

An appropriate urban formulation methodology for the communities of upper Egypt to preserve areas of heritage value

(case study-The city of Qena)

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Abstract: *The urban city center contains various vital activities throughout the ages, it is its heart which is beating continuously without stopping, and the architectural value increases when talking about the history of that city through the ages, which has suffered from a lot of extinction, neglect and loss of character, function and the basic elements that distinguish its urban fabric and heritage buildings, All this is due to neglect on the one hand and lack of awareness of the heritage and the factors of time and some external factors on the other side, The importance of heritage areas increases with their elements and their urban space and the elements that they contain in the urban fabric of these areas, and the subsequent residential buildings that carry heritage meanings and vocabulary. That is why the importance of developing a methodology for urban reformulation and preservation is due to defining the identity of the city and realizing the community's awareness of preservation projects for valuable heritage areas. These methodologies are also considered to be one of the methods of preserving urbanization in conducting basic activities without prejudice to the cultural heritage of the place. This study aims to find suggested and appropriate methodologies for urban reformulation and heritage preservation, Especially for the communities of upper Egypt, And Qena city center was chosen as Model for developing and testing these methodologies in order to find a proposal that contributes to preserve the city's heritage center. A methodology for the study was developed through an analytical and quantitative approach, A questionnaire and a descriptive approach were developed through the interview with officials. Many similar case studies have been studied in English and Arabic with a field increase in the target area which contributes in putting conceptualization of the proposed methodologies appropriate to the city center. The study reached to a number of suggested methodologies for urban drafting and for the preservation of the urban city center, within a set of axes, including an urban methodology, which includes urban reformulation and defining urban features of heritage areas and methodology for preservation and methodology for dealing with heritage areas, in addition to community methodology and another one for preparing programs and projects for preservation and finally legal methodology for dealing with those previous methodologies, Finally, a number of results and recommendations, which need continuous communication between the responsible authorities and the community to enable the activation of these methodologies that are presented at the end.*

Keywords: *Urban fabric - Areas of heritage value - Upper Egypt community - The proposed methodologies - Urban preservation.*

I. INTRODUCTION

Planning city and its urban design which deals with different communities and people was and still from the most important issues that preoccupied nations and people since a long time ago and there are lots of studies since a long time ago for studying the city and the effects that lead to the formation and formulation of urbanization and this indicates that the study of the urban environment or the city is a complicated work due to the difference of the theoretical frameworks that can be adopted in this field. And also the areas of heritage and historical value suffer from neglect and visual and environmental pollution and from the degradation that affects its urban environment which leads to occurrence of distortions and encroachments on streets, sidewalks, pavements and vacant spaces, until the distortions affected many buildings of outstanding

architectural value. From here, The study is looking to find a suitable methodologies to formulate urbanization of areas of heritage value and to protect them from extinction and attacks and preserving these areas through the importance of preserving the history and character of the city.

Research problems: The research problem is that these areas suffer from lack of clear methodology to formulate urbanization and protect it in proportion to the community, in light of modern extensions as a result of the requirement of the recent time, the situation which caused the loss of the character and history of the city.

Research Targets: The target of this study is putting a planning framework for the city of Qena which helps to establish a methodology for urban reformulation to preserve the heritage areas and to preserve the cultural heritage of the city of Qena and to reach a main goal, The research is

conducted in procedural goals as follows:

- Study and analysis of the urban fabric of the city of Qena through field studies, personal interviews and statistics.
- Studying the most important experiments and knowing the mechanisms and methodologies of preservation operations in historical cities and for Arab and foreign cities.
- Preparing a study for "El Derasa" "Qena city center" and the urban analysis there to find solutions which help us to establish methodology for urban formulation to preserve heritage areas.

Study methodology: Study methodology is considered to be main axis through which the applied curriculum of the study is completed and through which the data required to conduct the required analysis is obtained to reach the results that are clarified in light of the theoretical study related to the topic of the research study and thus the objectives that the study seeks are achieved. The analytical approach includes providing a description of the approach used as well as the study tools used and the method of preparing them. It also includes the procedures that the researcher undertook in designing the study tools and the tools that were used to collect the study data with clarification of the statistics that were used in the analysis of the questionnaire data, as well as the descriptive analysis that was used in the analysis of the interview data and the analytical method is used for many similar study cases locally and in the Arab world, with a field visit in the targeted areas in the city center of Qena, which contributed to reading and analyzing the general situation about the status of the city center and identifying methodologies through which the city can be appropriately formulated. In addition to the analytical method for the required results through a specific questionnaire for a random sample of residents and users of the Qena city center. An interview prepared with questions for decision-makers and officials in various government agencies with an explanation of the strengths and weaknesses of the city.

The research framework for the study: It contains several stages:

- Analytical-theoretical framework: By reviewing studies and different references and also the similar study cases and all the information that are related with urbanism and preservation and social studies.
- Social framework: By making questionnaire which was reviewed by specialists in the literary study.
- Informational technical framework: By preparing personal interviews after reviewing the literary study.

II. PROPOSED WORK

1/1 The concept of urban drafting for the built environments. The word formula in the language means template or composition, it is the formation template and its combination formulas. For example, plastic molds, formations. In the research topic, the word urban formulas means three dimensional plastic molds of the urban fabric. Consequently, for each area with homogenous characteristics and characteristics in the built environment, a specific urban formula or a specific morphology through which the construction of this region was formulated. From here, the urban formulation of the built environment can be defined as the tools of urban formation (in addition to the set of determinants and available capabilities that enable group to shape the built environment in which they

live). Therefore, researchers in the urban environment come up with that the urban formula is the urban formation or template with its own characteristics and features, which can be studied separately in the same way as the urban fabric of the city as a whole. It should be noted here that the word urban fabric is related to its use with a large urban scale, in addition to that, it expresses the shape of the city in the horizontal plan more than the three dimensional expression, and from here comes the use of the term urban formulas to express a small scale of the urban fabric can express a single neighborhood unit within a residential neighborhood, as it expresses more comprehensive and accurate dimensions in terms of the relationship between the population and the built environment than the term urban fabric which is well known. [1]

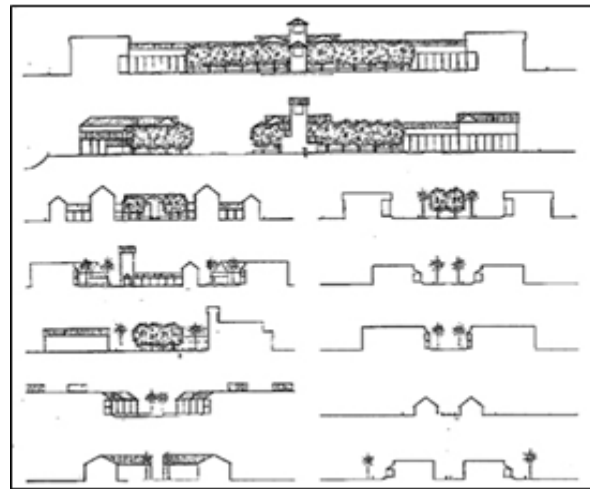


Fig. 1. The mass and its relationship to the space as one of the distinguishing features of the urban formulas in the environment.

1/1/2 Main features of urban formulas:

The main vocabulary that contributes to the structure of the urban fabric can be divided into the first level (two-dimensional, but not in dimensions) as follows:

- 1-The cluster: It is represented in buildings and all kinds of site coordination elements, whether natural or man-made.
- 2-Emptiness: It is represented in the paths of the movement of cars-pedestrian traffic lanes-green landscapes and water bodies, if it is found in the city. -As for the second level: It deals with the vocabulary of the fabric itself in a relatively deeper way, as it takes into account that all the components or vocabulary of the urban fabric formation as a group of three dimensional volumetric figures and it is not flat and if some of them are like car and pedestrian traffic paths and the interstitial spaces between building, the third dimension can be considered to be equal to zero. Thus, new elements can be introduced that have a significant impact on the fabric structure such as building heights-the sky line-spatial formation within the urban community-the relationship of mass to spaces-the ratio of openings in the facades-Distinctive signs in the urban formation. [1]

Features and urban characteristics of the heritage city:

The urban characteristics of the heritage city remain constant, although it may sometimes differ according to place and time. There are common urban features that characterize the heritage city, the most important of which are: [2]

- The mosque exists as a center of religious and political activity and contains commercial and administrative activities.
- It includes the urban structure that reflects the social structure of the population, which appears in the divisions of the city into regions, plans or lanes.
- There are also general names for the planning and

architectural elements that were described by the society that inhabits it, despite the difficulty of defining the urban features of the city in the Arab region before Islam due to the disappearance of some of them or the development of some others after Islam. However, these features can be identified as being more like general principles in the city planning, including:

-It is a city that gathers the population around cultural, religious and commercial center. "The mosque and the market" and does not separate them.

-It is also a career city that provides educational, health and social services.

-It is also characterized by calmness, delicate privacy and unity among its elements.

-The commercial area is considered to be the most important urban feature in the heritage city, public squares were clearly visible in the heritage city and with periods of weakness, they were no longer the same as their importance, however there are clear models today for the return of the field with its implications and value. The mosque's presence in the urban center is one of the most prominent urban characteristics of the heritage city, in addition to being one of the main components of form and content in the urban fabric of the city.

1/2/1 Morphology of the heritage city:

The general appearance of the city, as its shape changes from one period to another throughout its long history and it does not take its final appearance unless it goes through multiple morphological stages, as each stage has characteristics that distinguish it from other stages [3]. The morphological stage is known as: A period of the city's history characterized by architectural models, forms and plans that differ from others and the city's residents have established it to meet their needs at that time, and it represents the cultural and civilizational heritage that expresses the culture of the city's inhabitants in a certain period, taking into account the fixed shape of the city, which depends on the natural shape of the land, upon which the general shape of the city is determined (circular, linear, ... etc).

1/2/2 Urban fabric in the heritage city :

Each place has its own climatic, topographical and personal characteristics that affect the urban fabric of the city, and some cities were planned to be defensive and divided as sectors for the soldiers, and these cities either ceased to exist as the city of Samarra, It grew after construction as the city of Basra in Iraq and took on the distinct character of cities that grew and developed with the growth and social and economic development of society, The weaving unit was a plan that gave the city its character, as the plan contained a mosque and a spacious square in front of or around the mosque, in which graves for its residents, baths, and a small market were erected. "Some historical cities arose out of central and central streets, influenced by ancient civilizations, and they quickly turned into that organic, solid fabric. The reasons for this organic growth are mainly related to the emergence of urbanization around the private space in the heart of the first house Which becomes a center for the growth of the homes of children and grandchildren in automatic interconnection aiming to contain the largest space of the surrounding space within the private space ... so that it

does not cross the road. ' The solidarity weaving pattern was used, as the direction of life imposed by environmental, natural and social conditions helped to confirm this planning appearance. [4]

1/3 Areas of heritage value :

They are the areas that characterize a balanced urban environment constructed in a historical era, forming a heritage that preserves the roots and characteristics of civilization and reflects the events of the era that accompanied it [5]. Or it is the homogeneous cultural spheres that are rich with a set of heritage vocabulary under the name of the Law on the Protection of Antiquities, It has homogeneous urban features stemming from dynamic and static values that express the characteristics of society, where we find urban values along with customs and traditions. [6]



Fig. 2. Some historical areas still bear their original character.

1/3/1 Criteria for identifying heritage areas:

The heritage areas are determined according to the history and characteristics of the area and also based on the presence of groups of heritage buildings in these areas.

The heritage areas include entire areas such as the downtown area (Khedive Cairo), or the European Quarter in Alexandria, Or specific places within the region or the district according to the type of planning and its urban characteristics or according to the density of heritage buildings in it, and a square or an entire street can also be considered as a distinct heritage area, whether inside or outside the conservation area.

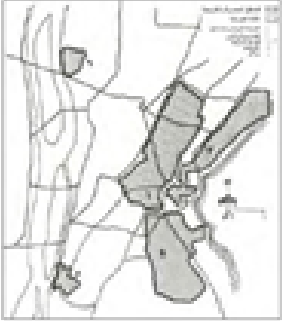
These areas must take priority and special attention with regard to issues of the general environment, afforestation, paving and infrastructure, as they are among the most important areas.



- Which distinguishes the city and highlights its elegance, beauty and value [7]. The heritage areas are dealt with through the following steps:
- Identification, documentation and registration.
- Classification and setting of priorities.
- Establishing protection and preservation regulations (special requirements).
- Implementation of protection projects.


2/3/1 Division of heritage areas within cities :

- An Egyptian city is not without a historical or

archaeological building and historical areas located in different places of the cities, whether within these cities are grouped or scattered or on the outskirts of these cities or far from their construction and we will deal with all Of these types separately. We also deal with examples from Egyptian cities that represent each of these divisions :[8]

<p>Historic / archaeological areas grouped in city center</p>	<p>Many Egyptian cities contain historical and archaeological areas within them, and these areas may occupy an entire neighborhood or part of a neighborhood, and sometimes these areas are located within the boundaries of more than one district in the city.</p> <p>Also, this area may be a street inside the city that has a special character or contains more than one monument or a building that has a special character so that in its entirety it forms what could be an open museum through which the history can be read.</p> 
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<p>Historic buildings scattered within cities :</p>	<p>There are some cities, and we find these buildings a large density and special style, which increases the importance of these buildings and cities and makes them like historical cities. Among the most important examples of these cities are the cities of Rashid and Fuwa, where each represents one of the most brilliant eras of civilization, and we see that represented in the historical buildings and facilities scattered within these cities, including mosques and the homes of the great fortresses.</p> 
<p>Historic / archaeological areas on the outskirts of cities :</p>	<p>They congregate on the edges of urban agglomerations, which may be in many times random. It may negatively affect these historical areas, whether due to poor planning and poor conditions in general or because of their proximity to the effects and their bad impact on them as a result of the rise in the level of groundwater, as these informal areas are not connected to the facilities Sewage and otherwise.</p> 

<p>Historical/ archaeological areas far from the city's urbanization :</p>	<p>In this case, it needs services and good roads to reach and develop it in tourism and at the same time to protect it from the random expansion around it, for example, the city of Fayoum and the western mainland area in Luxor.</p> 
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1/4 Urban preservation of the heritage city center :

When talking about preserving urban heritage in city centers, we often talk about preservation, revival, and historical buildings. It is necessary to separate them.[9]

Preservation means the maintenance of historical facilities and the built environment, and preserving them without any modification or change affecting their essence or contradicting their style.

While revival means the maintenance of these historical installations and the surrounding urban environment, and re-employing them in a beneficial manner, either according to what they were or using them for similar new purposes.

The aim of preserving an urban site or historic building is to:[10]

- Creating a complementary and harmonious state in the urban fabric between the ancient and modern areas.
- Stopping the extent of loss, loss, and extinction in the heritage, urban and architectural environment in a step to preserve the inherited urban and architectural features, with appropriate methods and procedures for each case.
- Choosing suitable jobs and events for the urban area and its buildings that are required to be preserved in order to achieve a general response to the contemporary requirements of society and with the preparation of appropriate staff for this and in all disciplines.

Also, 'the importance of preserving historical buildings lies in the fact that they are one of the main attractions of any city, which constitutes the individual identity' to achieve a community identity.

1/4/1 Rehabilitation and Urban Conservation areas :

Work is done in urban conservation areas within the following parameters :[11]

- Awareness of the unique value of the historical environment and historical areas within the city, which results in actual classification processes for historical areas that need urban preservation.
- Emphasizing the important role of urban planning in preserving these areas.

- Designing urban preservation areas according to specific criteria, as they represent a known part of the city, town, or village, and the buildings and roads share coordination and contents together to give the area its historical character.
- Urban development areas need a very special treatment, and this dealings are characterized by high accuracy with all aspects of planning, development, and architecture, as well as the coordination of surrounding sites, whether they are urban (buildings), or green spaces.
- Historic urban development areas may not contain any buildings with distinctive architectural features or specific historical significance, but in general they are of special importance.
- The architect Aldo Rossi says in this matter that the city is the repository of the collective memory of its inhabitants ... Rather, the city itself is the site of that collective memory of its inhabitants, as it is linked to the elements and places ... Therefore, the relationship between place and population is the prevailing picture.

1/5 The social and cultural components of Upper Egypt society :

Upper Egypt society is characterized by civilizational origins that extend throughout history, carrying on it many cultural burdens and a set of social behaviors that Lasting for several centuries, it is only natural that she had her own distinct personality and unmistakable identity.[12]

1/5/1 The cultural and social dimension and its relationship with humans :

Through the study of individual and group behavior within any society, it is possible to measure or perceive those complex dimensions in the structure, which can be through measuring or inferring the cultural and social dimension of this society.

The cultural and social dimension of a group is represented in many concepts and overlapping elements such as values, customs, traditions, and the intellectual and ideological stock of society, Perhaps the behavior of individuals within society is the clear indication and evidence that can be considered a result of all these concepts.

Also, the person's perception of the built environment makes him respond to the information that is conveyed to him and also draws a mental picture of his environment. Perception is to use his senses and turn them into his mind. A set of behavioral expectations defined by the types of actions that are likely to occur, and generate in the perceiver a set of feelings, repercussions and directions in addition to the emotional side of this place.

1/6 Rehabilitation and preservation of heritage areas centers :

There are methods of urban rehabilitation and preservation that are considered optimal in their application. They can be detailed in the following axes :[11]

A. Enhancing the archaeological value of the physical formation and character :

- Traffic study represented by Pedestrian traffic.
- Parking.
- Regulating the nature of traffic movement.

B. Adjusting the process of additive construction and ancillary designs :

There are several controls for these additions, including :

- The building has a specific historical style, such as Fez, Morocco.
- The building is in a completely modern style like Paris.
- The building is in a homogeneous and complementary pattern.

C-Urban renewal :

It includes the following operations :

- Building repair process.
- Adaptation to modern services (roads and utility network ...).
- The process of studying urban density and controlling transportation.

2- The applied study - its objectives and methodology :

The applied study aims through application to our center, which contains many heritage buildings, which adopt the achievement of a set of proposed methodologies that were extracted from the theoretical study to achieve a set of objectives as follows:

- 1- Emphasis on the research problem in relation to the current reality and clarify it and analyze the urban aspect to find solutions.
- 2- A study and analysis of the urban fabric, through a field study and personal interviews, we were able to extract the statistics.
- 3- Examining the proposed methodologies from the theoretical study on the city center of Qena, from which it is possible to reformulate the urban area to preserve the heritage area (the city center) in line with the community of Upper Egypt.

2/1 Applied study methodology :

Based on the nature of the study and the goals it seeks to achieve, the researcher used the analytical descriptive method, which depends on the study of the phenomenon as it exists in reality and is interested in describing it accurately and expresses it, Nor is this approach sufficient when collecting information related to the phenomenon for its various manifestations and relationships, Rather, it goes beyond analysis, linking and interpretation to reach conclusions upon which the proposed vision is based, in order to increase the balance of knowledge on the subject.

The methodology used in the applied study was divided into three parts:

- 1- Collecting private data about the city of Qena: It includes the basic data of the city from the geographical location, natural and environmental characteristics, and the urban development of the city, in addition to the identification of different patterns of urbanization Knowing the urban features, including morphology and urban determinants, and getting acquainted with the current urban fabric of the city, in addition to studying the social and cultural characteristics of the city's residents, and presenting the previous experience in preserving the city, including on the planning and urban aspect.
- 2- Preparing a questionnaire for city users and another for city officials: This is through the creation of a questionnaire form for the community of the region and emptying it through a statistical program, and another for personal interviews, and their opinions were analyzed through paragraphs of the directions of the urban institutions in the

city towards preservation and urban reformulation.

- 3- Testing the proposed methodologies for the city of Qena : Through a presentation of all the methodologies and how to test their application, with the aim of achieving those methodologies to find solutions, we were able to reformulate urbanization and preserve the heritage area.

2/2 Selection of the study area:

The choice of the study area is one of the most important elements on which the success of the applied study depends. The city of Qena has won international awards for its success with a unique experience in developing and beautifying the city. Therefore, the applied study area was chosen in this research based on four main axes, which are as follows :

First: for the study area to be a representative sample for preserving areas of heritage value, so that through the study of this area, we can reach results and recommendations that can be generalized on the patterns of urban formulas in the preservation of areas of heritage value.
 Second: that the study area be inhabited to the extent that it allows the formation of an urban community that can be studied. Also, these societies must have existed for a sufficient period of time to allow interaction between the population and the features of the urban formations in this area so that we can measure the extent to which the social and cultural characteristics of the study community are achieved with features Urban formulas of areas of value through the extent to which these features suit the social and cultural dimension of the population.



Third: that the study area contains different types of urban formations for areas of heritage value to preserve them and different socio-cultural environments so that this area is representative of all societies.

Fourth: that the study area be in a single urban space or in one city, so that we can discover the faults and features of the urban fabric of the city.

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2/3 The different types of urban formulas in Qena :

The patterns of urban formations in the city of Qena are divided into three main patterns that vary in terms of block design, including space, and road network planning, as they clearly differ in the third dimension with respect to the height and shape of the buildings.

- 1- **Architectural formulas for the old city core :** an urban style in which the architectural building blocks are juxtaposed and contiguous and we find street widths of 6-8 meters and it is characterized by the factor of flexibility and adaptation in its planning, its high specificity and its distinctive identity, and this type of planning contributed to providing the bonds of love and intimacy among the population, as it had a great impact From the security and social point of view, in addition to climate protection, we

also mentioned the nature of the climate in this region. It is noticed in the traditional fabric that the visual urban density is its distinguishing feature, while the population density is subject to change and fluctuation in the historical centers of cities, and this fabric includes the relationship of the buildings to each other and the heights of the buildings are often from two to three floors and the relationship of these buildings with the surrounding urban spaces and a network the movement.

Fig. 3. The traditional fabric of the heart of the city and the population density

2- Urban formulas for heritage areas gathered within the city : The most important characteristic of the urban formulas for heritage areas grouped within the city that collects them in a group of streets inside the city, where they have a special character that contains many heritage buildings of value so that they form in their entirety an open museum through which history can be read, and this area concerned with applied study.

The urban fabric within the city may in itself be what must



be preserved, as it represents a planning thought for the era in which it was established and the urban pattern for that

area represents a stripe pattern and we find street widths of up to 20 meters The heights of the heritage buildings are five floors, while there are modern towers adjacent to the heritage buildings with a height of 12 floors, and the area lacks urban spaces that must have an important role for the practice of social activities.

Fig. 4. Heritage building gathered inside the city.

3- Urban formulas for heritage areas scattered within the city : these areas are characterized by the separation of their heritage buildings from each other, and this region we find a special style, which increases its importance and makes the city a historical importance, and often this area is villas with a historical character, such as the building of the Fouad High School 1927 and is currently occupied by the College of Engineering, which is built in the English style And the Al-Hamiyat Hospital building, a group of buildings constructed in the Ottoman style that spread in the 17th and 18th centuries AD.

What distinguishes these buildings is the presence of their

own spaces, which makes them achieve visual distinction, and we also find the dominant pattern is a striped pattern that affected the Nile River.

Fig. 5. Fouad secondary school building previously and the college of engineering now.

2/4 The current urban fabric in the Medina Heritage Center :

1- Urban fabric: the core of the city is distinguished by the compact fabric by the convergence of its buildings so that they are clustered and stacked in adjacent rows, as this method contributed to providing shadows and reducing the buildings' exposure to solar radiation.

This fabric is also characterized by the factor of flexibility and adaptation in its planning, and its high specificity and distinctive identity. Therefore, this area is distinguished by its gradation in its texture, and this gradient reaches the interior of the inner courtyard of the house, around which the spaces of the house are distributed and give a sense of the gradual order.



It also appeared in the solidified fabric of the core of the

city, with the presence of a central area transforming the Mosque and the Ottoman Bath, but it was demolished.

In the city center, some historical outpost areas and streets with buildings of heritage value, as mentioned earlier, are located in different places in the city, showing a stripe texture and forming a special character of the city in terms of spaces and road network.

2- Differences in heights: the old nucleus area of the city is distinguished by its low heights, as well as the method of roofing part of the streets, as for the buildings of heritage value in the city center that are grouped in hotspots and streets within the city, up to five floors high, In addition to the neighboring modern towers, the heights of 12 floors are multi-purpose, and here there is a difference in the heights of buildings in the city center with a distinctive character.

3- Winding and narrow streets and roads : the old nucleus of the city was distinguished by its narrow streets with exposed inner courtyards, street widths of 6-8 meters, where the network of streets was distinguished by being winding and narrow to suit the lives of the residents and allowed the presence of shaded areas, as well as The urbanized center of the city is characterized by the striped fabric of the city, the 'historical areas', with wide street widths up to 20 meters. The street network is also characterized by straightness and the presence of open courtyards in some buildings, in addition to public spaces and squares.

4- The privacy of the place's character: the prevailing character in the study area is a historical character with aesthetic values stemming from the historical value of

keeping the building for a long period of time that witnessed its era not only through the temporal dimension, but this value may be acquired through an important event or a distinctive personality or an architectural function of value.

2/5 The social and cultural characteristics of the region's residents :

Upper Egypt society is characterized by privacy through its isolation and the presence of tribalism, which led to the problem of lack of awareness of heritage and historical values and the need for their life requirements, as well as wrong practices as follows :

First: by wrongly dealing with heritage materials and working to replace some elements such as windows and wooden doors with aluminum windows, distorting open courtyards with their roof, and working on changing the features and elements of the heritage area or damaging or destroying it.

As well as the external facades, or paint them with paints that are not suitable for the existing historical and heritage building material, with the aim of life in light of the expansion and population increase.

Second: by taking neighboring buildings and open spaces as a cube of waste, which turns it into health niches on the one hand, and on the other hand it works to destroy it.

Third: the distortion of the urban fabric, and the demolition of heritage and historical buildings, as happened in many areas in the study area.

Fourth: additions, and sabotage the urban composition.

The reason for these problems is not only the lack of awareness of the importance of this heritage, but also the existence of other priorities for the population represented in meeting their life needs in urban expansion.

2/6 The proposed methodologies for the city of Qena for urban reformulation to preserve the heritage areas :

1- Methodology of urban reformulation of areas of heritage value in Qena.

This methodology can be applied in many areas of urban formulation, which can be presented as follows :

- The first axis is the road network and pedestrian paths.
- The second axis, squares and spaces.
- The third axis buildings.

2- Methodology for determining the urban features of the heritage city center.

3- Methodology for preserving areas of heritage value in Qena.

4- Methodologies for dealing with areas of heritage value.

To implement this methodology, the stages must overlap with each other to achieve the objectives of preservation and dealing, which are as follows :

First: dealing with heritage buildings.

Second: the methodology of reform, revitalization and renewal in the vicinity of heritage areas.

Third: dealing with heritage areas.

5- Methodology of the social aspect.

The methodology is divided into the participation of the community of Qena, in addition to the participation of civil society institutions in the city.

First: the participation of the community of Qena.

Second: the participation of civil societies in Qena.

6- A methodology for preparing programs and projects that includes the relationship between the urban heritage and the

social aspect.

7- Methodology of the legal aspect.

III.Laboratory Tests, Results and Analyses

After the stage of collecting the theoretical study and field information from a tour to fill out questionnaires among the target groups and meet the responsible individuals, it appeared that there was a lack of material capabilities in government institutions, And the presence of deficiencies in the laws related to preserving the cultural heritage, and he suffers from the lack of trained cadres to deal with it, on both of these matters and others made the study summarize the following results :

Results of the applied study :

- The challenges facing the reformulation of the urban fabric and the preservation of the city center of Qena:

There are many challenges facing the city of Qena in general as mentioned, which have a clear impact on the success of these urban formulation processes, they can be summarized in the following points:

- 1- Weakness of the adequate, clear and integrated legal framework that is appropriate for the urban formulation methodology to preserve and the basis for its application.
- 2- The preservation of areas of value is not a top priority, and attention to them is not at the required level.
- 3- Distorting the historical and cultural aspects of the city center through the attacks on buildings and construction.
- 4- Urban expansion and real estate investments not controlled by them, which leads to the destruction of the city center and heritage areas.
- 5- The absence and lack of clarity of guidelines and concepts for the community in the field of investment in a manner consistent with preserving the identity, distinct character and history of the city.
- 6- Lack of concern for specialists in conservation operations, and a lack of specialized human cadres.
- 7- Advocating and paying attention to urban planning, without activating it and laying the foundations for its implementation.
- 8- Lack of financial resources and insufficient support for the necessary and vulnerable projects.
- 9- The multiplicity of properties, the high costs of restoration and preservation, the lack of provision of expertise, in addition to the weak awareness of society for these problems.

The legal problems facing conservation in the city :

The legal problems facing these operations in the city are as follows :

- 1- Not updating and studying laws, and relying on existing old laws.
- 2- Weak enforcement of the law regarding preservation

Elements of strength and potentials available	Existing vulnerabilities
<p>1- The existence of an archaeological urban fabric, although it is threatened with extinction.</p> <p>2- The presence of large parts of the city center with its original architectural and urban character.</p> <p>3- Mixed use in the study area between residential and commercial.</p> <p>4- The privacy of many buildings in the city center.</p> <p>5- Community awareness to some extent in the heritage aspect.</p> <p>6- Increasing the environmental awareness of the people of the region and their conviction of the importance of preserving urbanization from pollution, due to this as a result of previous experience.</p>	<p>1- Weak interest by government institutions and the absence of specialized centers concerned with preservation, in addition to lack of follow-up by legal authorities.</p> <p>2- There are no plans to preserve and not deal with the city's heritage areas.</p> <p>3- The lack of a vision and a clear strategic plan for the issue of urban conservation in the city of Qena.</p> <p>4- Variables of the era are represented in the following matters:</p> <ul style="list-style-type: none"> -Change of existing jobs for places and spaces. -Population increase and the need for vertical expansion, which led to building additions. -Significant increase in commercial services. - The price of plots of land has increased dramatically in the study area, which negatively affected the buildings of value. -The migration of indigenous people from their ancient homes. <p>Lack of cooperation and participation of people, residents and users of the study area, with conservation projects due to economic investments.</p> <ul style="list-style-type: none"> - Inadequate conservation plans take into account the needs and conditions of the population. - Lack of coordination or coherence between government institutions and the population. - The desire of many residents of homes of heritage value to demolish their buildings and rebuild them in a new way for the sake of expansion and economic return. - Lack of resources and financial support for government institutions.

and its need for monitoring and evaluation.

- 3- Lack of community awareness of the legal aspects.
- 4- The negligence of officials in applying the law in order to preserve.
- 5- A lack of laws for some concepts and definitions of urban conservation.

6- The absence of any clear articles or policies in the law aimed at activating the urban identity.

The strengths and weaknesses of the study area :

General results :

Urban fabric results :

- The urban fabric of the city was distinguished by a distinct urban formation with an authentic character, despite the fact that the urban features did not appear in their full form of the heritage city center, as one of the basic elements of the urban formation of the heritage cities.

- The aforementioned development process was implemented with a comprehensive long-term plan to develop the city on all sides without paying attention to the preservation of the heritage character.

- There are efforts exerted by government institutions in solving the problem of traffic and parking spaces in the city center, which is a matter that was agreed upon by all groups of the study sample.

- Despite the various studies, plans and methodologies that reformulate the urban and urban preservation of the cities and historical centers of the Arab cities that have been studied,

- However, the implementation of these plans when implemented in the case of the study did not take effect in the required manner, for a number of reasons, including :

- Lack of financial resources.
- Lack of expertise in government institutions.
- The need for a strong legal framework to undertake urban formulation and conservation projects.

- In spite of the presence of facilities and service buildings in the city center, and in light of the contiguous buildings and the high building density and the weakness of the vacuum, the city lacks to :

- Parks and green areas, as well as private and public parking.
- A cultural center and places for practicing social activities

-Taking into consideration the strength and weakness elements associated with the results of the applied study, there are many aspects and methodologies that can be tested as follows:

• Methodology of the urban features of the city center: strengthening and reading the urban features of the urban center.

• Conservation methodology: rehabilitation, use and maintenance of buildings of heritage value, activation of tourism infrastructure and improvement of the infrastructure of the city center.

• The methodology of dealing with the urban environment: work on the improvement, renovation and rehabilitation of the urban area of heritage buildings in the study area.

- **Social aspect:** to stimulate social and cultural programs and activities for the residents of the heritage area, by developing training programs and developing the use of urbanization, so that the region lives and maintains its continuity.

- **Methodology for the preparation of conservation programs and projects:** a program that includes interaction and awareness of the importance of heritage and the protection of the urban fabric of the city center.

- **Legal methodology:** the existence of clear clauses and framework aimed at activating the physical identity.

Results for the preservation of areas of heritage value:

- One of the factors adversely affecting the preservation process in Qena city, the lack of conservation specialists in the city, as the urban center of the city was not registered among the heritage areas despite It contains many heritage buildings of a historical character, dating back to the area from (1925-1937) and this negatively affects the subject of interest in urban and architectural preservation.

- However, there are a number of limited attempts to preserve the architecture and restoration in relation to some residential buildings of a character, but the process of preserving only the building without affecting the urban surroundings of the area.

- The need for pedestrians in the commercial area in the center of the city to allow feeling and belonging to the heritage area.

Social-related results:

- The previous experience of the development of Qena city has greatly affected the social, cultural and economic conditions of Qena city, especially the center of the city, It relied entirely on government institutions and the involvement of community members, which in the affirmative led to a response from members of the community to improve their standard of living.

- There is a willingness by the community and users of the area to preserve the character of the city center, and contribute to the return of the heritage character of the urban fabric of the city.

Law enforcement results:

- Poor implementation of laws and the absence of clear provisions for strong coordination to regulate the relationship between the owners and owners of buildings and the competent authorities of conservation work has had a significant impact on the inadequacy of the maintenance operations and attacks on those buildings.

Recommendations:

After identifying and studying the previous results, it is clear that the responsibility for the processes of construction and preservation, is distributed among a group of parties in the process of redrafting and preserving the heritage, and these parties must be activated to complete those The process, and in no case can be linked to one party but the other, and therefore the

recommendations have been distributed to these parties, and determine their responsibility to enable the activation of these parties as follows:

Recommendations related to the urban aspect and traffic of the heritage area:

1- Maintaining the harmony between the heritage area (city center) and its buildings in a distinctive link style, and work to restore the mental image of the architectural features of the heritage area, and develop the roads in the area to suit them.

2- Identify parking and parking areas for cars and can be fined for parking violation, and blocking hours can be made for that area.

3- The area (Saha) was identified behind The Hour square, which is the property of the province by making a parking lot, in addition to the exploitation of land next to it to be determined by officials in the province, to be joined next to that area proposed by the researcher to become a parking area for private and public cars in the center of the city, and therefore to organize and arrange the movement of cars in the center of the city and especially the study area (July 23 Republican - Republican).

4- The development of public urban spaces (Square of the Hour), as well as can be used to make it a vacuum outlet for the residents of the city by preventing traffic and its exploitation of seating areas, which increases the sense of belonging to the heritage place and raise their awareness in how to read the heritage around them, as can be implemented cultural evenings with the aim of activating the entertainment aspect through various activities, all of this works to document the cultural and social aspects between the population and the place and between officials who follow the area.

Recommendations for the urban development of the city center:

1-Re-work the detailed charts clearly and integrated by the specialists of the city center.

2-Providing the material support and resources necessary from the competent institutions for the implementation processes, and therefore it is necessary to take the necessary steps in order to start and implement and succeed the process and redraft the building to preserve the center of The city of Qena.

3-Follow-up the process of reformulation and urban preservation by removing all negative scenes in the region through the decisions of the government institutions concerned with those operations, in addition to rehabilitating the streets and providing parking spaces.

4-It is necessary to work an office of the cultural coordination body in the province to follow up and study the processes of drafting urbanization and preserving the city's heritage center, and to establish a special unit for urban planning and restoration work and maintenance of heritage buildings through the development of a program for conservation and restoration, which aims to develop the architectural features of the heritage center, preserve the monuments and the heritage area, provide the

necessary services to its residents, and stimulate tourism and economic worker in the city for the participation of the city's residents.

5- Workshops and courses are conducted by the relevant institutions to discuss laws related to urban preservation in the city.

Community-specific recommendations:

1- Work specialized vocational training courses for the individual community in the field of preserving the cultural and urban heritage and its value in the field of preserving the national, economic and tourism identity, in addition to the work of technical courses for craftsmen members of the community in the field of restoration and maintenance by specialists in this field by government institutions, to qualify them to work within all the projects implemented in heritage buildings to involve them to ensure the success of that process, and to build more feelings of belonging to them and their economic and positive returns on them.

2- Raising awareness among the owners of heritage buildings and decision makers in government institutions in addition to the different segments of society about the importance and necessity of preserving the urban and architectural heritage, through the distribution of awareness publications, awareness lectures and media campaigns.

3- They must be raised to respect the cultural fabric that exists in the center of the city, which still retains its heritage features, and the need for them to be aware of development and preservation.

Recommendations for government institutions:

1- Activating the role of the institutions concerned in the field of urban conservation and urban planning of the city center.

2- There is a committee formed by the province limited its role in documenting and registering heritage buildings, without working on preserving and drafting the building for the heritage area, it must be given powers in all procedures and decisions in the field of urban drafting and preservation of heritage, as well as the involvement of the local community in the care and stimulation of planning and preservation work.

3- It is recommended that courses and workshops should be conducted in the presence of the community group controlling the members of the region, and distribute leaflets to learn about the regulations, laws and mechanisms of implementation of the methodologies that have been put forward and work on them in the study area, as well as provide the required and appropriate support to the individuals themselves.

4- Preparing a comprehensive proposed methodology that can participate in all institutions in the province (local council- provincial council - union of engineers - directorate of housing and facilities - university - civil society associations), including all aspects affecting the existing urban fabric of urban reformulation, preservation of the city's heritage center, maintenance and restoration of heritage buildings and awareness of members of the

community, which will focus efforts and set priorities for those institutions.

5- A decision must be issued that the city centre of Qena is considered a heritage and historical site to which the laws of heritage areas apply, and then begin to implement this decision to preserve the city center and the possibility of implementing these proposed methodologies.

6- The media aspect should be activated in the process of urban conservation and urban planning in Qena city.

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