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THE INFLUENCE OF LANDMARKS' ENERGY ON THE SOCIAL VITALITY OF THE PLACE BASRA'S LANDMARKS AS A CASE STUDY

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ABSTRACT

Landmarks are considered essential attractions in city planning and play a role in activating tourism and reviving the region's economy. Still, Basra's landmarks suffer from people's social withdrawal, creating distorted foci of the city fabric. Basra's urban development pursues an ill-considered development policy in developing such places. Therefore, the research considers the role of spiritual values, symbolism, and social dimensions embedded in landmarks to activate the spatial attraction energy. The research aims to identify design variables that create spatial energy in the presence of historical and socially significant landmarks to enhance social interaction and preserve the city's urban aesthetic. This research used a questionnaire and a site survey in multiple case studies to investigate the impact of landmarks' spatial energy on a place's vitality, attraction for people, and surrounding functions. The results identified variables that can help urban designers and authorities develop landmarks and enhance their roles in the city.

KEYWORDS

Basra's landmarks; Spatial energy; Social interaction; Vitality; Symbolism.

1. INTRODUCTION

Landmarks are crucial attractions in city planning because they connect with historical, social, and spatial levels. A landmark is what can be easily seen on Earth's surface, to which time is added because of its connection with the collective memory and with certain events (Quesnot et al., 2015). Landmarks' energy comes from their effectiveness, especially religious, such as mosques, which are the fundamental core for outlining the city's boundaries on schematic, design and social levels. It also comes from their temporal presence within their context as an important part of the cultural heritage (Fanjan and AL-Khafaji, 2022). Variable spatial energy is generated according to the relationship between a landmark and its context. This energy controls the user's degree of visual pleasure and the visual image's homogeneity among the components of the surrounding environment (Aljashaami and Mohammed, 2024). The landmark falls under several primary groups, including Icons, which distinguish landmarks from icons because Icons have strong semiotic connotations. Also, symbolic landmarks are associated with significant events or achievements, and finally, points of interest represent a specific group's favorite places. In contrast, monuments have shared knowledge and serve as mental images of a particular community (Bellentani and Panico, 2016).

2. LITERATURE REVIEW

A set of critical key points could be recognized by reviewing relevant studies that consider the place's energy. It is well acknowledged that landmarks do not have to be enormous to be significant in the locals' eyes, even though they play a crucial role in guiding residents and establishing a sense of place (Yun, 2019). Also, the historical landmarks' visual elements with varying scales according to size give the viewer the pleasure of viewing, attracting, and provoking curiosity because of their symbolism and content impartiality (Mackintosh, 1985). This is because landmarks reflect features in the place. This is through their emphasis on directionality and trajectories, their colours and association with specific events, perceiving them for their form, structure, or socio-cultural significance that connects with individual perceptions and memories (Bala, 2016).

On the other hand, the power attraction of landmarks can revive historical city centres. This can be achieved by adding activities that motivate residents to preserve the heritage and emphasise landmarks' social, aesthetic, and cultural values (Mustafa, 2010). It is also essential to preserve the cultural character and protect the monuments surrounding the landmarks (Zhao, Zhang and Cai, 2020). As a result, landmarks contribute positively to the urban scene and help its integration. Integration takes place at two levels- the visual level, which is the visual unity of

the physical elements visually perceived through the urban landscape, and the cognitive level, which is a cognitive orientation through the laws of synthetic relations of the physical aspects of the urban structure (Faraj and Tawfeeq, 2019). Moreover, landmarks have been found to activate the energy of spatial attraction at three levels. Firstly, the visual attraction level combines several subcategories, such as the façade's area, shape, colour, and vision clarity. Secondly, the structural element of attraction level depends on the structural elements identified by Lynch, such as landmarks, nodes, edges, and areas. The last level is semantic attraction, which directly indicates the features of the historical and cultural importance of the facades and their obvious signs (Quesnot et al., 2015). Landmarks' importance is represented by their ability to perform four interrelated functions: cognitive, axiological, emotional, and pragmatic function (Bellentani and Panico, 2016).

To conclude, there is a lack of studies investigating the impact of landmarks' spatial attraction on city planning, especially in Basra, and, thus, on the social interaction between people and the extent of their attraction to such places. This research aims to identify the most critical variables and characteristics that define landmarks' spatial energy socially and schematically.

3. THEORETICAL FRAMEWORK

Theories of the place's energy involve combining biophysical landscape features with cultural traditions and religious beliefs to select and design urban spaces. One of them is the Chinese philosophy of feng shui, which suggests that humans should tune in to nature's rhythms and consider the interaction between a place, its atmosphere, and community (Daneshvar et al., 2013) Fig.1.

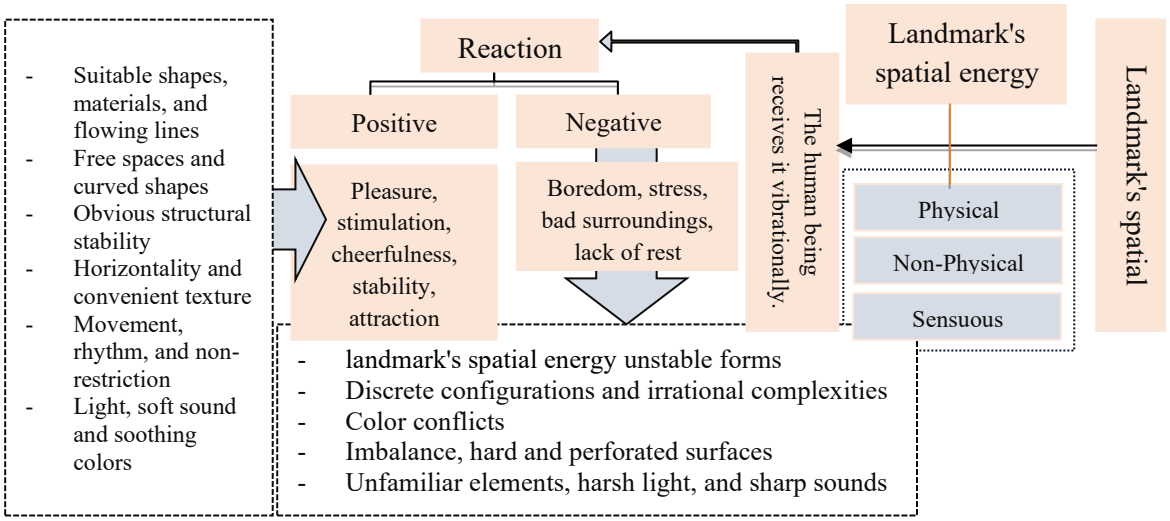

Fig 1: Definition of Place Energy and its Relationship to Human Dimensions, source: researchers

Assessing a place's energy involves adopting local construction techniques and taking measures appropriate for local conditions, such as geography, climate, customs, and traditions of the

community and culture (Lah *et al.*, 2015). The research identifies landmarks as important locations that can be reactivated to increase energy levels socially, environmentally, and design. They are attractions due to their association with important social events and moral and spiritual values. According to Richter and Winter (Richter and Winter, 2014) A landmark can be an Entity, Physical entity, Object or physical object, Location, Point, Position or place, or a Landmark, which is the location of a noticeable or famous object in a particular landscape; "the church tower provided a convenient landmark.

3.1. Landmarks' Spatial Energy Sources:

A- Sources of customs and traditions strength: Every community has a local history and seeks a distinct identity. People's stories and events related to spaces, landscapes, and gathering areas can be a source of a strong and effective design reaction as well as the city's attraction element, thereby giving the city's overall character that affects the place's energy (Lah *et al.*, 2015).

B- Sources related to the event's type: A particular event at a specific point led to the emergence of that point as a landmark of its association with that event.

C- Sources related to spiritual dimensions: The landmark's strength comes through the connection with the spirit, thought, and doctrine, which overshadows its physical form. The essence of landmarks is more significant and vital than the outer shell because they are connected to people spiritually and intellectually, but not physically.

D- Sources related to functional characteristics: They relate to points that have become functional in their surroundings due to their functional identity, such as the Mustansiriya school or Qishla, which are in the middle of an urban environment (Tahalea et al , 2022).

3.2. The Diversity of Spatial Elements Surrounding Landmarks:

Lynch's classification of urban forms into landmarks, nodes, paths, edges, and areas helps study environmental perception in landscape and urban planning (Al-Issawi, 2012). The environment of the landmarks should have visual continuity, openness, and integration between its parts because it provides the city's first visual impression and the place's attraction. It also achieves a distinctive positive atmosphere through multi-functions, such as green spaces designed to improve environmental quality and public axes to link the movement paths dynamically. The urban spaces method is based on visual aesthetic reasonableness by examining values because they are related to the local history of that place, including the landmark (Fenjan et al., 2022). The diversity of the place elements gives high energy, and according to Tahalea (Tahalea, Novianti and Damarjati, 2022), these elements include:

A- Edges: The location of landmarks is as natural or artificial linear elements that help define

the area's boundaries.

B- Nodes: The landmark's location is an essential starting point for users of the urban sector. It is usually either a meeting area for the residents' movement or generated at the corners of the streets so that they carry certain symbols for users (Mahmoud and Sulaiman, 2008).

C- Water: Water enhances the sensory quality of most places. It matches the spaces by giving a feeling of nature or contradicts it. (Ervin, 2001).

D- The plants: This element adds life to the static scenes and hot climates, as it emphasizes the movement of air and psychologically generates a feeling of comfort for the viewer (Alzubaidy, et al, 2017).

3.3. Design Principles of Landmark's Spatial Energy

A- The balance principle: There are two types of balance. The symmetrical form is achieved in elements, the simple unity, and the combination of these elements. the asymmetry form is achieved by the presence of one axis and a center around which the elements are grouped (Al-Sadkhan and Hatem, 2013).

B- The simplicity principle: This principle's design relies on an open space filled with natural light and simple details. It reduces everything to reach what is only necessary in terms of shape to achieve visual attractiveness by focusing on color and material and achieving the desired character of the space (Ghoneim, 2021).

C- The interference principle: The interference between one mass and another or a mass and a void is one of the methods of energy formation, which reflects the place's positive energy (Alzubaidy et al., 2017).

D- The rhythmic repetition: It aims to break the frustration and boredom in the continuity of a place's structural elements that may have a monumental character (Wang, 2012).

E- The adaptation principle: It includes adopting appropriate architectural measures for various natural surroundings (Al-Sadkhan and Hatem, 2013).

3.4. The Landmark and Social Dimensions:

The strong presence of famous age-old buildings in the community's memory gives them the right to be considered landmarks and attraction elements in the city's urban landscape. Landmarks enhance social interaction by significantly contributing to the built environment's design and, in return, human psychological development (Bruns and Chamberlain, 2019). Landmarks become influential in the community for their spiritual, intellectual, intuitive, or functional subjectivity as well as their physical form. Moreover, when their outstanding features contrast with their surroundings and demonstrate the poverty and lack of diversity in their

surroundings. Nevertheless, the essential point is when landmarks are associated with the community's memory. Landmarks can be regarded as visible functions and dealt with physically or invisibly, and their emergence at a specific time has linked them with the region's people's thoughts (Aljashaami and Mohammed, 2024).

3.5. Spatial Schematic Systems of Landmarks According to the Form:

- The type of void with which the landmark is associated: This type is classified according to the power of the place energy, which gives high vitality into:

A- Landmarks within positive urban spaces: The positivity of these spaces comes from being relatively closed, having a distinctive measured shape, having specific boundaries, being unconnected. This positivity increases the fact that these spaces become high points of attraction, resulting in the landmark being located within a specific plaza.

B- Landmarks within negative urban spaces: These spaces have no specific shape related to their surroundings. The landmark must have a clear and strong impact (Bala, 2016).

- The place's form as a landmark is divided into a round shape, which is more stable and steadier regarding energy. All the main streets and roads meet in the landmark's square, which gives it the character of centrality and dominance, forming a landmark with a high expressive, semantic, and aesthetic value (Hameed and Al_deen, 2013), as the location of the mosque within the rounded city of Baghdad. Its high energy attracts the design around the radial lines of its location (AlWaily, 2017). A square shape is an unstable energy structure susceptible to external energy. The streets' layout is broad and needs a center. The landmark's shape must be distinctive so that it can be viewed individually or as part of a group based on the background of a landscape or a repetitive detail resulting from the place's grid system (Nassar, 2017). Linear and rectangular shapes are usually located along rivers or railway lines. The energy field here is felt more strongly than in other forms of cities. The significant shortage of energy lies in the fact that the wide route of these cities brings energy and loses it quickly, only allowing for saving it for a short time (Sabri, 2018) Fig.2.

3.6. Schematic Characteristics of the Fabric Surrounding the Landmark:

The landmark’s impact and positive energy stand out through the planning bases that it reflects on the spot in terms of three aspects represented by the streets, viewing angles, and surrounding functions. The landmark's relationship with the streets defines its spatial strength and impact on the place. Thus, increasing the place's energy improves the landmark's spatial vitality regarding its social impact. Winding and curved streets direct movement and perception, revealing historical events sequentially and giving a sense of intuition and surprise (Leyzerova and Bagina, 2018). Straight streets cause a viewer to feel bored while passing through them. This is

because they directly reveal the landmarks' attractiveness to the observer, although the street's view changes when traversed (Hameed et al., 2013). The landmark's location as a street closure sign makes it a visual attraction point, such as buildings of historical value with parallel and symmetrical facades (Leyzerova et al., 2018).

Moreover, the containment of streets leading to the landmark, represented by the streets' width, dramatically affects how the recipient perceives the landmark. Vertical changes in the street sections can also help avoid boredom, depending on the degree of surface slope. The closure of a straight street gives the viewer a sense of illusion where the continuous edges of the street, consisting of buildings or trees along its sides, will seem as if the ends meet (Aldewachi et al., 2008). The landmark's angles of view are essential in urban planning as they act as organizational and navigational features, reflecting a moral, emotional, cultural expression, and symbolic presence beyond their physicality (Al-askary and Al-Obaidi, 2018; Bruns and Chamberlain, 2019). It is important to note that the presence of multiple functions surrounding a landmark means high energy in the area, which improves its social vitality in attracting people around it (Fadhil, 2021), Table1.

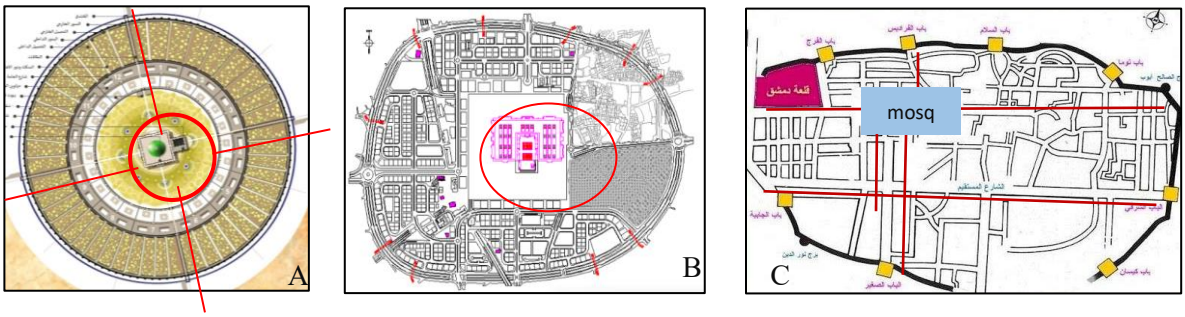

Fig.2. A- the location of the mosque in the center of Baghdad, the radial circular system (Nassar, 2017) B- the energy of the Prophet's mosque with its central location in the planning of the city (Nassar, 2017)

4. RESEARCH METHODOLOGY:

The authors employed mixed methods in three case studies with varying spatial energy. First, they reviewed relevant studies to extract the most influential variables that demonstrate the presence of spatial energy in landmarks. They then measured the presence of these variables within the case studies using two approaches. Firstly, they used qualitative methods, including historical descriptions, a site survey, and a desktop study analysis of the selected cases to examine the street planning systems, the nature of movement, events, and the site features of landmarks. Secondly, they employed a quantitative method directing a questionnaire to a random sample of 279 participants to examine the landmarks' strengths regarding social

dimensions (The highest answers to check the variable are 60 answers, in Appendix 1). After analyzing the collected data, the results were extrapolated to determine the most achievable indicators in all case studies. Thus, the study met its aim of determining the factors and characteristics that reactivate the essential places from the social and planning aspects, Fig 3.

Table 1. The extracted indicators, variables and sub-variables

Indicators	Variables & Sub- Variables			Code
Landmarks - Spatial Energy Sources	Sources of strength of Habits and traditions			A1
	Sources related to a particular event			A2
	Sources related to spiritual dimensions			A3
	Sources related to functional characteristics			A4
Schematic Characteristics of the Fabric Surrounding the Landmark	Schematic systems	The central system -The central geometric & Radial-circular shapes		A5
		Grid system		A6
	The Streets' Schematic Patterns Surrounding the Landmark	The street type	Twisting street: (Closedness & Changing scenery)	A7
			Winding street: The landmark is a changing point for the street section / It is at the close end of the street	A8
		Containment of aspects (Street's width > 8m / < 8m)		A9
	The Landmark's Angles of View	The landmark has multiple angles of view or a specific one that is stronger than the other.		A10
	Functions Surrounding the Landmark	The landmark is surrounded by various or specific activities.		A11
Principles and elements of the landmark's design energy	The Diversity of Spatial Elements Surrounding Landmarks	Edges, Nodes, Water, Industrial components		A12
	Design Principles of Spatial Energy	The balance, The design simplicity, Rhythmic repetition, The complementarity, The adaptation.		A13
The Landmark and Social Dimensions	The presence of landmarks in the memory of community	Their association with the community by a specific doctrinal event or religious function.		A14
		Reflection of their spatial value by being a heritage or a function point in the region.		A15
		Community reaction to their presence as a positive or Negative reaction)		A16
	Landmarks as influential functions of community	Subjective property of landmarks		A17
		The contrast property with the surrounding		A18
		The association with the memory of the community (Visual-morphological function / Semantic function)		A19

4.1. Case Studies Selection:

4.1.1. Al-Kawaz Mosque in Basra (Case 1):

The Al-kawaz Mosque, located in Basra city, is one of the historical, archaeological mosques founded by the Abbasid dynasty in Basra (1514 ad /920 Ah). It is named after Sheikh Mohammed Amin Al-kawaz. It had a council where strangers and poor people had been staying for the night. in 1972, the mosuque was declared an archaeological building. The mosque has a distinctive structure, built inside the roundabout square, Fig.4. All prayers are still held there to this today. It has a unique minaret built with glazing and a dome covered with Karbala blue

tile (Saadeh, 1999). The mosque has a library, several rooms, a large courtyard, a summer prayer room, and several ancient graves behind the mosque (Hamdan, 2015).

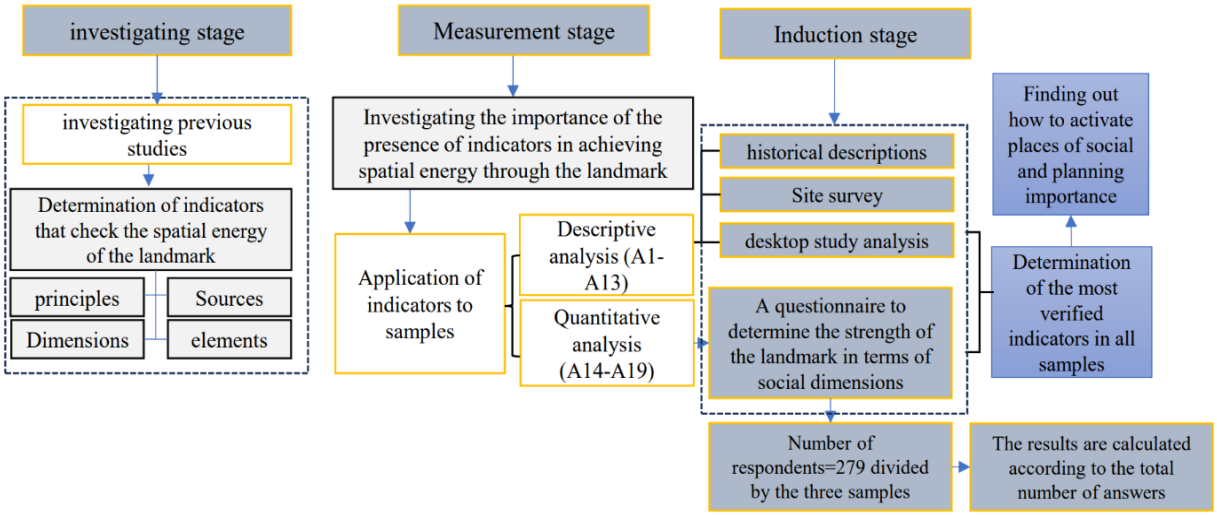

Fig.3. shows the measurement methods used in analyzing the results, source: researchers

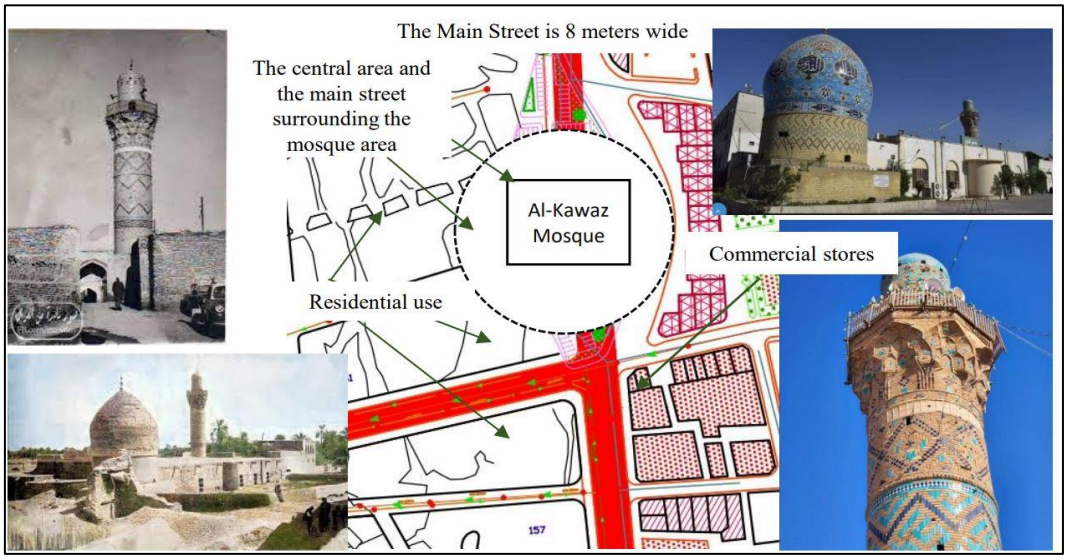

Fig.4. The analysis of the Case 1, by researchers.
https://mapcarta.com/N5005516824, (Nagham Makki, 2023)

4.1.2. Imam Ali Mosque (Case 2):

It is the second mosque in Islam and the first one built outside Mecca and Medina. It was built during Caliph Omar ibn Al-Khattab's reign in 14 AH .The mosque is one of the important archaeological and heritage sites in Basra, located 12 km west of the city centre in the Zubair area, and was named after the fourth Rashid caliph, Imam Ali (Almosawi, 2022). The mosque's last architectural stage was completed in 2000, with a new construction far from the original site. This landmark has a spiritual atmosphere and is an extension of the era of Ahl Al-Bayt (Nasrallah, 2008). It hosts five devotional prayers and Friday and Jama'ah prayers and organizes Qur'an reading competitions during Ramadan. Visitors from different countries come to this

mosque annually for religious activities, including the millionth visit, the tenth Muharram visit, the birth and death of Imam Ali, and the martyrdom memorial of the Prophet Mohammed (Al-Saleh, 2019) (Al-Rawda, 2011) Fig.4.

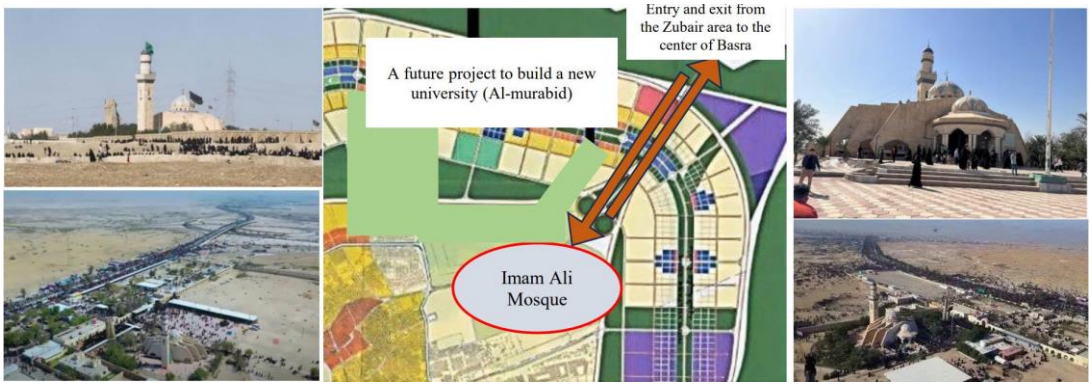

Fig.4. The analysis of the Case 2, by researchers (Al-Saleh, 2019) (Nasrallah, 2008)

4.1.3. Al-Maqam (or Alameer) Mosque in Basra (Case 3):

It is in the Ashar area in Basra, one of Iraq's ancient and historical mosques. The Maqam's total area is more than 600 m^2, including a small square room with a side length of 3 m, representing the Maqam. The Maqam also includes a large mosque accommodating (400 - 500) worshipers. It was newly built in the old Islamic style; its walls are topped with a blue ribbon with verses from the Holy Qur'an written inside, and its reinforced concrete roof is based on cylindrical columns. The place adjacent to the Maqam room was isolated as a women's place to rest and pray. A beautiful *mihrab*, made in the modern style with Islamic inscriptions, was centred on its wall towards the *Qibla*. The Maqam also includes two libraries: one on the ground floor, which includes Qur'an and books of supplications, and the second on the upper floor, which has been newly established and has many diverse books (Basra Heritage Center, 2016) Fig.5.

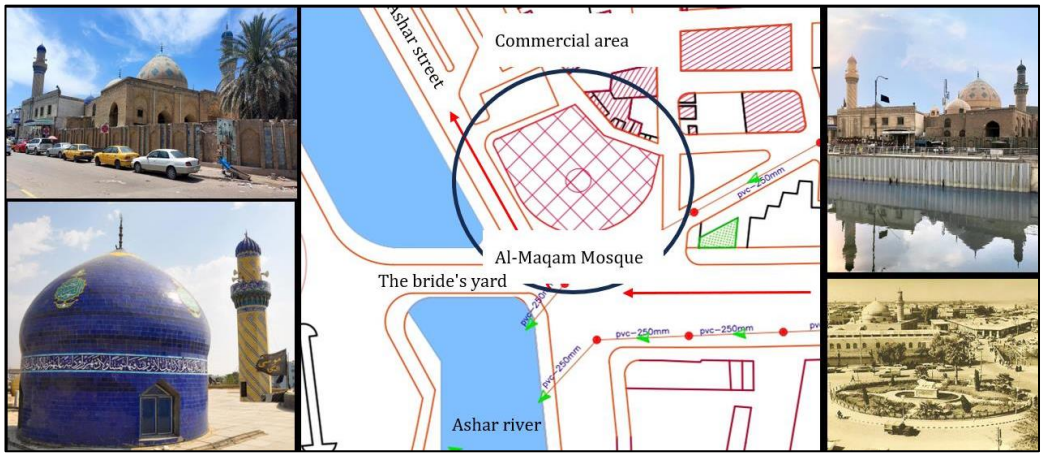

Fig.6. The analysis of the Case 3, by researchers. (Basra Heritage Center, 2016)

4.2. The Site Survey Analysis:

The Cases were analyzed according to Tables 2, 3, and 4 and scheme below:

Table 2. Descriptive analysis of case 1 (Al-Kawaz Mosque)

Street style The straight pattern has an end with the closing signs represented by the landmark.
The distance of eight meters is minimal, reducing the attraction percentage to the landmark.
The landmark's Location It has a circular pattern, making it a positive urban space because it is within a defined circular space.
Spatial characteristics of landmarks High accessibility by nearby points The viewing angle is weak and direct due to the narrowness of the surrounding streets
The type of functions surrounding landmarks Multi-functions (mostly commercial)
Characteristics of the surrounding buildings Buildings are close to the landmark. Significant overcrowding of the surrounding buildings The buildings' height varies between 1-4 floors, increasing the percentage of landmark blocking.
Spatial elements achieved by landmarks Represents a kinetic node within the area's compact tissue.
There are no water or plants within the place.
Design Principles of Landmark's Spatial Energy Simplicity and balance of design form through the cylindrical shape Repetition by using arcs element in the façade.
The landmark's spatial energy sources Its spatial energy sources are from the area's spiritual, doctrinal, and historical dimensions, as well as its function as a mosque and its central plaza location.
The landmark's spatial power in the area planning The landmark is located on a straight street path to turn into a node, increasing the landmark's energy within the place.

Table 3. Descriptive analysis of case 2 (Imam Ali Mosque)

Street style: The straight style with closedness, the landmark is considered as a changing point for the street section. The streets' width is 10m each. The parallel rims of the two sides of the straight street are made up of almost continuous trees that seem to meet each other at the end, giving the street a high dynamism.
The landmark's Location The shape is rectangular. The landmark's location is defined by clear boundaries and entrances, and it is a positive urban space.
Spatial characteristics of the landmark's High accessibility by nearby and distant points as the roads are passable and varied. Its viewing angles are medium because the surrounding streets are vast. However, the curved street near the mosque gives multiple viewing angles.
The type of functions surrounding landmarks

Expansion of the mosque to include service spaces, seating areas, gardens, stalls selling food, and parking area.
Characteristics of the surrounding buildings The landmark is surrounded by an empty open space; the nearest buildings are houses located 500m away.
Spatial elements achieved by landmarks There are plants, water, defined edges (the fence), and internal functions. The mosque was a residential distribution extension point and a vital old city center. It is planned to expand it to extend over 200 acres.
Design principles of landmark's spatial energy Its design characteristics are represented by the traces of the remaining cylindrical minaret from the old mosque, rising almost 5m from bricks and plaster with simple decoration, and Umayyad arches (pointed nodes with two centers). The new mosque is entirely different from the old one. It has pointed arcs with two centers, false walls, one minaret, and two domes, one of which serves as the entrance.
The landmark's spatial energy sources Its spatial energy sources are from the city's spiritual and dogmatic and the place's historical dimensions.
The landmark's spatial power in the area planning It was previously considered the center of the Old City of Basra, from which the population expansion extended. Currently, it is undergoing expansion plans as it represents a religious center in the Zubair region and Basra.

Table 4. Descriptive analysis of case 3 (Al-Maqam Mosque)

Street style It is located at the corner of two main streets, making it a turning point in the street path with a straight pattern. Al-Dakir Street is 10m wide but then changes to a narrower street bordering the Ashar River, less than eight meters wide.
The landmarks' Location Its shape is semi-rectangular, influenced by the street's rotation angle.
Spatial characteristics of landmarks High accessibility by nearby points The viewing angle is medium because it is located at an intersection.
The type of functions surrounding it It is surrounded by commercial activities (the Al-Ashar market) and simple houses dating back to the Maqam area in the Ottoman period
Characteristics of the surrounding buildings Medium-rise buildings (shops and stores) and simple houses.
Spatial elements achieved by landmarks The mosque's location on two main streets and near the Al Ashar River increases its vitality and energy.
Design Principles of Landmark's Spatial Energy The mosque was designed in the Ottoman style, represented by the repetition of three domes and the minaret; in addition to balancing the mosque's height and relationship to the street, no spatial effects block the landmark's angle of view.
The landmark's spatial energy sources Its spatial energy sources are from the city's spiritual, doctrinal, and historical dimensions and events, where it previously represented the Customs Department of the Ottoman State.

The landmark's spatial power in the area planning Its strength is shown by its location on the Ashar River, occupying the side corner opposite the street and the Ashar River opposite the Babylon lion node.

5. RESULTS AND DISCUSSION:

The following results were reached from combining the case studies' descriptive analysis (see Tables 2, 3 and 4) and the site survey for each. Also, using questionnaire examined the variables A14-A19. The data were collected according to the indicators, variables, and sub-variables obtained from the theoretical framework, as shown in Table1. Fig.6 The final graph shows the values reached.

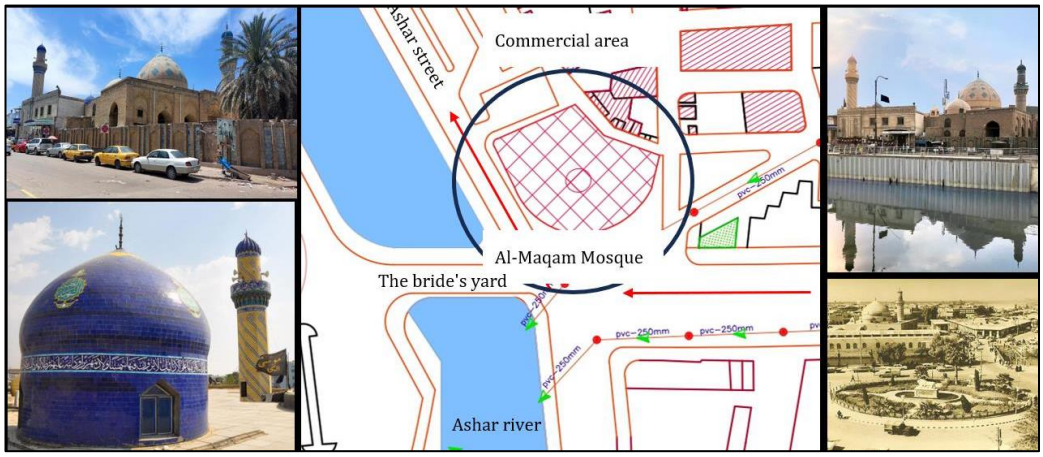

Fig.6. The analysis of the Case 3, by researchers. (Basra Heritage Center, 2016)

5.1. The indicator "Landmark's spatial energy sources"

included four variables, as shown in Table5. Landmarks' spatial energy increases when their connection with multiple sources increases. Therefore, this variable scored 75% in terms of the presence of these sources. However, the variables A1 and A2 were more important than the others (A3 and A4). suggesting the importance of the event aspect and the strength of customs and traditions in increasing place energy, which aligns with Panico's (2016) study that defined the spatial energy of landmarks through their cognitive, axiological, and value functions.

Table 5. The landmark's spatial energy sources

Case studies	A1	A2	A3	A4
Case 1	•	•		•
Case 2	•	•	•	
Case 3	•	•		•

5.2. The indicator "Landmarks' design characteristics according to the power of spatial energy":

The site survey's results show the following: The results in Table 6 about the variable (Schematic systems) showed that the sub-variables (A5, A6) had a degree of importance 83.3% in terms of their role in increasing landmarks' spatial energy, which is a high percentage. Cases

2 and 3 adopted the linear grid system, while Case 1 adopted the central nodal system.

The indicator "Streets' schematic styles surrounding the landmark" includes two sub-variables (A7, A8). All the case studies stressed the importance of changing the street section, with the need for the landmark to show a change in the surrounding view when moving around or next to it. The street patterns may vary between straight or winding streets. However, the sub-variable (A9) highlighted the importance of broader streets (>8m) to maintain the landmark's significance as a landmark that can be perceived from distant points and angles of view. This is evident in cases 2, 3, whereas case one may have streets narrower than 8 meters and straight streets leading towards the landmark from two sides.

The results in Table 6 showed that the variable "Viewing angles" (A10) scored a percentage of 83.3%. The site survey's results showed that case 1 and case 2 have both points of view in terms of multiple angles of view to the landmark with a distinctive and strong angle of view. However, case 3 relied on a specific but very strong and sufficient angle of view to attract people to the landmark and introduce them to its importance as a function point within the place. This aligns with the findings of both Quesnot (2015) and Bala (2016) regarding the significance of visual appeal and the need for landmarks to free themselves from elements that may obstruct their visibility, thus making them stand out within space.

Variable (A11) highlighted the significance of a strong visual angle from multiple points within the space, as demonstrated in cases 2 and 1. However, case 1 exhibited a specific, yet highly powerful visual angle, sufficient to attract people and introduce them to its importance. This aligns with (Quesnot's 2015) study on the significance of visual attraction and the strength of visual angles for the viewer.

Table 6. The landmarks' design characteristics according to the power of spatial energy

Case studies	Schematic systems		The Streets' Schematic Patterns Surrounding the Landmark			Viewing angles		Functions surrounding the landmark
	A11	A10	A9	A8	A7	A6	A5	A11
Case 1	•			•		•	•	•
Case 2		•		•	•	•	•	
Case 3		•	•		•		•	•
Result	83.3%		55.5%			83.3%		66.6%

5.3. The indicator "Principles and elements of the landmark's design energy".

The landmark's spatial energy increases by being in a place that combines most of the spatial elements. Depending on the results of the site survey in Table7, the variable "Elements of spatial energy" (A12) achieved a percentage of 50%, showing its strength in case 1 and case 2 by containing three elements. In contrast, case 3 contained only two elements, this aligns with

Zhao's (2021) study regarding the importance of elements and surrounding effects of the landmark in attracting the community.

Variable A13 achieved a rate of 86.6% in terms of the availability of all formal principles within sample 2, while both samples 1 and 3 achieved most of them, indicating the strength of these principles in increasing attraction towards the landmark and consequently increasing spatial energy. This agrees with Faraj (2019), who emphasized the importance of formal, visual, and compositional unity in activating the landmark's power formally within the urban landscape.

Table 7. The principles and elements of the landmark's design energy

Case studies	Elements of spatial energy A12					Design principles of spatial energy A13								
Case 1		•	•		•		•	•		•	•			
Case 2		•	•		•	•	•		•			•		
Case 3	•			•			•	•			•			
Result	50%					86.6%								

5.4. The indicator (landmark energy and social dimensions):

The results were reached from the questionnaire see Table 9, Appendix 1. The indicator includes two variables can be explained as follows:

"The variable "presence of the landmark in the memory of society" achieved a high percentage (87.5%) in terms of the importance of both (A14, A15) and all samples compared to variable (A16) which showed a weak achievement percentage in all samples. This indicates the strong power of the spatial landmark derived from its association with specific events and religious dimensions, thus agreeing with (Panico, 2016) study in terms of the importance of linking the landmark to emotional functions that arouse the user's feelings associated with influential events. Table8, the variable "landmarks power as a function of influence on society" achieved a percentage of (66.6%) in terms of the importance of this term, which showed its strength within the property of linking the landmark to the memory of society as a visible and perceived function and a reference point in the city of Basra, followed by the importance of both the contrast with the surroundings and the intrinsic properties of the landmark. This agrees with the studies of (Mustafa, 2010) and (Mackintosh, 1985) on the importance of activating the landmark as attraction points in terms of the associated function and the type of movement paths leading to it, and its cultural and social importance as points linked to the memory of society.

Table 8. The landmark energy and social dimensions

Case studies	The landmarks' presence in the community's memory						Landmarks power as an influential sign on community					
	A14		A15		A16		A17		A18		A19	
Case 1	•	•	•	•			•		•		•	
Case 2	•	•	•	•	•		•		•		•	
Case 3	•	•	•						•		•	
Result	86.6%						66.6%					

6. CONCLUSION

Landmarks derive their spatial energy from community's customs, traditions, and spiritual dimensions. This is because they reflect the community's identity, specificity, and convictions for connection with certain principles. This, in return, supports the development of urban spaces with these landmarks.

The architectural characteristics of the landmark become more visually appealing through its design elements, which in turn activates the underlying spatial system, be it grid-based or centralized. Both systems have affected a role in enhancing the spatial power surrounding the mosque. While the winding or straight patterns of surrounding streets do not significantly affect the spatial energy, the landmark's location at a nodal point where the street angle or view changes increases the visibility of the landmark as a significant and influential landmark. Additionally, a single, strong angles view is sufficient to distinguish the mosque within its context. The increasing importance of mixed-use activities around the landmark contributes to its attractiveness and potential for continuous development.

Water, plants, and industrial elements increase landmarks' spatial energy. Being near a sea, river, or main street increases their function and people's social interaction. Afforestation, shops, and seating can revive the area surrounding a landmark and enhance its position within the city. The power of spatial energy is associated with the landmarks' distinguished formalistic characteristics. The rhythmic repetition of elements connects the landmark with its identity and helps integrate its use with societal needs.

Landmarks with a spiritual and ideological influence associated with religious events and decrees are more attractive and have more spatial energy. These places are considered to be religious recreational areas. This highlights the need to develop the surrounding area with the necessary amenities. The landmark has values of their spiritual and functional identity because they are mosques and religious places dating back to a long time because of their connection with the memory of society.

Appendix 1

Table 9. Questionnaire form used to measure the landmark energy and social dimensions

By considering AlMaqam mosque, Imam Ali Mosque, and AlKawaz Mosque, please, answer the following questions:		Statistics Case 1	Case 2	Case3	Total answers
Why the landmark's presence within the area is important for you?					
Because it is associated with important doctrinal events.		100	95	84	279
Being a place for performing prayers and certain religious ceremonies		96	91	92	279
Does the landmark have value for you? If yes, please specify	Yes	87	90	86	263
the reason (more than one reason can be checked).	No	7	5	4	16
Because it has a historical background		87	90	86	263
Because of its function.		90	92	0	182
What is the psychological impact and your reaction to a such landmark?					
When seen, it reflects sense of rest and holiness.		13	96	4	113
When seen, it reflects a forced condition of adherence to specific duties.		0	7	2	9
When the landmark mentions, what kind of ideas come to your mind?					
A function point recalled intellectually integrally regarding form and place.		77	94	14	212
A function point is recalled by being in contradiction with its external surroundings.		86	87	93	266
A function point defined visually in terms of space.		79	91	89	259
A function points due to the well-known spiritual dimension.		10	5	3	18

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