

# Mechanisms of Forming Architectural Identity: Expert Perceptions of a Case Study in Iraq

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## Abstract

Every place has a special, distinct and unique identity that is formed over time through interactions across tangible and intangible material forms, thus giving a distinction to the place from the rest of the places. The formation takes place through organized relationships across the forms, and the process is subject to certain rules and controls according to the place. The new formations are affected by them, giving a distinction to the place that differs from the rest of the places. Thus, a distinct architectural identity is formed through these formations.

This research explores the concept of formation in architecture, the concept of identity, and how architectural identity is formed. It presents studies related to formation and identity and identifies a gap of knowledge related to the formation of identity and the mechanisms for forming them. The research intends to help strengthen cultural heritage in the process of forming identity. It investigated this through indicators extracted from previous studies. It employs a case study as a method; reviews the previous studies related to the concepts and generates indicators which are then applied to the case study: the Qashla building in Iraq.

It concludes that Historic buildings are linked to the memory of a particular association because the buildings contain important historical events. Historical buildings have cultural identities. Identity is formed by the place and its elements through shaping relationships such as proportionality, repetition, etc. and the activities carried out in the place to determine people's behavior. It concludes that architectural formation is the basis of identity formation.

**Keywords:** Formation, Identity, Architectural identity, Cultural heritage  
Cultural identity.

## Introduction

Identity is a historical indicator of a period in the life of a society that gives a sense of belonging and feeling to the place. It is the characteristic of the place, including the material and non-material influences it contains. It constitutes the soul of the place, including the historical meanings and values it carries. Identity is also a set of material and cultural signs,

etc., that distinguish a place: people are connected to the place through interactions with the place through commercial, social, and cultural activities.

A heritage place connects people emotionally through symbols and meanings within the process of formation by linking a group of elements in an organized relationship. Cultural symbols create a sense of place and belonging to it. In this context, this paper examines the role of cultural heritage to enhance memory about the place and achieve social interaction to reach the research goal of achieving the continuity of heritage buildings.

Its aim is to explore the mechanisms of such formations and shed light on the process of forming identity through the relationships between the physical forms of the place according to specific organizational rules to achieve a distinct and unique identity with a certain specificity in architecture

Its objectives are:

1. To identify identity and the influences that affect it and its components for the purpose of forming identity based on the material heritage and the spirit of the place.
2. To identify the relationships that affect the formation.
3. To identify a mechanism with steps to follow in order to form identity.

### **Theoretical Framework**

Lopez defined identity as the simplest form of feeling, which is the extent to which a person can perceive or remember a place distinct from other places (Lopez, 2010). While it was defined by Twigger-Ross & Uzzell as the desire to maintain personal differentiation or uniqueness, as people use place identities to distinguish themselves from others, or place can be considered a representative of social identification (Twigger-Ross & Uzzell, 1996), identity according to Belanche works with place as a means of distinguishing self from others, to maintain a sense of continuity, build positive self-esteem, and create a sense of self-efficacy Residents' identification with their city is therefore determined in part by their evaluation of the city and its community as a place valued or worth belonging to (Belanche et al., 2017).

Shinbira defines place as the result of the relationship between perception and material qualities. The geographical concept of place refers to the atmospheric context of events, things and actions, and this includes both natural elements and elements of human construction in terms of materials and ideals (Shinbira, 2012). Places are formations. Certain physical objects that occupy a specific part of space and have a set of meanings associated with them (Cresswell, 2008)

Hauge has described "place identity" as an individual's integration of place into a larger concept of self. Place attachment is part of place identity, but place identity is more than just attachment. Place identity is a basic structure of self-identity, consisting of perceptions and concepts in relation to the environment. These perceptions and concepts can be organized into two types of groups; The first type consists of memories, ideas, and values, and the second type consists of the relationship between different environments such as home, school, and neighborhood. (Hauge, 2007) Place identity is the product of a collective memory or a group of individuals' memories, as people define a place through the physical environment. (Casakin and Bernardo, 2012). Trąbka says that the formation of place identity is mainly based on a sense of familiarity and social capital, which made it feel like one with the city. In other cases, this deep emotional connection may result from the fact that the new urban environment has become a place of personal growth and development. (Trąbka, 2019).

This theoretical basis is appropriate to examine identity of place in this research.

### **Review of Literature**

There is an abundance of research that examines the ideas of identity and place. In the context of Iraq, Hussein et al. (2019) examines the preservation of local architectural heritage through the redevelopment and reconstruction of a city suffering from post-war devastation while preserving local identity. They point out that urban renewal strategies that should be taken during the redevelopment of the old city of Mosul. A set of strategies that may ensure the

preservation of the urban identity of the region, while redeveloping and adapting to current environmental, social, economic and political changes are presented. They emphasize the integration of new designs with the old urban fabric, and the harmonization of the urban environment with the original buildings, whether existing or destroyed. They also pointed out the importance of buildings with historical and symbolic values and their role in restoring urban identity and enhancing the sense of belonging. In contrast, Peng, Strijker and Wu (2020) focus on active research topics and new developments in place identity through scientific analysis. They highlight the differences and interrelationships between the meaning of place identity with regard to intellectual base, thematic focus, measurement and function. They show the similarities and differences between the spatial identity of a place and the spatial identity of people in multiple aspects and have sorted out the basic framework of the theory of place identity and its relationship to other related theories.

Similarly, Phetsuriya and Heath (2021) examine determining the identity of a place, where distinction is an essential part of determining the identity of a place through the distinction of urban heritage. They focus on how local people interpret and understand urban heritage identity. This is in sharp contrast to Al-Mohammedy et al. (2022) focus on the contribution of the physical environment in shaping the unique character of a place over psychological elements. However, architecture is a main driver for analyzing the identity of a place. They identify clear elements of emerging new identities by discussing the causes, processes and outcomes of examples in which identities have developed through architecture over time.

Kumaraku & Pula (2023) on the other hand, clarify the interactions between identity - as a theoretical concept directly related to form - and architectural specialization. Architectural forms have identities expressed through morphology; that is, dealing with aspects of the building such as classification, geometry, proportions, aesthetics, technology and materials used in its construction. Likewise, different structures express an external identity that depends on historical, political, social or cultural circumstances.

These studies have dealt with highlighting identity through heritage and preserving it. They show the similarities and differences between the identity of place for the place and the identity of places for the people, and the effect of urban heritage on identity and shaping the character of the place through elements of the physical environment and the influence of various external factors on the architectural form.

However, these studies do not address the issue of the mechanism of forming architectural identity. They are studies limited to the external form only. The research problem about finding the knowledge gap between formation and identity to find the mechanism of forming architectural identity needs to be thus investigated.

## **Research Methodology**

This paper employs two methods: First, it carries out a survey of previous studies related to research concepts, and develops indicators that can ascertain identity and place. It then applies them to a case study comprised of places created by architecture, to ascertain how they have defined the places and have achieved identity.

This could be detailed as follows.

- The theoretical investigation of published research to construct a framework and identity and place indicators.
- Applying these indicators to the case study

The case study chosen is Al-Qashla, in Baghdad, Iraq. This building is chosen because it represents an important landmark and represents a time period. Application of the indicators is done through a questionnaire distributed to specialists in the field of architecture. The responses to the questionnaire are collected and analyzed to measure the degree to which the case study has achieved these indicators.

## **Findings: Concepts Employed**

### **1. Form and Formation**

Ching (1996) points out that form is the external appearance that distinguishes a thing, and it is often used in art and architecture to indicate the formal composition of the work, and refers to the elements of the form and the method of connecting them. Arising from the idea of form, formation refers to the process in which a group of elements that make up a form are linked or assembled under an organizational relationship that governs the presence of these elements in relation to each other according to specific standards and rules (Wafiq,1980). Architectural formation is defined as the art of organizing the relationship between the building's formal elements and its components within the framework of the systems and laws that govern those elements to achieve the goals of public benefit. They involve aesthetic, functional, economic, and security aspects (Dabour,2021).

#### **1.1 Foundations and principles of formation**

Architecture contains the rules for organizing the relationship between the elements of the architectural composition, which represent fixed rules and the apparent meaning of form and space in architecture. Ching (1996) divides the principles through which the relationship between the elements in the architectural composition can be organized into two groups. The first is called the geometric foundations of design, and the second is the principles of organization, classified under the systems of architecture in space architecture, and structure, through movement in space-time along with proportion (Ching,1996). Similarly, relying on the concepts of Vitruvius, Zevi (1993) identifies the basic concepts and principles of architectural formation, including space, which includes the principles of order, arrangement, symmetry, proportion, and scale, as well as rhythm, balance, and harmony. Architecture takes these basics and apply them to achieve aesthetic dimensions, function, and intellectual meanings that reflect the principles of civilized societies throughout the ages and history (Zevi,1993).

#### **1.2 Characteristics of architectural form**

The most important characteristics of the architectural form are:

##### **Balance**

According to Trancik (1986) balance may be defined physically in architecture as creating an interconnected relationship between the building mass and space, to form a pattern or system whose parts are in harmony with each other. It is in such a way that adding or deleting any part works to 'imbalance' the scale of that system, as it is linked to the structural formation on the one hand and to the nature of the functional relationships between the main and subsidiary components of the formation (Trancik,1986).

##### **Repetition**

As Licklider (1965) says, the feature of repetition through the use of typical grids is one of the most important means used by the architects in controlling the scale in his designs, whether in forming the scale of spaces and architectural or urban blocks alike. These forms of repeated grids may be different and varied, circular, square, or triangular, as in the case of it was used in Gothic churches in a triangular shape to form the heights of the church in its wings and central nave (Licklider, 1965).

##### **Proportion**

Rubenstein (1969) points out that the property of proportion enhances our sense of scale through size. It is the basic tool for improving and controlling design concepts because proportion is a property that determines our sense of compatibility with space, determining the type of response that individuals show in the people who experience it. The success of design is determined by the success of the relationships between people and buildings on the one hand, and it also creates a feeling for people. It is also determined by their relationships with each

other, on the other hand, through the property of proportionality, and therefore proportionality is a very important design factor (Rubenstein, 1969).

### Scale

Ching (1996) points out that a property that regulates the relationship between the size or shape of a physical space with another size (another space or the human being contained in it), because determining the scale depends on two methods: the general scale, where the size of a space is measured relative to the size of another space, and this indicates how the size of a space is perceived. Space or mass compared to another, and the human scale refers to a person's perception of the size of space or mass compared to the size of a person. In both styles, the architectural space represents the container, while the person, with his physical dimensions and sensations, represents the content (Ching, 1996).

## 2. Identity

According to the geographer Relph (1976), identity of something refers to a permanent sameness and unity that allows this thing to be distinguished from others. Identity consists of both the content that refers to people or things and of the context that consists of culture and environment (Relph, 1976). Identity is a set of physical, biological, psychological and cultural signs that distinguish each individual, group, population or culture from others, and it differs depending on the society or nation in question.

According to Othman (2018), it is an expression of a kind of unity, solidarity, unification, perseverance, integrity and indivisibility. Identity refers to the perception of human beings and, therefore, has two aspects: Firstly, it is a tool to control people's mind, and secondly, it is a source of power for forming new societies (Othman, 2018). Identity refers to how an individual, group of people, or clan is different from others. It defines the uniqueness of a thing and its characteristics of being unique or separate from another place (Garg, 2020).

Indeed, Identity is a fundamental feature of experience in places that are exposed to factors and affected by experiences, which is not just the identity of a place but also the identity of a person or group with the place (Carmona & Tiesdell, 2007). It consists of three basic aspects: time, place and culture. However, sometimes, identity is given a fourth aspect, which is meaning. Architecture primarily uses time and space as elements essential for developing images that convey identity (Khaznadar & Baper, 2023).

As Kumaraku & Pula (2023) explain, formal identity consists of three overlapping layers. The first layer relates to the elements of the building and its shapes. These elements can have different geometric shapes. This layer refers to the geometric relationship of the filled parts of the building, such as columns and the walls. The second layer refers to the relationship and proportions that these elements create with each other. This layer deals with the proportions of a single element and the proportions formed between the different elements that make up the building. The third layer of the building's official identity consists of classification and geometry, depending on the way the elements are placed and the type (Kumaraku & Pula, 2023).

### 2.2 Identity components

#### Identity and Heritage: The Temporal Component

Urban heritage tends to reflect a certain image that indicates the spirit of place to attract people, and the urban area must have distinct characteristics from others. The distinctive characteristics, which indicate the identity of a place, include the uniqueness of historical objects, historical buildings, cultural activity, and local products. In fact, identity of an urban area will reflect the complexity of the culture that is different from other places and is closely linked to the special character of the place as the history will reflect the distinctiveness of the place (Ginting & Wahid, 2016).

Thus, according to Russell et al. (2011) built heritage contributes to the development of modern sustainable communities, which are defined as communities that provide:

- A sense of belonging to the community.
- Tolerance, respect and engagement with people of different cultures, backgrounds and beliefs.
- Friendly, cooperative and helpful behavior in the neighborhoods.
- Opportunities for cultural, recreational, community, sporting and other activities, including for children and young people.
- Low levels of crime, drugs and anti-social behavior with a visible, effective and community-friendly police presence;
- Social inclusion and good life opportunities for all.

As Hall (2011) says, identity reflects cultural heritage and shared cultural norms. It tends to be stable over time because as a legacy it has been selected and reinforced by many generations. He further points out that cultural heritage, both tangible and intangible, affects the continuity of architectural identity. Buildings are considered tangible cultural heritage and represent physical components and spaces. Other tangible cultural heritage factors include environment, economy and other relevant aspects. On the other hand, intangible cultural heritage is linked to social and cultural factors that can also influence the continuity of architectural identity. However, Khaznadar & Baper (2023) show that identity reflects the urban and tangible and intangible cultural heritage () according to rules that regulate the behavior of individuals because history enhances the distinctiveness of the place.

### **Identity and spirit of place (Spatial component)**

Spirit of place is the characteristic of a place that occurs due to the material and non-material conditions where the process of reconstruction is ongoing and is a response to the need for change and sustainability in society. Change in the spirit of a place is made possible through changes in the function and needs of the place by the community in it (Mutfianti,2013). Spirit of place or Genius Loci as Shultz (1984) put it, is a characteristic of a place that has been known to people for a long time and which distinguishes that place from other places.

Indeed, spirit of place gives a local spirit to these places and makes people who are in that place feel comfortable because they can feel and experience. Moreover, all forms of architecture are considered cultural symbols agreed upon by the society. Architecture, with all its equipment, expresses the values and the social and cultural systems of the society in which architecture is presented. It is believed to be a cultural product based on a number of rules, values, standards, ideals, beliefs and social and economic conditions of people (Schulz,1984).

Spirit of place that occurs in the cultural sense of a unique region is often found in all countries of the world in its history. However, as Mutfianti (2013) shows it is possible to change the spirit of place through the meaning of the historical region along with changing times and changing public interests towards the function of the region so in a region that has a spirit of place with historical meaning tends to change easily.

### **Identity and politics (intellectual component)**

Reality and its social and intellectual interactions are what give politics the privilege in determining the pattern of production of history, represented by its great buildings and distinctive urban formations. Architecture here:

“The state of physical and moral integration that prepares the act of continuity for daily human activities in architecture and urban designs.”

Al-Obaidi,2012:262

These human actions usually consist of the different history production patterns of the individual and society and the specific meanings they produce in the life of society, which later becomes a distinctive identity for that place, or that social environment (Al-Obaidi,2012). The architectural image interacts with human and civil relations to revive the concept of urban politics, and to restore the role of political action to take care of the affairs of the city and citizens and its relationship with civil society, thus shaping the image of the city by emphasizing

identity, structure and meaning. The role of authority in shaping the architectural image is either explicit (material) or implicit by influencing planning, management, governance, economics, architectural thought, and directing social and cultural issues (Al-Majidi,2019).

### 2.3 Architecture and identity

Architecture is part of the identity of every society and carries the message, concept and characteristics attributed to the society in which it was born. Therefore, it depends on the geography, traditions, morals, visions and knowledge of the society in addition to its history. There is no doubt that architecture, the layout of buildings and their internal and external facades are clear manifestations of the civilization and culture of every tribe. (Torabi & Brahman,2013) As a nation, the ideas, effects, and functions resulting from the cultural features present in an architectural work determine its architectural identity. It is the product of individual experience.

However, because of the difference between these experiences, the meaning of identity varies in different societies (Carmona&Tiesdell,2007). Architecture is the field of representation of society and its physical existence that depends on context, users and historical circumstances. Therefore, it is usually linked to the concept of identity, whether national, religious, cultural (Kumaraku & Pula,2023). Moreover, architecture has always been used as a link to re-examine the nature and definition of the identity of any nation. It is a feature of the environment that does not change in different situations. This can be physical features such as shape, size, decoration, building style etc. or it can be specific activities or practices in the environment or its functions (Ghotbi,2008).

Thus, architecture is part of identity and bears the character, characteristics and concepts attributed to society. It depends on various aspects such as geography, traditions, ethics, history and knowledge of the community. As Alzahrani (2022) shows, therefore, architecture through the building's facade, structures, and interior spaces are manifestations of culture observed in every nation. Further, Al-Naim (2008) says that identity is not something given to society but something that must arise from the interaction between individuals and groups in society and between the entire society and the surrounding material objects ( ).

However, the link between place and identity is temporal and social and relates to the way we weave meaning around our past, present and future. Place has a meaning for identity, but what the place itself means is made of other things that have evolved over time (Kenny et al.,2011). Architecture plays a crucial role in the representation of identity because it provides a means of conveying human identity across physical components and spaces. In addition, architecture as a physical product contributes to giving identity to its users and occupants (Khaznadar & Baper,2023). Identity formation can be thus represented through the Fig. 1.



Fig.1: Influences of identity formation

### **3. Previous studies**

#### **3.1 Study of Castells, 2010**

This study defines identity as “the process of constructing meaning based on a cultural trait.” Since the materials for constructing identity are history, geography, biology, productive institutions, collective memory, personal imaginations, and religious revelation, societies use these materials according to their social structure. The symbolic content of identity is one of the determinants of collective identity.

#### **3.2 Study of Torabi and Brahman, 2013**

This study examines the fact that identity works to distinguish and identify one element from another. According to this Torabi and Brahman, it is a feature of the environment that does not change in different situations. This feature can be physical features such as shape, size, decoration, building style, etc., or it can be specific activities or practices in the environment or its functions. They also take into account the factors influencing the process of creating an architectural identity, which are: Spatial Organization, Time Organization, Semantic, Organization, General Design Principles, Form and Shape in the Building, Building Materials, Relationship with Context.

#### **3) Study of Abgarm, 2015**

This study focuses on the fact that identity is linked to tangible and intangible heritage: buildings, history, and memories. Identity helps people relate to their environment and confirms that it belongs to them individually and collectively, and this increases their readiness to defend this place. Identity helps improve the image of the region and support the social transformation of the place.

#### **4) Study of Belanche et al., 2017**

This study finds that the process of identification is influenced by cultures, religion, and traditions inherent in places, and social demographic variables such as age, gender, level of education, place of birth, and location, all of these social representations give a sense of the uniqueness of the city and distinguish it from other cities or spatial levels.

#### **5) Study of Boussaa, 2018**

This study examines the role of urban renewal in revitalizing historical areas and how it can be used to enhance the urban identities of cities. There is also a role for cultural heritage in improving people’s lives while meeting their needs for identity and belonging, and that renewing cultural heritage is a means to enhance the city’s uniqueness and distinction.

#### **6) Study of O’Toole and Grey, 2018**

This study examines the role that place plays in the development, formation and maintenance of identity, and how the meaning of place is constructed by social actors. It also examines the development of the formation and maintenance of identities through contingent relationships with particular local, cultural and historical contexts.

#### **7) Study of Othman, 2018**

This study defines identity as a set of physical, biological, psychological and cultural signs that distinguish each individual, group, population or culture from others. It varies depending on the society or nation in question and is an expression of a kind of unity, solidarity, uniformity, perseverance, integrity and non-divisiveness. Identity refers to the perception of human beings, and therefore It has two aspects: first, it is a tool for controlling people’s minds, and second, it is a source of power for forming new societies. The architectural identity of any nation is a product and a direct reflection of the political system applied in the country and the extent of democracy in decision-making in the country.



**8) Study of Goussous & Qashmar, 2019**

This study examines the definition of architectural identity and also raises the issue of identity in general and architecture as a multidisciplinary concept. The study addresses the influence of local culture in shaping architectural identity, relying on cultural and historical concepts of meaning.

**9) Study of Garg, 2020**

This study identifies that culture and identity are intertwined aspects that absolutely help to create integrity and uniqueness in society and architecture. Preserving the cultural identity of a place, region or community would generate a sense of place for people. Architectural identity is described by culture and tradition, place includes people's feelings, emotions, and memories, and the future and history may be related to the place. Therefore, in order to create a sense of place, it is necessary for people to relate to the area or place through its architecture, which will connect them to their culture and thus form their identity.

**10) Study of Dabour, 2021**

This study states that architectural formation is determined by organizing the relationship between the building's formal elements and its components within the framework of the systems and laws that govern those elements and achieve the goals of public benefit (aesthetic - functional - economic - security).

**11) Study of Alzahrani, 2022**

This research identifies and analyzes the relationship between the concept of original identity and the contemporary architecture of projects. The research addresses five components that constitute architectural identity in two aspects. The first is the concept of identity in the work of architects and how to express it. The second is how the public sees and understands the architects' design product where the emphasis is on harmony with context and environment in achieving identity-oriented and context-oriented work. The components that constitute architectural identity are: design concept, construction technology, shape and composition, materials used, and the relationship with the surroundings.

**12) Study of Kumaraku & Pula, 2023**

This study clarifies the interaction between identity as a theoretical concept directly related to form and architectural specialization. Architectural forms have an identity expressed through morphology, that is, dealing with aspects of the building such as classification, geometry, proportions, aesthetics, technology, and materials used in its construction. Likewise, different structures express an external identity that depends on historical, political, social or cultural circumstances.

**13) Study of Khaznadar & Baper, 2023**

This study creates a model for the sustainable continuity of cultural heritage as an introduction to the study of architectural identity through the elements that represent cultural heritage as a sustainable process and the continuity of architectural identity. Some elements of cultural heritage have a greater impact on the continuity of architectural identity.

**14) Study of Mohammed & Al Nuaimi, 2020**

The research talks about exploring important spaces in heritage Islamic buildings. The research aims to explore effective, sustainable traditional elements for use in contemporary buildings. Thus, preserving the traditional Islamic heritage and Islamic identity.

**15) Study of Al Nuaimi & Al Yousif, 2023**

This research discovers the extent of the power of architectural thought in creating architectural models according to the Islamic perspective and creating a sustainable environment. These ideas are a means of conveying and interpreting the architectural identity,

which carries within it the reasons for its existence and its purposes. It seeks to search for the community's identity and beliefs so that their products stem from the architect's ideas, feelings and beliefs.

From the reading of the previous studies, it becomes clear that the importance of place is to determine the distinctive features of identity and its connection to cultural heritage to give it a characteristic of distinction and uniqueness through meaning and symbols. The methods of forming identity between societies also appear different, as in the Table 1.

**Table 1:** Indicators emerging from the previous studies

Source: Author

The study	The most important aspects
Castells,2010	Emphasizing the symbolic content of identity and meaning and that identity consists of a social structure.
Torabi and Brahman, 2013	Distinguishing the elements of identity through physical features and finding factors for forming identity.
Abgarm,2015,	Identity is linked to material and intangible heritage, and identity is shaped by meanings and memories.
Belanche&et al., 2017	Identity is affected by cultures, religion, and traditions rooted in places and social demographic variables, and identity contributes to distinguishing the population from other individuals.
Boussaa, 2017	The role of cultural heritage in improving people's lives while meeting their identity needs to enhance the city's uniqueness and distinction.
O'Toole and Grey, 2018	The role of place in developing, shaping and maintaining identity, and constructing the meaning of place by social actors, forming and maintaining identities within a specific local, cultural and historical context.
Othman, 2018	Identity is a set of physical, biological, psychological and cultural signs that refers to the perception of humans and represents, Architectural identity is a product and direct reflection of the political system
Goussous&Qashmar, 2019	Forming architectural identity based on local culture.
Kritika Gar, 2020	Culture and identity help create uniqueness in society and architecture, and preserving cultural identity generates a sense of place for people.
Dabour ,2021	Architectural formation is the organization of the relationship according to the framework of systems and laws.
Alzahrani, 2022	Trying to understand the relationship between (opinion) what goes on in the minds of architects about their design to achieve identity (and the architectural product), which is what the public sees and understands in the design product.
Kumaraku&Pula,2023	Deciphering the identity of architecture by revealing the plans in which it appears; and understanding how architectural work is used to represent identity.
Khaznadar&Baper,2023	Cultural heritage as a sustainable process determines the representation and continuity of architectural identity

As can be seen, previous studies have examined several variables, such as formation relationships and the role of each one of them in organizing architectural formation. Studies related to formation in architecture have dealt with the basic principles of formation, emphasizing scale, balance, repetition, proportion, etc. As the concept of formation is concerned with organizing the relationship between elements and finding the basic principles for forming elements and assembling them according to certain foundations, studies related to identity have also made clear that identity has physical and social connotations. Each of them has secondary branches that are the basis for forming identity through distinctive characteristics. It focused on how an element, thing, or person differs and distinguishes itself from the rest. Through the studies, indicators are derived to be applied to a case study to find out how to form architectural identity.

#### 4. Application of the Indicators to the Case Study

Data was collected through a review of previous literature related to search terms. Books, articles, theses, and conference reports were studied, indicators were extracted from them, and questions were proposed for the questionnaire to measure the indicators. A case study (Al-Qashla) was chosen to measure the indicators, and it was distributed to people. Then the results obtained from the questionnaires were collected and analyzed to reach the final conclusions of the research and propose recommendations.

##### 4.1 Indicators and the Questionnaire

Al-Qashla building was chosen as a case study to apply the research indicators. This questionnaire includes a set of questions about the issue, and was distributed to specialists and connoisseurs of architecture (50 people) who are familiar with this place. The questions were chosen according to the studies that dealt with an aspect of the research issue, as shown in the following table 2.

**Table 2:** The indicators, the question related to each indicator, and related studies

Source: Author

Study name	Indicator	question
Zevi,1993	Symmetry	The presence of symmetry in the formation of the historical building
Zevi,1993	Repetition	There is repetition in the formation of the historical building
Zevi,1993	Ratio and proportion	Proportion and proportion are achieved in the formation of the building
Kritika Garg, 2020	Cultural identity	The historical building contains a cultural identity
Al-Majidi,2019	The impact of laws and policy	The impact of regulations and legislation on shaping the identity of a historic building
O'Toole and Grey, 2018 Kumaraku&Pula,2023	The importance of the heritage place	The function of the historic building is important to the place
Othman,2018	Physical signs	The historic building shows distinctive physical signs
Torabi & Brahman, 2013	Historical continuity	The historic building is considered historically continuous
Ghotbi ,2008	Type of activity	The historic building contains a specific activity
Mutfianti,2013 Russell&others,2011	Functional changes	The historic building has many activities, including cultural, recreational, community, sports and others
Kenny&others,2011	Producing meanings	The meanings of the historical building are linked to the memory of a particular association
Al-Majidi,2019	The influence of power	Authority influences the formation of a building's identity
Hall,2011 Khaznadar&Baper,2023	Cultural Heritage	Heritage relates to the qualities of a historic building
Abgarm,2015 Kritika Garg, 2020	The emotional side of the place	The historic building generates emotional reactions
Al-Naim,2008	Social interaction	The historic building encourages social interaction
Belanche&et al.,2017	Formation of a cultural pattern	The identity of the historic building reflects the cultural heritage and common cultural norms
Russell&others,2011	social behavior	Human behavior depends on the nature of the historical building and the elements of its formation
Boussaa 2018	spirit of the place	Adding new shapes to the historic building changes the spirit of the place
Schulz, 1984 Castells,2010	Cultural symbols	The historic building is considered a cultural icon
Al-Obaidi,2012	Production history	The formation of the historical building and its general form affect the identity of the place

#### 4.2 The Case Study: Al-Qashla Building.

The building is located in the Al-Sara district on the Eastern bank of the Tigris River. The word Qashla is Turkish Qashlag, which means Ashta. It goes back to the soldiers' barracks, as it contains a tower and in the middle of its courtyard, there is a clock to wake up the soldiers. The land on which Al-Qashla is located was a Hanafi school called the Al-Mawfiqiyah School. It dates back to the days of the Ottomans during the time of the governor Midhat Pasha 1868 - 1872 AD. (Cook,1967)

Its planning has been during the time of the governor Namik Pasha and he used the bricks that were in the wall of Baghdad (Cook, 1967). The Qishla has two entrances, the first is located on the facade overlooking the Al-Saray Street, and the second is in the middle of the Southern side. The Qishla has a number of functions that varied according to the social and political changes and circumstances that occurred in Iraq. It has initially been a barracks for the soldiers and then a residence for them. King Faisal I was crowned as the King of Iraq in it and it has then been transformed into the headquarters of the Iraqi government and ministries. It has been recently rehabilitated to become a headquarters for holding cultural events and activities such as seminars.

This site was chosen because it overlooks the Tigris River and constitutes the military historical focus of the region as it is a military barracks and contains the Qishla Clock. However, at the present time, it has great cultural importance as it is a center of attraction for various cultural activities such as poetry - drawing - music etc.

#### 4.3 Survey Results

The questionnaire contained general and research-specific questions. It was distributed to 50 experts and specialists in the field of architecture. The questions dealt with the concepts of the research. A five-point Likert scale was used and the results were collected according to the Table 3.

**Table 3A:** general questionnaire information

<b>The age</b>	29-18	49-30	69-50	
	%63.3	%28.6	%8.3	
<b>Educational attainment</b>	Bachelor's	Master's	Ph.D	
	%73.5	%20.4	%6.1	
<b>The job</b>	chitectural student	chitectural teaching	Interested in architecture	Architect
	%55.1	%12.2	%8.2	%24.5
<b>Your relationship with the area</b>	Resident	Visitor	Specialized	
	%14.6	%72.9	%12.5	

The answers to the questionnaire varied, as shown in the following table:

**Table 3B:** The questionnaire information

Question number	The question	Totally agree	agree	neutral	not agree	Completely disagree
1	The presence of symmetry in the Qashla formation	15	27	8	1	0
2	The presence of repetition in the formation of Qashla	17	23	6	4	1
3	Ratio and proportion are achieved in the formation of the Qashla building	17	23	12	1	0
4	Qashla contains a cultural identity	31	13	5	0	0
5	The impact of regulations and legislation on shaping the identity of the Qashla building	9	16	21	3	1

6	The function of the Qashla is important to the place	26	16	6	3	0
7	The building shows distinctive physical signs	14	18	12	5	0
8	The building is considered historically continuous	22	22	4	1	1
9	The historic building contains a specific activity	19	21	8	3	1
10	Al-Qashla Building has multiple activities, including cultural, recreational, community, sports, and others	10	17	14	11	0
11	The building's meanings are linked to a specific collective memory	12	26	10	2	1
12	Authority influences the formation of a building's identity	17	16	10	6	2
13	Heritage is related to the qualities of a building	17	23	6	2	1
14	The Qashla building generates emotional reactions	18	25	7	1	0
15	The Qashla building encourages social interaction	16	31	5	0	0
16	The Qashla identity reflects cultural heritage and shared cultural norms	17	25	5	2	0
17	Human behavior depends on the nature of the building and the elements of its formation	15	23	7	5	0
18	Adding new shapes to the building changes the spirit of the place	17	23	4	5	1
19	The building is considered a cultural symbol	27	17	5	2	1
20	The formation of the building and its general shape affects the identity of the place	22	24	5	1	0

#### 4.4 Analysis of the responses to the questionnaire

Through the results of the questionnaire, the following was noted:

- A large percentage of the respondents agreed on the presence of (repetition - symmetry - ratio and proportion in the formation of Qashla. The building elements employ symmetry to form the final shape of the building, and the repetition of arches and windows is used. The height of the building is proportional to the neighbors in terms of height and the river view.
- Emphasizes the cultural identity of the Qishla and the connection of the Qishla with heritage and culture. By holding cultural events in the place to revive the cultural heritage. The identity is represented in the customs and traditions that continued in the place and through the elements of the building that carry the cultural values of the place.
- Emphasizes the existence of a function to give importance to the place through a specific activity. The building's functional changes varied between military, cultural, residential, and commercial activities due to the absence of the need for old functions due to the development in life and the difference in priorities, while opinions varied regarding the multiplicity of the building's activities and the emphasis on a specific activity, as most of the uses of the place have turned to cultural use because of its importance in attracting interaction with the place along with the importance of the historical region.
- Opinions varied between approval, neutrality, and rejection of the influence of regulations and legislation in shaping identity due to the weakness of legislation and laws that protect historical areas, while the majority of opinions were on the importance of authority in shaping identity due to the dominance of opinion through enacting regulations, laws, and legislation regarding buildings and historical areas and how keeping it saving it.
- Emphasizes the importance of the building's characteristics. The building is unique through its shape by being distinguished by its distinctive and high clock, which represents a point of attraction for the place, making it a distinctive landmark in forming identity. The shape of the building affects the identity of the place, and that adding new shapes to the historical building changes the spirit of the place and preserving its spirit of the place by preserving the historical building and rehabilitating

it to form a point of emotional interaction with the place because of its special memories.

- Emphasizes the importance of social interaction in the historic building. Since the place was a military barracks for soldiers, and after the passage of time the need for military function ceased and it has now become a cultural center for holding cultural activities for the general public., Human behavior is determined by the elements of formation.
- Emphasizes the importance of the emotional aspect of the historical building where people interact with the place because the place connects people to the past and recalls their memories there, which generates a special belonging to the place and creates a feeling of comfort.

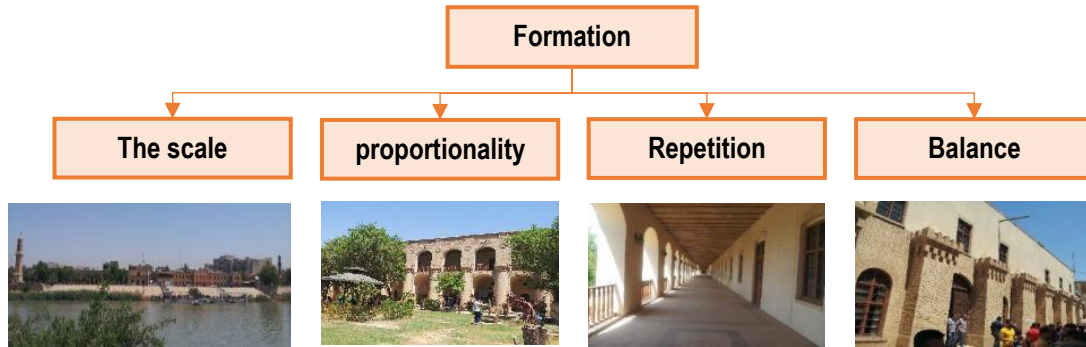


Fig. 3: The formation principles in Qashla.

Source: Author

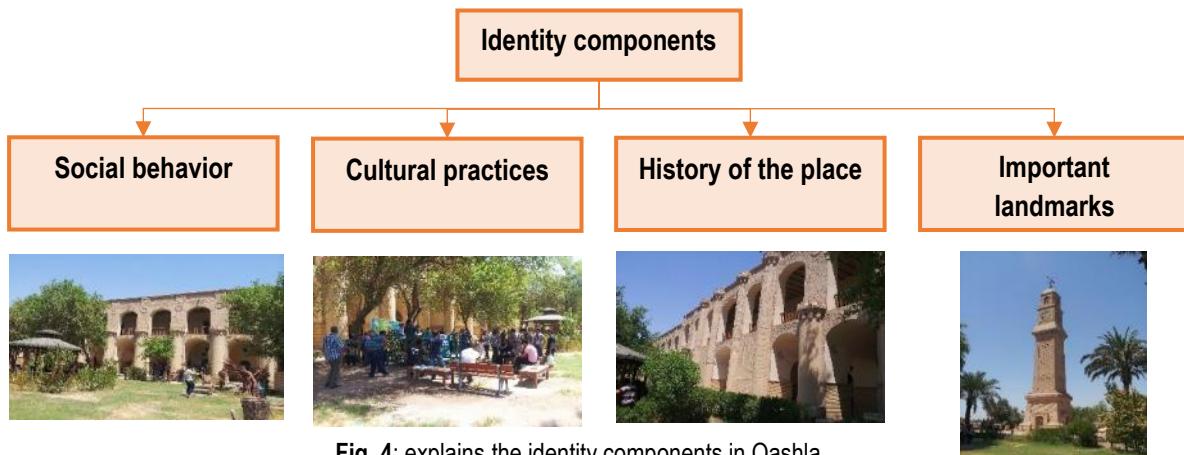


Fig. 4: explains the identity components in Qashla.

Source: Author

## 5. Conclusions and recommendations

This paper observes that the experts agree with the theoretical ideas articulated in this paper before this research was carried out and re-confirm that:

- Formation relationships are related to symmetry, repetition, ratio, and proportion.
- Formation is affected by the type of function of the shell. Thus, the type of activity determines the identity of the place.
- Cultural identity of Qishla is affected by the type of cultural activities held and the customs and traditions of the place.
- Regulations and legislation are weakly affected by identity formation because identity is formed over time.

- Distinctive physical signs contribute to forming the identity of Al-Qashla, as in the Al-Qashla Clock Tower.
- Continuity of the building is linked to the preservation of the building and the formation relationships that make up the shell.
- Collective memory of the Qishla contributes to strengthening identity because it enhances the spirit of the place.

## Conclusions

According to the evaluations of the experts and their perceptions, it therefore concludes that:

- Identity is formed by the place and its elements through shaping relationships such as (proportionality, repetition, etc.) and the activities carried out in the place to determine people's behavior, thus achieving the research hypothesis (architectural formation is the basis of identity formation).
- The importance of the presence of the aspect of culture and its connection to the meanings of place in forming identity.
- Enhancing the place through activity, which requires people to interact with it because it meets the needs of the place.
- The identity of the place stems from the continuity of the place through the regulations and legislation related to heritage.
- Identity is shaped by the elements of place through organized relationships, the activity that generates certain behavior, and the memory that generates meanings.
- Identity formation is achieved through the relationships between the building's elements (the Qishla): symmetry, repetition, proportion, most of which may be present in the building.
- Historical buildings have a cultural identity due to their importance in the sustainability of the place as they represent the cultural heritage of the place.
- The presence of an activity or function for the historic building (the Qishla) that maintains its continuity and historical identity and encourages social interaction, thus generating emotional reactions towards the building.
- The authority has a role in shaping identity by enacting laws and legislation to preserve historical buildings.
- Human behavior in the historic building (the Qishla) depends on the building's shaping elements, and adding new shapes to the building will change the spirit of the building and thus affect the identity of the place.
- Historical buildings are linked to the memory of a particular association because the buildings contain important historical events that gave meaning and value to the place and formed cultural symbols that contributed to the formation of identity.
- The activities that enhance the identity of the Qashla building are represented by cultural activities (such as drawing, pottery making, poetry, handicrafts, etc.). The indicators were applied to a case study in Iraq, and therefore, the experience cannot be generalized to all heritage buildings.

## Recommendations

**It is therefore recommended that it may be sensible to**

- Preserve identity by preserving and enhancing tangible heritage through preservation laws.
- Take into account customs and traditions because they are part of the formation of identity and because they represent the moral aspect of identity.
- Emphasize the identity by the authorities through the formation of the architectural image, taking into account the architectural regulations, as the architectural formation is subject to the engineering foundations of design and the principles of organization.

- Enhance social interaction through activities to enhance the emotional aspect of the place with cultural events, taking into account choosing activities that enhance the historical place and preserve the cultural value of the place.
- Preserve the human scale, which dominates the character of the area, where the blocks fit together.
- Preserve the spirit of the place by not using modern materials and not using strange blocks in forming historical buildings.
- Emphasize the preservation of heritage through public policies as it represents an important symbol of the past.

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