographs.

The aim of the survey was to grasp the different aspects of human perception about the historical environment. The

first two questions were introductory questions for detecting the participants' demographic data. The third question asked about the amount of time that was spent in the area (Table 2). The performance of the promenade was explored by determining how the visitors would perceive, make sense, and experience the historical environment with respect to the promenade based on Rapoport's environmental signs. The main body of the survey contained 31 structured and closed-ended statements about the sensorial, experiential, and spatial attributes of the area (Table 3). In this manner, the degree of agreement/disagreement of the participants with a particular statement could be revealed. S1 and S16, where S denotes a statement, were related to sensory experiences, such as sight, sound, and scent. S17 and S18 entailed an identification of users. S19 and S25 were about activities in the public space, while S26 and S27 entailed an understanding of the existence of objects, such as urban furniture or greenery elements. S28–S31 were related to the evaluation of temporal differences of the public space in terms of the city's characteristics.

Participants, who were first-time visitors of Amasya at the time of the survey, were asked to rate how much environmental signs in each survey location were effective signs by answering a five-point Likert scale. The Likert scale usually asks participants the degree to which they agree with a particular statement. We asked participants to what degree do they agree to a survey statement. The question was as follows: In what degree do you agree or disagree with the following statement? In all cases, a rating of 1 denotes the lowest degree of agreement to the statement, whereas a rating 5 denotes the highest one. As perception can vary depending on the position in space and the distance to a perceived object, three different locations on the promenade were selected to reveal the difference of the perception of users, namely, the pedestrian path at the road level, the pedestrian path at the river level, and the Magdenus Bridge (Fig. 2).

For the research design requirement, a respondent should have visited Amasya and the Yalıboyu Promenade for the first time. In this manner, the effects of perception of previous memories and experiences could be prevented (Rapoport, 1977, p. 26) while isolating the contribution of the promenade to the perception inferred from any other factors. The answers of the participants were recorded on the questionnaire by the interviewer. A three-day face-to-face survey was conducted in July 2019 between rush hours (3 p.m.–5 p.m.) with 75 first-time visitors. As it was not the aim of this study to develop a measurement scale, the environmental signs (Rapoport, 1977, 1990), which are exemplary studies in theory, were formulated as statements. The survey questions were formulated in such a way that each sub-theme of the environmental signs have counterparts. This approach suggests that our pilot survey can be used as the basis of future research entailing a larger sample and the perception of the historical environment with respect to the modern public space of Amasya.

The findings of the statistical analysis were evaluated using IBM SPSS Statistics 22 (IBM SPSS, Turkey). The suitability of the parameters to the normal distribution was evaluated by Kolmogorov–Smirnov and Shapiro–Wilks tests, and we found that the parameters did not have a

Table 2 Introductory survey questions.

Introductory Data	
Age
Gender	[] Female [] Male
Amount of time spent on the promenade	[] Less than 15 min [] Between 15 and 30 min. [] Between 30 and 60 min [] More than 1 h

normal distribution. Given this nature of the parameters, the non-parametric Kruskal–Wallis test was used for the comparison of parameters between the survey locations. Dunn's test was used to determine the location that would cause a difference. In addition, descriptive statistical methods (mean, standard deviation, minimum, maximum, median, and frequency) were utilized. Cronbach's alpha was calculated for the reliability of the scale. The value range was set between 0 and 1. As a rule of thumb, the alpha value should be at least 0.7 for the reliability of the scale (De Vaus, 2002, p. 241). Significance (p) was evaluated at the $p < 0.05$ level. The percentage weights of the statements were calculated and graphed for each location.

4. Context analysis: the Yalıboyu Promenade as part of the conservation process in Amasya

Amasya dates back to at least 3500 years (Özdemir, 1996) and lies in the deep valley of the Iris River in the Black Sea Region of Turkey. The river and the mountains have shaped the city, and the area has not severed its connection to the river despite the rapid urbanization. The most valuable objects of Amasya's historical texture are found in the district comprising Yalıboyu houses, which were built on the Pontus walls by the river, and they are regarded as the first settlement of the city. In addition, the historic houses in this area are the first elements perceived in the city center, and they attract a high number of tourists every year. As shown in Fig. 3, the Yalıboyu houses and the area of the promenade have been in a central position since the establishment of Amasya.

Presently, most residential areas are located on the northern bank of the river, whereas the city's commercial and administrative center is located on the southern bank. Additionally, various monumental structures from the Seljuk and Ottoman periods are located on the south, and they are within walkable distance from the promenade (Fig. 4). Modern commercial and public buildings are also located on the southern part of the riverside.

The Yalıboyu Promenade and the new buildings on the southern bank of the river have the view of Yalıboyu houses, Ottoman Palace, baths and mosques, the Harşena Mountain, the ancient tombs (Hellenistic and Byzantine), the castle on top of the mountain (from Hellenistic Period), and the fortification wall along the river as an urban vista (Fig. 5). In the Yalıboyu house area, the fortification walls belong to the Roman period (Dönmez, 2014). The Alçak Bridge built during the Pontus period was repaired by the Ottomans (Özdemir, 1996). The current appearance of the

Yalıboyu region is highly similar to the one in the Roman period (Göztaş, 2014; Bechhoefer, 1998). Two of the registered buildings in the Yalıboyu region are from the 18th century. Most of the buildings are from the 19th century, some of which were built in the 20th century based on the traditional construction method of using wooden frames with a mud-brick infill (Özdemir et al., 2007). Reinforced concrete apartments were built towards the end of the 20th century. Presently, while some of the registered buildings have been restored in accordance with their originality, some of them have been demolished and replaced with buildings, creating new inventions in terms of historical style (Sotoudeh and Abdullah, 2013).

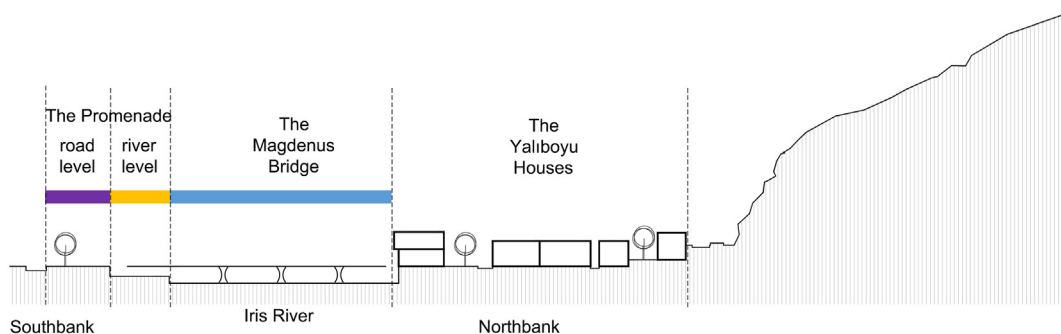
In Amasya, the initial attempts of public space design began in the period of Ziya Paşa in the 1860s. The axis on the southern bank of the river, which is now called the Ziya Paşa Boulevard where the Yalıboyu Promenade is located, was opened in this period along with the demolition of mansions and small shops (Menç, 2014). On this road, a stone wall was built, trees were planted on the upper part of the wall, and the road was transformed into a viewing and recreation area for the public (Serbestoğlu and Temizer, 2015). After the city was hit by a large fire in 1915, the urban texture along this road was lost. Later, the existing narrow road was expanded, and the present Ziya Pasha Boulevard was nearly formed (Seçkin and Dülger Türkoğlu, 2006). The first master plan was drafted in 1945, and Yavuz Selim Square was opened in 1954 (Seçkin, 2004). The formation of Ziya Paşa Boulevard and Yavuz Selim Square created a continuous network that runs along the river between the Beyazit Mosque and the city square.

The rapid urbanization process accelerated after 1965, and it caused the loss of green areas and disrupted the historical texture outside the fortification wall along the river. In the 1970s, conservation efforts to preserve the city's historical heritage and the open spaces surrounding the historical environment gained importance (Seçkin and Dülger Türkoğlu, 2006). The area of Yalıboyu houses was designated as a protected area by the Ministry of Culture in 1978. In 1994, within the scope of the Yalıboyu Houses Improvement Project (YABEP), the private sector and public institutions started to work together, and studies began to call for the restoration and modernization of buildings in the Yalıboyu house area (Bechhoefer, 2001). In 1997, the slums, which formed the background of the Yalıboyu houses, were demolished (Şenol, 2010). The Yalıboyu Promenade became a crucial element in the 1970s, especially for recreational purposes, and the conservation efforts included the Yalıboyu houses. After 1985, the promenade was extended towards the eastern part of the city and called the Pirinççi Promenade (Canik, 2011). In the beginning of the 21st century, the area between the Magdenus Bridge and Alçak Bridge was filled, and the Yalıboyu Promenade was expanded (Seçkin, 2004). The Harşena Mountain and the Rock Tombs of Pontus Kings, which are located opposite to the Yalıboyu Promenade and behind the Yalıboyu houses in Amasya, were included in the tentative heritage list by UNESCO in the mixed category (natural and cultural) in 2015. Thereafter, the promenade area has been in a central location of the city throughout history, and it has undergone various transformations. Presently, the Yalıboyu Promenade has an open space design in the

Table 3 Main body of the survey.

Statements (S)		
Sight	S1	I had no trouble finding the promenade by walking.
	S2	From where I stand, I can observe Yalıboyu houses.
	S3	From where I stand, I can observe monumental buildings (Turkish Baths, Mosque).
	S4	From where I stand, I can observe fortification walls.
	S5	From where I stand, I can observe the King Rock Tombs and the Kızlar Palace.
	S6	From where I stand, I can perceive registered/historical buildings.
	S7	From where I stand, I can perceive modern buildings.
	S8	From where I stand, I can distinguish the structural materials of historical texture.
	S9	I am very close to the historical texture at the point where I stand.
	S10	From where I am, I overlook the whole historical texture.
	S11	From where I stand, I can notice the colors that make up the historical texture.
Sound	S12	There are barriers and fences that block my view of the historical texture landscape.
	S13	From where I stand, I can hear the Iris River.
	S14	Urban noise (traffic, announcements, etc.) at my location is uncomfortable.
Scent	S15	From where I stand, I can hear the sound of trees.
	S16	The smell of the river is not disturbing at my location.
People	S17	The number of tourists is very high around my location.
	S18	The number of local people is very high around my location.
Activities and Uses	S19	Air conditions (wind, sun exposure, etc.) did not restrict my actions at my location.
	S20	During my trip, I came across images, booklets, boards, sculptures where you can get information about the historical environment.
	S21	The variety of urban actions I can make/participate in the promenade is sufficient.
	S22	Before I came to this point on the promenade, I visited the historical sites in the city.
	S23	I felt the need to learn more about the historical texture of Yalıboyu after visiting the promenade
	S24	On the promenade, I came across different coastal uses associated with the urban culture (shops selling handicrafts and local food, boats, motor trips, performance shows by local artists, etc.)
	S25	There were enough seating units where I could rest and observe the historical texture.
Objects	S26	From where I stand, I can observe the open and green areas and plant varieties in the historical texture.
	S27	On the promenade, I experience modern sculptures and reliefs.
Temporal Differences	S28	The view that I observe from my current position strengthens the image of Amasya as a historical and archaeological river city.
	S29	The urban identity of Yalıboyu houses has been protected to the present day without changing.
	S30	The architectural character and scale of the promenade are compatible with the historical environment.
	S31	The modern buildings in the historical site that I have observed are in harmony with the historical texture.

Five-point Likert scale for all statements (1: Strongly Disagree; 2: Disagree; 3: Neutral; 4: Agree; 5: Strongly Agree).

**Fig. 2** Survey locations on the Yalıboyu Promenade.

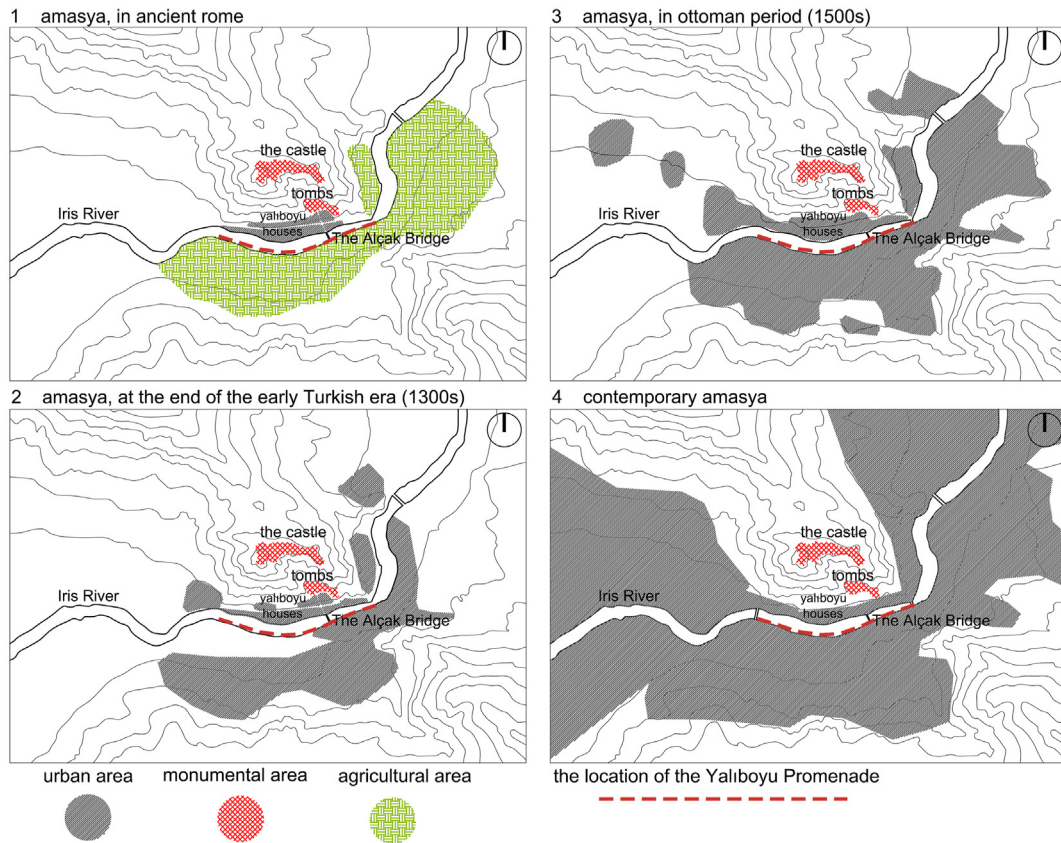


Fig. 3 Development Process of Amasya (1, 2, and 3 redrawn from Kuzucular (1994), 4 is an image produced by Google Earth).

historical texture as an example of contemporary architecture merging the people and the historical texture of Yalıboyu. The appearance of the promenade is the product of contemporary design decisions, except for the old plane

trees stretching along the promenade, İstasyon Bridge (from Seljuks), and Alçak Bridge (Pontus, Ottoman).

In present-day Amasya, the continuous coastline is prominent along the river (Fig. 6), stretching from the west

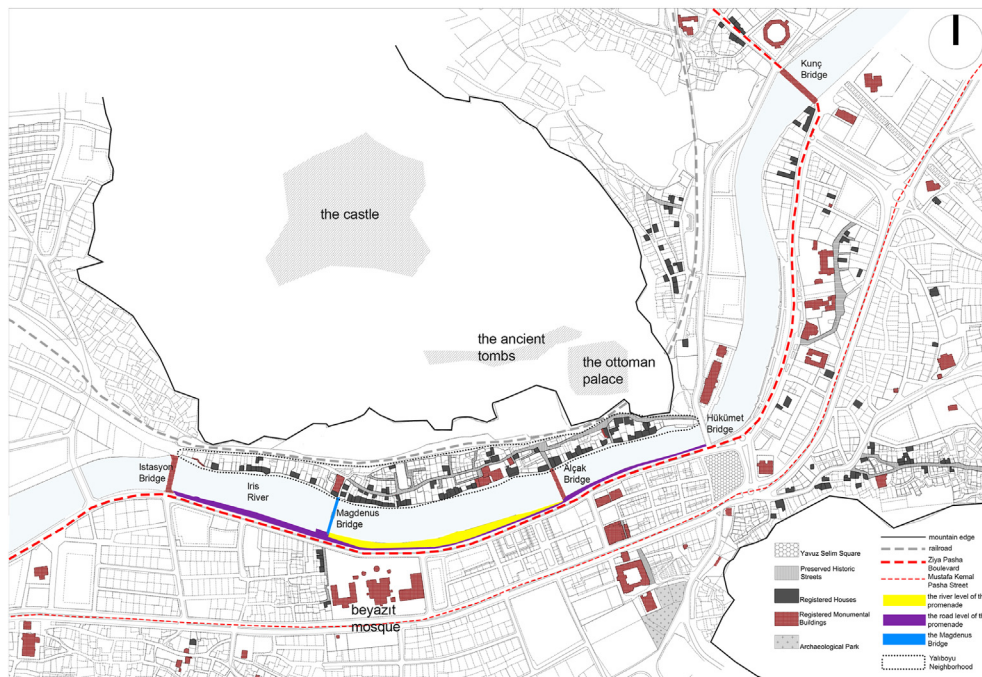


Fig. 4 Context of the Yalıboyu Promenade.

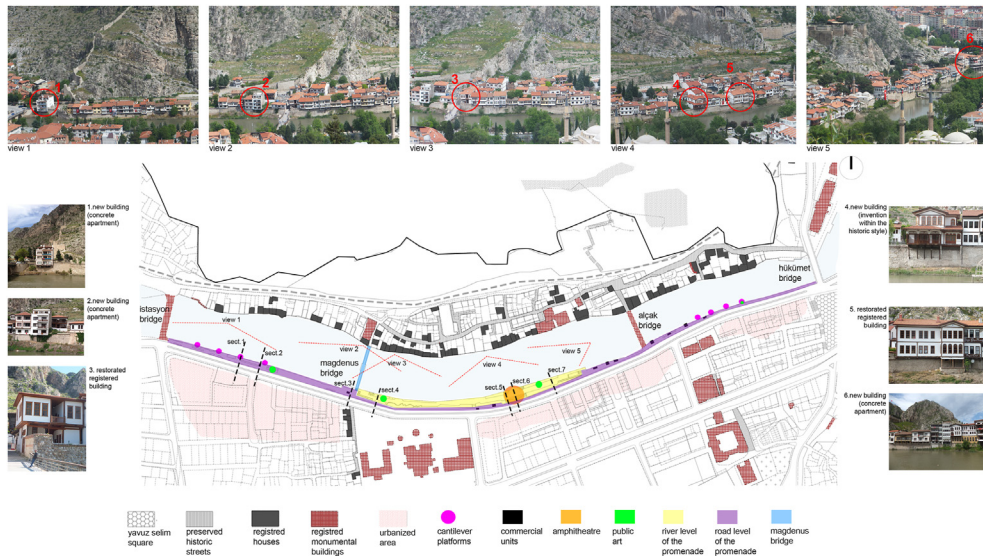


Fig. 5 Spatial differentiation of the Yaliboyu Promenade.

side to the east entrance of the city. The coastal arrangements sometimes surround the historical environments at specific points, such as the Yaliboyu Promenade or the Pirinçci Promenade, and sometimes pass through modern settlements. Given the current needs of the city, the demand for open public spaces is increasing. The Yaliboyu Promenade “draws attention as the only recreational area in the borders of the protected heritage site of Amasya and is an important experimental design for new open public spaces to be planned in historical cities” (Seçkin, 2004, p. 101). Although the importance of the Yaliboyu Promenade area in front of the historical texture has been felt since the beginning of the public space studies, no research has investigated the perceptual relationship of the promenade with the historical texture.

According to Carr et al. (1992), as cited in Carmona et al. (2003), the five primary aspects that people search for fulfillment in public spaces are the following: comfort, relaxation, passive engagement with the environment, active engagement with the environment, and discovery. In the Yaliboyu Promenade, people can relax by participating in activities, such as sports or recreation, given the various spatial arrangements in the area. Passive engagement occurs through “monitoring/watching,” such as observing the walking people, Yaliboyu houses, and background heritage. Active engagement during certain seasons, such as the cherry festival and events during Ramadan, are organized with the active participation of the citizens. The promenade enables people to communicate with the historical environment by providing various spaces to build this connection (Fig. 7). For instance, people are brought closer to the river, thus enhancing the historical texture at different levels. Owing to its unique position and potential for establishing various spatial relationships between the people and the historical texture, the Yaliboyu Promenade has become a highly significant area for both public life and touristic actions. The possibilities of “watching” the view offered by the space are effective when people select a point to perform activities, such as resting and spending leisure time, in public spaces.

Furthermore, the opposite shore of the promenade offers a multilayered historical texture in which history, heritage, and identity jointly intersect (Fig. 6). A squatter settlement was prohibited in the area in the 1950s, and a “more hygienic” city image was created in 1997. The city museum—the Hazeranlar Mansion—in the Yaliboyu house area is an old Ottoman house that presents a section of the daily life of an Ottoman family. Contrary to the multilayered texture of the Yaliboyu house area, modern sculptures are built in the promenade, and they only highlight the Ottoman and Republican Period identities.

Similarly, the successful relationship of the public space with the city’s transportation network affects the value of the space (Carmona et al., 2003, p. 169). At the same time, “how the specific design features support the use of the space is also significant” (Carmona et al., 2003, p. 173). In this regard, the Yaliboyu Promenade merges two major focal points of the city that lay parallel to the most crucial transportation axis, linking the main axis with numerous perpendicular streets and enhancing the viewing experience through the Yaliboyu houses. Accordingly, the promenade increases the appreciation of the public by highlighting the values of the historical environments. According to the ICOMOS Charter (2008), the Yaliboyu Promenade may serve as a part of the conservation process to protect the historical heritage of Amasya. The promenade creates an environment in which the historical texture is observable to people from various perspectives. This aspect is a major contributor to the promotion and presentation of Amasya’s historical heritage given its central location and relationship with the historical texture.

5. Survey study: effects of the Yaliboyu Promenade on the perception of historical texture

The study was conducted with a total of 75 first-time visitors aged between 16 and 61 at the time of the research, in which 34 (45.3%) are men and 41 (54.7%) are women. The

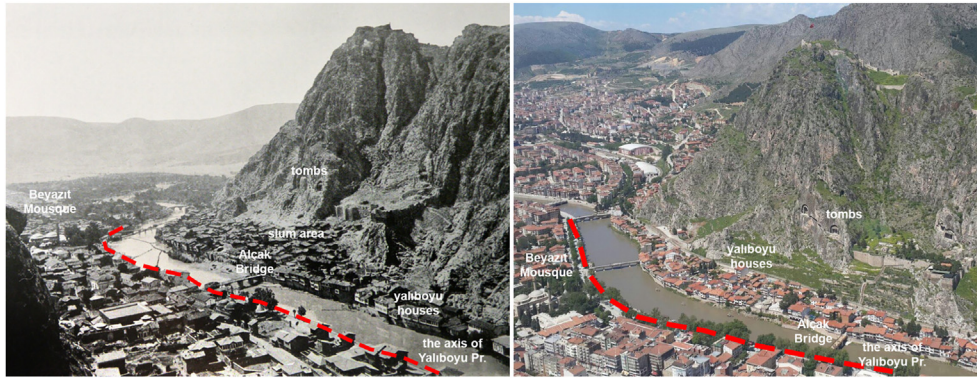


Fig. 6 Left: The Yaliboyu Promenade Area in 1906 (Cumont and Cumont, 1906). Right: Contemporary Amasya from the same perspective.

mean age is 33.45 years. The first study was performed on the Magdenus Bridge, and 11 female and 14 male tourists participated in the survey. The second study was carried out on the promenade's pedestrian path at the river level, in which 12 female and 13 male tourists participated in the survey. The third study was carried out on the promenade pedestrian path at the road level, in which 18 female and 7 male tourists participated in the survey. According to survey results, 68% of the participants spent more than 1 h in the area, 14.6% of them spent less than 15 min on the promenade, 9.4% of them stayed between 15 and 30 min, and 8% of them spent 30–60 min in the area.

5.1. Reliability

Table 4 shows the internal consistency reliability of the respondents based on De Vaus (2002) rules of thumb. The results are larger or equal to 0.7; hence, they are acceptable for this study.

A change in the Cronbach's alpha values was observed between the sub-thematic variables when the reliability analysis was performed according to the sub-themes (Table 5).

The sub-theme scores for "sight" range from 26 to 60, with a mean of 48.53 ± 6.25 and a median of 50. The Cronbach's alpha is 0.724. The sub-theme scores for "sound" range from 3 to 14, with a mean of 8.41 ± 2.61 and a median of 8. The Cronbach's alpha is 0.682. The sub-theme scores for "scent" range from 1 to 5, with a mean of 4.64 ± 0.88 and a median of 5. The Cronbach's alpha cannot be calculated because the sub-theme consists of only one question. The sub-theme scores for "people" range from 2 to 10, with a mean of 6.04 ± 1.59 and a median of 6. The Cronbach's alpha is 0.650. The sub-theme scores for "activities and uses" range from 10 to 35, with a mean of 23.4 ± 5.58 and a median of 24. The Cronbach's alpha is 0.602. The sub-theme scores for "objects" range from 3 to 10, with a mean of 7.51 ± 2.13 and a median of 8. The Cronbach's alpha is 0.481. The sub-theme scores for "temporal differences" range from 6 to 20, with a mean of 14.19 ± 3.34 and a median of 14. The Cronbach's alpha is 0.564. The total scores range from 70 to 144, with a mean of 112.72 ± 14.22 and a median of 112. The Cronbach's alpha is 0.790.

5.2. Means and standard deviations

The difference is statistically significant for the mean scores of "activities and uses" between the survey locations ($p: 0.002$; $p < 0.05$). Dunn's Test was used to determine from which group the significance originated. The mean score of "activities and uses" for Magdenus Bridge is significantly lower than those of the river and road levels of the promenade ($p_1: 0.002$; $p_2: 0.043$; $p < 0.05$). No statistically significant difference is found between river and road levels of the promenade ($p: 0.935$; $p > 0.05$) (Table 6).

The difference is statistically significant for the mean scores of "objects" between the survey locations ($p: 0.000$; $p < 0.05$). According to Dunn's test, the mean score of "objects" of Magdenus Bridge is significantly lower than those of the river and the road levels of the promenade ($p_1: 0.000$; $p_2: 0.012$; $p < 0.05$). No statistically significant difference is found between the river and road levels of the promenade ($p: 0.434$; $p > 0.05$) (Table 6).

The difference is statistically significant between the locations in terms of the mean values of the total scores ($p: 0.009$; $p < 0.05$). According to Dunn's test, the mean of the total score of Magdenus Bridge is significantly lower than that of the river level of the promenade ($p: 0.008$; $p < 0.05$). The difference is not statistically significant between the river and road levels of the promenade ($p: 0.870$; $p > 0.05$). No statistically significant difference is found between Magdenus Bridge and the road level of the promenade ($p: 0.149$; $p > 0.05$) (Table 6).

The difference is not statistically significant between the survey locations in terms of "sight," "sound," "scent," "people," and "temporal differences" ($p > 0.05$) (Table 6).

5.3. Percentage weights of the survey statements

After examining the significant differences between the sub-themes, the answers to the statements were evaluated on the basis of the percentage weights of the responses for each statement (Figs. 8–10).

According to the findings, most participants at the river level had no trouble reaching the promenade on foot (S1). While 48% of the respondents at the road level agreed to

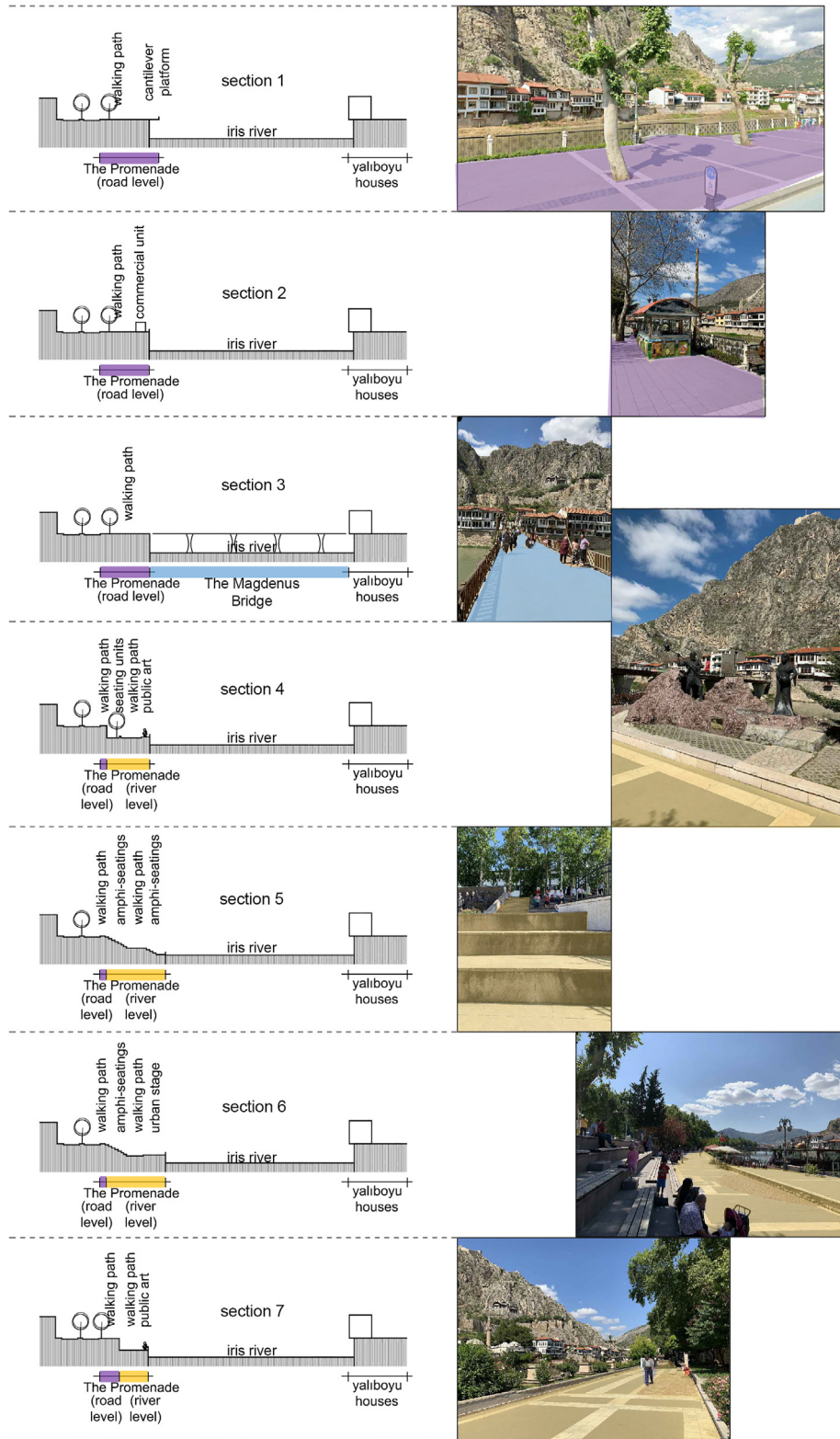


Fig. 7 Different levels and uses of the Yalıboyu Promenade.

this statement, the agreement and disagreement to the statement were equal to that of Magdenus Bridge. In all three locations, 56% of the participants made a positive evaluation of finding the promenade by walking. The

Yalıboyu houses (S2), the monumental buildings (S3), the city walls (S4), the Kings' Tombs, the Kızlar Palace (S5), and other historical buildings (S6) are visually accessible from the three survey locations. By contrast, the perception of

Table 4 Internal consistency reliability of respondents.

Survey Location	Cronbach's Alpha	No. of Items
Road level of the promenade	0.70	31
River level of the promenade	0.78	31
Magdenus Bridge	0.79	31

modern buildings (S7) from the survey locations was low. Most especially, among participants at the road level, only 12% of them stated they can perceive the modern buildings. The participants stated that they could observe the structural materials (S8) and the colors (S11) of the historical texture over the bridge and felt that they were close (S9) to the historical texture of the survey locations. The existence of vista points and the entire view of the historical texture (S10) had a higher percentage for the river and road level items when the perspectives in these areas are enlarged. At the road level, 32% of the participants stated that barriers and fences block the view of the historical texture (S12), while 36% of them reported the absence of these structures. The number of respondents who stated that barriers and fences do not block the view is higher at the Magdenus Bridge and at the river level. The noise values of the river (S13) were lower at the road level of the promenade and at the Magdenus Bridge compared with that at the riverside.

Among the survey locations, 44% of the participants did not find the traffic noise to be disturbing (S14), whereas 36% of them found traffic noise to be disturbing. Furthermore, although big old trees appear along the promenade, the sound of these trees (S15) was not significantly received by the participants. The smell of the river (S16) was not disturbing at any of the selected locations, and the tourist density (S17) was low in each *location*. In addition, the participants could not clearly distinguish between the locals (S18) and tourists in these areas. The climatic conditions (S19) did not restrict the movement of the participants at the road and bridge levels compared with those at the river level. The number of images, panels, and sculptures (S20) that helped to provide information about the historical texture along the river was higher than those at the road level and the Magdenus Bridge. According to the results, in terms of survey locations, 44% of the participants stated that the variety of urban actions was sufficient, whereas 44% of them stated the opposite. Furthermore, 44% of the participants went to the survey locations without visiting the other historical heritage sites in the city (S22). In all locations, most participants felt the need to learn more about the historical texture (S23) of the Yalıboyu houses. Different coastal uses associated with the urban culture (S24) were more common at the river level of the promenade compared with the other two areas. Seating units (S25), modern sculptures, and reliefs (S27) were more common at the river level of the promenade, but this number was less for the other sites, especially the

Table 5 Minimum, maximum, mean, standard deviation, median, and Cronbach's alpha values of the sub-themes and the total score.

	No. of Items	Min	Max	Mean \pm SD	Median	Cronbach's Alpha
Sight	12	26	60	48,53 \pm 6,25	50	0,724
Sound	3	3	14	8,41 \pm 2,61	8	0,682
Scent	1	1	5	4,64 \pm 0,88	5	–
People	2	2	10	6,04 \pm 1,59	6	0,650
Activities and Uses	7	10	35	23,4 \pm 5,58	24	0,602
Objects	2	3	10	7,51 \pm 2,13	8	0,481
Temporal Differences	4	6	20	14,19 \pm 3,34	14	0,564
Total	31	70	144	112,72 \pm 14,22	112	0,790

Table 6 Evaluation of sub-themes and their total scores according to the survey locations.

	Magdenus Bridge	River Level	Road Level	p
	Mean \pm SD (Median)	Mean \pm SD (Median)	Mean \pm SD (Median)	
Sight	46,84 \pm 6,86 (48)	49,68 \pm 6,57 (52)	49,08 \pm 5,05 (50)	0,157
Sound	8,44 \pm 2,12 (8)	8,88 \pm 2,73 (9)	7,92 \pm 2,93 (8)	0,498
Scent	4,68 \pm 0,99 (5)	4,4 \pm 1,08 (5)	4,84 \pm 0,37 (5)	0,169
People	6,36 \pm 1,5 (6)	5,52 \pm 1,45 (6)	6,24 \pm 1,74 (6)	0,153
Activities and Uses	19,96 \pm 6,39 (20)	25,8 \pm 4,73 (26)	24,44 \pm 3,68 (24)	0,002*
Objects	6 \pm 2,04 (6)	8,68 \pm 1,49 (9)	7,84 \pm 1,91 (8)	0,000*
Temporal Differences	13,6 \pm 3,43 (13)	14,08 \pm 3,58 (14)	14,88 \pm 2,99 (16)	0,406
Total	105,88 \pm 15,6 (106)	117,04 \pm 13,33 (119)	115,24 \pm 11,29 (112)	0,009*

Kruskal–Wallis Test *p < 0.05.



Fig. 8 Percentage weights of the survey statements (S1–12) based on locations.

Magdenus Bridge. Open and green areas and plant varieties of the historical texture (S26) could be observed clearly from the river and at the road level compared with that at the Magdenus Bridge. Arguably, the view (S28) observed from all locations supported the historical and archaeological character of Amasya. Most of the participants in all

locations thought that the urban identity of the Yalıbozu houses has survived (S29) to the present day and have not changed. Nearly half of the participants (48%) in all locations found the architectural character and scale of the whole promenade compatible with the historical environment (S30), although some of them were hesitant to



Fig. 9 Percentage weights of the survey statements (S13–24) based on locations.

present an opinion. The modern buildings in the historical site (S31), which are observable from all locations, were mostly found to be compatible with the historical texture.

6. Discussion

This study investigated how people had perceived a particular area of Amasya for the first time. In terms of the

limitations of the study, with the goal of reducing the number of questions of the survey, only informative urban elements and the seating units were evaluated during the survey; the other elements, such as street lighting, paving, and signage, were excluded. Furthermore, as the survey was conducted with first-time tourists of Amasya, intangible heritage items were excluded, and we simply focused on tangible architectural items. The effect of seasons on perception was also excluded in the study.



Fig. 10 Percentage weights of the survey statements (S25–31) based on locations.

Valid and reliable indices should be developed prior to assessing the people’s perception of a historical texture of a public space. A pre-tested assessment is required to construct these indices. The assessment should be conducted as a means of ensuring the compatibility of the results of two studies, particularly when a designed instrument for a present study will be used in a future detailed study given the same conditions. However, due to the COVID-19 conditions, another face-to-face survey in the area could not be implemented, and we also could not obtain permission to perform another phase of the research. Nonetheless, we realized that the first public space interventions in the area date back to the mid-1800s, and a perception research of the historical texture of the area has never been conducted. Thus, we consider this study as an a priori study. Environmental signs (Rapoport, 1977, 1990), which are exemplary studies in theory, have been formulated as statements. The survey questions were formulated in such a way that each sub-theme of the environmental signs has counterparts. Therefore, we accepted this research as a pilot study. Once conditions become safe, sample cases for future studies can be implemented in similar cities and public spaces within different historical areas of the case city.

Considering the reliability values, increasing the number of questions for some sub-themes will produce more

meaningful results. In terms of mean values, the sub-themes of “activity and uses” and “objects” were evaluated more negatively for the Magdenus Bridge compared with the river and the road levels of the promenade. The distinction was unclear between the river and the promenade according to the sub-theme evaluations. This situation necessitated an examination of the percentage weight of each statement to be able to produce much clearer inferences. Meanwhile, although the small sample size may not have provided statistically conclusive results, the indicative findings alongside the additional insights inferred from the context analysis can be interpreted more thoroughly. Increasing the number of survey days and extending the time spent on the area may have helped to increase the sample size.

On the basis of the survey results, the river level appears to be more powerful in terms of presenting the historical texture based on the different perceptual signs compared with the other locations. In general, the central location and various connections to the city network may support the accessibility of the promenade. The hierarchy of spaces was designed to orient users on the historical texture. The visual perception of the historical texture from a wider perspective seems stronger at the river and road levels of the promenade, as the perspectives in these areas are enlarged, and the road level and the riverside of the promenade face the opposite shore from a wider distance.

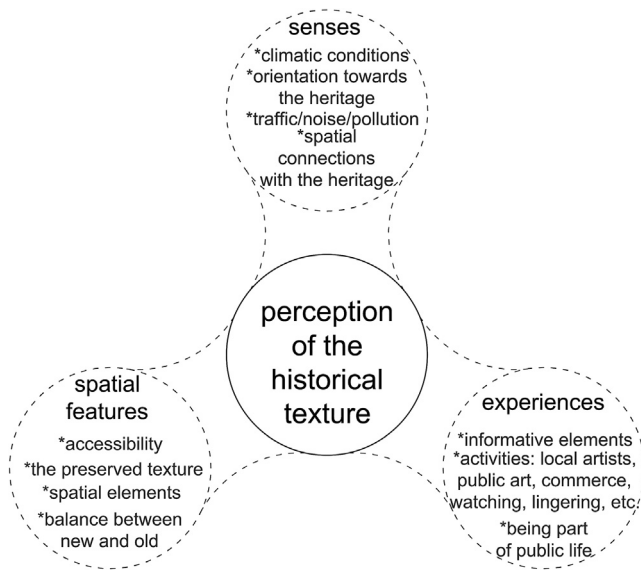


Fig. 11 Holistic Approach for designing public spaces to enhance the perception of historical texture.

Within the promenade, especially on the riverside, the lines of trees generally create an isolated area by breaking the connection to the modern fabric in the southern part. Therefore, the historical texture, river, and greenery have defined the boundaries of the promenade, and they may strengthen the connection of the users with the historical texture. The area of the Yaliboyu houses offers a fragmented perception of the space produced by the promenade. This situation creates various interactions between the historical fabric and the visitors at different spots. The promenade has allowed the people to be at different distances and levels with respect to the historical texture, thus enhancing their perception. For example, the cantilever platforms at the road level and the elevated platforms at the river level bring people closer to the texture. Additionally, as the Magdenus bridge is a circulation path connecting the two points, it offers a perspective in motion to the people. The barriers and fences built for protection purposes should not block the visual perception of the historical texture. Given the context of the existence of historical texture, it cannot be considered separately from the river and the green texture. As for some parts of the promenade, the auditory perception of the river decreases whereas the visual perception increases. The tree line and walls along the promenade help to block traffic noise. The use of a single-lane road, which is parallel to the promenade, also affects traffic density. The cleaning of the river in recent years may have provided comfort in terms of smell. However, the lack of greenery along the river exposes the users to sun and wind. The continuity of informative elements, urban activities, and urban furniture should be ensured throughout the promenade. According to the research results, all of the aforementioned three locations must be enhanced in terms of diversity in urban activities. Participants view the historical fabric to be preserved, and the houses have survived up to the present day. This perception indicates that the conservation efforts thus far have been producing positive results in Amasya.

The unique historical texture facing the promenade seems to promote the exploration of other historic areas of the city.

7. Conclusion

Examining the promenade as part of the conservation process and revealing its effects based on the perception of historical texture may guide the design of public spaces in similar contexts. On this basis, this study has contributed to the discussion of contemporary conservation practices by expounding the critical relationship between the newly designed public space and its surrounding historical context.

The results of the study can help to integrate urban design and conservation efforts in the development of historical cities. Additionally, the results can serve as an example of urban design studies to further reveal the character of a historical city. Some of the strategies used in the Yaliboyu Promenade design can be replicated in future projects with similar contexts. For example, if water is regarded as a threshold between the historical texture and the public space, then platforms can be designed to bring people closer and orient them about the historical texture and water. In this manner, the visual perception of the materials, colors, and details of the historical texture and the sense of hearing the river can be strengthened. Safety barriers and guardrails should not interrupt visual perception. Informative urban elements and seating units should be made available, and a variety of urban actions should be sufficiently planned for the area. The historical texture should be evaluated as a whole along with its artificial (existing modern and historical texture) and natural elements (the Iris River or greeneries).

Throughout the evolution of historical cities, public spaces should be arranged in consideration of all aspects and context, including the periphery of historical environments (Fig. 11). Greenery and sustainability should be considered a part of the process of public space design. The variety of urban functions and the types of spatial relations with respect to the historical texture can be enhanced through the active promotion of public life.

The complexity of the process suggests the production of public space can also be regarded as a process, and the public design of historical environments should engage all senses based on the context for ensuring a holistic perception. The protection of the historical texture ensures the survival of cultural and historical values, and it can contribute to increasing the touristic potential and economic development of the city by helping to create attraction centers in the area. In conclusion, the historical environments should be preserved and transferred to future generations owing to their represented values and contained structures. In consideration of the impact of the environment on humans and its cultural formation, the conservation of historical environments will also increase the consciousness and awareness of the people regarding the historical heritage. The urban design of historical environments should be pleasing; it must promote the historic heritage through the design and provide varied urban experiences for users. More importantly, designers must ensure that the new urban

designs are harmonized with the special character of the historical environment. All these dimensions and the strong perception of the historical texture may increase the success of open public spaces in the historical environment.

This study examined the contribution of public space to the perception of historical texture, its powerful presentation, and the interaction between public space and historical texture. Overall, according to research results, the Yaliboyu Promenade may support the perception of the historical texture as a presentation tool and can be a part of the conservation efforts in Amasya.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

References

- Ashworth, G.J., Graham, B., Tunbridge, J.E., 2007. *Pluralising Pasts: Heritage, Identity and Place in Multicultural Societies*. Pluto Press, London, Ann Arbor, MI.
- Ashworth, G.J., Larkham, P.J. (Eds.), 1994. *Building A New Heritage (RLE Tourism)*, first ed. Routledge.
- Ashworth, G.J., Tunbridge, J.E., 2000. The tourist-historic city: retrospect and prospect of managing the heritage city. In: *Advances in Tourism Research Series*. Pergamon, Elsevier, Oxford.
- Azhari, N.M.N., Mohamed, E., 2012. Public perception: heritage building conservation in Kuala Lumpur. *Procedia - Social and Behavioral Sciences* 50, 271–279.
- Baker, D., 1999. Introduction: context for collaboration and conflict. In: Baker, D., Chitty, G. (Eds.), *Managing Historic Sites and Buildings: Reconciling Presentation and Preservation*. Routledge, New York, pp. 1–23.
- Banerjee, T., 2001. The future of public space: beyond invented streets and reinvented places. *J. Am. Plann. Assoc.* 67 (1), 9–24.
- Bechhoefer, W., 1998. House and urban form in Amasya, Turkey: a paradigm for new neighborhoods. In: Ireland, S., Bechhoefer, W. (Eds.), *The Ottoman House Papers from the Amasya Symposium, 24-27 September 1996*. The British Institute of Archaeology, Ankara, pp. 128–133.
- Bechhoefer, W., 2001. Amasya: the future of tradition. In: Turgut, H., Kellett, P. (Eds.), *Traditional Environments in a New Millennium: Defining Principles and Professional Practice*, International Symposium of IAPS-CSBE Network (2nd: 20-23 June 2001: Amasya, Turkey). Yapı-Endüstri Merkezi, Ankara, pp. 51–54.
- Canik, G., 2011. *The Research of the Landscape Design of Amasya Yesilirmak riverfront: Case study, Yaliboyu and Pirincci Promenade*. Master Thesis. İstanbul Technical University, Graduate School of Natural and Applied Sciences, İstanbul, Turkey.
- Cardoso, A., Brites, J., 2017. Heritage, identity and destruction: “Islamic state’s” actions and its interpretation by the international press. *Herit. Soc.* 10 (3), 259–282.
- Carmona, M., Heath, T., Oc, T., Tiesdell, S., 2003. *Urban Spaces- Public Places: the Dimensions of Urban Design*. Architectural Press, Oxford.
- Carr, S., Francis, M., Rivlin, L.G., Stone, A.M., 1992. *Public Space*. Cambridge University Press, Cambridge.
- Cooper Marcus, C., Francis, C., 1998. *People Places: Design Guidelines for Urban Open Space*. Van Nostrand Reinhold, New York.
- Creswell, J.W., 2009. *Research Design: Qualitative, Quantitative and Mixed Methods Approaches*, third ed. Sage, London, LA.
- Cumont, F., Cumont, E., 1906. *Voyage d’exploration archeologique dans le Pont et la Petite Armenie*. H. Lamertin, Bruxelles.
- Darabi, H., Irani Behbahani, H., Shokoohi, S., 2020. Perceptual buffer zone: a potential of going beyond the definition of broader preservation areas. *J. Cult. Herit. Manag. Sustain Dev.* 10 (3), 271–291.
- De La Torre, M., 2013. Values and heritage conservation. *Herit. Soc.* 60 (2), 155–166.
- De Vaus, D., 2002. *Surveys in Social Research*, fifth ed. Routledge, London.
- Dönmez, Ş., 2014. Amaseia antik kenti. In: Özden, F. (Ed.), *Yar İle Gezdiğimiz Dağlar, Amasya*. Yapı Kredi Publishing, İstanbul, pp. 9–29.
- Erder, C., 2018. In: Aktaş, Y.D., Diri Akyıldız, F. (Eds.), *The Perception of the Historical Environment*. YEM Publishing, İstanbul.
- Ferreira, T.C., Silva, A.T., Pinto, L., 2018. Towards a historic urban landscape approach: community engagement through local population’s perception on heritage values and attributes. In: *Heritage 2018: Proceedings of the 6th International Conference on Heritage and Sustainable Development*.
- Ford, L.R., 2000. *The Spaces between Buildings*. Johns Hopkins University Press, Baltimore.
- Gehl, J., Kaefer, L.J., Reigstad, S., 2006. Close encounters with buildings. In: *URBAN DESIGN International*, vol. 11. Palgrave Macmillan, pp. 9–47.
- Göztaş, H., 2014. Amasya kentinin tarihi gelişimi ve sivil mimarisi. In: Özden, F. (Ed.), *Yar İle Gezdiğimiz Dağlar, Amasya*. Yapı Kredi Publishing, İstanbul, pp. 293–332.
- Groat, L., Wang, D., 2013. *Architectural Research Methods*, second ed. Wiley & Sons, Inc., Hoboken, New Jersey.
- Habermas, J., 1989. *The Structural Transformation of the Public Sphere: an Inquiry into a Category of Bourgeois Society*. Translated by Burger, T. MIT Press, Cambridge MA.
- ICOMOS Charter, 2008. ICOMOS – 16e AG/16th GA – Québec 2008 – Interpretation and presentation of cultural Heritage Sites. http://www.icomos.org.tr/Dosyalar/ICOMOSTR_en0066198001536912401.pdf. (Accessed 12 January 2021).
- Imon, S.S., 2017. Cultural heritage management under tourism pressure. *Worldwide Hospitality and Tourism Themes* 9 (3), 335–348.
- Ittelson, W.H., 1960. *Visual Space Perception*. Springer, New York.
- Jacobs, J., 1992. *The Death and Life of Great American Cities*. Vintage Books.
- Kiruthiga, K., Thirumaran, K., 2017. Visual perception on the architectural elements of the built heritage of a historic temple town: a case study of Kumbakonam, India. *Frontiers of Architectural Research* 6 (1), 96–107.
- Kuzucular, K., 1994. *Historical Development of the Physical Structure of Amasya*. PhD Thesis. ITU Department of Architecture, İstanbul, Turkey.
- Lang, J.T., 1987. *Creating Architectural Theory: the Role of the Behavioral Sciences in Environmental Design*. Van Nostrand Reinhold.
- Lang, J.T., 2005. *Urban Design: a Typology of Procedures and Products*. Elsevier; Architectural Press, Oxford; Burlington, MA.
- Levy, S.A., 2014. Heritage, history, and identity. *Teach. Coll. Rec.* 116 (6), 1–34.
- Lowenthal, D., 1998. *The Heritage Crusade and the Spoils of History*. Reprint (2003). Cambridge University Press, Cambridge.
- Lynch, K., 1960. *The Image of the City*. The M.I.T. Press, Cambridge and London.
- Menç, H., 2014. *Amasya throughout History*. T.C. Amasya Municipality Publishing, Amasya.
- Neisser, U., 1977. Gibson’s ecological optics: consequences of a different stimulus description. *J. Theor. Soc. Behav.* 7, 17–28.
- Özdemir, C., 1996. *Amasya, Arkitekt*, 441. Nokta Publishing, 28-26.

- Özdemir, C., Dođanbař, M., Yancı, A., 2007. Amasya Cultural Inventory. Governorship of Amasya, Amasya.
- Pinassi, A., Van Hoof, H.B., Ercolani, P.S., 2017. Perceptions about cultural heritage and recreational sites among older adults in Bahia Blanca, Argentina. *J. Cult. Herit. Manag. Sustain Dev.* 7 (1), 72–90. Emerald Publishing Limited.
- Pinheiro, F.V., 2017. Redesigning historic cities facing rapid tourism growth: the case of Macao's World Heritage centre and San Ma Lou Avenue. *Worldwide Hospitality and Tourism Themes* 9 (3), 274–288.
- Rapoport, A., 1977. Human aspects of urban form: towards a man-environment approach to urban form and design. In: *Urban and Regional Planning Series*, vol. 15. Pergamon Publishing, Oxford.
- Rapoport, A., 1990. *The Meaning of the Built Environment: a Nonverbal Communication Approach*. University of Arizona Press, Tucson.
- Roberts, P., 2000. The evolution and purpose of urban regeneration. In: Roberts, P., Hykes, H., Granger, R. (Eds.), *Urban Regeneration: A Handbook*. Sage, London, p. 17.
- Savvides, A., 2012. Urban design as a tool for preservation and adaptive reuse of public space in historic districts. In: *1st International Conference on Architecture and Urban Design Proceedings*, 19-21 April 2012, pp. 657–665.
- řenol, E., 2010. *The Urban Development Process and Urbanization Problems of Amasya in the Republican Period*. PhD Thesis. Ankara University, Graduate School of Social Sciences, Ankara, Turkey.
- Serbestođlu, İ., Temizer, A., 2015. Ziya Pařa's activities during the governorship of Amasya in the light of new documents. In: Çoban, A., Babacan, H., Çolak, M., Serbestođlu, İ., Temizer, A. (Eds.), *3rd International Symposium on Merzifon and Amasya Region from Past to Present Proceedings*, 8-11 October 2015. Merzifon, Turkey.
- Seçkin, Y.Ç., 2004. *The Evaluation of the Chancing Usage of the Open Spaces in the Historic Cities: Amasya Example*. PhD Thesis. İstanbul Technical University, Graduate School of Natural and Applied Sciences, İstanbul, Turkey.
- Seçkin, Y.Ç., Dülger Türkođlu, H., 2006. Usage analysis of open spaces of Amasya historical city center. *ITU Journal/a: architecture, planning, design* 5 (1), 15–28.
- Sirisrisak, T., 2007. Historic urban landscape: interpretation and presentation of the image of the city. In: *Paper Presented in ICOMOS Thailand International Symposium 2007: Interpretation: from Monument to Living Heritage*, 1-3 Nov. 2007.
- Skogheima, R., Simon, V.K., Gao, L., Dietze-Schirdewahnc, A., 2018. Place identity with a historic landscape – an interview-based case study of local residents' relationship with the austrått landscape in Norway. *Herit. Soc.* 11 (1), 1–18.
- Sotoudeh, H., Abdullah, W.M.Z.W., 2013. Evaluation of fitness design in urban historical context: from the perspectives of residents. *Frontiers of Architectural Research* 2, 85–93, 2012.
- Strange, I., 1997. Planning for change, conserving the past: towards sustainable development policy in historic cities. *Cities* 14 (4), 227–233.
- Torres Outón, S.M., 2019. Gentrification, touristification and revitalization of the monumental zone of pontevedra, Spain. *International Journal of Tourism Cities* 6 (2), 347–369.
- UNESCO World Heritage Center, 2017. *Operational guidelines for the implementation of the world heritage convention*. <http://whc.unesco.org/en/guidelines>. (Accessed 3 January 2021).
- van der Hoeven, A., 2020. Valuing urban heritage through participatory heritage websites: citizen perceptions of historic urban landscapes. *Space Cult.* 23 (2), 129–148.
- Vienna Memorandum, 2005. *World Heritage and Contemporary Architecture - Managing the Historic Urban Landscape and Decision 29 COM 5D*. <https://whc.unesco.org/archive/2005/whc05-15ga-inf7e.pdf>. (Accessed 12 January 2021).
- Zanini, S., 2017. Tourism pressures and depopulation in Cannaregio: effects of mass tourism on Venetian cultural heritage. *J. Cult. Herit. Manag. Sustain Dev.* 7 (2), 164–178.