Research 5

Enhancing the sustainability of the visual scenery elements of urbanism to achieve quality-of-life standards

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Abstract

The quality of life for urban areas is an idea that has recently been discussed in various studies as a response to the many problems facing cities around the world as well as in Egypt. As the city is the product of a reflection of its identity and cultural and civilized heritage that is growing and changing, enhancing the sustainability of the elements of the visual image of the city is one of the changes that, in turn, seeks to create a suitable urban environment for the population and reach the highest rates of environmental comfort and complete well-being for them, the research is divided into three parts. In Part 1, the concept, dimensions, and standards of quality of life were monitored and analyzed using the descriptive analytical approach. Part two deals with the elements of urban formation and the elements of sustainability of the visual image as one of the important tools in urban rehabilitation to achieve quality of life standards using the comparative analytical approach. Part three, the presentation of one of the experiments, deals with rehabilitating and enhancing the sustainability of the elements of the visual image of the city's urbanisation to achieve the standards of quality of life using the deductive approach.

Finaly we found that the statement of the importance of integrating the criteria of quality of life with the elements of the visual image of the city helps to create a sustainable urban environment, which is represented by the quality of environmental life, physical urbanism, quality of life for transport and movement, social, economic, and psychological life, up to the quality of political life. Application of saving.

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Keywords

Quality Of Life, Urban Environment, Sustainability,Visual Image Elements, Historical Urban Development

ملخص البحث

تعد جودة الحياة في المناطق الحضرية فكرة تمت مناقشتها مؤخرًا في العديد من الدراسات كاستجابة للمشكلات العديدة التي تواجه المدن حول العالم وكذلك في مصر. حيث أن المدينة هي نتاج انعكاس لهويتها وتراثها الثقافي والحضاري الذي ينمو ويتغير، كما أن تعزيز استدامة عناصر الصورة المرئية للمدينة هو أحد التغييرات التي تسعى بدورها إلى خلق بيئة عمرانية مناسبة للسكان والوصول إلى أعلى معدلات الراحة البيئية والرفاهية الكاملة لهم، وينقسم البحث إلى ثلاثة أجزاء. وفي الجزء الأول تم رصد وتحليل مفهوم وأبعاد ومعايير جودة الحياة باستخدام المنهج الوصفي التحليلي. ويتناول الجزء الثاني عناصر التكوين الحضري وعناصر استدامة الصورة البصرية كأحد الأدوات المهمة في التأهيل الحضري لتحقيق معايير جودة الحياة باستخدام المنهج التحليلي المقارن. أما الجزء الثالث، وهو عرض إحدى التجارب، فيتناول إعادة تأهيل وتعزيز استدامة عناصر الصورة البصرية لتحضر المدينة لتحقيق معايير جودة الحياة باستخدام المنهج الاستنباطي.

وأخيرا وجدنا أن بيان أهمية تكامل معايير جودة الحياة مع عناصر الصورة البصرية للمدينة يساعد على خلق بيئة عمرانية مستدامة تتمثل في جودة الحياة البيئية، العمران المادي، جودة الحياة. الحياة من حيث النقل والحركة، والحياة الاجتماعية والاقتصادية والنفسية، وصولاً إلى نوعية الحياة السياسية. تطبيق الادخار.

الكلمات الدالة
جودة الحياة، البيئة الحضرية، الاستدامة، عناصر الصورة المرئية، التطور الحضري التاريخي

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I. INTRODUCTION

The concept of quality of life is widely understood and contains several definitions, and it can be said, indeed, that the concept of Quality of Life measures the level of satisfaction concerning the most important aspects in the life of the individual, but this definition remains relatively to the extent.

In order to get to understand specifically the quality of life, we conducted a discussion of the program in order to recognize the general characteristics, i.e. indicators, and to identify the most common definitions. The initial research identified a set of global indicators that measure the quality of life from different aspects, and each indicator was examined in detail to determine the common elements. [1]

1. Definition of Quality of Life:

The research was conducted based on six of the most important and globally known global indicators as basic references: [2]

- **Livability Factor Classification**:
  It is an annual index issued by The Unit Intelligence Economist, which ranks various cities in 140 countries by quality of urban life performing assessments of stability, health care, culture, environment, education, sports and infrastructure.
- **Mercer Survey of Quality of Life**:
  It classifies 231 cities based on the following aspects: transportation, political, social and cultural environment, public services, health, economic services, schools, education, natural fauna and flora, housing, availability of media, theaters, cinemas, sports, consumer goods, restaurants, and recreation.
- Monocle **Lifestyle Magazine's List**:

It is an annual list of 25 of the best cities to live in the world, and its assessment is based on the following aspects: global connectivity, environmental issues, accessibility to natural places, architectural quality, urban design, health care, business environment, crime, security, culture, restaurants, tolerance and policy development initiatives.

- **World Happiness Index 2017:**
  It ranks 155 countries according to happiness levels based on levels of corruption, freedom of choice, life expectancy, GDP per capita, social support and bonuses.
- **OECD Quality of Life Index:**
  it is an indicator that compares the quality of life between countries based on 11 primary key aspects: security, health, income, employment, work-life balance, education, satisfaction, housing, environment, community and civic engagement.
- **ARRP Quality of Living Index:**
  This is a distinguished initiative by the Public Policy Institute to measure the quality of life in American communities based on the following aspects: transportation, health, economy, education, housing, residential neighborhoods, environment, community participation, and equity in opportunities.

1.1 Urban Quality of Life Dimensions

The quality of urban life is a multi-disciplinary and complex concept that consists of a network of different dimensions. The quality of urban development is a result of the cross-relation of such dimensions, which basically consists of seven dimensions that contribute to achieving the urban quality of life, world-widely known as follows: the environmental dimension, urban dimension, movement and transport dimension, social dimension, psychological dimension, economic dimension, and political dimension. [3]

- Environmental urban quality refers to the natural aspects related to a neighborhood or a city.
- Landscape Urban quality refers to utilities, landscape and infrastructure, and services and facilities.
- The urban quality of transport and movement measures the accessibility, traffic and transport issues and possibilities.
- Social urban quality refers to the social dimension of a neighborhood, i.e. challenges regarding individual choices and citizen participation.
- Urban Psychological Quality discusses various issues related to citizens' feelings and lives, such as the whereabouts of their identity and heritage.
- Economic urban quality refers to the value of a neighborhood as a place of economic activities.

Urban political quality refers to city policies that support the concept of urban quality of life and the extent to which these policies are implemented.

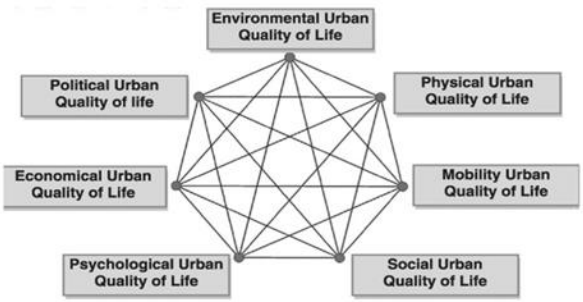

Figure (1) Urban dimensions of quality of life

1.2 Quality of Life Criteria and Environmental Sustainability

Sustainability is basically concerned with meeting the needs of present generations without compromising the future needs of forthcoming generations.

One finds that the basic idea of environmental sustainability is to relinquish Earth in a better shape for future generations without harming it while meeting the needs of current generations.

Consequently, any sustainable direction can be initially evaluated based on its efficiency in providing the current needs and its impact on the ability to provide basic future needs. Hence, we find the importance of sustainable development with a focus on the quality of life.

A set of standards and foundations that achieve the quality of life were derived by the European Union through a questionnaire conducted, in 2013, on Quality of Life in European Cities, covering all the capital cities of European countries, a total number of 79 cities. The questionnaire was approved by the Directorate General of Regional and Urban Policy of the European Union, which reached those urban results that achieve the quality of life as follows:

- **Satisfaction with the urbanization of the city**
  - Sustainable public transportation
  - Healthcare Services
  - Sports Facility
  - Cultural facilities
  - Educational Facilities
  - Availability of shopping, entertainment, and recreational facilities
  - Administrative Services
  - Streets and roads
  - Pedestrian paths
  - Public Spaces
  - Public Green Areas and Landscape
  - Complementary green landscaping
  - Safety and security
- **Satisfaction with the city's economy**
  - Land Prices
  - Job vacancies
  - Family Group Income
  - Housing possibilities
  - Integration with foreigners.
- **Satisfaction with the natural environment**
  - Air quality
  - Quality of hygiene
  - water quality
  - Combating climate change
- **Social Satisfaction**
  - Sense of happiness
  - Participation and Influence
  - Interconnected society
  - The place where you live.

2. Urban design and visual image elements

The urban formation is defined as the product of the cross-interaction of a group of elements and components operating within an urban space, governed by a set of spatial relations, functions and activities of such components that represent the core of the formation of the urban identity of cities and neighborhoods through the formation of the physical environment for living and arranging and improving the general appearance according to the function. Kevin Lynch believes that urban formation can be defined by the spatial distribution of human activities with the urban and natural elements constituting the city and the field, in which, these activities are dealt with, in addition to the social and mental aspects that these elements are linked to each other.

2.1 Urban design elements [5]

- **Buildings and Services**

The building is the most obvious element in urban design, where the good design of inter-connected buildings with each other helps to feel the place in addition to giving an identity and architectural character to the neighborhood or the city, whether classic or modern buildings or buildings that combine authenticity and contemporary. Such diversity, in terms of the character of buildings, along with different building uses give the urban space a distinctive urban style in the process of urban formation.

- **Open Spaces**

Public spaces represent the living room in the city, where people gather to enjoy the place and get acquainted with each other to initiate and consolidate social relations. The main function of public spaces is to make a life of high-quality in a public space, whether squares, open spaces or gardens in all its forms according to its location and function. A set of criteria must be fulfilled to achieve the humanization of cities to achieve the quality of life, see figure 2.

Figure (2) Formation of urban spaces to meet the quality of life standards.

- **Streets**

Streets and roads are the main means of communication between public spaces and places. From the point of view of a city, streets and roads are considered public spaces that give character to the city, whereas unclear streets fade the city's character. Each street style has its own definition that draws a certain impression to the visitor and strengthens the sense of space and helps to consolidate the visual image of the city.

- **Public Transportation**

Transportation systems help in connecting the far-reaching parts of a city with each other and enable mass-mobility around the city with ease and convenience. These include roads, railways, and bicycle and pedestrian lanes, which together form the overall traffic system of a city. The balance of these systems works together to determine both the quality and nature of a city, making them either environmentally- and pedestrian-friendly. The best cities are those that promote pedestrians in addition to maximize the use of public means of transportation while minimizing the dominance of private cars.

- **Landscape Elements**

Landscape design, i.e., landscaping, or landscape architecture is the art and science of designing external sites and improving their attractiveness and enhancing their functionality to enjoy the quality of life of both the users and visitors. The elements of site coordination are essential to the development of urban formation systems, some of these elements are afforestation and agriculture works, tiling, lighting, sitting places, signage, ... etc.

2.2 Visual image elements

Urban formation consists of spaces and shapes, and the formation of a city depends on the geometric inter- and cross-connection between its various components such as streets, shops, offices, houses, pedestrian areas, squares and public parks.

The urban formation is also known as the spatial formation of a set of things that make up the city's architecture, such as buildings, streets, utilities, hills, rivers, ... etc. In the sixties, Kevin Lynch came up with a set of urban elements [5], that form a clear visual and mental image of the place. Nowadays, these elements have increased [10] to be as follows:

- **Paths:**

The roads network and passages emphasizing their differences. Figure (3).

Figure (3) path as a visual image Elements of the city

- **Homogeneous Districts:**

Areas that are similar in their urban components, so that their identity can be recognized, distinguished and differentiated. Figure (4).

Figure (4) Districts as a visual image Elements of the city

- **Nodes:**

On the one hand, nodes are spaces prepared to permit the practice of activities, and, on the other hand, to add up aesthetic values to the urban formation. They can be represented in terms of squares and intersections. Figure (5)

Figure (5) Elements of the visual image of a city

- **Landmarks:**

Visually significant and distinct points from which positions and locations can be precisely identified Figure (6)..

Figure (6) Landmarks as a visual image Elements of the city

- **City Entrances/Gates:**

The city gate is the first thing that affects people's conception, which strengthens the city's visual image . Figure (7).

Figure (7) Entrances/Gates as a visual image Elements of the city

- **Borders/Edges:**

They express the transitional phase and give a distinctive character and they might be external or internal. Figure (8).

Figure (8) Borders/Edges as a visual image Elements of the city

- **Furniture Elements:** Figure (9).

Figure (9 Furniture Elements as a visual image Elements of the city

- **Historical and Heritage Dimension:** Figure (10).

Figure (10) path as a visual image Elements of the city

- **Emphasize the hierarchy of paths and spaces.** Figure (11).

Figure (11) Emphasize the hierarchy of paths and spaces as a visual image Elements of the city.

There are other elements that we can be called "structural elements", which are specific vocabularies that clarify and explain the urban structure and could be perceived through their impact and importance, as follows:

- **The formation and nature of the land:**

The nature and features of the land are the first determinants of the formation of the city visually and functionally.

- **Figure**.

It is expressed by the horizontal view, i.e. plan, of the city highlighting the movement and flow network.

- **Volume, Area, and Density:**

Volume, synonym to "size" in the same context, is measured by the number of population, where the density can be calculated via the relationship of such a size and the city area, which inversely impacts the process of perceiving the city.

- **Urban fabric:**

It is a relationship between streets and spaces that affects the mental image of the city conceived by the visitor. Moreover, it explains the different relationships such as the height and the area of a block, which gives a long-lasting impression if the area is homogeneous or not Figure (12).

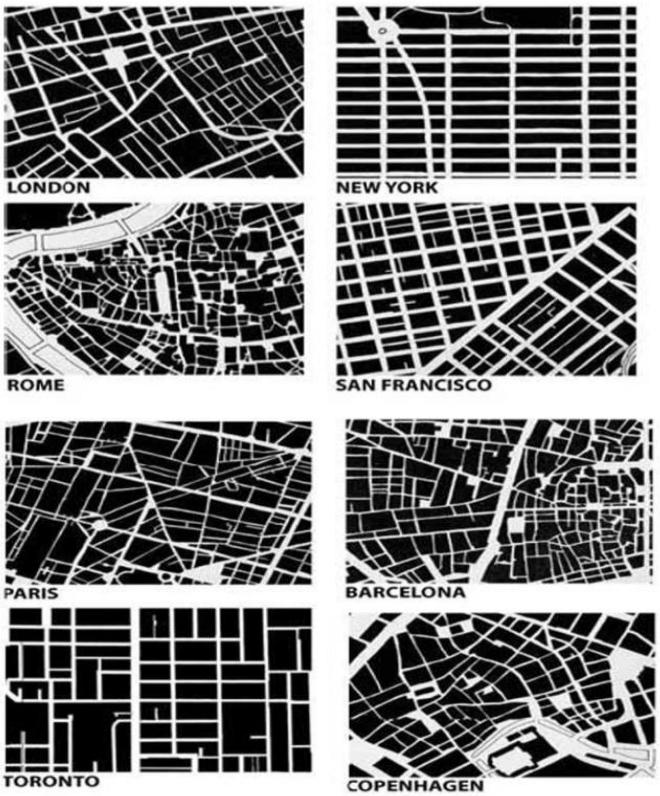

Figure (12) Space formation and urban fabrics.

- Identity/character:

Character is defined as a set of general qualities that characterize a particular period of time or a certain form/shape. It can be considered as an expression used in most urban-related fields that are dominated by additions or

man-made elements and it includes the interaction between space, buildings and activities, which is also known as the appearance of urbanism, the overall image of the city, and the distinct local urbanism, as shown in Figure (13).

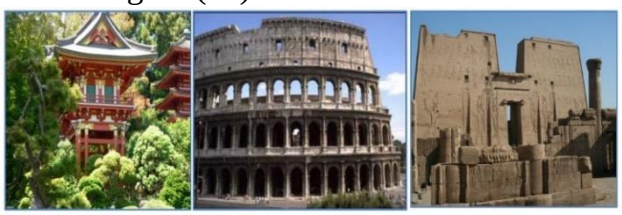

Figure (13) Architectural character and urban style

- Activities and their distribution:

Topography, density and area affect the type and the function of the activity and its function and have the greatest impact on the perception processes and affect the aesthetics of the areas and give meaning to the place.

3. Rehabilitation of the city urbanization by enhancing the urban image in order to achieve quality of life standards [6]

The objective of enhancing the sustainability of the urban formation elements and the visual image elements through the rehabilitation of the city's urbanization to achieve/create a clean and pollution-free environment, better city economics, psychological comfort, tourism activities, as well as the visual and aesthetic aspects that characterize it. In order to achieve the quality of life standards.

The Importance of visual formation of city:

The topic of the visual formation of a city has received the attention of many researchers, planners, urban designers, and architects, who were interested in defining the features of a city and describing its features through the landscapes and elements of urban formation, as the city with its landmarks and urban structures is only a reflection of the identity of its cultural heritage throughout history, and then grows to keep pace with the changes that occur on its residents and to suit their needs.

Any visual study must be concerned with the application of the principles and elements of the integrated visual image to a city, so that the latter can be formed through the elements of that visual image, e.g., tracks, main axes of movement, gates, distinctive signs, neighborhoods, main squares and visual borders, etc., in addition to the elements of urban formation, i.e., buildings and services, streets, urban spaces, transport and movement, and site coordination elements.

This is what the city of Al-Baha, located in the Kingdom of Saudi Arabia, has executed by preparing a study of a set of existing or proposed axes. The visual axes, in which the elements of the visual image are developed and applied to form a visual formation of the city of Al-Baha. Additionally, a comprehensive visual plan for the city was prepared in order to reflect the city's identity, urban character, and function as a promising tourist destination. It focuses on rehabilitating the sustainability of urbanization as well as the urban formation of the city in order to be one of the tools implemented to raise the standards of quality of life.

3.1 Location of Al-Baha City, Kingdom of Saudi Arabia [6].

- The city of Al-Baha is located in the mountainous range of Sarat, with an altitude that ranges between 1800m and 2500 m above the mean sea level. The northern part of the city has an altitude ranging between 1000 m and 1750 m.
- The city of Al-Baha is located in the south-west part of the Kingdom of Saudi Arabia, where it is considered as center of the region. Al-Baha is one of the most important touristic destinations in the Kingdom of Saudi Arabia, and it has a moderate climate and a picturesque nature. Moreover, it is worth mentioning that Al-Baha contains more than forty forests, the most famous of which are Raghadan Forest, Al-Baydan, Al-Sakran, Shahba, and Blue Salah.
- Due to the location of the city of Al-Baha, it plays a vital role at the confluence of important regional roads in addition to being the administrative capital of Al-Baha region. In addition to the administrative importance, the headquarter of the government administration and branches of local councils are located in the city. Furthermore, many educational, tourism and health institutions have branches in the city. . Figure (14),(15)

Al-Baha was also given many names and titles such as the jewel of the resorts and the Hejaz garden.

. Figure (14) Diversity of functionality

Figure (15) forms

3.1.1 Factors promoting the sustainability of both the urban design and visual image elements [6].

- Rehabilitation of the urban Formation in Al-Baha City to achieve the quality of life standards.
- Taking into consideration the humanitarian and social aspects of the urbanization of the city of Al-Baha (humanization city).
- Studying the visual-mental map of Al-Baha city.
- Preparing a visual plan for the city of Al-Baha.
- An evaluation study of the axes of the movement, the current situation, and their relationship to the visual image of the city.
- Visually develop the main axes of movement within the city, in line with the proposed urban character of the city.
- Development of public spaces and squares located on those axes and design of a set of distinctive relationships between them, forming a visual development element in order to make them look like an outdoor living room for urban and human interaction.
- Designing site coordination elements for the axes and on both of their sides to achieve visual and urban attraction components.
- specify and design pedestrian-related areas, i.e., crossing and walking lanes.
- A distinctive design of the city's main gates/entrances shapes the overall urban character of the city.
- Designing various projects located on both sides of the axis in the range of the first Urban design block that matches the proposed city character.
- Traffic treatment of the visual axes.

3.1.2. Perspectives and Concepts for achieving the standards of quality of life in order to enhance the quality of living of Al Baha City

- The human is, in general, the primary component of urban planning, wherein the human as a basic state of our study enjoys a distinct nature beyond being a mere body to being mind and soul, and therefore has physical and mental needs to be satisfied through the environment in which he lives, to form the city where he lives, and to form a set of small environments created by man to meet the physical, mental and spiritual needs in order to meet the standards of quality of life.
- Rehabilitation of the city urbanization through the planning of visual formation and the urban formation elements Figure (16).

Figure (16) Elements of visual image implemented to improve the quality of life

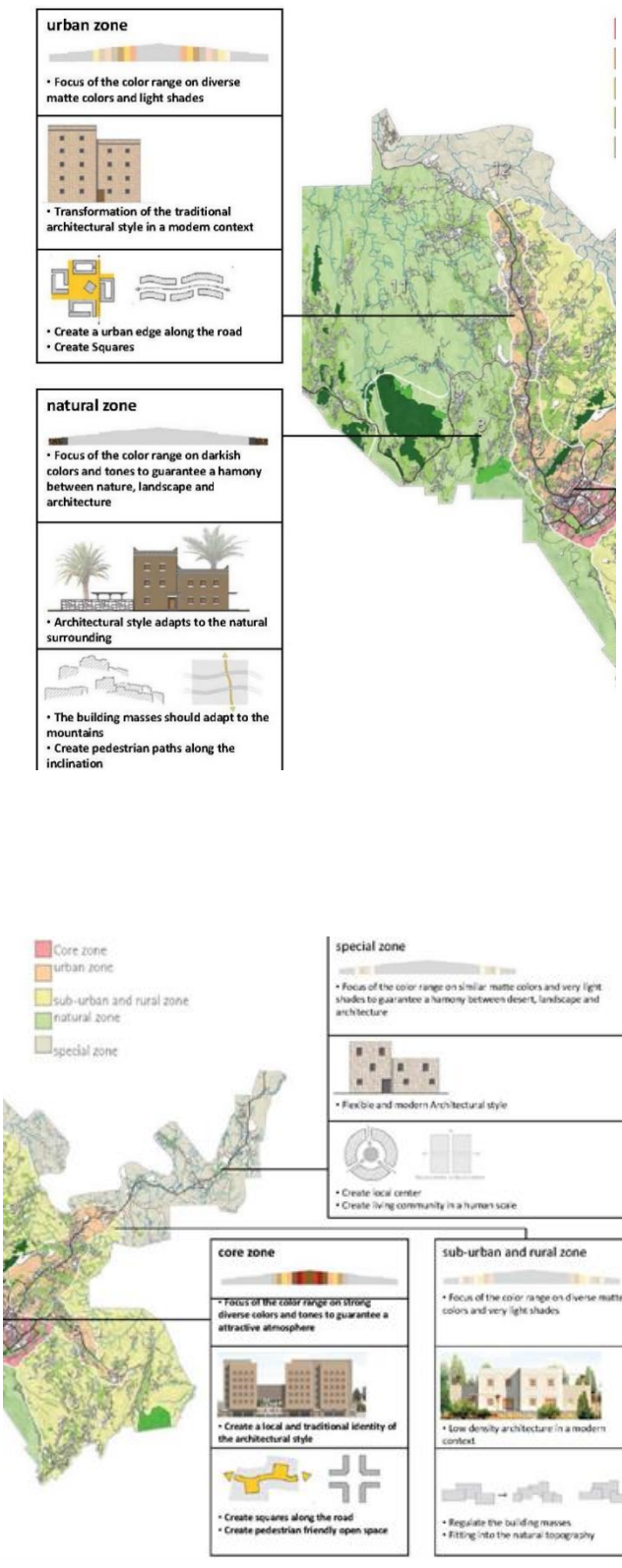

Figure (17) visual axes that reflect the identity and heritage of the Al-Baha region.

- Rehabilitation of the urbanization of the city to form visually homogeneous neighborhoods with a distinct urban identity that fulfils human needs. Figure (17)

3.2. case study (Historic Cairo Development Project: Cairo, Egypt) [14]

This project represents the heritage treasures of Cairo of hundreds of monuments, which vary between Pharaonic, Coptic, and Islamic. The Historic Cairo Development Project demonstrates the great attention paid by the state to preserve Egyptian civilization, by reviving archaeological buildings and restructuring the area in order to turn it into an integrated tourist attraction that enhances the sustainability of the visual image and the illustration of urban design elements to achieve the quality of life standards. Figure (18)

The Cairo development project was classified as an "extended project" due to the large size of its plans, as the number of buildings that need to be rehabilitated exceeds 500 heritage buildings, while the development plan was divided into three main phases to be executed in parallel, in addition to some separate projects, where the former could be summarized as follows:

- Phase I (Priority Project): It has the most prominent monuments that attract both tourists and citizens alike.
- Al Fustat Area Restructuring Project
- Ophthalmic duct area development project
- Facades of residential buildings, located in historic Cairo, Renovation project

It is worth mentioning that the cost of the development of the historic Cairo project was initially estimated to be 30 billion Egyptian pounds, and it was expected to reach approximately 70 or 80 billion Egyptian pounds.

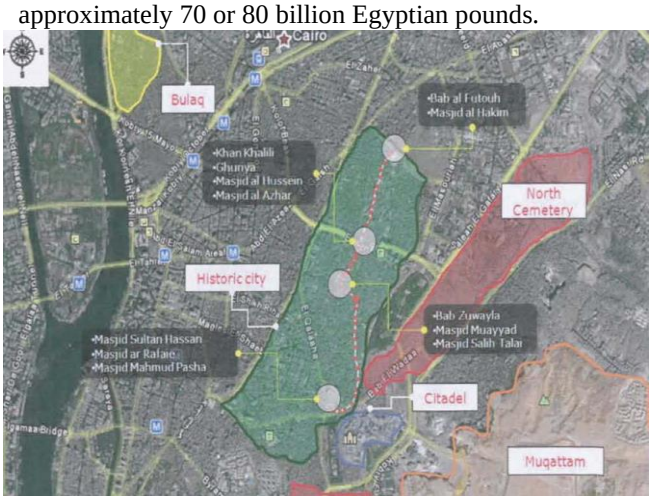

Figure (18) Distinctive optical axes to improve the quality of life

The main features of the Historic Cairo Development Project implemented to enhance the visual image [15] : Figure (19),(20),(21),(22),(23)

- Al-Hakim Mosque

The ongoing development includes the waste removal, and then the restoration of the facade of the Al-Hakim Mosque; these works extend from the mosque to Bab

Al-Nasr (Al-Nasr's gate/door) and Bab Al-Futuh on an area of 14 acres.

- Bab Zuwaila and Al Room district

The area to be restored, in the vicinity of Bab Zuwaila, is about 8 acres, starting from Ahmed Maher Street to Hammam Al Qirbah, in addition to building a range of craftsmen workshops and shops.

- Amr ibn Al-A'as Mosque

Given the religious and heritage status of Amr ibn Al-A'as Mosque, in addition to its vicinity to-be-developed Fustat region, the Prime Minister, Dr. Mustafa Madbouly, has directed the full restoration of the Mosque

- Al Hussein Mosque

The restoration procedures are concentrated in the area surrounding the mosque covering an area of 13 acres. Such procedures include the rehabilitation of the facades of the residential buildings, where the area of 13 acres covers the following:

  - Al Azhar Street
  - Sayed Al Dawakhli Street
  - the El-Darb El-Ahmar (Red Trail) street

- Darb el labanna (Milky Way) street [16]

The area of Darb Al-Labbana is surrounded by many places such as Al-Azhar Street and Al-Hussein Mosque, so the procedures will focus on reviving the neighborhood through:

- The establishment of educational and cultural centers; The establishment of a commercial market;
- Restaurants Area; The rehabilitation of Old Buildings;
- The establishment of an amusement park; The construction of a luxury hotel;
- The creation of Craft and Heritage Workshops; The establishment of tourist Trails;

Figure (19) Distinctive optical axes to improve the quality of life

Figure (20 Visual image improvement the quality of life after and before rehabilitation .

Figure (21) Improving and developing the facade of the main axis

Figure (22) Distinctive optical axes to improve the quality of life.

after restoration before restoration

Figure (23) Distinguish Architectural facade to improve the quality of life.

- **Saladin (Salah al-Din al-Ayyubi) Citadel [17]**

The head of the Armed Forces Engineering Authority confirmed the construction of a recreational park for the citadel, in addition to the renovation works included in the master Development Project plan.

In addition to the above-mentioned monuments, many places will successively receive rehabilitation works, after the completion of the priority phase, such as: [18]

- Al-Azhar Mosque;
- Ain Al-Sira lake;
- Al Sayeda garden;
- Al Mawardi;
- The Citadel;
- Sultan Hassan;
- Mosque of Ibn Tulun

4. The reciprocity relation of the urban formation elements and the visual image with the standards of quality of life.Tabhe (1),(2)

Quality of Life Standards		Elements of urban formation				
		Buildings	Spaces/ voids	The Streets	Transportation and means of transportation	Landscaping
Satisfaction with the city urbanization	Sustainable public transportation		*	*	*	*
	Healthcare Services	*	*	*		
	Sports facility	*	*			*
	Cultural facilities	*	*	*		*
	Educational Facilities	*	*			*
	Availability of shopping, entertainment, and recreational facilities	*	*	*		*
	Administrative Services	*				
	Streets and roads		*	*	*	*
	Pedestrian paths	*	*	*	*	*
	Public Spaces	*	*	*	*	*
	Green spaces	*	*	*	*	*
	Complementary green landscaping	*	*	*	*	*
Satisfaction with the city's economy	Land Prices	*				
	Job vacancies	*	*		*	*
	Family Group Income	*			*	
	Housing possibilities	*				
	Presence and integration of foreigners	*				
Satisfaction with the	Air quality	*	*	*	*	*
	Quality of hygiene	*	*	*	*	*
	Quality of water	*	*	*	*	*
Social Satisfaction	Sense of happiness	*	*	*	*	*
	Participation	*	*	*	*	*
	Interconnected society		*	*	*	*
	the place where you live.	*	*	*	*	*

From the analysis of the interrelationship between the urban formation elements and

quality of life standards, we find the following

- The elements of the urban formation, e.g., buildings, tracks, spaces, transport and movement, elements of site coordination, representing one of the essential tools that contributed to achieving 75% of the quality of life standards as follows:
- In order to fulfil the urbanization satisfaction standards through the urban formation elements, the latter must be as follows:

- **Buildings:**
- Distinctive urban character, which suits the local environment as well as the privacy of the place.
- The use of local materials in the creation of building blocks.
- Performing environmental treatments of buildings in order to achieve the environmental quality standards.
- Apply the concepts and foundations of green architecture.
- Mixed use of buildings.
- Diversify the architectural nature of the various uses of buildings between housing and services.

- **Open spaces:**
- The hierarchy of urban spaces in neighborhoods, strict, and cities.
- Designing unique spaces that meet the requirements of users.
- The diversity of urban spaces between recreational, cultural, marketing, residential, and service, ... etc.
- The possibility to access public spaces and their relation with pedestrian paths and parking.
- Security, safety and comfort for users of urban spaces.
- Design spaces to perform as an urban interface for users and visitors.
- Elements of space furniture should be characterized by modern technologies to create smart open spaces.

- **Streets**
- Street hierarchy in neighborhoods and cities.
- Providing pedestrian paths in neighborhoods and cities as a deterministic design system.
- Elements of street furniture should be characterized by modern technologies to create smart streets.
- Availability of all elements of sustainable transport in the streets, e.g., pedestrians, bicycle lanes, buses, metro, ... etc.
- Landscaping and afforestation work in the street.
- The complete separation between the movement of pedestrians and the movement of vehicles.
- **Movement and Public Transportation:**
- The use of sustainable public transport.
- Availability of all means of public transport (pedestrians, bicycles, buses, filobus, metro, railways, and airports.
- Enhance the rate of interdependence between neighborhoods and cities.

- **Landscape:**
- Designing a system of green areas at both levels of neighborhoods and city
- Design of coordination elements for streets, spaces and gardens regardless of the different characters and identities.
- Using sustainable landscaping and coordination elements
- Taking into account the privacy of the place and the environment in the selection of green areas and agricultural works.

- able No. (2) shows the correlation between the visual image elements and the quality of life standards.

Quality of Life Standards		Visual Image Elements				
		Paths	Gathering Points	Distinctive Marks	Districts	Boarders
Satisfaction	Sustainable public transportation	*	*	*		*
	Healthcare Services		*		*	
	Sports facility	*	*	*	*	

	Cultural facilities	*	*	*	*	
	Educational Facilities	*	*	*	*	
	Availability of shopping, entertainment, and recreational facilities	*	*	*	*	
	Administrative Services	*	*	*	*	
	Streets and roads	*	*	*	*	*
	Pedestrian paths	*	*	*	*	*
	Public Spaces		*	*	*	*
	Green spaces	*	*	*	*	*
	Complementary green landscaping	*	*	*	*	*
Satisfaction with	**Land Prices**		*	*	*	
	Job vacancies	*	*		*	
	Family Group Income		*		*	
	Housing possibilities		*		*	
	Integration with foreigners	*	*		*	
Satis	**Air quality**	*	*	*	*	*
	Quality of hygiene	*	*	*	*	*
	water quality	*	*	*	*	
Social Satisfaction	**Sense of happiness**	*	*	*	*	
	Participation and influence	*	*	*	*	
	Social Interconnection	*	*		*	
	the place where you live.				*	

By analyzing the interrelationship between urban formation elements and quality of life standards, we find the following:

- The elements of the urban formation, e.g., buildings, tracks, spaces, transport and movement, elements of site coordination, representing one of the essential tools that contributed to achieving 75% of the quality of life standards as follows:
- There must be a set of factors that clarify and distinguish the elements of the visual image to achieve the pleasure of the visitor and the user and enjoy the standards of quality of life, It is the connection of the city elements so that they represent simple relationships that can be perceived. The easier the elements are linked, the easier it will be realized by:

- Hierarchy: It is the progression in showing the areas of elements.

- Simplicity: The primitiveness of existing relationships as of network configuration and explicit geometry.

- to achieve the standards of urbanization satisfaction where the visual image elements must be as follows:

including:

- Differentiation

Differences through observation, where the differences of the characteristics built up side by side help to perceive the mental image, where such differences can be perceived by:

- Contrast or antithesis: such as the differences in terms of colours and/or heights.

- Uniqueness: Having a unique unrepeated building like a tower.

- Control: The control of a large item due to its size over the rest of the smaller-sized similar items.

- Visual separation: A strong element that draws attention in comparison to its surroundings.

- Exposure

The greater the exposure of the elements built in front of the viewers, the clearer it is to the mental map. With the increase in the number of viewers and the time of viewing, the degree of exposure varies and got affected by the lighting at different times, the frequency of vision, the axis of vision, and its presence on more than one axis of movement, where the exposure is accomplished via:

- Quantity: The element is measured by the number of viewers and the distance of view.

- Panorama: is the view of a wide, high element from all directions.

- Surprise: The sudden appearance of an element that draws all the attention to it.

- View Overlap: Seeing different composite elements one behind the other.

- **Structure:**

-Sequence: Always on the same line or street and it can be perceived through time which is translated into distances, where different elements arranged along the way could be visualized.

- **Meaning**

-It is to find a functional, social or economic meaning to the element

- **Distracts:**
- Neighborhoods with a distinctive architectural character and a distinctive urban style in comparison with each other.

- The use of high-intensity neighborhoods and mixed uses.
- **Gathering Points (Nodes):**
- The hierarchy of gathering points in neighborhoods and cities.
- Designing unique gathering points that meet the requirements of users.
- The diversity of gathering points between recreational, cultural, commercial, residential and services, ...etc.
- Accessibility of the gathering and their relationship with pedestrian paths and car parking.
- Elements of space furniture should be characterized by modern technologies to create smart open spaces.
- **Paths:**
- Conveying a distinctive urban character to each street and road.
- Progression hierarchy in neighborhoods and cities.
- Providing pedestrian paths in neighborhoods and cities as a deterministic design system.
- Elements of street furniture should be characterized by modern technologies to create smart streets.
- Availability of all elements of sustainable transport in the streets, e.g., pedestrians, bicycle lanes, buses, metro, ... etc.
- Landscaping and afforestation work in the street.
- The complete separation between the movement of pedestrians and the movement of vehicles.
- **Distinctive Landmarks:**
- Availability of visual image clarity factors for distinctive signs, e.g., differences, exposure, composition, and meaning.
- Excellence, uniqueness, and control of distinctive landmarks
- contrast and difference between Distinctive landmarks at both the Neighborhood and City Levels.
- **Edges:**
- Availability of visual image clarity factors for distinctive signs, e.g., differences, exposure, composition, and meaning.

5. Results:

- The concept of quality of life is defined by measuring the level of satisfaction in regard to the most important aspects of an individual's life.
- There are various indicators to measure the quality of life as follows:
- Assessment of the stability, health care, culture, environment, education, sports and infrastructure.
- transportation, political, social and cultural environment, public services, health, economic services, schools, education, natural fauna and flora, housing, availability of media, theaters, cinemas, sports, consumer goods, restaurants, and recreation.
- Accessibility to natural places as well as architectural quality, urban design and healthcare services. Business environment, crime, security, culture, restaurants, tolerance and policy initiative development.
- Corruption, freedom of choice, life expectancy, GDP per capita, social support and giving.
- Security, health, income, jobs, work-life balance, education, satisfaction level, housing, environment, community and civic engagement.
- Transportation, health, economy, education, housing, neighborhoods, environment, community participation and equal opportunities
- Seven main dimensions contribute to the achievement of urban quality of life (environmental dimension - urban dimension - mobility and transport dimension - social dimension - psychological dimension - economic dimension - political dimension)
- Standards and foundations to achieve quality of life:
- Satisfaction with the city urbanization (sustainable public transport, healthcare services, sports facilities, cultural facilities, educational facilities, availability of shopping centers and entertainment shops, administrative services, streets and roads, pedestrian paths, public squares, public green spaces, complementary green spaces, safety and security).
- Satisfaction with the city's economies (land

prices, job opportunities, family income, housing possibilities, the existence of integration with foreigners).

- Satisfaction with the natural environment (air quality, hygiene quality, water quality, combating climate change).
- Social satisfaction (happiness, participation and influence, community connectedness, where you live).
- Urban formation is defined as the product of the interaction of a set of elements and components operating within urban space and governed by a set of inter-spatial relations, functions and activities of those components that are essential to the formation of the urban identity of cities and neighborhoods through the formation of the physical environment for living, arranging and improving the overall appearance according to the function.
- The elements of the urban formation are (buildings, urban spaces, streets, transport and movement, and site coordination), which contribute to the formation and improvement in achieving 75% of the quality of life standards.
- The urban formation of a city consists of spaces and shapes, and the formation of a city depends on the geometric inter- and cross-connection between its various components such as streets, shops, offices, houses, pedestrian areas, squares and public parks. Urban formation is also known as the spatial formation of the set of things that make up the city's architecture, such as buildings, streets, utilities, plateaus and rivers.
- The elements of the visual image are homogeneous neighborhoods, paths, gathering points, edges, distinctive signage, and gates and entrances, which their formation contributes to the improvement in achieving 73% of the quality of life standards.

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