The impact of cultural values on the sustainability of Egyptian urbanism: Case study of Zagazig city

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ABSTRACT:

The research aims to explore the cultural values that constitute the behavior of Egyptian urban users and the extent of its suitability to the values of sustainability. Most urban sustainability processes seek to change and transform the behavior of urban users into sustainable behavior, which depends on a specific set of values that must be present in the culture of every society in order to achieve the sustainability process in it. These values are summarized in: (respect for the environment, freedom and democracy, justice and equality, tolerance, sharing responsibility). Despite the efforts made for urban development in Egypt, Egyptian urbanism suffers from many environmental, social and economic problems that explain its unsustainability. Therefore, the research assumes that the unsustainability of Egyptian urbanism results from the lack of harmony in the behavior of users resulting from their cultural values with the values of sustainability. This is evident from the urban problems in the city of Zagazig. The descriptive analytical approach is used to monitor and analyze the current cultural situation and its impact on the formation of Egyptian urbanization, by presenting some of the changes that have taken place in the culture of Egyptian society since the middle of the twentieth century until now, and comparing the current cultural values of society with the values of the principles of sustainability. And the impact of user's behavior and values on the sustainability of the current Egyptian urban, as is evident in the case of the city of Zagazig.

Keywords: Cultural values ; Sustainable values ; Sustainable behavior ; Sustainable urbanism

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1. Introduction

Sustainable development was defined in the Bertland Commission report "Our common future" as: "development which meets the needs of the present without compromising the ability of future generations to meet their own needs." It relied on three basic dimensions (social, economic and environmental dimensions) for the advancement of society and achieving continuous progress. The focus was on the three main dimensions which became the main pillars of the sustainable development process, and was adopted by most international conferences such as: (Earth Summit in Rio de Janeiro (1992), the World Summit on Sustainable Development (2002), and the Sustainable Development Plan (2015)), which in most of its objectives agreed on the necessity Economic growth, justice and social development while preserving environmental and natural resources for future generations and limiting the unjustified and irrational consumption of economic resources. The United Nations Declaration (2000) also defines a set of values that are supposed to be present in the culture of any society to achieve the sustainable development process, which are: (respect for nature, preservation of living creatures and natural resources, freedom of choice and democracy, social and economic justice and equality among members of society, tolerance and rejection of racism and nondiscrimination between individuals on the basis of colour, gender or religion, sharing responsibility and working to repair existing environmental, social and economic damages). The Human Development Report (1996) examined the relationship between economic growth, culture and human development, as cultural development works to expand people's choices by providing them with opportunities in work fields, income, health, education and political rights that condense in the concept of participation, which starts from the bottom up, i.e., from the base or the traditional society. Provided that that society is fully convinced of the necessity of change and that success in achieving development depends on its participation. The 36th session of the UNESCO General Conference (October and November 2011) launched the Culture Bridge for Development initiative. This initiative aims to promote an innovative and creative approach and promote culture as a bridge for sustainable social, economic and human development, job creation opportunities for social cohesion, education and mutual understanding ^[1-6]

From above, the importance of culture and its role in the success of the sustainability process is clear. Therefore, this research follows the descriptive analytical approach to answer the main research question: What is the relationship

between culture and urban sustainability? And the subsequent sub-questions: Is Egyptian urbanism sustainable? Are the cultural values of Egyptian society compatible with the values and principles of sustainability? How do cultural values affect the behaviour of users of Egyptian urbanism and Zagazig city?

The research methodology is divided into:

- Content analysis: It deals with the research concepts and the relationships between them, namely (culture, cultural values, sustainability, urban sustainability), and the role of culture in shaping sustainable behavior in urbanism.
- Empirical analysis: An Interpretative analytical approach based on Participant Observation is used to describe and analyze the relationship between cultural values and the behavior of users of Egyptian urbanism, and to compare the current cultural values of society with sustainability values.

Case study approach: It is applied to the city of Zagazig as an example of Egyptian cities, due to the lack of studies that dealt with the relationship between culture and the behavior of urban users of the city, and also because it is the researcher's place of residence, which makes it easy to study and make observations about the behavior of individuals and institutions in the city's urbanization and the causes of its urban problems.

Research problem

Many problems occur in Egyptian urbanization, including random construction, lack of facilities, and environmental pollution. This is what applies to most Egyptian cities, especially the city of Zagazig. Unconsidered urban growth and the failure to involve local councils and residents in planning, in addition to non-compliance with laws related to protecting the urban environment, led to the deterioration of the city's construction. Hence, the problem of the research appears that most urban development processes in Egypt have ignored the influence of the cultural dimension and its ability to shape the behavior of urban users, and did not take into account the cultural specificity of Egyptian society and the changes that occurred to its values, and were concerned only with the economic aspects.

The aim of the research

The aim of this study is to answer the research questions to know the relationship between culture and urban sustainability, and the impact of the values that constitute the behavior of Egyptians on Egyptian urbanism in general (Zagazig city in particular), and the extent of their compatibility with the values of sustainability. The research ends with a set of recommendations that must be followed to achieve sustainable urbanism.

Some previous studies that focused on studying such a relationship were presented, including:

1. Studies on Egyptian Urbanism:

Allam and Shaaban^[7] presenting the form of Egyptian urbanization and its natural and urban characteristics, its components of cities and villages, its laws and legislation governing urbanization, and the problems faced by Egyptian urbanization (loss of balance between built and uninhabited spaces, inflation Major urban centers, deterioration of old neighborhoods, lack of housing and facilities, unplanned urban sprawl, loss of urban character of the city, environmental pollution). Rajeh^[8] monitors the ruling elements of Egyptian urbanization (such as population and urban growth, the narrowness of the inhabited space, the imbalance between population, economic and urban growth, and the restriction of development to major cities, and presents the components and elements of urbanization from (urban, rural, coastal desert urbanization, urbanization of cities and new human settlements), and the problems faced by each element of (imbalance between man and place, absence of a volumetric sequence of cities, random growth, deterioration of urban structures, overlapping of uses Lands, loss of architectural character and low urban infrastructure, disruption of the housing system).

Farhat ^[9] presents the impact of human behavior and its relationship to the physical environment. He monitors the impact of neglecting human studies and cultural dimension when designing urban spaces, which cause the failure of development processes to achieve their economic, social, cultural and recreational objectives. Abdel Hamid ^[10] monitors the impact of cultural changes on the built environment in the Egyptian villages by monitoring the social, cultural and economic transformations experienced by some villages in the delta region, which were the cause of changes in villages planning, as they led to distorted architectural patterns that do not express structural privacy or the inhabitants of the villages today, and the rapid transformation of urbanization without the presence of controls led to the transformation of these villages into an informal one.

2. Studies on the current cultural situation of Egyptian society:

Laila ^[11] presents in his study the impact of political and social transformations on the cultural values of the Egyptian society. He sees that culture consists of a set of meanings and symbols that crystallize in the form of value systems that guide human behavior in various areas of social life, whether they are normal or perverted. Based on this,

culture and value systems play a role in building society, as they are the ones that organize the interaction that occurs in society. Humans perform their roles and accomplish their behaviors while guided by the values of culture. He presents the impact of the political and social changes that have taken place in the Egyptian society and how they led to the weakening of the culture and value systems of the society, including: dismantling the structure of religion as an entry point for dismantling culture and morals, the spread of consumption culture and values in society, and the spread of a culture of moral and social deviation.

To emphasize the change in the cultural values governing the Egyptian society, Zayed et al. ^[12] present the definition of values as: general guidelines for behavior that are related to the needs of individuals and are formed through the meanings, opinions and perceptions upon which individuals' vision of the world is built, and are also reflected in people's behavior and choices, and are determined in their light. The researchers present the change in the moral structure of the Egyptians and their view of the future and corruption, and the findings of the study: decrease in integrity values, which combine values of (fidelity, contradiction and justice), decrease in values of transparency, which combine (honesty, trust, participation and clarity), increase in corruption values, including values of (nepotism, primacy of personal interest over public interest, achievement). Asfour ^[13] presented the definition of culture and the political and social transformations that society went through that led to the current cultural situation. Fandi ^[14] agrees with him about the impact of political transformations, formal religiosity, and the adoption of a value system that relies on intermediary rather than competence on Egyptian society and its impact on urbanism.

3. Studies on Culture, Sustainability and Urban form:

Hawkes ^[15] presents the debate about the need to consider culture the fourth pillar of sustainable development. Culture for him is an invaluable concept that has been largely ignored in the planning process. The cultural dimension of the sustainability process is just as important as the economic, social and environmental dimensions. Culture also constitutes society's awareness and appreciation of its natural resources. It is linked to the economy through the generation of income, employment, and social programs that address poverty, equal rights, and civic participation. It is also linked to the environment through the use of cultural capital to raise environmental awareness; and thus play an essential role in promoting economic progress in a just society, Its importance is highlighted in that it: 1 - clarifies the aspirations and values of society, 2-Neglecting the study of culture has impeded previous development processes due to the inability to assess the past, work in the present, and discuss the future, 3 - Culture brings together many concepts and issues that are discussed in most planning processes, such as: (well-being, cohesion, participation, belonging and excellence), and therefore culture provides the effective intellectual tools necessary for development. Khansari ^[16] believes that achieving sustainable urban development aims to reduce the use of non-renewable resources, reduce waste production, and achieve human needs.

Opoku ^[17] presents the role of culture sustainability of the built environment. The cultural dimension of sustainability is no less important than other dimensions. To achieve the sustainability of any society, the relationship between the built environment and the natural environment must be redefined. The built environment consumes a large amount of energy and natural resources and produces a large number of polluting materials and waste that destroy the natural environment. So, culture plays an important role as a non-renewable resource that constitutes a vital part of the formation of cities to develop the forms of buildings, materials and construction methods in accordance with local culture and experience, reuse heritage buildings and encourage the participation of their residents in the sustainable development process and enhance their sense of belonging and social cohesion.

Culture

1.The concept of culture

There are many definitions of the concept of culture depending on the fields it deals with, including sociology. J. Hawkes ^[15] defined culture as: 'It is the way of life of a particular group of people. It includes: customs, traditions, beliefs, conventions, and moral laws, form of clothing, food, language, science, arts, technology, religion and rules of conduct. Lila ^[11] defined it as a group of meanings and symbols which organizes the interaction that occurs in society. Humans perform their roles and accomplish their behaviors while guided by the values of culture.

Therefore, Culture refers to the forms of social awareness, traditions, values, customs of society and its material and non-material forms that refer to the existing and governing values of social practices, or other forms of behavior and linguistic habits associated with the arts of the people. The culture of society is the product of political, economic, social and religious factors to which it is exposed ^[13].

2. Characteristics and elements of culture

Culture is characterized as a general and comprehensive framework that contains many elements, and it can be classified into two elements: the first is materialism, which is what is produced by man, and it includes architecture, furniture, materials for daily use, means of communication, art materials, handicrafts, materials used for religious

sacrifice and folk customs, templates and materials used in artistic presentations, cities, villages and items used for games, sports, etc. The second is immaterial which means elements that include patterns of behavior, ethics, values, custom, traditions, artistic methods and religious beliefs. used by the community as a result of the human presence in a defined society, and can be displayed through values, customs, religion, language and social structure ^[18].

3. Cultural values

The word value means 'the price and worth of something'. It can be studied on the basis of ideal standards, norms and the worth it entails, which is appreciated by society, or it can be studied as a concept that accommodates the realistic rules of behavior in society, so that values become relative and not absolute, differing from one culture to another ^{[8].} Therefore, in the research, Cultural values can be identified as general guidelines for behavior that are related to the needs of individuals and are formed through the meanings, opinions and perceptions upon which the individual's vision of the world is built. They are reflected in people's behavior and choices, and determined in their light. There are four main sources of values: religion, cultural heritage, social interaction, and culture from abroad ^[11]. *Sustainability*

1. Sustainable development

The definition of sustainable development has been linked to many different fields and important issues such as the environment, health, education, economics and politics. The first definition of sustainable development was put in the report of the World Commission on Development and Environment known as the Portland Commission (Our Common Future) in 1987 as "development that fulfills the needs of present society without weakening the ability of generations." coming to meet their needs. Which approved three main dimensions on which the sustainable development process depends: the dimensions (economic, environmental, and social).^[18]

2. Sustainable development values

For the success of the sustainable development process, some values must be promoted:^[19]

• Respect for the environment: Manage all living species and natural resources with caution and wisdom to preserve them and pass them on to future generations. Current unsustainable production and consumption patterns must be transformed into sustainable patterns.

• Freedom and Democracy: all human beings have the right to live their lives and raise their children with dignity in an environment free of hunger, fear of violence, persecution and injustice. These rights are guaranteed through democratic governance based on the will of the people.

• Justice and equality: Including social and economic justice, no individual may be deprived of the exercise of his rights because of gender, color, religion or social and functional assets. The equitable distribution of wealth between members of one society and between current and future generations must improve the situation of the marginalized and raise the standard of living.

• Tolerance: Human beings must respect each other with all their diversity of belief, culture and language. Differences within society should not be feared and suppressed, but cherished as a precious value to humanity. The culture of peace and dialogue among all civilizations should be strengthened.

• Sharing responsibility: Countries and institutions must take responsibility for existing environmental, economic and social damage, and work to address them.

3. Sustainable Urbanism

Hallsal ^[20] described urbanism as the human-created physical environments such as roads, bridges, and building structures, in contrast to the natural environment. It includes privately owned buildings, transportation systems, urban landscapes and other infrastructure buildings. It also includes cultural experiences and interactions between people, which create a stronger and more sustainable society. Sustainable urbanism aims to reduce environmental impacts in terms of energy exploitation, reduce carbon emissions, waste production and water waste, and this involves creating a built environment that produces more environmental, social, cultural and economic benefits than it consumes. This is why sustainable urbanism is the most obvious application. That is why sustainable urbanization is the most obvious application. That is why sustainable urbanization is the most obvious application. That is why sustainable urbanization is the most obvious application. That is why sustainable urbanization is the most obvious application. That is why sustainable urbanization is the most obvious application. That is why sustainable urbanization is the most obvious application. That is why sustainable urbanization is the most obvious application of the sustainable development process. It is the management of the urban development process by making optimal use of the available natural resources to meet the needs of the present generation without affecting the opportunities of future generations. This is achieved by adopting more sustainable behaviors and habits, aiming to protect natural resources while preserving human resources ^[20].

3. Sustainable behavior

Behavior is defined as the natural product of the mutual influence between human beings with their organic, psychological, mental and cultural abilities and personal experiences on the one hand and the natural and constructed (man-made) urban environment in all its components on the other. And the more real the interaction, the more the behavior reflects the nature of the space in it, and the human behavior can be judged by examining the environment in which people live and knowing the time they have spent ^[21].

Sustainable behavior is a set of actions that regulate this interaction in a way that aims to protect natural resources while preserving human resources. It is proactive, meaning that it is oriented towards the future by virtue of its combination of sustainable development, which takes into account meeting the needs of current generations while meeting future needs. The process of changing the behavior of community members is carried out in two directions: [16]

- Sustainable environmental behaviour: It is based on the economy in the use of resources such as non-renewable energy and reliance on renewable energy resources, rationalization and recycling of water consumption, reducing fuel consumption by providing comfortable and mass transportation, recycling waste and preserving the environment.
- Sustainable social behavior: Focuses on increasing individual participation in social and political life using internet means, leading to decentralized services, increasing the awareness of members of society about the importance of preserving the environment, and adopting sustainable behavioral values in everyday life.

5. The role of culture in shaping sustainable behavior in urbanism

Culture plays an important role in determining human lives and needs. It is a set of meanings and symbols that crystallize in the form of value systems that direct human behavior in various areas of life, whether normal or deviant. It regulates the interaction that occurs in society. Humans perform their roles and accomplish their behaviors guided by these values. The cultural dimension of the sustainable development process is equally important as the economic, social and environmental dimensions, as culture shapes society's awareness and extent of its appreciation for its natural resources. Culture is linked to the economy through income and employment generation, social programs that address poverty, equal rights, and civic participation. Culture is also linked to the environment through the use of cultural capital to raise environmental awareness. Thus, it plays an essential role in promoting economic progress in a just society. A sustainable society combines social justice, environmental responsibility, and economic feasibility, and this is achieved in the eyes of many researchers, such as Hawks^[15], and Opoku^[17] considering culture as the fourth dimension of the sustainable development process.

From the above, the importance of the role of culture in developing a sustainable environment becomes clear. Hawks^[15] believes that the nature of the place in which members of society interact affects their behavior. Most public facilities such as (gardens, parks, reserves, streets, pedestrian paths, sports arenas, squares, exhibitions, Museums are primarily cultural activities, and places run by the private sector such as (shopping malls, cinemas, restaurants, clubs) represent cultural and community activities. As well as places of cultural heritage in historical cities, many conferences and conventions have urged the importance of achieving economic, cultural, environmental and social sustainability for them, and benefiting from them in confirming the identity and character of society, which increases individuals' connection to the place and their sense of belonging to it.

Egyptian Urbanism

1. The cultural values of Egyptian society in the first quarter of the 21st century

Egyptian culture and identity have been maintained continuously through dozens of social and cultural features through traditions and customs, words, ideas and holidays, but since the middle of the twentieth century Egypt has been subjected to many political, economic and social changes that influenced the cultural values of Egyptian society and shaped the current cultural reality. ^[12]

• Decreased values of integrity, which combine the values of honesty, justice, and contradiction:

Decreased value of honesty in transactions between individuals, decreased value of justice, and increased sense of injustice and inequality. Increasing the discrepancy between what should be done and what is actually done.

Decrease in the values of transparency, which combines honesty, trust, participation, and clarity:

Clarity and disclosure rates decrease in the public sphere, even if they increase only within the family. Lying increases in government transactions or in areas of work to avoid problems. Indicators of participation in public life in general and electoral participation in particular decline. Trust rates in government officials and institutions are low, and they rise among relatives and acquaintances, who possess traditional characteristics such as religiosity, and characteristics such as education and competence do not take a place among the qualities that qualify for trust. ^[12]

Increase values of corruption include values of (nepotism, prioritizing personal interest over public interest): ^[12]
 The percentage of those who accept nepotism and favoritism in order to achieve personal benefit has increased.

High percentage of personal interest over public interest, as many prefer to achieve their personal benefits first.

Although the value of achievement is an ideal and positive value, it is associated with the extent to which some personal interests and benefits are achieved.

Deterioration of cultural life and public taste:

The stagnation and intolerance that affected it, and the transformation of intellectual relations into conflict and an attempt to impose opinions. And marginalizing the role of universities and interfering with them. Central cultural policies did not extend to the villages, which left them prey to ignorance and fanaticism and an open space for the forces of religious extremism. The separation of intellectuals from the rest of the classes of people, and the disappearance of cultural and social diversity.^[13]

• Spread of religious intolerance and apparent religiosity at the same time:

The spread of Salafist religious fanaticism that rejects innovation and acceptance of difference. It tends to exclude, spread the values of racism and intolerance, lack the spirit of integration and cooperation, and racial discrimination among people on the basis of religion, occupation, and gender. In addition to exploiting religion to manipulate laws and deceive citizens.^[13]

2. Manifestations of Egyptian urbanization in the first quarter of the 21st century:

Egyptian urbanism currently suffers from many different problems, including according Allam and Shaaban^[7] and Rajeh^[8]: Loss of balance between built and uninhabited areas (population increase): resulted in many subproblems. Organization laws, building conditions, and laws specifying building and population density have been violated, and the degree of human crowding in the streets and roads has increased, and the degree of car crowding has increased. The lack of sufficient parking spaces, increased pressure on public facilities, and the widespread phenomenon of random and marginal housing, as well as housing in cemeteries. Urbanization is expanding at an accelerating rate and resulting encroachment on agricultural lands.

Inefficiency of the Egyptian urban management system: The current management system is characterized by several basic features: the dominance of central ministries over localities, the lack of coordination between government agencies working in the same urban area, and the lack of effective popular participation in the management of urban development. The role of non-governmental organizations and the private sector is still ineffective in the development process.^[9]

Lack of clarity in classifying urban and rural communities:

The city in Egypt is defined on an administrative basis without taking into account the size of the centers and their population density. According to this definition, it has become possible to create new urban centers in the governorates without taking into account the characteristics of the current urban situation. It is also possible to change the existing capital of one center to another capital without mentioning reasons related to the efficiency of the cities in performing this role. Which led to the problem of rural aspects of life dominating cities and vice versa with urbanization of the countryside.

Imbalance in city sizes and geographical distribution:

Egyptian urbanization suffers from a clear imbalance due to the imbalance in the distribution of urban communities. The cities quickly expanded outward, beyond their original borders, at the expense of the agricultural lands surrounding the cities, especially the cities of the valley and delta. The cancerous growth of slums: Slums spread widely around city borders on the outside and on the available spaces inside, in addition to the random growth of villages in the countryside (rural urbanization).^[7]

- Deterioration of the urban environment and loss of architectural character:

The large population growth that is not matched by economic growth and the absence of proper management of urban development has led to a significant deterioration of the urban environment in Egypt, and its manifestations (the shrinkage of green spaces - loss of architectural character: the emergence of distorted architectural patterns in villages that do not reflect the structural or cultural specificity of the Egyptian villages).^[8]

- Pollution and utility problems:

Egyptian cities suffer from severe environmental pollution, including air, water, and noise pollution. The

percentage of families connected to the sewage network reached 56.05% ^[22]. As for the sewage network, it suffers from the high costs of establishing infrastructure, which is why some areas follow less expensive methods such as private stations and trenches, but they are not subject to the necessary health and environmental control, resulting in problems of pollution and the spread of diseases. As for the electricity network, despite the high rate of unit connections to the networks, continuous outages occur, especially in the summer. ^[23]

3. The impact of the cultural values of Egyptian society on Egyptian urbanism"

From the above, the role of cultural values in shaping the behavior of urban users is clear. The problems that Egyptian urbanism currently suffers from are a result of the behavior of its users and the values stemming from it. In his study on the impact of politics on urbanization in Egypt, Fendi describes society as: "a society of reward, not of efficiency, in which there are no criteria governing the preference of an individual over others in work and advancement except through relations of nepotism and kinship." ^[14]

These problems appeared in Egyptian urbanism with the absence of many values, such as honesty, transparency, and the tyranny of the values of lying and tyranny, which led to the dominance of what is known as backward urbanism: "an urbanism that is unable to designate a comfortable place for human movement at the level of house architecture or public spaces (streets, squares, and city planning), Which prompts a person to leave it or leave and escape from it." These values are consistent with the values mentioned by: Abu Laila ^[11], and Asfour ^[13]. Egyptian society currently suffers from a set of contradictory cultural values that have led to social and moral deviation in the culture of society, which appeared through the behavior of urban users (government agencies and institutions, individuals) in **Table (1)**.

4. The impact of the cultural values of Egyptian society on Zagazig city urbanization:

1. Decreased values of integrity, which combine the values of honesty, justice, and contradiction:

Governmental institutions: Despite the existence of laws that criminalize building on agricultural lands, cutting down or destroying trees, and encroaching on sidewalks, most of these laws are violated:

- The state bulldozed 83 acres of agricultural land to construct 75 residential buildings in Kafr al-Hamam in Zagazig ^[30]. Trees are cut down from most of the streets in Zagazig, such as Al-Galaa, and commercial kiosks are built in their place, or theare rented to banks and cafes in front of the city council on Al-Janain Street, in front of the University Hospital and Tolba Aweida Street. It was also removed from Al Mahatta Square to carry out development work that has been ongoing for years (Fig. 1-3).
- Individuals: With the law stipulating that violators must be punished and applying it to some individuals and excluding others who are nepotistic and nepotistic, the feeling of injustice and inequality increased, so it was: Encroaching on agricultural lands, the city grew randomly in most directions, which led to the city merging with neighboring estates and villages. The green areas that separated it from the cities were also lost. The emergence of planned informal areas on the city borders (**Fig. 2**).
- The sidewalk has been encroached upon by street vendors such as the square and the station tunnel. Among the owners of shops and cafes set up on both sides of the sidewalk and car lanes, such as the shops on Al-Bosta Street and the Montazah area. Which led to an increase in the narrowness of the road and crowding of cars and pedestrians next to each other (**Fig. 2**).

The city of Zagazig appeared with the construction of the Nine Arches (Zagazig Qanater) in 1832. Then the Governor of Egypt, Muhammad Ali Pasha, issued a decree making the city of Zagazig the capital of the Sharkia Governorate, due to its central location on the governorate's land. This was followed by the establishment of the directorate's office and public buildings [28].

With the construction of a railway line, a second urban core appeared around the railway station in the south of the city of Zagazig, allowing its old construction to continue or to be replaced by modern buildings. The old core around the nine arches did not receive this planning, which led to the faltering process of replacing it. As a result of the presence of the railway station in the south and the Moise Sea in the north-east, two areas appeared, enclosing large lands between them. Growth gradually occurred until the space between the two cores was filled and the city began to grow outward [29].

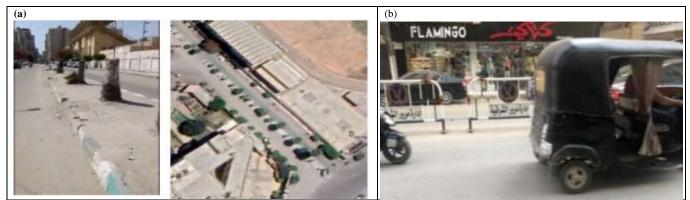
The repercussions of cultural changes on the urban environment of the city:

2. Decrease in the values of transparency, which combines honesty, trust, participation, and clarity: Governmental institutions: Public participation in decision-making and confidence in government projects decreased. Decisions became the responsibility of the responsible authorities only without consulting those affected by the existing urban problems and listening to them, which led to their exacerbation, such as: (encroachment on sidewalks, garbage piled up in the streets, raising the streets to levels higher than some old buildings, which led to the conversion of the ground floor It leads to a basement. Individuals violated building permits by fraudulently building more floors than were permitted and inconsistent with the dimensions of the streets overlooking them, which led to the spread of the phenomenon of towers, especially in the violating areas such as the Al-Ghasham area, and the subsequent pressure on utility networks and infrastructure in the area. Theft of electricity and water meters in other areas, which led to increased network losses (**Fig. 3**).

3. Increase values of corruption include values of (nepotism, prioritizing personal interest over public interest):

Governmental institutions: allowing the principle of legalizing violations and reconciling with the payment of fines, which encouraged individuals to violate the laws and made them confident of escaping punishment while imposing weak penalties and small financial fines, which increased the severity of violations, such as the penalty for trespassing on the sidewalk in the station and park area, which is punishable by imprisonment for a period not exceeding one month and a fine not exceeding ten pounds, or one of these two penalties, for anyone who trespasses

on public roads, places violating advertisements, and destroys trees. ^[31]. Allowing clubs, unions, and directorates to establish their own buildings on the Nile Corniche, in addition to shops and cafes, the Police Club, and a hotel in front of the University Hospital (**Fig. 3**).



- **Figure 1:** (a) Zagazig Hospital sidewalk before and after demolition and tree cutting ; (b)Removing the traffic sidewalk on Tolba Aweida Street and replacing it with metal barriers (source: researcher).

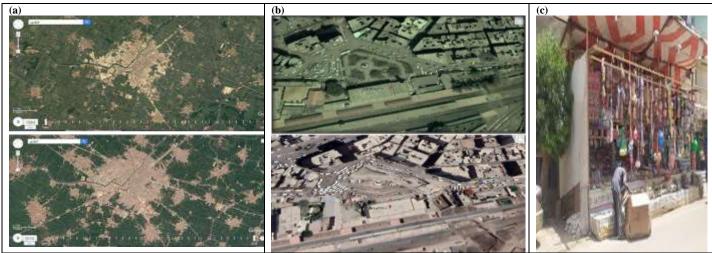


Figure (2): The urban development of Zagazig city between the years (1984-2023), showing the coalescence of Al-Kfour and Al-Azab in the city "Google Earth"; (b) Al Mahatta Square (1984-2022) after cutting down the trees and removing the square "Google Earth"; (c) Street vendors trespass on the sidewalk in front of the Security Directorate (source: researcher)

1.Decreased values of	Although there are many laws that regulate dealing with the urban environment (agricultural lands, building
integrity, which	conditions, gardens, sidewalks and roads, heritage buildings), most of these laws have been violated by urban users
combine the values	(institutions, government agencies, individuals). Government institutions' violation of the laws that they helped
of honesty, justice,	establish has created a state of contradiction among individuals between what should be done and what is being
and contradiction:	implemented on the ground. The lax implementation of these laws also encouraged individuals to violate them and
	the application of penalties to some rather than others, which affected the values of justice and honesty and
	increased the sense of injustice and inequality. ^[24]
2.Decrease in the	Egyptian society suffers from the spread of lying, a decline in the values of transparency, honesty, and clarity,
values of	and a lack of trust between government institutions and individuals. Indicators of participation in public projects
transparency, which	decrease, in addition to the centralization of the decision-making process and the lack of involvement of local
combines honesty,	councils, the conflict of laws regulating housing and the provision of economic benefit and revenues over the rights
trust, participation,	of citizens, which leads individuals to increase lying in government transactions, underestimating the value of the
and clarity:	law, and violating most of the laws regulating the urban environment. [9, 24]

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Table 1. The impact of cultural values on Egyptian urbanism - Source: Research



Figure (2): The urban development of Zagazig city between the years (1984-2023), showing the coalescence of Al-Kfour and Al-Azab in the city "Google Earth"; (b) Al Mahatta Square (1984-2022) after cutting down the trees and removing the square "Google Earth"; (c) Street vendors trespass on the sidewalk in front of the Security Directorate (source: researcher)

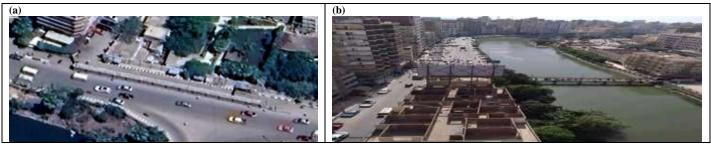


Figure (3): (a) Government institutions taking over part of the road and converting it to an internal road in the governorate area – "Google Earth"; (b) The encroachment on the Nile River by constructing the Mahrousa Hotel and the Police Club on the right of the picture and residential towers on the opposite side, on the far left of the picture.

- Individuals:

Many citizens took advantage of the leniency of the laws and the lack of security after 2013, the lack of deterrent penalties, and the acceptance of some employees to accept bribes, so agricultural lands were encroached upon, and random areas emerged resulting from urban expansion with a high standard of living that does not depend on the principles of planning and causes pressure on the city's facilities. Agricultural lands and green spaces gradually disappeared until their area reached 343 acres, representing 10.6% of administrative land uses ^[32]. Encroachment on the Nile River: Some old houses in Manshiyet Abaza on the Nile River were demolished, many high-rise towers were constructed, and the ground floors were used as cafes and restaurants, which led to blocking the view of the Nile and increasing pressure on the roads and congestion in this area, (**Fig. 3b**). Some individuals also tried to establish restaurants within the Nile Campus, but their construction was stopped and demolished. Encroachment on the sidewalk by shop owners and street vendors due to weak punishment and payment of bribes to municipal officials.

- 4. Deterioration of cultural life and public taste:
- Zagazig city and Sharqia Governorate as a whole suffer from the small number of cultural institutions in it compared to the number of residents. The governorate contains 19 palaces and culture houses, 70 libraries, one cinema, and only one theater distributed among the governorate's centers. Thus, the city of Zagazig contains one Palace of Culture that contains the only theater and cinema in the governorate. As for libraries, there is one public library, and the rest of the libraries belong to the colleges and institutes of Zagazig University ^[25]. There are also 3 museums belonging to the city of Zagazig: (Tel Basta Archeology Museum), which includes artifacts that were discovered in the governorate (Fig. 4a), but it has been closed for years)^[33].
- The city's distinctive architectural style buildings suffer from neglect, misuse, and weak oversight by the authorities responsible for them. The city contains 97 buildings that have been registered with the Urban Coordination Authority. Its uses vary between government buildings such as schools, religious facilities such as mosques and churches, or private residential and commercial buildings ^[34].
- The state's lack of interest in the old part of the city has prompted many of its residents to leave their homes, close them and move to newer, well-planned areas, or demolish them and build multi-storey houses that do not fit into the urban fabric of these areas, such as Ezbet Abu Tartour behind Al-Mabarra or the Nine Qanater area. As for residential and commercial buildings with a distinct architectural character, they have often been subjected to neglect and misuse due to their residents' ignorance of their importance, or their desire for them to be exposed to damage that is difficult to repair, so they are demolished (**Fig. 4b**).

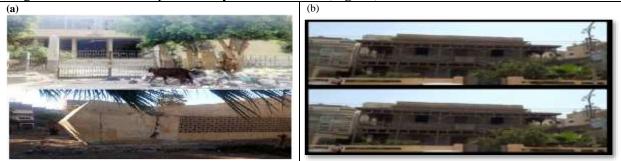


Figure (4): (a) Ahmed Orabi Museum (Source: Researcher); (b) Examples of heritage buildings within the city showing the effects of neglect and lack of maintenance " urbanharmony.org".

5. Spread of religious intolerance and apparent religiosity at the same time:

- Governmental institutions:

The construction of mosques is not controlled and monitored, as most of them are carried out through civil efforts and donations, and no specific locations are specified for them. A street may contain more than one Zawya and a mosque without taking into account the residents' need for it or the readiness of the street for parking spaces for worshipers, which hinders traffic. Most of these Zawiyas are not subject to the supervision of the Ministry of Endowments, which leads to them turning into hotbeds for the spread of terrorism and extremism.

Individuals:

Some individuals seek to build mosques and corners under houses and buildings in order to license them and then exploit them to evade electricity and taxes or to legalize construction on agricultural lands.

Results Summary:

- 1- Egyptian urbanismsuffers from many problems. The continuous development processes have not achieved the desired effect. This is a result of the absence of a study of the impact of the behavior and culture of Egyptians on urbanization and the changes that Egyptian society has undergone since the 1950s until now.
- 2- The city of Zagazig has suffered from random planning since its inception. The nature of the city, the possibilities of its urban expansion at the expense of agricultural lands, and the concentration of administrative, recreational and educational services in it were not taken into account, which led to the spread of slums, increased rates of crowding and pollution, and increased pressure on public facilities. Which led to the deterioration of the city's urban environment.
- 3- The cultural value system of each society affects the behavior of its urban users. The rise in values such as corruption and nepotism and the decline in the values of integrity, justice and transparency have led to an increase in violation of building laws, encroachment on agricultural lands and public property, and the spread of slums.
- 4- Culture is the product of a person's interaction with his surrounding environment, and every society has its own distinct culture. They are forms of social awareness and society's traditions, values and customs. And its material and non-material forms that refer to the existing values that govern the social practices of customs, customs, traditions, or other forms of behavior and linguistic customs associated with the arts of the people. Society's culture is the product of political, economic, social and religious factors and it affects those factors.
- 5- For the success of sustainable development process, some values must be promoted (respect for the environment, freedom, democracy, justice and equality, tolerance, shared responsibility).
- 6- Sustainable behavior results from the mutual influence between humans and the environment, and is regulated by a set of actions aimed at protecting natural resources while preserving human resources.
- 7- The nature of the place in which community members interact affects their behavior, public facilities such as (gardens, parks, reserves, streets, pedestrian paths, sports arenas, squares, exhibitions, museums, heritage and archaeological buildings) are cultural activities, and places run by the private sector Such as (commercial malls, cinemas, restaurants, clubs) are also represent cultural and community activities.
- 8- The political and economic transformations that Egyptian society has gone through have led to a contradictory set of values that have affected the behaviors of its members, and its impact has been reflected in the way they deal with the environment surrounding them.

Conclusions

The research addressed the relationship of culture to urban sustainability, by presenting the role of culture in shaping the behavior of urban users, as it guides the values that shape the behavior of individuals and institutions in the urban environment. Which must be compatible with the values and principles of sustainability to achieve the urban sustainability process. The concepts of sustainability, the values on which they are based, and the role of sustainable behavior in achieving urban sustainability were presented. And presenting the cultural values that govern the behavior of Egyptian society at the present time. With a presentation of the current situation of Egyptian urbanism and its many problems, such as: (loss of balance between built and uninhabited spaces, the expansion of major urban centers, the deterioration of old neighborhoods, the lack of housing and facilities, unplanned urban sprawl, the loss of the urban character of the city, and the spread of pollution). Which indicates that the values of sustainability are not available in Egyptian urbanism and therefore it is not sustainable.

This is done by comparing the values of sustainability, which are: (respect for the environment, freedom and democracy, justice and equality, tolerance, sharing responsibility), with the cultural values of Egyptian society, which are dominated by the values of: (corruption and nepotism, religious fanaticism, deterioration of the cultural situation, decline in the values of transparency and integrity). It is clear that the values of sustainability are not compatible with the current cultural situation in Egypt, and by applying them to the urban aspects of Zagazig city, it becomes clear the reasons for the unsustainability of the city's urban environment, and why it is a difficult process to achieve unless these values change.

Recommendations

Research recommends the importance of changing the behavior of members of society and transforming it into: sustainable environmental behavior based on (economy in the use of non-renewable energy resources, reliance on

renewable energy resources, rationalization of water and fuel consumption, recycling of waste, environmental conservation), and sustainable social behavior focused on (increasing individual participation in social and political life, leading to decentralized services, increasing community awareness of the importance of preserving the environment, and adopting sustainable behavioral values in everyday life).

- The focus should be on the role of culture in urban development processes, as most international conferences have called for.
- Culture should be considered the fourth dimension of the sustainable development process, such as the environmental, economic and social dimensions, and not a sub-axis in it.
- Attention to achieving the environmental, economic, social and cultural sustainability of society as a whole, without neglecting or preferring any dimension of the process, in order to confirm the identity and personality of society, and increase the sense of belonging of individuals.
- The negative effects of political and social transformations, which have affected the process of urban sustainability from the spread of religious intolerance and tyranny in decisions, the fading values of justice and the marginalization and interference of the role of universities, must be addressed.
- Paying attention to spreading moderate cultural values in the countryside so that it does not fall prey to ignorance and extremism.
- Paying attention to popular participation and the role of non-governmental organizations in the process of developing laws and legislation.
- A classification of rural and urban communities must be developed based on a scientific basis, taking into account the size and population density of these communities.
- Addressing the current imbalance in the geographical distribution of cities and the distribution of educational and cultural services in them.
- Paying attention to the urban character of Egyptian cities, and not creating or imposing a distorted character on them. Or unify the character between cities in order to preserve the architectural privacy of each city
- Laws established to protect the built environment must be adhered to by government institutions and individuals
- Building regulation and real estate registration laws must be reviewed to comply with current social conditions. Restoring individuals' confidence in the integrity of these institutions and ensuring the achievement of equality and justice
- Studies on the urbanization of the city of Zagazig and its existing problems must be increased. With increasing interest in studying the behavior of urban users to clarify the changes they are exposed to and trying to change them to become more sustainable.
- Availability of data and materials: All data are available on request.
- Competing interests: The authors declare that they have no competing interests.
- Funding: Self-funding.

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