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## **Employing Riverbanks to Humanize Cities**

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#### **Abstract**

Riverbanks in cities are considered important urban spaces in their planning, but we see at the present time the neglect of the human factor and a significant decline in human levels in them, as city planning focuses on creating spaces to accommodate vehicles instead of providing citizens with spaces that encourage social participation and social interaction. This has led to the lack of public spaces that enable citizens to enjoy the city, in addition to high pollution rates and the emergence of cities that are unfriendly to people and unsustainable. From Here the research problem arose: Is the Baghdad Historical Center properly employed? to Humanization of the city of Baghdad? Therefore, the research aims to try to reach Indicators to employ the riverbank in the historical center of Baghdad to make it more humane and the hypothesis of the research is to employ the riverbank Humanization Baghdad Historical Center by following planning indicators and procedures. The research followed the descriptive analytical approach and presented a theoretical framework. Containing examples of humanizing the banks in global cities. To test the research hypothesis The practical part of the research take Analysis of the study area supported by maps and images, and application Human planning indicators on it and Conducting a field survey by the researcher and studying land uses, the research reached a number of conclusions, namely: The bank of the historic center of Baghdad, towards Rusafa Missing The human dimension in most of its parts is due to the poor quality of urban planning, neglect of the environment of the river section and the adjacent bank, and neglect of the historical, commercial and human aspects in it.

## **Keywords:**

Riverbanks, humanize cities, baghdad historical center.

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#### The Introduction

The concept of humanization of the city is linked to sustainable development. And to achieve a humane environment for people, it has become necessary to add a human character to Riverbanks are among the most important urban spaces that have witnessed great pressures and challenges, based on the principle of functional restructuring and coordination of environmental systems through specific methods (Rajalakshmi et al., 2024). The goal is to find a balance and a symbiotic relationship between the riverbank and the city, improve the quality of life of residents, and achieve positive interaction in the city. Therefore, the research aims to build a theoretical framework for employing the bank in humanizing the city by clarifying the concept of humanization and its impact, extracting the most important indicators, and applying them to the riverbank in the Rusafa area in the historic center of Baghdad (Jameel, 2018).

## The Theoretical Aspect

#### 1. Riverbanks

Riverbanks in cities are space the land Aligned to river bed It represents the landscape of urban areas and is one of the important open spaces linking the land and the river and is considered an extension of the city's growth and development (Hussain & Taimooz, 2024). Its importance is highlighted It is a center of attraction for many human activities. And achieve roles Social, historical and environmental (Son et al., 2024). For the city, as it plays an important role in the lives of people in the city, in recent years, the trend of decision-makers and planners in Urban areas (Raman et al., 2024). Giving vehicles and cars great importance in city planning and I lost the Spaces Public suddenly her job in the formation of urban fabric Including riverbanks (Pešević et al., 2019). Recently, with the development of technology and communications, concepts and challenges have prevailed that focus on the quality of urban spaces and areas, where people and their activities are present, and where the individual is at the center of public policies. And finding a balance between people, city and nature (Tolegen et al., 2024).

#### 2. Humanizing Cities

The urban city is one of the most important and prominent forms of urban development in which people aim to build comfortable and prosperous societies that promote freedom, creativity, and equal opportunities among people regardless of their gender or social status, relying on ethics and human capabilities. The impact of globalization on the urban system and the major role of cities in the global economy have exposed the nature of urban life to instability. Recently, there have been calls by planners to highlight the human dimension in cities and to pay more attention to their natural, economic and social environment (Yang, 2024).

From here the concept of humanizing cities emerged, which is a vital and important term that seeks to create cities that are more harmonious and suitable for their residents, in which they feel a sense of belonging, and not just a place where they live, where they are provided with all the services that allow them to enjoy their lives and develop their capabilities (Gehl, 2013). Humanizing the city is a worthwhile endeavor because it is a process by which places can be developed in a way that prioritizes people, makes the city environment a place for social interaction, and improves the sociability of public space (Abdel Hamid & Ahmed, 2020).

The concept of humanizing cities seeks to achieve three important goals, which are (Hadi & Alwan, 2021):

Making the city suitable for all age groups, classes and orientations.

- To reach the best planning solutions in cities to make them sustainable cities, achieve quality of life in cities, and provide well-being to people.
- Developing urban spaces and strengthening the role of urban planners.

One of the important goals of humanizing cities is to increase communication between people, strengthen ties between them, and create opportunities for cultural and social harmony. This is clearly evident in urban spaces, where the shift from silent negativity to positivity requires several important points (Hadi & Alwan, 2021) And it is a for connectivity, accessibility and mixed land uses. And the attraction and the vitality, And the human scale. As in the Figure 1.



Figure 1. Humanizing urban spaces Source https://qafilah.com/

## 4 Investment Riverside in Humanizing the City

It is Riverbanks One of the most important Elements Which urban areas have become more Sustainability If employed well in the urban system, it is an important part of the city's environmental structure and It is a point Important Start to develop the environment (Jubouri & Lafi, 2020). And Humanization find These areas and Achieving quality of life In it Must Taking Consideration Levels of Effective planning in the appropriate spatial environment is Attractive For any urban and human development, as it is known, one of the goals of urban land planning is to prevent its deterioration, create a connection between human and natural activities, preserve natural resources and historical and cultural heritage, develop green spaces, and choose the optimal location for services (Farahnaki & Barakpur, 2019; Karim, 2012).

from essential That the environmental, planning and service elements are available in open areas So that he can the audience from practicing his activity and his life affairs Daily B Style Safe and civilized. Planners currently consider these areas to be...To solve Typical to face Urban and climate challenges Strengthening the human aspect through urban environment integration with nature.

**Methods and Techniques for Humanizing Riverbanks:-** The planning of the banks of the A day It requires studying the potential and opportunities it provides and employing them properly to make it an attractive point for people. And achieve Increase its spatial and economic value These techniques include:

1. Spatial Planning as Green Spaces:- It is known that the majority of open areas are green spaces, as most planners call them green open spaces. Major cities, such as Shanghai in China, have found a solution to the problems of riverbanks, by planning green spaces in them and providing natural conditions for pedestrian and bicycle movement (Nefedov & Stiglitz, 2015) Achieving the possibility

of walking and enhancing high comfort in the street by providing furniture in it, such as seating places and shaded paths to protect pedestrians from climatic conditions, as on the bank of the Nile River in Cairo, as shown in the Figure 2.



Figure 2. Nile Riverbank Source https://www.wataninet.com/2020/10/

And I followed Melbourne city On the bank of the Yara River Humanization Strategy by converting it to open green spaces and pedestrian bridges work Association On both banks of the river as in the Figure 3.



Figure 3. Yarra River City of Melbourne Source https://www.travelvictoria.com.au/southbank/photos/

In order to achieve ease and accessibility to public services on the riverbank, amenities must be well connected, the maintenance of the corridors linking the main streets must be renewed, and greater accessibility for pedestrian traffic must be enhanced. Walking services must be available to them and the appropriate path must be chosen, regardless of their abilities (Hadi & Alwan, 2021).

It is also necessary for passers-by to feel safe and not be exposed to any crime, by increasing the number of eyes on the street and taking into account its basic physical design, as well as taking into account lighting, lighting gardens and green spaces, and providing a large and appropriate viewing angle for external and high-rise buildings, taking into account the placement of indicative signboards. For the public and passers-by.

**Various Land Uses:-** Planners are currently focusing on utilizing the resources and potential of riverbanks and their interfaces. Make it a point of attraction urban cities Taking into account the spatial, economic and social dimensions, The interaction between people, the environment, and the culture and traditions of society (Abou El-Ela et al., 2007; Adnan, 2018). Organizing recreational social activities and

creating diverse events in urban green spaces is an important factor in rejuvenating the health of communities and enhancing the human character of different age groups, during the day and days of the week (Petrow, 2008). Like a residence Talking toy for kids Sports fields, as for cultural use and cultural activities, various festivals are held, memorials are erected, and museums are built to attract the public, such as the Branly Museum. In Paris on the banks of the Seine, exhibitions, cultural gatherings and artistic performances are held in theatres such as the National Theatre on the south bank of the River Thames in England, as shown in the Figure 4.



Figure 4. The Grand National Theatre in England, on the banks of the River Thames https://www.tripadvisor.co.uk/Attraction\_Review-g186338-d188721-Reviews-South\_Bank-London\_England.html

It is possible to encourage some economic activities on the riverbank that allow social interaction, such as commercial buildings for shopping and the establishment of restaurants, to enhance meeting between people and a sense of comfort, as is the case on the south bank of the Thames River, as shown in the Figure 5.



Figure 5. Restaurant on the south bank of the River Thames, England https://www.tripadvisor.co.uk/Attraction\_Review-g186338-d188721-Reviews-South\_Bank-London\_England.html

**Public and River Transportation:-** Efficient public transport enhances the human presence in the city as it: It will provide easy access to the riverside and all parts of the city and reduce private vehicles and parking. Dedicated to it. Thus, these spaces are available for social, cultural and economic activities. In the event that there is a parking lot, it should be in appropriate, planned places that preserve Balance on the riverbank: The city of Curitiba has adopted the principle of public transport for some time to give a human character and revive the central area and encourage pedestrian movement. Partially closing the city center to car traffic and operating a rapid transit system for buses and create special parking spaces for bicycles and specific paths (Al-Hinkawi & Al-Saadi, 2020) As in the Figure 6.



Figure 6. Public transport in Cortinha city Source https://www.theguardian.com/cities/2016/may/06/story-of-cities -37-mayor-jaime-lerner-curitiba-brazil-green-capital-global-icon

Developing river transport and enhancing its role is considered one of the important conditions for reviving the riverfront and achieving human presence in it. People are naturally attracted to the river and its banks, and to using its waters to move from the dams (Nefedov & Stiglitz, 2015) As in Montreal, Canada, river transport provides easy access to certain places and meets modern urban challenges. As in the Figure 7.



Figure 7. River transport in Montreal Canada Source https://www.mtlblog.com/montreal/new-montreal-area-river-taxis-are-coming-this-summer-to-get-you-off-island

#### Human Scale of Buildings and Containment

One of the important strategies to attract people and achieve a suitable view of the river is to direct the buildings towards it and arrange them perpendicular to the riverbank. Planners and designers differed regarding the height of buildings according to the urban level. Some of them determined that the best height for buildings

is four floors, and others six floors as the maximum limit for the human scale (Radwan & Morsi, 2019). They are connected to each other by vital passages that include various activities to ensure easy access to it, as shown in the Figure 8.

The human measure of street width is (3-6) m (Hadi & Alwan, 2021) and the principle of containment depends on the height of buildings with adjacent spaces. The ratio of the vertical height of buildings to the width of the open space is the measure of containment and the appropriate ratio between them is 1:25 and the higher the height, the less the feeling of containment.



Figure~8.~City~Strasbourg~https://unsplash.com/photos/brown-and-white-concrete-buildings-beside-river-under-blue-sky-during-daytime-zYCToy6IUkM

### Theoretical Part Indicators

The theoretical framework of the research dealt with general terms directly related to riverbanks and the human dimension of cities shown in Figure 9. The research reached several indicators, which are:

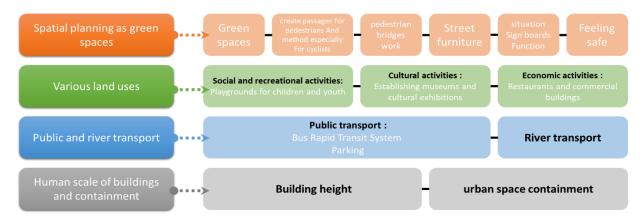


Figure 9. Theoretical part indicators / source the researcher

#### The Practical Part

The research deals with part of the historical center of Baghdad in the Rusafa direction.in The eastern bank of the Tigris River, and flourished This area was established during the Abbasid Caliphate. And enjoy That area Importantly Big At the regional level and the local Because it contains A large number of heritage and historical

buildings and in good structural condition and such as the Minister's Mosque, the Governor's House, and historical symbols such as the statue of Al-Mutanabbi. Which I witnessed Patterns Important historical events and various activities But at the same time, it lacks the human dimension in some parts and neglects other parts. It has been selected riverbank The area between Al-Shuhada Bridge and Bab Al-Muadham Bridge is for study as shown in Figure 10.

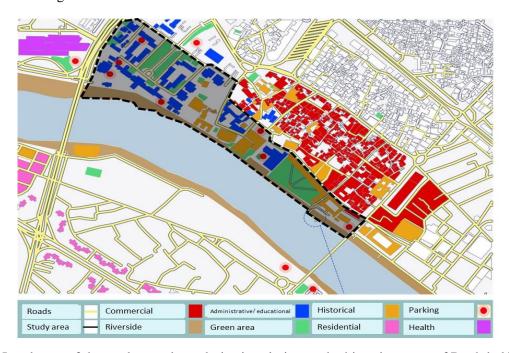


Figure 10. Land uses of the study area boundaries in relation to the historic center of Baghdad/Source The researchers worked based on the Baghdad Municipality branch GIS.

## Potentials and Limitations of the Study Area

Potentials and Limitations of the Study Area shown in Table 1.

	Potential	Determinants
1	Its strategic location and easy accessibility, as it is located	The absence of the human dimension and the
	between Bab Al-Muadham and Al-Shuhada bridges.	dominance of mechanisms in some of its
		parts
2	It is characterized by quality Many A no Historical cultural	Neglect of some of the historical buildings in
	structure that is a focal point for And Ideal location for cultural	the area
	and social events	
3	Community approval and government interest	Poor security in some parts of the riverbank
4	Possibility of developing, renewing and humanizing it	Weakness of the relationship between the
		river and the riverbank.
5	My possibility And A modesty and development River transport	Lack of maintenance of the river and banks in
	in it	it.
6	Buildings that achieve the human dimension consist of:	Weak planning interest and randomness in
	(4-6) floor.	the distribution of land uses.

Source / Researcher



Figure 11. The study area Source The researchers worked based on the Baghdad Municipality branch GIS

The research divided the study area into two main sections, in which it identified the current situation of the area, its weaknesses and strengths, as in Figure 11:

They are as follows:

**The First Area:** Extends from Bab Al-Muadham Bridge and its approaches towards the House of Wisdom building and its affiliated library. With a length of (427) m and a width from the river edge towards the bank (225) m, this is considered an area of historical and cultural character with many government buildings. The task is like:

- 1. Chief of Staff of the Army/Ministry of Defense and its historical portal.
- 2. Abbasid Palace/Ministry of Culture.
- 3. House of Wisdom/Ministry of Culture.

## Problems and Obstacles Facing the Region

1. Suffering The riverfront adjacent to the Ministry of Defense and the Abbasid Palace is isolated because it is a deserted area with many concrete castings and iron insulators. It also lacks the human scale of containment and a sense of security, difficulty of movement, and not being exploited in developing the area, as in the Figure 12.



Figure 12. Neglect of the riverbank adjacent to the Ministry of Defense and the Abbasid Palace / Source: Field visit

2. The Abbasid Palace lacks interest and neglect and suffers in all its parts, as it needs architectural and engineering maintenance, as it is an important cultural monument that represents an important historical era, as in the Figure 13.



Figure 13. Neglect of the Abbasid Palace and its courtyards / Source: Field visit

3. The weak connection between the House of Wisdom and its library on the one hand and the Abbasid Palace on the other hand, as these streets lack signboards and suffer from clear neglect in terms of paving and street furniture, the lack of pedestrian traffic in them, and the absence of economic activities in them, in addition to the movement of cars in them, knowing that the width of the streets is (3-6) m. As in the Figure 14.



Figure 14. Neglecting the street adjacent to the House of Wisdom Foundation / Source: Field visit

- 1. Random distribution of land uses and the presence of non-urban and poorly qualified parking lots.
- 2. Suffering The area in general and the Ministry of Defense Gate in particular from the lack of clarity of its entrances and not Invest It in the picture Correct as a point of attraction.
- 3. Under the bridge The Great Gate Al-Rusafa side is a neglected area. There is a parking lot belonging to the Ministry of Defense, in addition to the presence of concrete slabs.

Area Second: - It extends from Governor's House and Central Cultural Office towards Shohda'a Bridge and its approaches with a length of (766) m and a width from the river edge towards the bank (176) m, this is considered an area of historical and cultural character with many government buildings. The task is like:

- 1. Minister Mosque
- 2. Baghdad Cultural Center.
- 3. Statue of Al-Mutanabbi.
- 4. The barracks clock and the surrounding square.
- 5. Old government office in Al-Qishla.
- 6. Suleymaniye Mosque.
- 7. Central Preparatory School for Boys.
- 8. The shrine of Sheikh Othman bin Saeed.
- 9. and the central cultural office
- 10. Saray Mosque.
- 11. Governor's house.
- 12. Writers' complex.
- 13. The historic Saray market.

## Problems and Obstacles Facing the Region

1. Suffering The riverfront adjacent to the Minister's Mosque is neglected, difficult to access, and has random traffic due to the presence of a parking lot that is not qualified in an urban manner, as in the figure. As for the riverfront adjacent to the Baghdad Cultural Center, the barracks, and the governor's house, it suffers from isolation and is not exploited as an attractive point. As shown in Figure 15.



Figure 15. The riverfront adjacent to the minister's mosque is neglected / Source: Field visit

2. The riverfront in front of the Mutanabbi statue, despite its symbolic importance, has not been well exploited in the human dimension of the area due to the area's lack of street furniture and other necessities. Despite the presence of a river transport station, it has simple, undeveloped and somewhat neglected capabilities shown in Figure 16.



Figure 16. The riverfront in front of the mutanabbi statue & a river transport station / Source: Field visit

- 3. The governor's house lacks Government Office Old in the barracks The Central Cultural Office and Al-Wazir Mosque Lack of interest and neglect in its internal parts exposes these buildings to collapse and loss of their historical value, as it needs architectural and engineering maintenance as it is an important cultural monument that represents an important historical era.
- 4. Al-Saray Street, adjacent to the barracks and linking Al-Mutanabbi, Dar Al-Wali and Al-Sulaymaniyah Mosque, lacks signboards, street furniture, little pedestrian traffic and a clear absence of economic activities.
- 5. Poor planning and random distribution of land uses Between (governmental, historical and cultural buildings).
- 6. The Saray Souq suffers from neglect in terms of construction and architecture, and the lack of clarity of its entrances and its proper use as an attraction point, despite its historical and cultural value. shown in Figure 17.



Figure 17. The Saray Souq

 $sourse/https://www.google.com/maps/uv?pb=!1s0x155778b242501cd7\%3A0x5526b5b51926d6c3!3m1!\\ 7e164!15sCgIgAQ\&imagekey=!1e10!2sAF1QipML98KM6SCJmae07OTuG79W33-dqsGHCMViWUxW\&hl=en&viewerState=$ 

- 1. The region's lack of green infrastructure and its confinement to the random growth of plants, despite the wide areas adjacent to the river that could be exploited to improve the region's environment.
- 2. The approaches to the Shohda'a Bridge are considered a cultural, historical, and commercial area on the Rusafa side, the Wazir Mosque and the Saray Market, in addition to a parking lot, and the area is characterized by being crowded with cars.

## Proposed Planning Treatments for the First and Second Regions

- 1. Lifting limestone from the riverbank and making longitudinal concrete terraces extending along the riverbank, intersecting with stone stairs in front of each historic building overlooking the river, to achieve openness to the river and enhancing those terraces with green cover, street furniture, lighting and umbrellas, taking into account the signboards indicating the public.
- 2. Creating walkways for pedestrians interspersed with bicycle paths parallel to the longitudinal terraces on the riverbank, linking the historic buildings, enhanced with green cover and lighting.
- 3. Exploiting the large spaces within the historical buildings overlooking the river and removing all fences and insulators, such as the square near the Qishla Clock, the outer courtyard in the Abbasid Palace, as modern cafes and restaurants. Children's playgrounds and Make it a public attraction and create floating plasma to extend the riverbank and connect it to the riverfront walkways.
- 4. Developing the river transport dock in front of the barracks and making it a main point for launching river ferries and creating two secondary docks for small boats, the first near the Martyrs Bridge and the second small dock near the Bab Al-Muadham Bridge after removing the concrete slabs in front of the Ministry of Defense.
- 5. Exploiting the Baghdad Cultural Center and the Cultural Office as a center for cultural and social activities such as holding art and cultural exhibitions and theatrical performances.
- 6. Paying attention to public transportation to facilitate access to the riverbank and creating underground parking lots within specific areas.
- 7. Constructing a pedestrian bridge in the narrowest area of the river, linking the two banks of the river to achieve easy access, similar to the bridge linking the areas of Al-Kadhimiya and Al-Krayat.
- 8. Rehabilitating the historic Saray Souq architecturally and engineering and restructuring the storefronts in the area's historical style to be an attraction for the public.
- 9. Taking care of the facades of historical buildings, rehabilitating them from the inside, taking care of them and maintaining them on an ongoing basis to preserve their symbolism and value, such as the Minister Mosque, the Suleimaniyah Mosque, the Governor's House, and others, and placing indicative plaques on them that include a historical overview of them.
- 10. Paying attention to the paths linking historical places and the alleys leading to them, taking into account the human dimension of street furniture and lighting, enhancing the feeling of security and preventing crime.
- 11. Designing the area under Bab Al-Muadham and Al-Shuhada bridges and removing concrete barriers as a recreational area with easy access (seating areas, lighting, landscaping, kiosks) to achieve maximum occupancy. Achieving and providing security through natural monitoring through a variety of activities that encourage (positive behavior), as well as managing and maintaining the site. Proposed planning treatments shown in Figure 18.



Figure 18. Proposed planning treatments

#### **Conclusions**

- 1. The historic center of Baghdad has a symbolic, functional, and aesthetic value, but its banks lack the human scale in most of its parts. However, it is possible to employ them in humanizing the city if they are planned according to the human indicators that the research has reached.
- 2. After conducting the field survey and documented observations with photos Found that One of the reasons for the weakness of the human scale is the neglect of the environment of the West Bank and the river, and its humanity can be enhanced through sustainable spatial planning.
- 3. necessity Site Interest and buildings Archaeology and revival Folklore heritage to promote cultural activities and provide distinguished services to attract the public to the region.
- 4. Taking care of the historic Saray market and organizing weekly bazaars in the area Boosting economic activity Commercial in the area Thus attracting pedestrians to it.
- 5. Taking care of the streets and paths adjacent to the riverbank by taking into account the human dimension in their design and providing all the necessary street furniture supplies. Providing protection measures and pedestrian safety.
- 6. investigation Opportunism (Ease of access) to the riverbank through attention to Public transportation and parking facilities Special Tracks for pedestrians and bicycles and the development of river transport.

#### **Author Contributions**

All Authors contributed equally.

### **Conflict of Interest**

The authors declared that no conflict of interest.

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