



Original Research Article

Reading the Urban Landscape; Spatial Capacity of Territories in the Spatial Organization of the City-Rivers of Khuzestan: A Case Study of Dezful City

Mehdi Hoseinzadeh¹Saba Jafari^{2**}Yegane Ghanbari³Shaghayegh Bagherzadeh⁴*1. Department of Landscape Architecture, School of Architecture, College of Fine Arts, University of Tehran, Iran**2. Department of Landscape Architecture, School of Architecture, College of Fine Arts, University of Tehran, Iran**3. Department of Landscape Architecture, School of Architecture, College of Fine Arts, University of Tehran, Iran**4. Department of Landscape Architecture, School of Architecture, College of Fine Arts, University of Tehran, Iran*

ARTICLE INFO

Received: 03 May 2025

Revised: 31 May 2025

Accepted: 10 June 2025

Online available^{***}: 19 February 2025**Keywords**

Place

Territory

Edge of the city

Spatial organization of the city

ABSTRACT

Many urban development initiatives in Iran have failed since spatial capacities have been overlooked, resulting from reductionist approaches. Dezful city, as an example with incomparable natural, historical, and cultural capacities, has encountered challenges in the interactions between the city and the river. Accordingly, the present study attempts to understand how we can achieve sustainable and place-based development in Dezful city by utilizing the landscape approach and harnessing the spatial capacities of the Dez River. This study attempts to discover and analyze the spatial capacities of the territories related to the Dez River and seeks to provide strategies to fortify the interactions between the city and the river and achieve balanced and sustainable development. This research employed a descriptive-analytical method drawing on field observations, map review, historical document study, and interviews. Analyzing the capacities and challenges of the territories adjacent to the Dez River is the main concern of this study. The results show that the Dez River, in addition to its environmental and economic importance, has a significant role in the spatial organization and identity of the city. However, improper exploitation and inefficient planning have enfeebled the city's interactions with the river. The proposed strategies include reinforcing the river banks as place-making elements, designing social and recreational spaces, and redefining the role of the river in the spatial cohesion of the city. Such strategies can improve the quality of life of citizens, protect the environment, and promote sustainable urban development. This study finally classified and presented its strategies in two main categories.

* This article is extracted from the Research Project entitled "A placed-oriented Approach in the Spatial Planning of Khuzestan Province" which was conducted under supervision of Dr. "Seyed Amir Mansouri" by the research team of NAZAR Research Center in Khozestan province in 2024.

Corresponding author: **Phone: +989391377620, **E-mail:** sabajafari@ut.ac.ir

***This issue was officially designated as Winter 2025, though published with delay in July 23, 2025.

This is an open access article distributed under the terms and conditions of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0/>)

Introduction

Authorities, planners, and experts in various fields have always voiced their concern about development. However, scrutinizing the findings of urban and territorial development plans in recent years indicates that many of the outlined goals in the plans have not been fulfilled. The main cause of this failure can be sought in the paradigms and approaches governing urban studies and planning. Landscape architecture, as an emerging discipline, offers a full-fledged approach to place-based and sustainable development. Such an approach highlights the precise recognition of spatial features and urban landscapes. Unlike traditional approaches that consider place merely as a platform for human activities, place-based development based on a landscape approach provides a general understanding of the various physical, cultural, semantic, and social aspects of this holographic phenomenon through a holistic interpretation of the city. Examining and analyzing the success and failure of urban development plans in many Iranian cities shows that ignoring the identity of place and adopting a reductionist approach to the city has led to the failure of the development model, a decrease in the quality of life, and social and environmental instability.

Dezful city, with its rich and prominent cultural heritage, is one of the exceptional cities of Iran. Its spatial features and urban landscape, including brick architecture, historical structure, and ties with nature (river), have empowered this city with potent capacities for place-based development. Nevertheless, the city has encountered serious challenges due to uncoordinated developments caused by neglecting spatial identity. This study examines how to adopt this approach for place-based development in Dezful and analyzes its significance in maintaining urban identity and sustainability while stressing the reading of the urban landscapes.

Rivers, the most important natural elements in the spatial and physical structure of cities, have played a vital role in the formation and development of cities throughout history. The study of rivers in the spatial organization of Khuzestan cities is mainly important due to their key role in shaping the urban structure and providing environmental resources. Rivers in Iran as natural resources have contributed to the emergence of cities and played a significant role in their economic dynamics,

social interactions, the formation of urban identity, and sustainable development. Despite these contributions, challenges such as climate change, inappropriate exploitation, and poor planning have constrained the positive functions of rivers and have harmed the sustainability of urban development. However, the current position of rivers in the spatial organization of Khuzestan cities and their role in urban development indicators have not been properly outlined. Thus, a detailed investigation of the role of rivers in the spatial organization of Khuzestan cities can help identify spatial capacities and present strategies for balanced and sustainable development.

The interactions between urban environments and rivers bring about complications that significantly disturb sustainable urban development. Cities often face problems in managing the bilateral relationships between urbanization and river ecosystems, leading to issues such as flooding, water quality degradation, river's functional passivity, and biodiversity loss. In addition, the spatial capacities of riverside lands are often underutilized due to improper development plans. Thus, the major concern of the present research is the instability of the relationship between the city's riverbank and the structure of urban spaces, as well as the neglect of edge capacities, which has weakened the associations between the river, the city, and citizens. This study attempts to examine the role of territory in the spatial organization of Dezful city and the challenges of the city-river relationship. It also attempts to identify and detail the spatial capacities of the territory and increase sustainable interaction between the city and the river.

Research Question

1. What is the mechanical capacity of the Dez River as a representative of the territory in the space organization of Dezful?
2. How to take advantage of the landscape and the mechanical capacity of Dez?

Research Objective

This research aims to discover and analyze the spatial capacities of the territories in the river-city based on the approach of spatial and sustainable urban development within the theoretical framework of landscape architecture. Focusing on river edges as key elements in the spatial

organization of the river-city, this research seeks to identify and discover the natural, cultural, and social potentials of these territories to create dynamic, interactive spaces that are appropriate to ecological characteristics. In this research, we also seek to identify the challenges in the relationship between the city and the river and examine the spatial capacities, and we also address issues such as the role of rivers in the formation of cities and determining the territory and its impact on the development of the city. The main goal of the research is to discover the spatial capacities of the territories and provide strategies for a balanced and sustainable development between the city and the rivers.

Theoretical Foundation

• The landscape approach to Reading the City

To read the urban landscape, the landscape approach shifts away from mechanical concepts and seeks to understand the meaning and subjective experience of citizens of the city. In this approach, the urban landscape is not just a physical structure or image; rather, it is the citizens' subjective perception of the city, which is achieved through urban symbols and signs. Drawing upon a holistic and systemic perspective, this approach sees the city as an integrated whole with physical, cultural, and semantic aspects. By stressing the interactions between these layers, this approach gives the urban landscape an independent and overall identity. The design and management of the urban landscape is based on a holistic perspective that scrutinizes all urban elements and layers relative to each other and the entire complex (Mansouri & Farzin, 2019). The city is not just a collection of scattered elements, but a coherent whole whose meaningful connections between its components increase citizens' understanding and their sense of belonging to the environment. The wider connections mean the stronger citizens' understanding of the city and its identity is (Adelvand et al., 2016).

The landscape approach to the city is a holistic approach that links objectivity with subjectivity. Through the lens of this approach, the urban landscape is an objective-subjective phenomenon depending on the interaction between humans and their environment. The perceptions of citizens and the city form do not have any meaning on their own and are only completed in interaction with each other (Zandieh & Goodarzian, 2014). One

of the merits of this approach is the integration of temporal, spatial, and natural aspects in understanding the city. The urban landscape is the result of human interactions with the natural and historical environment that has been formed over time. The link between nature and history is visible in the urban landscape, transforming it into a dynamic phenomenon connected to the past and present (Mansouri, 2005). Consequently, the urban landscape only gains meaning through the connection between the body, the mind, and events, and the landscape approach, emphasizing the interactions among humans, the environment, and history, provides a holistic understanding of the city, transforming it into a living and dynamic phenomenon.

• Conceptualization of place

Place refers to a meaningful space defined by the social actions occurring in the space (Logan & Motlotch, 1987, 47). Examining the place where people's social behaviors emerge is one of the main concerns of phenomenological research in the field of spatial and human studies. In his book "Place and Placelessness," Relph (1976) describes place as a phenomenon that is defined at the intersection of three components: physical, activity, and semantic. Emphasizing the phenomenological approach, he argues that understanding the meaning of place has a higher position than its physical and functional dimensions, which makes its achievement much more complex (Tuan, 1977) (Fig. 1).

Canter (1977) offers a tripartite model for place that includes activities, mental images, and physical forms. Although he highlights the impact of physical forms on the psychological

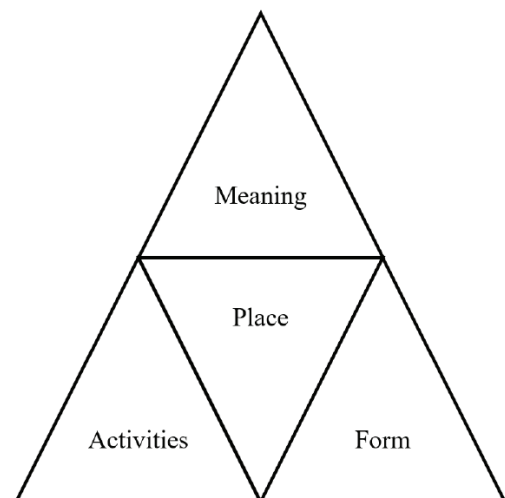


Fig. 1. Place-forming components. Source: Authors based on Tuan, 1977.

and behavioral understanding of space, he also emphasizes the individuality of the perception of space and believes that the perception of place is strongly influenced by individual differences in experience and interpretation. Gustafson (2001, 12) also analyzes the meaning of place in a three-dimensional framework including “person”, “others”, and “environment”. He believes that meaning is not simply the result of one of these dimensions, but the product of their interaction and mutual relationship. Rapaport (1982, 93) highlights the role of culture as a meaning-making system in the development of the meaning of the environment. Culture, as a set of shared values, beliefs, worldviews, and institutions, is a tool through which individuals transform meaningless spaces into meaningful places. He considers culture to be one of the indirect but influential foundations of human psychological life and emphasizes that understanding human perception of the environment is not possible without analyzing cultural contexts. Therefore, the actions and reactions of individuals towards places are a reflection of the meanings they perceive from them. In his book “A Theory of Good City Form,” Lynch (2008, 76) sees meaning as the connection between the physical elements of space and the mental and cognitive structures of the observer. He believes that what makes a place meaningful is not simply the physical characteristics, but the way these elements are mentally interpreted and decoded by the users of the space; interpretations that are rooted in the culture, experience, and situation of individuals.

According to Gibson (1950), human-environment interactions can be classified in six semantic levels, ranging from basic physical perception to symbolic and ontological concepts. These levels include immediate and apparent meanings, functional meanings, instrumental meanings, evaluative and emotional meanings, denotative meanings, and symbolic meanings.

To delve into the sensory and emotional experience of place, Shamai (1991) proposed three levels: belonging, attachment, and commitment to place. Manzo (2005, 84) also presented the emotional relationships between humans and place, highlighting that the perception of the meaning of place depends on the personal experiences, cultural, and social backgrounds of individuals. Simply put, a place can imply either positive or

negative meanings depending on how individuals experience that place.

Accordingly, a review of theories related to the concept of place shows that people’s perception and experience of place can include various meanings, depending on how they relate to and interact with the environment (Lak & Jalalian, 2022).

• Urban territories and edges in river cities

“Edge” is an element of the urban landscape that evokes a discernible extension in the mind of citizens. The urban edge serves as the most significant characteristic used for identifying space on a micro scale (Yarahmadi, 2010). Urban edges, either natural or artificial, are linear elements that play a role in setting boundaries, improving the urban landscape, and organizing the city’s space. The adaptation of urban edges to natural features such as rivers contributes to the creation of dynamic and event-driven spaces and leads to a better quality of urban life (Ebrahimi Dehkordi, 2019). While in the initial definitions, the edge was regarded as a linear element, in reality, this territory, such as an edge, can include a range or area of land. The territory as an edge distinguishes an area with specific characteristics from the adjacent areas (Mansouri et al., 2019, 52).

The water edge of the city is the boundary where water and the city meet, and it is the margin where humans and water, city and ecology, culture and nature, interact. A context that expresses multifaceted interactions with functional contradictions and similarities, including natural processes on one side and human needs on the other (Sashurpoor & Elyasi, 2015). Urban territories and edges in river cities are instrumental in the spatial and social structure of cities due to their unique natural and cultural characteristics. In river cities, rivers, as natural elements, define physical and social boundaries and affect the territories and the overall structure of the city. These natural boundaries help to strike a balance between development and the environment by limiting the physical expansion of cities. In addition, they set the grounds for social interactions by creating collective urban spaces. At the same time, cities, as living and dynamic entities, are continuously changing and evolving under the effect of natural and human factors. By defining distinct territories, rivers contribute to the urban landscape aesthetically and play a fundamental role in organizing urban spaces (Bell, 2011).

The interactions between humans, rivers, and

cities in urban development processes are indisputable. Human needs in urban environments are met in various ways and through relationships with natural elements such as rivers. Changes in any of these factors can significantly affect the others and ultimately lead to the redefinition of urban territories and edges. Thus, river cities can potentially contribute to sustainable and spatial development in which the balance between humans, nature, and the city is maintained (Saedian et al., 2011).

• **The contribution of rivers to urban history and development**

Rivers have long had a fundamental role in developing cities and have been regarded as one of the factors that have contributed to developing human attachment to the land by meeting basic needs. These vital arteries are crucial factors in finding locations, creation, and expansion of cities (Haeri & Masnavi, 2023) and have influenced the location and connection of urban spaces and have directly affected the texture and appearance of cities (Saedian et al., 2011). The presence of rivers in urban space is not only important as a natural structure and a sustainable ecosystem, but also plays an important role in the main skeleton and form of cities (Haeri & Masnavi, 2023) as well as in achieving a desirable and sustainable urban space (Antrop, 2006).

Rivers, as prominent and powerful elements in the urban ecosystem, can control the health of the city and its spatial, visual, and physical organization. Apart from their ecological function, these natural elements establish a deep connection with citizens by shaping the identity of cities and strengthening the sense of belonging and history

(Azizi, 2002; Sabokro et al., 2024). Meanwhile, rivers play a role as the main infrastructure for economic prosperity and social interactions in the cities that have formed in their vicinity. These interactions have led to the definition of river urban edges that are not only functionally but also culturally and socially linked to the identity of the city (Hemmati & Amiri, 2016). Urban edges that are formed in connection with rivers, due to their strategic location, have a high capacity to become lively, event-oriented, and interactive spaces. These edges create dynamic boundaries between urban territories that, while enhancing the urban landscape, provide a space for the formation of social activities (Ebrahimi Dehkordi, 2010). Therefore, rivers are not only life-giving natural elements, but also an important element in the spatial organization of cities (Table 1).

Research Methodology

This research is a case study adopting a descriptive-analytical method to examine, recognize, and interpret how the territory can affect the reading of urban landscapes. This study drew upon the “Iranian City Spatial Organization Theory” and adopted a holistic perspective. Instruments such as field observation, map review, historical document study, and interviews were used to collect the data. The city of Dezful was examined as a sample of river cities in this research. The Dez River was also selected as an indicative element in shaping the city and an influential edge on the city’s structure. The spatial analysis was conducted on the city’s spatial organization to analyze the capacities and challenges in the territories related to the river. In this way, the role of the river in sustainable

Table 1. Evaluation criteria for the role of the river as an urban territory in sustainable urban development. Source: Authors.

Evaluation criteria	Description
Human-environment interaction	- River connectivity with urban spaces and citizens’ daily lives - Facilitating social interactions on the urban edges of the river
Aesthetics and urban landscape	- The role of the river in strengthening the city’s appearance, landscape, and identity - The coordination of the river with the spatial and visual organization of the city
Livability and quality of public spaces	- Citizen presence along the river - Creating lively, dynamic, and event-driven spaces along the riverbank
Ecological dimensions and environmental sustainability	- Maintaining a balance between urban development and river ecosystem protection - Role of rivers in improving the quality of the urban environment
History and urban identity	- The contribution of the river to the formation and continuation of the city’s identity - The relationship of the river with collective memories and cultural values
Spatial structure and urban territory	- The role of the river in defining urban territories and spatial organization - The impact of water edges on the integrity and structural coherence of the city
Economic and functional role	- The impact of the river on the economic prosperity and sustainable development of the city - Optimum use of spaces adjacent to the river for economic and tourism activities

urban development and the spatial organization of Dezful was investigated, and practical strategies were provided.

Analysis and Discussion

• The contribution of the river to the spatial organization of Dezful city: Examining the impacts of the river on the formation of urban territories and edges

Dezful city's core was initially formed on the banks of the Dez River, and the first residential core of this city was established in the neighborhood of the riverbank. The initial core of the city was the point from which the city gradually expanded. As a natural and vital element, this river had a key role in the formation and spatial growth of this city, and its impacts on different dimensions of urban life, such as economic, social, and environmental aspects, and even the urban landscape, cannot be denied. Although this river serves as the natural edge and boundary of the city, this boundary has not had a merely divisive function, and, as a natural and vital element, it played a key role in the creation and spatial development of Dezful. As can be seen in Fig. 2, the initial core of this city was formed on one side of the river, and this natural element, as the main source of water supply, has been a factor in attracting people and developing settlements in this area. In the early stages, the river was the main axis for the construction of the

city's main core and urban neighborhoods, and the creation of public spaces, and early settlements, markets, and historical houses were formed in its vicinity. Dezful's historical dependency on the Dez River turned the city into an important center for trade, agriculture, and economic activities, and played a vital role in the spatial organization of the city. The Dez River also redefined separate territories in the city over time and created a semi-radial development pattern for Dezful. The physical growth of the city was carried out to maximize the use of the river's edge and establish itself on its periphery, and the river is not an obstacle to development. However, the old fabric of the city, which is located near the river, remains the historical and economic heart of Dezful and has preserved its cultural and historical identity.

This river is not only a linear element, but also an area with multifaceted capacities contributing to organizing the physical, identity, and functional structure of the city. Counter to a merely linear view of the edges, the river area encompasses a range of urban spaces that have ecological, cultural, and social qualities. Serving as a border, a connector, and a landscape element all at once, this river has played an active role in the development of its urban territories. As mentioned in the theoretical foundations, edges in the city can have identity and distinctive characteristics, especially when they coincide with natural

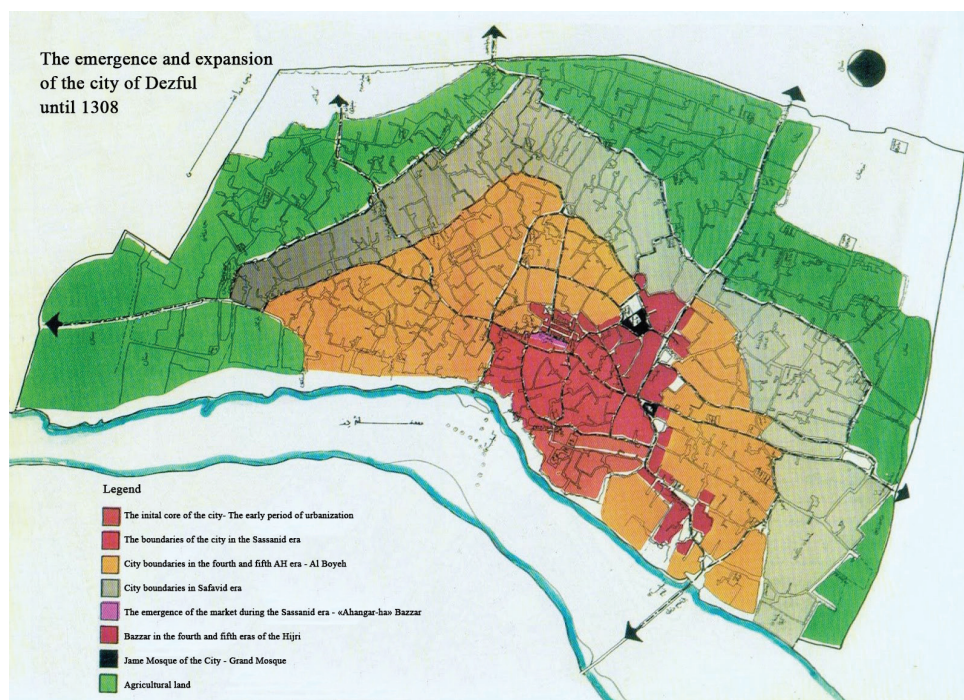


Fig. 2. Map of Dezful County - from its emergence to 1929. Source: Naeima, 1997.

elements such as rivers. For this reason, the presence of the river has led to the creation of spaces with high visual quality, environmental capacity, and the ability to host social activities; territories that have acquired a special place due to their proximity to water and have provided a platform for interaction between humans, culture, and nature. These spaces, relying on the historical interaction of people with the river, have become event-driven and dynamic platforms. However, recent changes in urban development methods and the lack of attention to these capacities have led to the loss of some of the traditional links between the city and the river. From a place-based planning perspective, the revitalization of these urban edges and the redefining of the role of the Dez River in the spatial organization of Dezful is not only a necessity for improving the quality of the urban environment, but can also lead to the strengthening of spatial identity, environmental sustainability, and the formation of vibrant public spaces. Therefore, the Dez River is an element beyond a natural boundary, but also a meaningful and identity-building structure in the body and soul of the city of Dezful.

Nevertheless, in recent decades, the impacts of human activities have been visible on this river. The construction of dams, overexploitation of sand resources, and contamination caused by urban sewage and agricultural wastes have directly affected the river ecosystem and its

environmental quality. Such changes have damaged both the natural ecosystem and the urban landscape of Dezful and decreased the visual and environmental qualities around the river. Recently, urban development has been carried out on both sides of the river, regardless of the characteristics of the location and the natural features of the river. Consequently, rather than strengthening spatial cohesion, the Dez River has become a factor in separating the eastern and western areas of the city in some parts. Also, over time, due to environmental imperatives and flood risks, a gradual distancing from the riverbank has been observed in urban planning. Such structural changes have led to the formation of two separate cores on both sides of the river, with the connection between these two areas being established mainly through urban bridges, but these bridges are more of a traffic aspect and are less considered as social and spatial elements (Fig. 3).

• Spatial capacities of territories

Appreciating the spatial structure of the city in its historical context can contribute to the revival and revitalization of the old texture of the city. The reason is that in most cities, the main structure and foundation depend on the skeleton of their old part. The extension of the historical life of the city requires the regrowth of the city from its inside. Given the presence of the market and commercial activities, historical and cultural identity, tourist attractions of unique buildings within the texture,



Fig. 3. Map of the primary and secondary cores of Dezful city. Source: Authors based on Google Earth.

and the presence of the Dez River bank, the old texture of Dezful can create opportunities to attract residents who have an age-old attachment to the texture and can renovate and improve it (Panah Yazdan & Jalili, 2016).

The urban territories of Dezful, especially those located along the edge of the Dez River, the most important structural and identity elements of the city of Dezful, have substantial spatial capacities for redefining the functions and enhancing the quality of public spaces. Such capacities have been fortified in conjunction with elements such as accessibility, physical continuity, visual connection with the river, visual exquisiteness, the presence of historical elements such as bridges and mills, deep cultural and social bonds with citizens, and local identity elements. The structure of traditional neighborhoods, historical paths leading to the river, and open areas around the river edge facilitate utilizing the edge to revive urban spaces with vitality and meaning. Such territories can serve as a connecting link between the different physical, social, and environmental layers of the city. In addition to historical and functional characteristics, the spatial capacities of Dezful's ancient fabric territories also depend on their adaptability to contemporary needs. These spaces, which simultaneously possess collective memory and physical continuity, can serve as a platform for redefining the association between the city and the river, boosting environmental quality, and consolidating social bonds.

Apart from that, the structural elements such as passages, collective spaces in connection with the river, and paths leading to the river can contribute to the functional reorganization of territories. In doing so, with minimal interventions, spaces with new functions (cultural, tourism, services) can be placed in the heart of the traditional structure. Moreover, the proper accessibility of territories and proximity to functional nodes such as the market enhance the capacity for human presence and support social interactions. Also, many of these territories can become public open spaces that can promote the coexistence of different social functions and strata by creating public space in the historical context.

• Data-driven analysis of the potential for spatial and sustainable development

The sense of continuity of identity and life in historical cities is one of the most valuable accomplishments of development programs. A

spatial and sustainable development approach to the basic elements of the land can enable place-based development that is based on the recognition of the land as a "place" (Mansouri, 2024). For this reason, the spatial capacities of territories have a major impact on spatial and sustainable development because these capacities reflect the environmental, social, economic, and cultural characteristics of each territory. Analyzing these capacities requires identifying the strengths and weaknesses of territories and adapting them to development needs. Urban edges that have formed in the neighborhood of the river have become centers for recreational, tourism, and cultural activities, benefiting from the environmental and aesthetic potential of the river. These edges play the role of a bridge between the city and nature due to their strategic location and provide a space for social interactions. However, the lack of comprehensive planning and efficient management can lead to the destruction of these edges and the loss of the balance between urban development and environmental protection. Therefore, the Dez River is not only a natural element, but also a constructive factor in the formation of the identity and dynamics of the spatial organization of the city of Dezful.

For instance, natural resources, critical infrastructure, and economic activities contribute to spatial development. Meanwhile, a detailed analysis of these capacities can lead to principled planning for the allocation of land uses and resource management and make the spatial distribution of activities proportional to the ecological and social capacity of each territory. In addition, to attain sustainable development, the spatial capacities of territories need to be used in a way that maintains a balance between economic exploitation, social justice, and the environment. This requires an all-inclusive and interdisciplinary approach that manages threats while identifying opportunities. In particular, results based on the analysis of spatial capacities can help identify areas with priority for development, and decrease negative impact on the environment and the quality of life of people while contributing to urban and economic growth. Eventually, tapping into these potentials within the framework of long-term and flexible policies can ensure harmonious and sustainable development. The city of Dezful and the Dez River, as its most significant landscape element, have an appropriate capacity for sustainable and place-

based development owing to its unique natural, historical, and cultural features. The historical and cultural history of the city and the long-standing connection of people with the urban margins, especially around the river, create a suitable platform for consolidating the interactions between nature, history, and society (Fig. 4). For this reason, the role of the riverbank of the city is beyond a natural boundary. As a place-making and dynamic element, the riverbank creates a place for citizens to gather, carry out social activities, and connect with nature. The micro-social activities of citizens on its edge promote the dynamism and vivacity of the city. Such a territory, if properly guided and participatory, can become an arena for social interactions, solidifying local networks and promoting a sense of belonging among residents. In addition, the physical capacities hidden in the vicinity of the river can be a platform linking historical spaces and contemporary needs. In this regard, adopting capacity-based and flexible design approaches can pave the way for sustainable and place-based development while protecting environmental values. Such development protects the city's historical identity and satisfies the needs of the people today. For example, historical bridges

and water structures that are an inseparable part of the city's texture and identity indicate a deep bond between the history and natural context of this region. These features provide a platform for place-based development that is compatible with environmental and social criteria, but also help to revive the identity of Dezful and reinforce the interactions between nature, history, and society. Finally, the analysis of the spatial capacities of the Dez River territory shows that this river is not just a natural element, but it is a dynamic force contributing to the spatial organization, identity, and sustainability of the city of Dezful. A deep understanding of these capacities and orientation of urban development based on local characteristics enables the protection of natural and cultural heritage and creates a platform for enhancing the quality of life of citizens and creating livable, dynamic, and sustainable spaces. Thus, future policies must align the development of the city of Dezful with the Dez River based on a place-based, flexible, and participatory approach.

Conclusion

The Dez River, the vital element of the city of Dezful, has a significant role in forming the identity, spatial organization, and development of the city. An analysis of the criteria from the theoretical foundations in conjunction with the assessment of case studies based on those criteria shows that the river is not just important as a natural resource meeting economic and environmental needs. This element can create social spaces, strengthening the urban landscape and spatial cohesion of cities. Though the Dez River is potentially beneficial, its ecological and aesthetic potential has been threatened by challenges such as dumping urban wastewater into the river, climate change, inadequate connection of the secondary core of the city with the river, and inappropriate planning. As a result, the interaction between the city and the river has been disrupted. However, despite these changes, the Dez River is still the backbone of the city of Dezful.

Finally, redefining the role of the Dez River in the spatial organization of Dezful can be considered as one of the main axes of sustainable urban development. By utilizing the ecological, visual, and social capacities of the river and enhancing its role in connecting the eastern and western parts of the city, it will be possible to recreate space and



Fig. 3. Riverside collective spaces have the potential to offer quality space and foster interactions among nature, history, and society. Photo: Mehdi Hoseinzadeh, 2025.

improve the quality of urban life. In doing so, the Dez River can transform from a passive natural element into a dynamic and active element in the spatial organization and cohesion of the city. For instance, using the opportunities available on the riverbank, including exploitable lands, can help revive the communication and pivotal role of the Dez River and transform it into a vibrant and dynamic urban axis that can bring different parts of the city together and boost the quality of its spatial organization.

Thus, exploiting the capacities of the Dez River reserve through a holistic and landscape approach can be an essential strategy for invigorating cultural-natural identity and creating constructive interactions among humans, the city, and nature. This approach highlights the importance of aesthetic, ecological, and social values of the river and seeks to create a dynamic and convergent space between the river and the city. The river reserve, as one of the most important public territories, has exceptional capacities in enhancing urban vitality, enhancing environmental safety and resilience, and rebuilding the relationship between citizens and nature.

In addition, the use of the inner-city banks of the Dez River serves as a space for social and cultural activities and acts as a platform for promoting the interaction of the natural landscape of the river with the city, and reinforcing the sense of belonging of citizens to their living environment. Suggested strategies for using edge capacities include designing spaces that are permeable to the river, allowing citizens to participate and carry out social activities, creating connecting paths between the two sides of the river to strengthen spatial and social cohesion, and preserving and restoring the vegetation cover of the river walls. Finally, by considering the interrelationship of

the layers of ecology, culture, and society, the landscape approach can pave the ground for enhancing the quality of life of Dezful citizens and rebuilding a meaningful connection between the city and the river. This territory can serve as a model of sustainable and spatial development on an urban and regional scale (Table 2).

Reading the urban landscape is a powerful tool for place-based development. Emphasizing the precise analysis of the elements, structures, and units of the urban landscape helps to truly understand the city, preserve identity, reinforce the sense of belonging, and improve social and environmental sustainability. The elements of the urban landscape, as signs of human interactions with the environment over time, actually provide us with signs of people's (citizens') perception of the city. Reading these signs in Dezful helped us address the misunderstanding of the city. According to the observations and studies conducted by landscape architecture experts on a field trip to the cities, the results of the studies can be summarized as follows:

The Dez River, as the main component of the urban landscape, on which the existence of the city (the reason for its existence) also relies, is instrumental in shaping the structure of the city and the interconnection of the elements and unifying the units (whole) of the landscape of Dezful. The Dezful development model will be balanced and sustainable if it considers the city as a whole of its main components.

The construction of new roads and bridges, the expansion of urban territories and spaces, as well as the development of the tourism industry, should be seen as positive consequences and outcomes of place-based development, not its goals. A one-sided focus on these measures, without considering the landscape system and the

Table 2. Current and desired status of the territory (The Dez River) in the spatial organization of Dezful city and proposed solutions.
Source: Authors.

The current state of the territory in spatial organization	The desired state of the territory in spatial organization	The state of proposed strategies concerning the spatial capacity of the territory
- The Dez River, a purely physical and functional element serving as a separating element and border between the two sides of the river	- The boundary that holds meaning and existence	- Invigorating citizens' sense of belonging and familiarity
- Improper use of existing capacities in the city territory (Dez River)	- Spatial and place-making elements	- Developing spatial activities associated with the river - Maximizing physical and semantic capacities to take advantage of the Dez River
- Lack of proper communication with the city's spatial organization	- Systemic and sustainable ties with the spatial organization of the city	- Redefining the Dez River as a vital and regulating element in the spatial organization of the city

overall identity of the city, can upset the structural balance of the city and lead to development instability and undesirable consequences. This study finally presents suggested strategies in two main categories:

A. Conservation strategies:

- Reproducing and reinforcing the semantic layers of the city to preserve its identity and memory role.

- Determining the privacy, protection, and restoration of the landscape of historical textures, sites, and buildings, especially in relation to the river.

B. Development-oriented strategies:

- Enhancing the role of the Dez River in the spatial organization of the city and its spatial-functional development.

- Gaining a deeper insight into the whole city, including elements, relationships, structures, and meanings to boost economic, social, and environmental infrastructures as a coherent system.

- Organizing spaces for social interaction and encouraging the presence of citizens in the city.

- Broadening the scope of activities to address the needs of different socio-economic groups.

- Enhancing greenery and refreshing the environment, aligned with the climate of the region.

Conflict of Interest

The authors declare that there was no conflict for them in conducting this research.

References List

- Adelvand, P., Mousavilar, A., & Mansouri, S. (2016). "Urban art" as a landscape phenomenon in today's society. *Bagh-e Nazar*, 13(39), 39–44. https://www.bagh-sj.com/article_14940.html
- Antrop, M. (2006). Sustainable landscapes: contradiction, fiction or utopia?. *Landscape and Urban Planning*, 75(3-4), 187–197.
- Azizi, M. M. (2002). توسعه شهری پایدار، برداشت و تحلیلی از دیدگاه‌های جهانی [Sustainable Urban Development: A Perspective and Analysis of Global Views]. *Soffeh*, 11(33), 14–27. [in Persian]
- Bell, S. (2011). Green/Blue Network; Planning for People Friendly Cities. *MANZAR, the Scientific Journal of Landscape*, 3(14), 88–95. https://www.manzar-sj.com/article_108.html?lang=en
- Canter, D. (1977). *The Psychology of Place*. St. Martin's Press.
- Ebrahimi Dehkordi, S. (2019). نقش لبه‌های شهری اکولوژیک در کیفیت فضای شهری [The role of ecological urban edges in the quality of

urban space]. *Architectural Studies*, 3(16), 200–204. <https://www.sid.ir/paper/526954/fa> [in Persian]

- Gibson, J. (1950). *The perception of the visual world*. Houghton Mifflin.
- Gustafson, P. (2001). Meanings of place: Everyday experience and theoretical conceptualizations. *Journal of environmental psychology*, 21(1), 5–16. <https://doi.org/10.1006/jevp.2000.0185>
- Haeri, S., & Masnavi, M. R. (2023). Analyzing and developing strategies for the ecological restoration of urban rivers in the framework of ecological urbanism. *MANZAR, the Scientific Journal of Landscape*, 15(62), 54–71. <https://doi.org/10.22034/manzar.2023.356492.2204>
- Hemmati, M., & Amiri, A. (2017). Karun's lips: Etiology of an urban edge—Evaluation of urban approaches and actions on relationship of Ahvaz city and Karun River. *MANZAR, the Scientific Journal of Landscape*, 8(37), 22–31. https://www.manzar-sj.com/article_47212.html
- Lak, A., & Jalalian, S. (2022). The experience of the meaning of place in urban spaces: Using qualitative content analysis to define the meaning of Bagh-e Ferdows. *Journal of Iranian Architecture Studies*, 7(13), 71–87. <https://doi.org/10.22052/1.13.71>
- Logan, J. R., & Molotch, H. L. (1987). *Urban Fortunes: The Political Economy of Place*. University of California Press.
- Lynch, K. (2008). *A theory of good city form* (S. H. Bahreini, Trans.). University of Tehran. (Original work published in 1981)
- Mansouri, S. (2005). An introduction to Landscape architecture identification. *Bagh-e Nazar*, 1(2), 69–78. https://www.bagh-sj.com/article_1489.html?lang=en
- Mansouri, S. A. (2024). Delineation, the First Step in Place Orientation. *MANZAR, the Scientific Journal of Landscape*, 16(69), 3–3. <https://doi.org/10.22034/manzar.2024.211796>
- Mansouri, S. S., & Farzin, M. A. (2019). *A landscape approach in urban design, A methodology for urban space design*. Nazar Research Center.
- Mansouri, S., Mokhles, F., Hemmati, M., Abarghuifard, H., & Mohammadzadeh, Sh. (2019). *The Spatial system of 'Iranian City' in the Islamic Period*. Nazar Research Center.
- Manzo, L. C. (2005). For better or worse: Exploring multiple dimensions of place meaning. *Journal of environmental psychology*, 25(1), 67–86. <https://doi.org/10.1016/j.jenvp.2005.01.002>
- Naeima, G. (1997). *Dezful, the city of bricks*. National Cultural Heritage Organization.
- Panah Yazdan, A., & Jalili, T. (2016). شناخت بافت تاریخی دزفول و کاربرد آنها در توسعه شهر [Understanding the historical context of Dezful and its application in the development of the city]. National Conference on Native Iranian Architecture and Urban Planning, Yazd. <https://www.sid.ir/paper/826689/fa> [in Persian]
- Rapoport, A. (1982). *The meaning of the built environment: a*

nonverbal communication approach. University of Arizona. https://books.google.com/books/about/The_Meaning_of_the_Built_Environment.html?id=bn_7_UFABdUC

• Relph, E. (1976). *Place and Placelessness*. Pion.

• Sabokro, D., Saboonchi, P., & Hemmati, M. (2023). Application of landscape ecology to develop a conceptual model for planning urban rivers (Case study: Darakeh River). *MANZAR, the Scientific Journal of Landscape*, 15(65), 62–71. https://www.manzar-sj.com/article_180133.html

• Saedian, A., Gholi, M., & Kaboli, A. R. (2011). بررسی تعامل رودخانه در و بافت شهر بر زندگی نوین شهری دزفول [Studying the interaction of the Dez River and the urban fabric on the modern urban life of Dezful]. National Conference on Archeology and Architecture of Dezful Water Structures papers. Khuzestan, Dezful. <https://en.civilica.com/doc/165008/> [in Persian]

• Sashurpoor, M., & Elyasi, E. (2015). Waterfront urban design with sustainable development approach (case study: Mahabad River). *Journal of Urban Landscape Research*, 4(2), 19–33. <https://short-link.me/173nI>

• Shama, S. (1991). Sense of place: An empirical measurement. *Geoforum*, 22(3), 347–358. [https://doi.org/10.1016/0016-7185\(91\)90017-K](https://doi.org/10.1016/0016-7185(91)90017-K)

• Tuan, Y-F. (1977). *Space and Place: The Perspective of Experience*. Univ Of Minnesota Press.

• Yarahmadi, S. (2010). Surveying the role of edges in the realization of landscape goals. *MANZAR, the Scientific Journal of Landscape*, 2(11), 30–37. https://www.manzar-sj.com/article_173.html?lang=en

• Zandieh, M., & Goodarzian, S. (2014). Landscape approach, the success factor of urban tourism. *Bagh-e Nazar*, 11(30), 59–66. https://www.bagh-sj.com/article_6498.html

COPYRIGHTS

Copyright for this article is retained by the authors with publication rights granted to Revitalization School journal. This is an open access article distributed under the terms and conditions of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0/>).



HOW TO CITE THIS ARTICLE

Hoseinzadeh, M., Jafari, S., Ghanbari, Y., & Bagherzadeh, Sh. (2025). Reading the Urban Landscape; Spatial Capacity of Territories in the Spatial Organization of the City-Rivers of Khuzestan: A Case Study of Dezful City. *Journal of Revitalization School*, 2(5), 68–79.

DOI: [10.22034/2.5.66](https://doi.org/10.22034/2.5.66)

URL: <https://jors-sj.com/article-1-69-en.html>

