



# Enhancing the Sense of Identity in the Public Places of Administrative Areas in Greater Cairo

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## Abstract

Contemporary urban design, as well as sustainable development calls, pays serious attention to the notion of identity in the urban context. Furthermore, there is an increase in scientific research in this field. This paper revisits identifying place identity components. Therefore, reliable literature and research articles were reviewed to identify the components that can create place identity. The paper empirically analyzes the checklist of place identity components by comparing two case studies. As identity is affected by the place's culture and the nature of the people in it, this paper focuses on public places in administrative areas in Greater Cairo. This comparison was made using the collected data from documents and archives and the observation during the site visits. An interview with experts was also done. Based on the data, the study assessed the sense of identity in the two cases. According to the results, this study identified the strengths and weaknesses in each assessment category, then presented identity enhancing strategies (IES) to enhance identity. The findings came in three categories, environment-related strategies, people-related strategies, and strategies for the relationship between the place and its people. This approach adopted by the study can be used to derive other strategies for different places.

## Keywords

Place identity · Enhance identity · Measuring identity · Identity components · Public place · Greater Cairo

## 1 Introduction

Identity has consistently been a popular research subject in various disciplines, such as psychology, philosophy, sociology, and human geography. In the last few decades, urbanization and globalization processes caused rapid environmental changes, and their strategies created cities with a similar, repetitive, and monotonous image. This influence included the existing and newly established cities. The old cities have changed to accommodate the new needs, whereas the new cities, in most cases, are indifferent to projecting their own identity. This situation led to the notion of identity becoming an essential topic on the agendas of planners and designers; several UN-Habitat reports confirm this (UN-HABITAT, 2012, 2013a, 2013b, 2018). As public places life is a major significant aspect in contemporary urban design, the interest in the quality of public places is one of the focuses of attention in sustainable development and the New Urban Agenda (NUA), which clearly states that urbanization needs to focus on the three elements of urban planning policies: standard of living, quality of life, and well-being (UN-HABITAT, 2020). The latter is a complex but comprehensive notion, where identity, or *Eigenart*, is one of the various attributes of well-being (Shekhar, 2017). For scientific research, the literature shows a growing interest in urban identity. A recent study (Peng et al., 2020) through 1011 bibliographic records from the Web of Science core database from 1985 (the first year for data to be available in the database core) and 2019 is surveyed. Using CiteSpace (a scientometric tool for analyzing and visualizing patterns and trends in scientific publications), this study shows that academic journals have published

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more articles about place identity over the past 40 years, particularly since 2006. Despite this momentum in research, a theoretical contribution is needed to connect the different perspectives of urban identity to define specific elements that create and affect the place identity.

At the regional level, the recent monumental urbanization changes in Egyptian cities raise concerns about the quality of the identity of its public places. Although there are many masterful buildings and brilliant architecture in Egyptian cities, particularly Cairo, the capital city of Egypt, these changes raise a concern about identity and summon the need to intensify the studies to determine their impact on the quality of identity in its places. The motivation behind choosing Cairo for studying was that it is the largest urban area in Egypt, Africa, the Middle East, and the Arab world, and the thirteenth in the world (Demographia, 2020). Since identity is affected by the place's culture and the nature of the people in it, this paper focuses on public places in administrative areas in Greater Cairo. Where this study adopts the opinion that the most important of urban identities is the experience within urban places (Cheshmehzangi, 2020), it is necessary to consolidate and enrich this experience. Therefore, this study examines the enrichment of this experience through enhancing the identity. Hence, this paper is intended to present specific strategies to enhance the sense of place identity in Cairo case studies by answering three questions:

What are the place identity components that the literature shows?

How can these components be measured in case studies and identify strengths and weaknesses?

What is identity status in case studies, and how can it be enhanced?

To this end, the present paper is structured into three stages to reach the research objective. The first stage is theoretical, which starts with this introduction, then includes a background of identity in the relevant literature to identify place identity components, and ends with a reliable tool (checklist) to assess the identity of public places based on the literature review. In stage two (Field study), the methodology of this study is described in three steps: the criteria for selecting a case to study, types of data resources, and finally, set up the evaluation methods of case studies. Then, the paper describes and assesses the two selected cases for studying to evaluate the identity of those places. In the third stage, positive and negative aspects of identity in each case are explored based on the matrix assessment. Then, the evaluation results are discussed through a comparative analysis to present specific strategies for enhancing identity in similar places. Finally, the conclusion states the whole process of establishing identity enhancement strategies (IES)

for enhancing the sense of identity of public places in the administrative areas of Greater Cairo, based on the previous discussion.

## 2 Research Background

### 2.1 Place Identity Overview

Humans use the term identity to define their origin, race, language, belief, class, esthetics, behavior..., and most importantly, their selves. Thus, the notion of identity is a common term in various sciences and defined from different perspectives. Likewise, place identity is a versatile concept studied in multiple disciplines, such as geography, sociology, psychology, environmental sciences and ecology, public administration, spatial planning, and more (Peng et al., 2020). In the 1960s, place identity studies appeared as a scientific subject. It was introduced by Lynch (Chapman & Lynch, 1962) when he said that the identity of a place is a response to the identification and recognition of objects in space, primarily to distinguish one from another. He also asserts that the meaning of the objects can be both practical or/and emotional. Place identity was also introduced by Proshansky (1976) as "those dimensions of self that define the individual's personal identity concerning the physical environment through a complex pattern of conscious and unconscious ideas, feelings, values, goals, preferences, skills, and behavioral tendencies relevant to a specific environment." For Relph (1976), however, the place is a humane environment with a mixture of meaningful significance and social concerns; thus, we can elucidate that place is more than a location. Successively, the researchers enriched the studies related to the identity of the place. According to a survey about the active topics and new developments of publications that study place identity, studies in this field experienced an active exploration in plural disciplines after 2000 (Peng et al., 2020).

In the urban context, some literature distinguished place identity into "insiders" and "outsiders" as types of place identity, where the "essence of place" is divided into the occasionally unconscious experience of an "inside" as opposed to an "outside." (Norberg-Schulz, 1971). Consequently, it comes in numerous purposes and forms. Place identity comprises three components essential for an intersectional understanding: activities and functions, physical features, and meanings and symbols. These elements are intertwined, showing an interconnected complexity. (Relph, 1976). Some other literature divided the identity of place into layers, extending from a person to the entire group in four layers; the personal layer: self-image; the enactment layer: performance; the relational layer: social interaction; finally, the communal layer: existing within a group (Hecht

et al., 2005). This differs from the literature that divides urban identity into levels: the global outlook or “global level,” the urban setting or “macro level,” the environmental framework or “medium level,” and the personal perspective or “micro-level” (Cheshmehzangi, 2020). The place identity incarnates in the third level (the medium level). The experience and events within this level are the most critical elements of urban identities, as the image remains in mind, and the experience is in the heart.

The dimensions of identity have been studied from different perspectives as well. In sociology, identity has four dimensions; personal: related to a humane perspective; social: related to human-society relations; cultural: related to human and everyday life; and locational: related to human-environment relations. Thus, one may embrace multiple identities. He can have a specific personality with a set of esthetics and characteristics while at the same time being associated with the social world, defined in groups, classes, and cultures, and inter-relate with various contexts (Cheshmehzangi, 2020). The literature discussed the dimensions of place identity in different ways. Lefebvre’s three key identity factors are self, reality, and relations (Lefebvre, 1991). Consequently, identity was defined in three intertwined dimensions that refer to the essence of human-environment relations, perceptual or psychological, behavioral, and social (Cheshmehzangi, 2020). A recent study summarized place identity in four primary dimensions: place, people, external look, and internal thoughts (Peng et al., 2020).

In sum, the identity of place is a set of various and reciprocal relationships between the context and the contents. It is a set of relationships, a social relationship between people and their surroundings, place and their constituent elements, and between elements and each other. See Fig. 1 for the summary of the main topics in this section.

## 2.2 Place Identity Components

This section will list identity components from many scholars’ perspectives. Reliable studies demonstrate that scholars define the components of place identity in diverse categories. Relph (1976) comprehensively analyzed place identity and outlined three main elements that contribute to its formation: observable activities and functions, physical features or appearance, and meanings or symbols. He posits that a sense of place is created through experiencing an inside distinct from an outside. For Lefebvre (1991), it was self, reality, and relations. Shekhar (2017) listed elements enhancing urban identity based on Lalli (1992). These elements were land ownership that impacts positively on the identity of place for a citizen and in like manner, the place of birth, social relationships, and quality of place (amenities

and facilities). Lalli also highlighted the main elements that Lynch mentioned in the image of city (Chapman & Lynch, 1962), such as a landmark, the history of a place, and its esthetics (visual form and appearance). All of the previous elements positively impact the identity of the place; in addition, the duration of stay impacts positively but not very significantly. In contrast, pollution and noise negatively impact the identity of the place.

The literature also shows other approaches to identifying the elements of urban identity. Rapoport (1990) argued that symbols and signs play the leading roles in creating the perceptual meaning of the places users. Thus, environments can be studied through signs that guide behaviors, affective signs that elicit feelings, and symbols that influence thoughts. In contrast, Valera (1998) discusses urban identity from a social perspective. For him, the character of the place and its meaning for users can be shaped through environmental and social imageability attitudes.

Moreover, available studies assessed identity through the cultural landscape elements. Ziyae (2018) suggests three descriptive categories—materials, immaterials, and links—to summarize the key components of the cultural environment; see Table 1. Surchi and Nafa (2021) explored the interplay between place identity elements and cultural landscape elements, examining both tangible components of identity and culture. Their model was used to assess this connection. (See Fig. 2).

These different approaches and more have been discussed in a previous recent study by the same authors of this paper (Ali et al., 2022), who have discussed these previous approaches and more. Elements and components of place identity mentioned in the literature have been organized into three classifications: environment, people, and interaction between people and place, under two forms: tangible and intangible (See Fig. 3). These components will be used as a checklist to assess the identity of place in two Egyptian case studies to re-acquaint them through the field study.

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## 3 Materials and Methods

### 3.1 Case Selection

The research is interested in examining the identity of two public places in administrative areas in Greater Cairo. The study sets three conditions for selecting the study case, classified as a public place, located in an administrative area, and existing in the Greater Cairo region (the capital). These conditions are defined as follows:

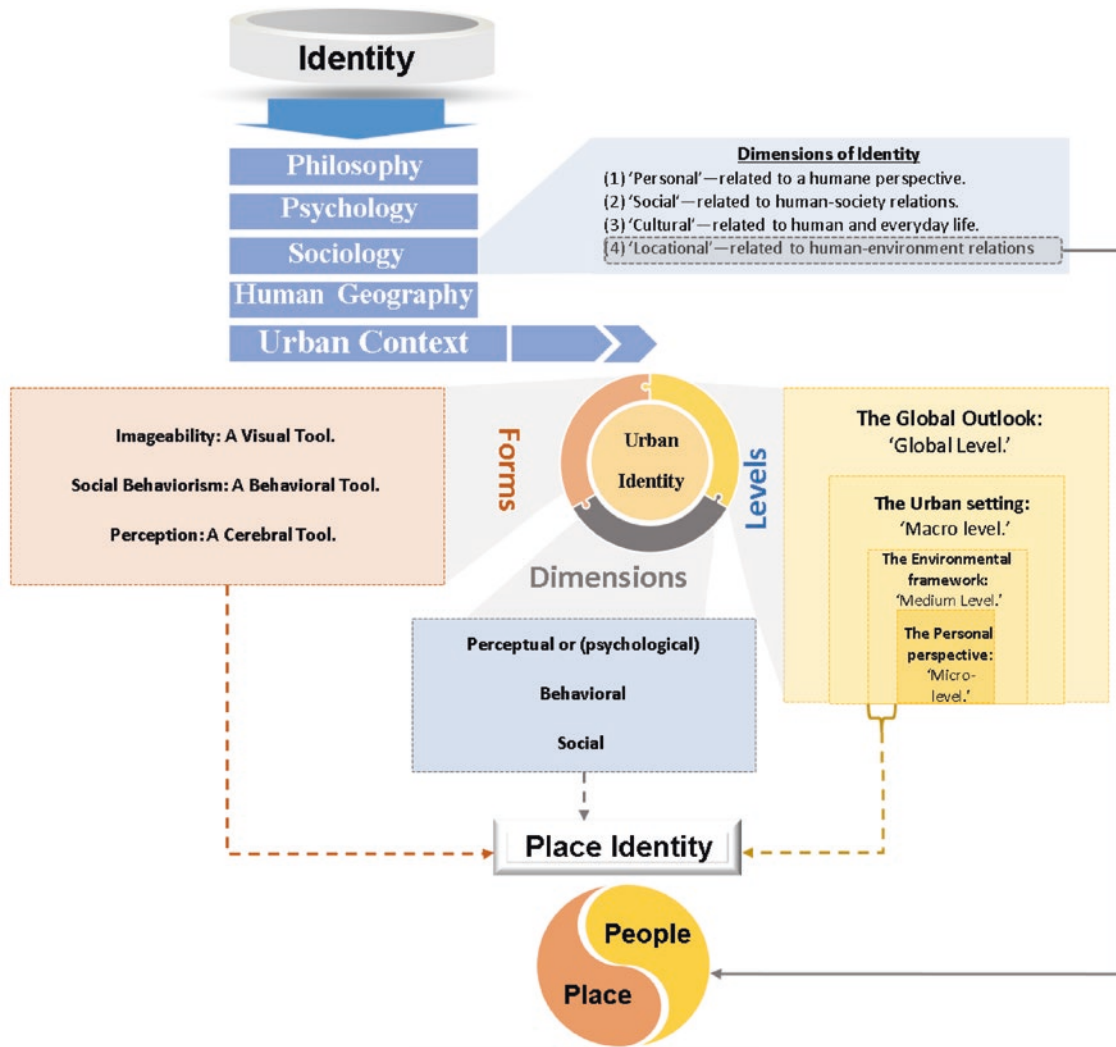
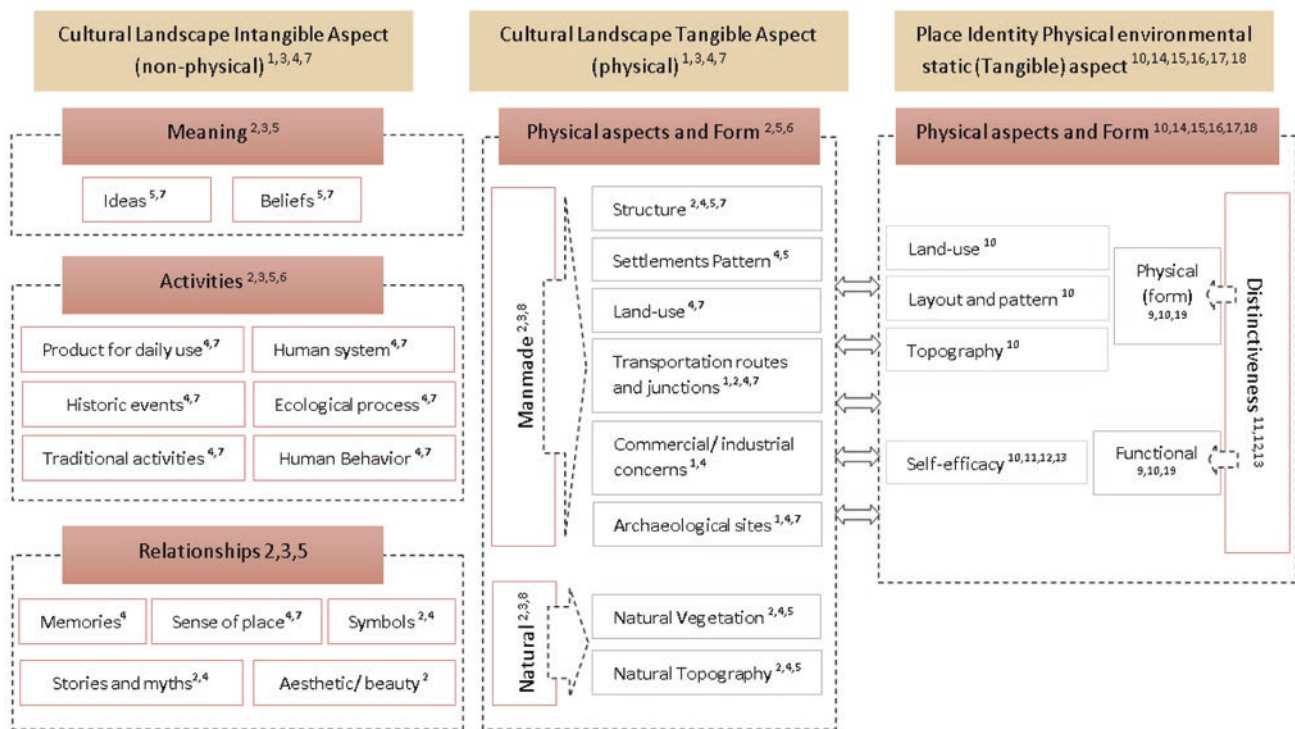


Fig. 1 Place identity overview. Source The Authors

Table 1 Components of cultural landscapes

Co.	Main elements	Sub-elements
Materials	Natural forms	Topology, geography, hydrography. Texture and surface materials, vegetation. The climatic situation, deserts, seaside
	Manmade forms	Buildings, roads, bridges, monuments, urban artifacts, gardens, agricultures
Immaterials	Beliefs	Values, visions, religions, ideologies
	Rules	Policy, economy, power
	Behaviors	Social practices, place name, patterns, symbols, lifestyle, icons, meanings, activities, myths, stories
Links	Time/process	History, memory
	Method and technique	Style, dance, paintings, clothes, foods, singing





**Fig. 2** Suggested model for the relationship between culture landscape and place identity. Source The Authors based on (Surchi & Nafa, 2021). (1) Brown (2001), (2) Stephenson (2008), (3) UNESCO and World Heritage (2008), (4) O'Donnell and Fasla (2008), (5) Vogeler (2010), (6) Jones (2003), (7) Sonkoly (2017), (8) Rees and

Cosgrove (1986), (9) Kermani et al. (2016), (10) Ibrahim et al. (2014), (11) Stokols and Shumaker (1981), (12) Breakwell (2015), (13) Twigger-Ross and Uzzell (1996), (14) Shawesh (2000), (15) Greene (1992), (16) Al-naim (2008), (17) Lynch (1981), (18) Tomlinson (2003), (19) Ziyae (2018)

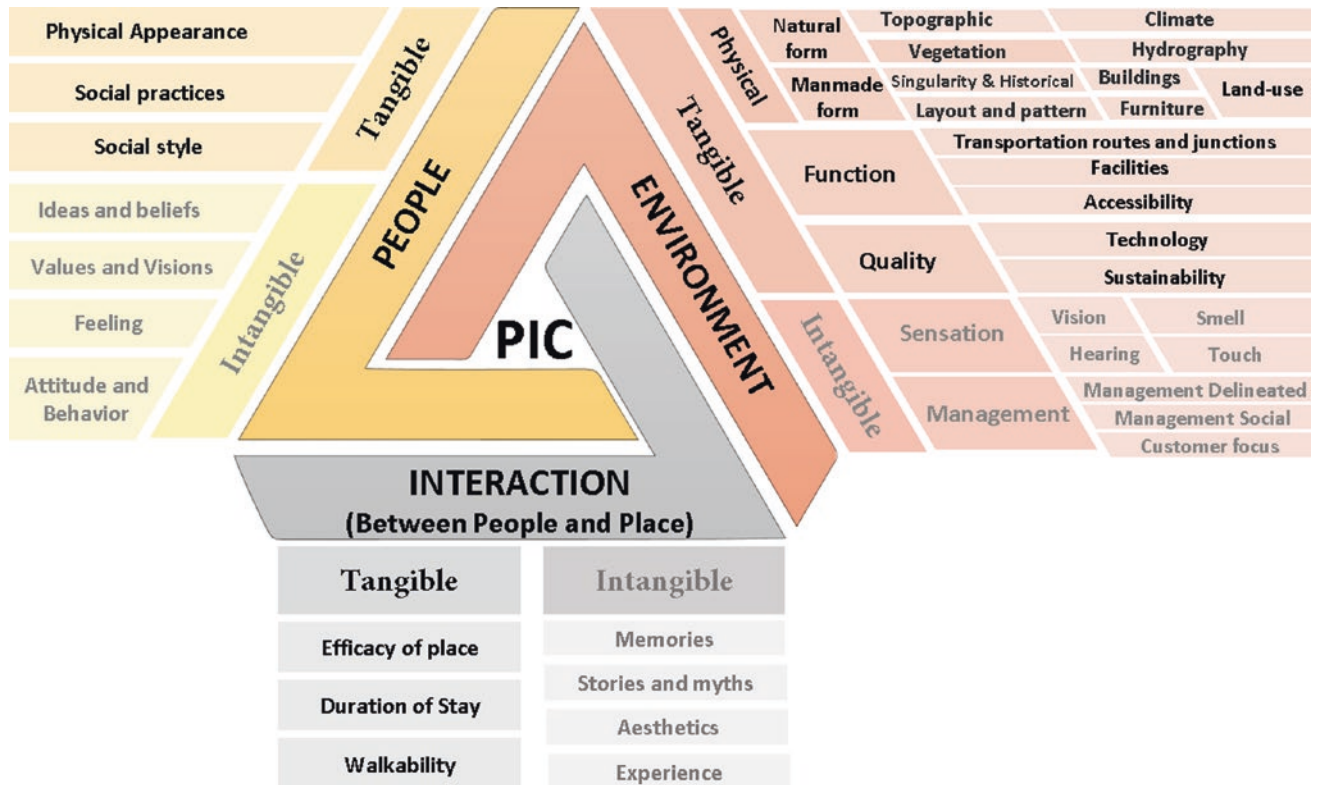
**Public Places:** These can be defined as physical spaces that, in the ideal, are open to all people to exercise their rights (Childs, 2006). In urban planning, public space has generally been characterized as an open space and ranges from informal alleys to the main arenas of the urban environment. Widely, formal public spaces play a significant role as presumed meeting centers and venues for public life, programs, and events. On a smaller scale, they might be just a place of rest, hanging out, or playing while providing a visual pause in the street flow through the urban area (Carmona, 2019). From another perspective, public areas must be open to everyone regardless of their culture, religion, or social status. In this context, Francis (1989) considered three types of access necessary to name any area as a public place. The first is physical access, where doors, walls, and locked passages block the accessibility of the space physically. The second type is social access, which means the place is open to different kinds and groups of users. The third type is visual access. If citizens can see inside any public area, it is visually accessible.

**Administrative Area:** According to the General Authority for Urban Planning of Egypt (General Authority for Urban Planning, n.d.), the government constructed the

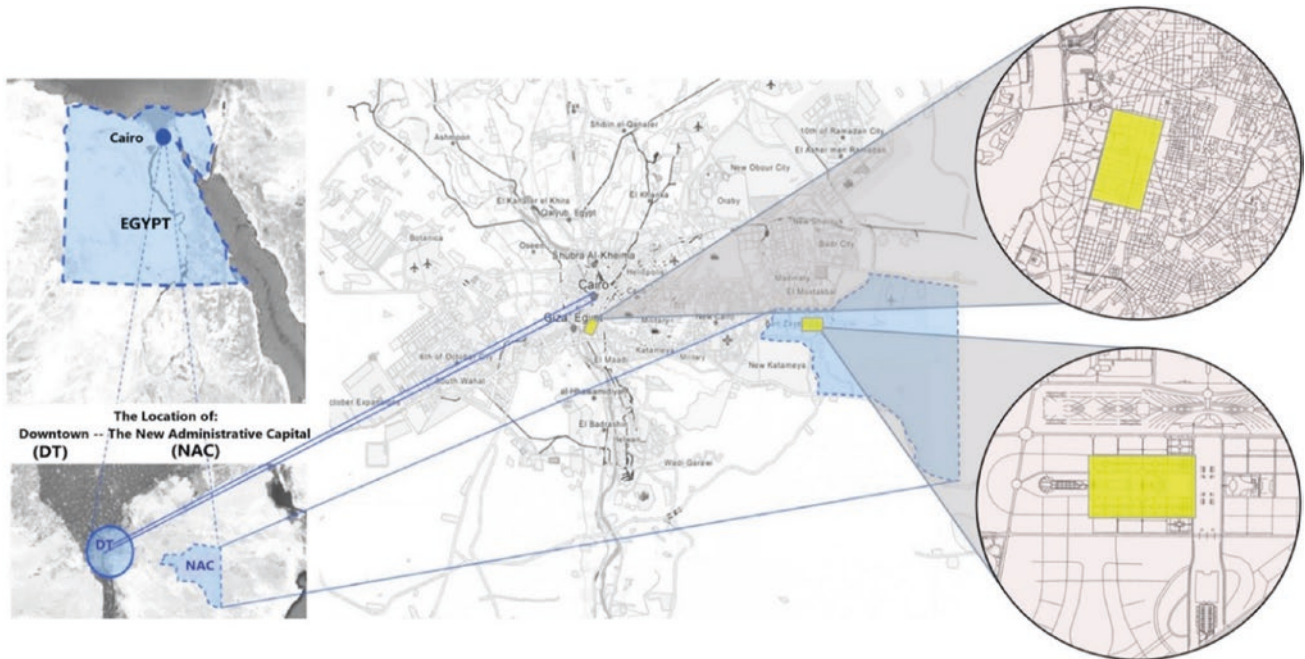
administrative area. It has different buildings, such as the House of Representatives, senate, ministries, and governmental agencies. Besides, it may have financial and business companies, provincial city hall, local councils and units, popular councils for governorates, cities, villages, and neighborhood headquarters. Public services directorates (education, health, social, security, supplying, etc.) and the tax authority also might be there.

**Greater Cairo (GC):** Egypt's political and economic capital. It comprises three governorates: Cairo governorate, Giza governorate, and Qalyubia governorate. It is one of the fastest-growing megacities worldwide, the sixth-largest city in 2018 with a 21.581 million population and the fifth in 2030 with a 25.517 million population (United Nations, Department of Economic and Social Affairs, Population Division, 2018). It has a historical administrative center, Downtown (DTC), surrounded by old suburbs. These suburbs are bordered by the ring road and satellite cities, Sheikh Zayed and the Sixth of October in the west, and New Cairo, Obour, El-Shorouk, and Badr in the east, in addition to the new administrative capital (NAC) that has currently constructed with a central administrative district as well.

Considering the three conditions, the study selected two cases to study (Fig. 4). The first case is Ministries Square



**Fig. 3** Place identity components (PIC). *Source* The Authors based on (Ali et al., 2022)



**Fig. 4** Location of the two case studies: The Ministries District at Downtown Cairo (DTC) and new administrative capital (NAC). *Source* The Authors

in the downtown area of Khedivial Cairo (DTC), while the second is the governmental district in the new administrative capital (NAC). These two places have the same function as the central ministries' buildings will be moved from the Ministries Square Downtown to the Ministries District in the new administrative capital. Ministries Square contains heritage buildings and buildings of a distinguished nature (palaces converted into public buildings) (Hawwas, 2002; UNESCO-WHC, 2012). Thus, Downtown Cairo was classified as "a protection range," according to National Organization for Urban Harmony (NOUH) (2022). It has also buildings built as governmental buildings. Opposing the ministerial district was built in the new administrative capital as a governmental district from the beginning. So, every case reflects its identity differently.

### 3.2 Data Sources

This study aims to explore practices for promoting a stronger sense of identity in public places of the administrative districts in Cairo and evaluate the current levels of identity present in two chosen case studies from Cairo. In light of the literature results, identity composition elements (environment, people, and interaction between them, in tangible and intangible forms) were used to evaluate the sense of identity in the two case studies. The data of study cases were collected from three primary sources:

- **Documents and Archives:** Due to the sensitivity of the study cases as they are central government places, the study will depend on all available data about the area and its buildings from previous studies, government reports, and the competent authorities, in addition to the government's websites.
- **Site Inventory:** It involves collecting scenes and impressions through four visits to each site on working days, morning and afternoon. The scenes' choices were based on atmospheres in the public place, facial details of users, and their attitudes, in addition to physical traces. Recording notes and cameras were used to take images (whenever possible) documenting the scenes, outdoor activities, and life in public places.
- **Interviews with Experts:** It was challenging to survey users, given the few visitors to the new administrative capital as it is nascent. So, the study relied on expert interviews (focus groups) to explore the users' opinions of the two study cases. The first interview was with four members of the Higher Scientific Committee of the National Organization for Urban Harmony to discuss the identity of public places in case studies and the factors that influence and constitute it. The second interview

was with three real estate brokers, specifically those who market the administrative units in the new administrative capital, to know the elements of attraction and interest of clients (future users) and the future life the place will give. In addition, their personal opinions as visitors to the place.

### 3.3 Methods Setup and Analysis

Since the research aims to enhance a sense of identity in study cases, the field study was conducted in three steps:

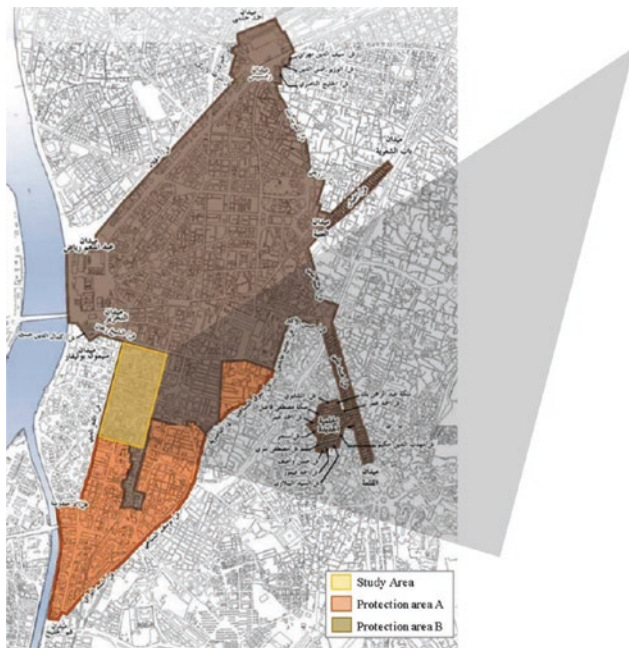
- **The First Step (Description):** The collected data from documents and archives, the observation during the site visits, and interviews were used to describe each case study's main feature for outlining the place's public image.
- **The Second Step (Evaluation):** The collected data from documents and archives, the observation during the site visits, and interviews were used to assess the sense of identity by evaluating all elements of place identity components (checklist) in each case study. The components are evaluated based on their contributions and are divided into three scores: "1" for element contribution positively and "-1" for negatively, while "0" is for the neutral or non-contribution element.
- **The Third Step (Analysis):** Based on the evaluation in the second step, a SWOT analysis was done to identify strengths and weaknesses that affected the quality of identity in the two study cases to design the identity enhancement strategies (IES).

## 4 Case Study Setting

### 4.1 Case 1: Ministries Square in Downtown Cairo (DTC)

The Downtown Cairo, or Khedivial Cairo, is to its founder Khedive Ismail. It has a rich historical value. According to (NOUH), this area has 633 heritage buildings with distinctive values (National Organization for Urban Harmony, 2022) on about (6 km<sup>2</sup>) on the eastern bank of the Nile (UNESCO-WHC, 2012). This area combines European styles with local materials and features designed by famous national and international architects; thus, it was considered a turning point in urban design in Egypt in the nineteenth century (Hawwas, 2002). This area was occupied by the wealthy class, making it an area for the most profitable and international activities, and through time, it became the central governmental area.





**Fig. 5** Protection zones map in Khedive Cairo. *Source* Adapted by the Authors based on (National Organization for Urban Harmony, 2022)

#### 4.1.1 Description

The study area is in protection zone B in Khedivial Cairo; see Fig. 5. The area is named the “Ministries Square” by The National Committee for the Development and Protection of Heritage Cairo. It is about  $900 \times 500$  m, occupied by ministerial and administrative buildings scheduled to be moved to the new administrative capital. The region’s borders are Sheikh Rihan Street from the north, Nubar Street from the east, Muhammad Ezz Al-Arab or Al-Mubtadayan Street from the south, and Al-Qasr Al-Aini Street from the west. The area is also crossed by six horizontal streets: Magles Al Shaeb, Saad Zaghloul, Dareh Saad Zaghloul, Ismail Abaza, and Safia Zaghloul, and vertically, Falaki Street and Mansour Street. The technical committee divided the buildings in this sector into three types: buildings registered as antiquities, others as distinctive architectural styles, and third as unregistered government buildings, see Fig. 6.

“The Ministries Square” contains many ancient and historical buildings, such as the Scientific Complex, the Egyptian Geographical Society, the Council of Ministers, the House of Representatives, the Ministry of Health, the Ministry of Housing, the Ministry of Education, the House of the Nation, the mausoleum of Saad Zaghloul, and the Ministry of Justice. These buildings are lofty with their unique designs (Fig. 7).

The interviewees from the Higher Scientific Committee of the National Organization for Urban Harmony

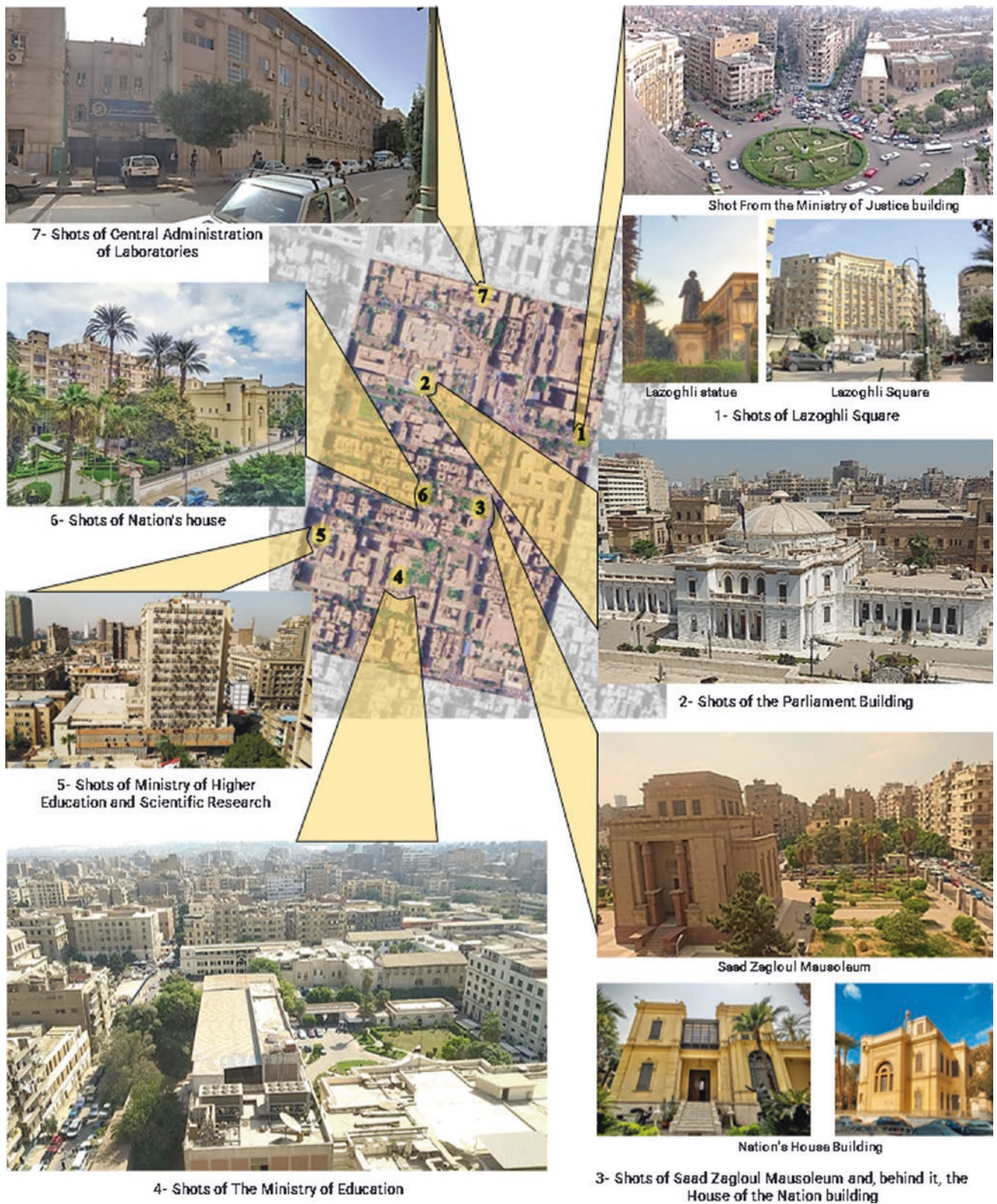


**Fig. 6** Types of governmental buildings in the study area. *Source* The Authors based on (The National Committee for the Development and Protection of Heritage Cairo, 2019)

maintained that the main problem in the area is that it was fundamentally built as an upscale neighborhood for the wealthy class. Therefore, the buildings of most of the ministries are residential palaces that have been converted into ministries. So, governmental administrative buildings were built in the gardens and courtyards of those palaces to adapt to new functions’ needs, which led to an increase in the building density of the area, thus reducing the visual perspective and the open space scenes and, unfortunately, limiting the enjoyment of the region’s unique architecture. The interviewees emphasized that the essential element of identity is the building, as buildings translate the nature of the community in which the building is built. The difference in the urban fabric in the region indicates the different patterns of society during those eras. The interviewees added that the identity without people occupying the place is not accurate and incomplete.

From the site visits, the authors found that most of the area’s buildings were mixed-use, with administrative, commercial, and residential overlapping activities in them. There are street vendors, especially near the Saad Zaghloul metro station. The health and judicial services areas were overcrowded by citizens seeking these services. The possibility of walking in the place is good, as the sidewalks and traffic lights intersect, and the nature of the urban fabric





**Fig. 7** Panoramic shots of the outdoor areas. *Source* The photograph was taken in the last two years, from 2020 to 2022, The shot from (<https://www.google.com/maps>), and it represents the current situation, according to the author's observation of the site. Edited by The Authors

provides shade for the sidewalks. As for transportation, it varied between bus and metro stations and, more recently, bicycle stations (Cairo bike), as the region had two nearby bicycle stations.

#### 4.1.2 Evaluation

Based on the place identity components checklist, this case study is evaluated as given in Table 2.

#### 4.1.3 Analysis

According to the two previous steps (description and evaluation), strengths, weaknesses, opportunities, and threats can be determined as follows, see Fig. 8. The results of the assessment came to show that 22 components had a positive impact on enriching the identity of the place (strengths of the case of the study). Eight components negatively affected the identity in the place (weaknesses of the case of the study). And, five components did not negatively or positively affect identity (potential opportunities to improve identity in the case of the study). Perhaps, the recurring impediment as a cause of weakness in several identity components was the overlapping activities in the area's buildings, overcrowding, and the new buildings in the yards of heritage buildings that led to the distortion of the area's architecture (threats in the case of the study).

## 4.2 Case 2: Government District in the New Administrative Capital (NAC)

The new administrative capital was established 35 km east of Cairo to distinguish the location as it is close to the Suez Canal area, regional roads, and main axes to develop Cairo into a leading political, cultural, and economic center for the Middle East and North Africa region through a prosperous economic environment supported by diversified economic activities and to achieve sustainable development (The Administrative Capital for Urban Development Company (ACUD), 2017). The city's total area is 170,000 acres, the target population is 6.5 million, and the job opportunities generated are about 2 million (New Urban Communities Authority, 2022). The first phase covers an area of 40,000 acres. It contains six residential neighborhoods and the most important ongoing projects, including the Business and Money District, the Green River, the Governmental District, the third residential district, and the fifth residential district (Ministry of Housing Utilities & Urban Communities, 2022).

#### 4.2.1 Description

The government district, "The Ministries District," in the new administrative capital, consists of 34 buildings. It includes ten complexes, each containing a group of

ministries. Some of these complexes have been designed in the Islamic style (such as complexes no. 5 and 10), others in the Egyptian Pharaonic style (such as complexes no. 2, 3, 4, 7, 8, and 9) as shown in Fig. 9, in addition to the sovereign nature of the Ministry of Foreign Affairs (complexes no. 6), the Ministry of Justice (complexes no. 1), and basically, the Council of Ministers. In addition, the government district contains a place called "Plaza," which is a yard to entertain employees, and the government district includes many parks. The Ministry of Justice is on the left side of the Council of Ministers, with four complexes 2, 3, 4, and 5. The Ministry of Foreign Affairs building is on the right of the Council of Ministers, with four complexes 7, 8, 9, and 10 (see Fig. 10).

The area of one complex within the government district is 170 thousand square meters, with a total of 1.5 million square meters for the ten complexes, which is equivalent to 360 acres out of 40 thousand acres, which is the area of the first stage of the new administrative capital (Ministry of Housing Utilities & Urban Communities, 2022). The ministries were due to be transferred by the end of 2020, and due to the COVID-19 pandemic and the consequent local and global repercussions, it has been postponed. However, some ministries are partly operating there during this research in 2022.

The interviewees, from real estate marketing experts, emphasized the importance of the view of the iconic tower and the central area as the prices of projects rise as we approach these influential areas. They also emphasized the region's sustainability by recycling water and using it in gardens, recycling waste, relying on renewable energy, and reducing pollution by relying on green transportation and other measures. Innovative safety services, such as the citizen application, are also available in the capital, making it easier for citizens to obtain intelligent and fast security services. They also confirmed that most of what was promised when establishing the new capital has become a tangible reality and that the mental image of the capital is strong enough to become the latest icon for Egypt that will be used as branding for Egypt soon abroad.

From the site visits, the authors found that the scene is open and highlights the important surrounding projects, such as the Masr mosque, People's Square, the parliament building, the opera, and the iconic tower. All of this can be seen from the plaza of the place. Walking around and moving between buildings was very difficult as the distances were huge. The weather is sunny, and the urban fabric is not compact and does not provide shade for passers-by, see Fig. 11.

#### 4.2.2 Evaluation

Based on the Place identity components checklist, this case study is evaluated as given in Table 3.



**Table 2** Sense of identity evaluation—Case study 1

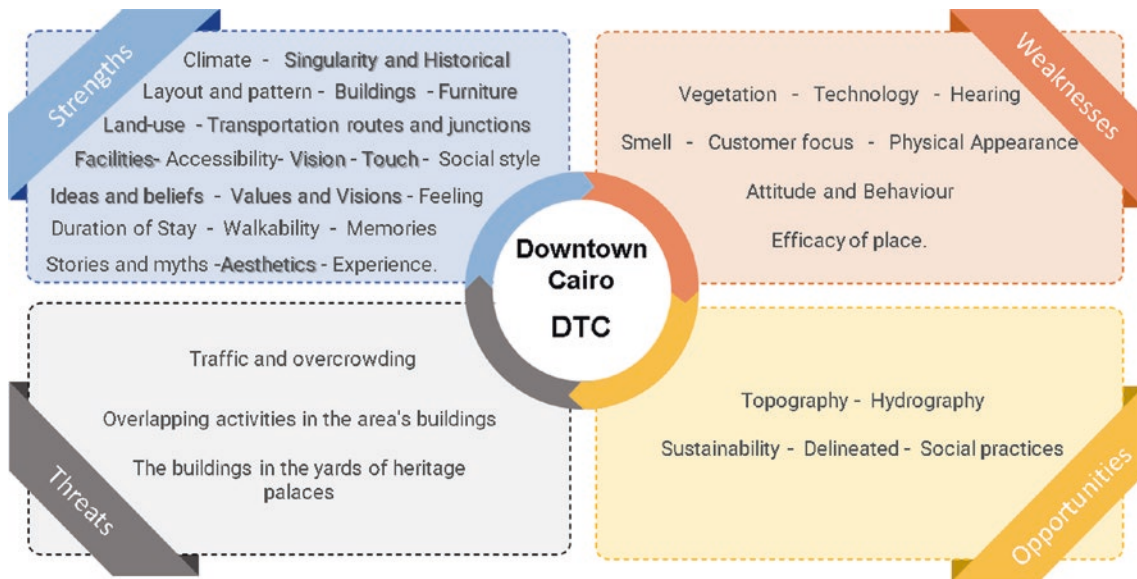
Classification		Element		Description	Mark	
Environment	Tangible	Physical	Natural forms	Topography		
				Vegetation	0	
				Climate	-1	
				Hydrography	1	
			Manmade forms	Singularity and historical	0	
				Layout and pattern	1	
				Buildings	1	
				Furniture	1	
		Function	Land-use	There are archeological and unique places, so this element's effect is positive	1	
			Transportation routes and junctions	Various transportation declared and clear conductors; subway, bikes, buses, and taxis, so this element's effect is positive	1	
			Facilities	Infrastructure is adaptable with time and history, so this element's effect is positive	1	
			Accessibility	Vividness and openness, free, secure, and pedestrian friendly, so this element's effect is positive	1	
		Quality	Technology	There are no elements of intelligent technology in the place. While the reliance on modern technology services is essential in enhancing the experience in public places today, the loss of this element negatively affects the evaluation	-1	
			Sustainability	There is a subway, and stations and roads for bikes. Nevertheless, sustainability applications were insufficient, so that this element would be neutralized	0	
	Intangible	Sensation	Vision	The mental image is singular and unforgettable, so this element's effect is positive	1	
			Hearing	Most of the time noisy, because of the public services there, traffic, and mixed-use building. As it is known, noise has a negative effect	-1	
				Smell	Pollution in the area is high due to crowding and various activities in the place. Pollution has a negative effect	-1
				Touch	The texture of the place is diverse and valuable, so this element's effect is positive	1
			Management	Delineated	Ownership of places varies between private, public, and endowments. So, this is a non-contribution element	0
			Social	The place encourages social engagement. It is a positive element	1	
			Customer focus	The human spatial experience is dispersed, and the convenience of users and recipients of services is not focused on them. The loss of this element negatively affects the evaluation	-1	

(continued)



Table 2 (continued)

Classification		Element	Description	Mark
People	Tangible	Physical appearance	Uncomfortable. The residents and owners of shops and non-administrative activities are present, negatively affecting the evaluation	-1
		Social practices	Although there are cafes and public spaces in the place, they are limited and do not serve to activate social activities, it is a non-contribution element	0
	Social style	The place is an affinity of different social styles and supports localism. It is a positive element	1	
	Intangible	Ideas and beliefs	Ideas of originality and richness influence the people in the place. It is a positive element	1
		Values and visions	Cultural and historical heritage are reflecting on their values. It is a positive element	1
		Feeling	Feeling safe and relaxed, as people in the place represents segments of society without discrimination. It is a positive element	1
	Attitude and behavior	The overlap of activities, thus, the users' goals affect understanding and acceptance of each other. So, the attitude of users has a negative effect	-1	
Interaction	Tangible	Efficacy of place	Various activities negatively affect the efficiency of the place. Also, reusing buildings for non-essential functions. It is a negative element	-1
		Duration of stay	The place is a Humanscale and has different ways to access it. It is a positive element	1
	Walkability	There are unique places and architecture that affect passers-by. The possibility of walking in the place is good. It is a positive element	1	
	Intangible	Memories	The memories of the place could be imageable and memorable. It is a positive element	1
		Stories and myths	The place has stories that reflect warmth and richness. Positive element	1
		Esthetics	The designs of buildings and squares give the impression of pride and glory. It is a positive element	1
	Experience	This site is familiar with being an administrative center for many centuries. The experience in general is good. It is a positive element	1	



**Fig. 8** SWOT of Ministries Square in Downtown Cairo (DTC). *Source* The Authors

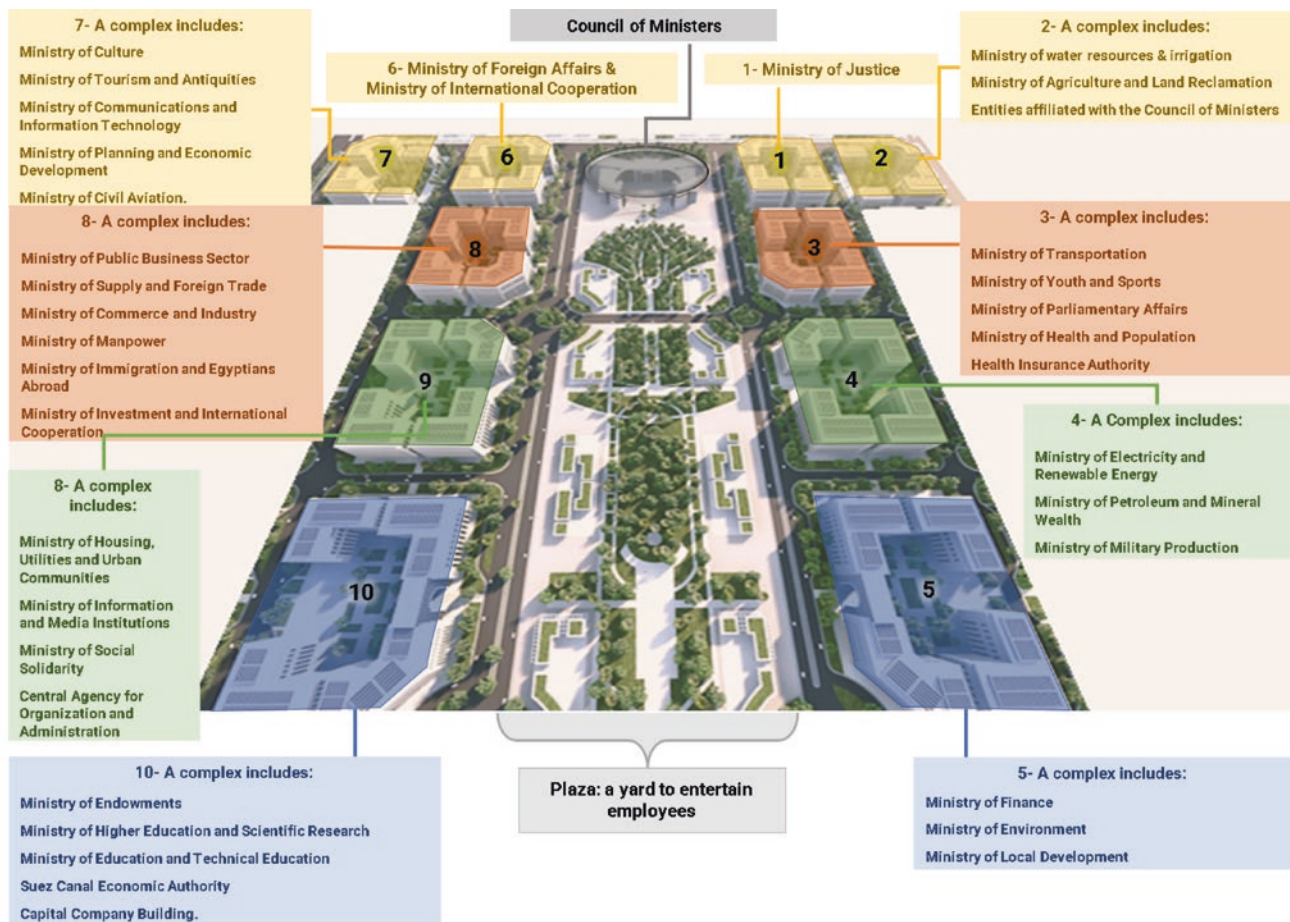


**Fig. 9** Examples of Islamic and Egyptian Pharaonic style of ministries. *Source* The Authors

### 4.2.3 Analysis

According to the two previous steps (description and evaluation), strengths, weaknesses, opportunities, and threats can be determined as follows, see Fig. 12. The results of the assessment came to show that 22 components had a positive impact on enriching the identity of the place (strengths of the case of the study). Six components negatively affected

the identity in the place (weaknesses of the case of the study). And, seven components did not negatively or positively affect identity (potential opportunities to improve identity in the case of the study). Perhaps, the recurring impediment as a cause of weakness in several identity components was the lack of respect for the human scale in the distances between buildings, the modernity of the place,



**Fig. 10** Distribution of ministries in the government district in the new administrative capital. *Source* The shot from ([www.egy-maps.com](http://www.egy-maps.com)), Edited by The Authors based on (Ministry of Housing Utilities & Urban Communities, 2022)

which made it difficult to evaluate some components, and the non-overlapping urban fabric, thus no shaded places, which negatively affected the climate (threats in the case of the study).

## 5 Discussion and Results

The analysis shows that each case study has 22 components that build place identity. Although the number of components is the same in both cases, the components differ. Consequently, this proves the hypothesis assumed by the study at the beginning, which is that each case reflects its identity differently. Of the 22 components, there were 11 components common, and they were:

- (1) Singularity and historical,
- (2) Buildings,
- (3) Furniture,
- (4) Land-use,
- (5) Transportation routes and junctions,

- (6) Facilities,
- (7) Vision,
- (8) Touch,
- (9) Ideas and beliefs,
- (10) Values and visions,
- (11) Esthetics.

In contrast, there were no common components in the negative or neutral effects. Thus, this increases the opportunity to take advantage of each case to extract ways to enhance the deficiency in the other. In the following, we will discuss the strengths and weaknesses extracted from the two cases in preparation for developing strategies to avoid weaknesses and enhance strengths in the next step.

### 5.1 First Results: Exploring the Positive and Negative Aspects

Based on the components of place identity, Table 4 presents the positive and negative aspects from the two cases.





**Fig. 11** Panoramic shots of the outdoor areas and shots for main buildings. *Source* The shot from (New Urban Communities Authority, 2022) in 2022, and it represents the current situation, according to the author’s observation of the site. Edited by The Authors

**Table 3** Sense of identity evaluation—Case study 2

Classification		Element		Description	Mark
Environment	Tangible	Physical	Natural forms	Topography	1
				The scene is open and highlights the most important surrounding projects, so this element's effect is positive	1
				A variety of forms and colors of vegetation, so this element's effect is positive	1
				The climate is sunny and lacks shade, and the loss of this element negatively affects the evaluation	-1
				There are lakes and fountains for esthetic purposes and to moisten the atmosphere, so this element's effect is positive	1
			Manmade forms	Singularity and historical	1
				The place views the tallest tower, the largest mosque in Africa, and the tallest flagpole in the world, so this element's effect is positive	1
				The place is designed in a pattern but does not respect the human scale. So, this element negatively affects the evaluation	-1
				Iconic buildings. Buildings are one of the most important elements of strength in this place, so this element's effect is positive	1
				Rich urban furniture: fountains, stairs, lights, paving, etc., so this element's effect is positive	1
		Function	Land-use	There are iconic places, so this element's effect is positive	1
			Transportation routes and junctions	Clearly public transportation such as monorail and bus stations, so this element's effect is positive	1
			Facilities	Infrastructure is adaptable with time and history, so this element's effect is positive	1
			Accessibility	Fortified and not pedestrian friendly, the loss of this element negatively affects the evaluation	-1
		Quality	Technology	Although many technological elements are included in the city's design, it is difficult to evaluate it. So, it is a non-contribution element	0
			Sustainability	The buildings and lighting are powered by solar energy, and there is a monorail nearby, and there is water recycling to use to irrigate the gardens. It is a positive element	1

(continued)

**Table 3** (continued)

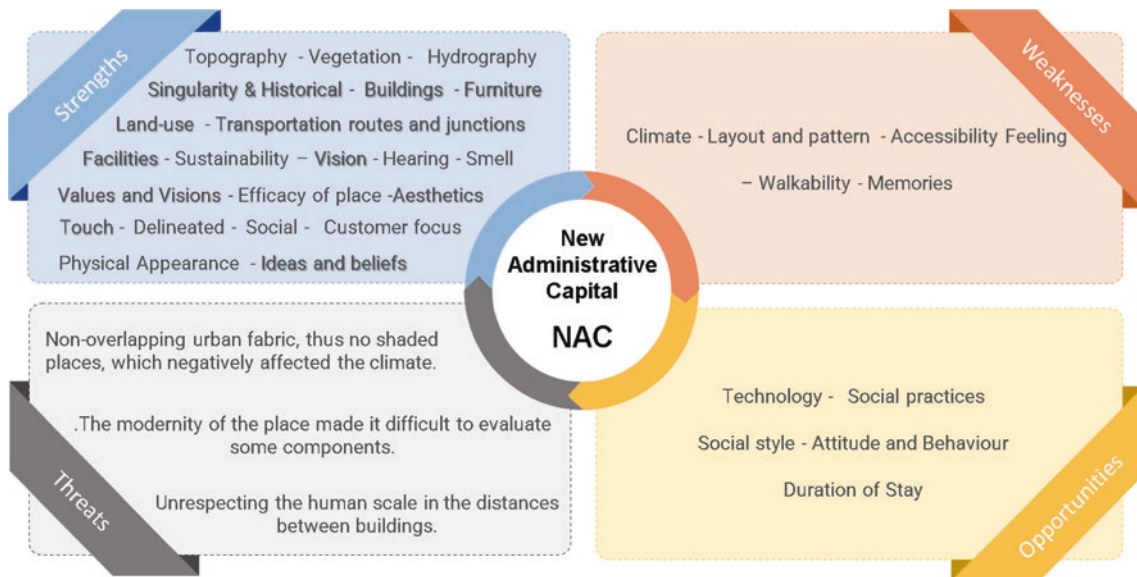
Classification		Element	Description	Mark	
People	Intangible	Sensation	Vision	The mental image has a pattern, so it is imageable and coherent. It is a positive element	1
			Hearing	Tranquility. It is a positive element	1
			Smell	The plaza and the multi-gardens make the smell likable. It is a positive element	1
			Touch	The texture of the place is diverse and valuable, so this element's effect is positive	1
			Management	Ownership is clearly defined. It is a positive element	1
	Tangible		Social	The place is designed to be encouraging social interaction (Plaza). It is a positive element	1
			Customer focus	The human spatial experience is clear. It is a positive element	1
			Physical appearance	Everyone in the place is there for matters related to the function of the place, so their appearance is comfortable and acceptable. It is a positive element	1
			Social practices	The place was designed to activate social activities, but in the current situation, it is not possible to measure the extent of its success	0
			Social style	The place was planned to be an affinity of different social styles, but it is not possible to admit it now	0
Intangible		Ideas and beliefs	The people in the place are influenced by ideas of progress and prosperity. It is a positive element	1	
		Values and visions	Smart, sustainable societies are reflecting on their values. It is a positive element	1	
		Feeling	Feeling of isolation and insignificance as access to the place is limited to specific groups. Negative element	-1	
		Attitude and behavior	The place was designed to contain future activities that reflect the attitudes and behaviors of users, but it is not realized yet	0	

(continued)



**Table 3** (continued)

Classification		Element	Description	Mark
Interaction	Tangible	Efficacy of place	The place has been designed to its function, so it is flexible and caters to its different needs	1
		Duration of stay	The place is vast (monumental scale), and it takes a lot of time to access or cross. It was hard to evaluate this element in the current situation	0
	Intangible	Walkability	The place has a monumental plaza and unique views. But because of the distances, it is difficult to walk. Negative element	-1
		Memories	The place is new, so it has no memories. The loss of this element negatively affects the evaluation	-1
		Stories and myths	The place is new, so it lacks stories, but there is a legendary story, but it cannot be evaluated currently	0
		Esthetics	The buildings and landscape designs of the place give the impression of elegance and pride. It is a positive element	1
		Experience	This site is unfamiliar to users, and therefore, there is no depth in-place experience and at the same time is not objectionable. Neutral element	0



**Fig. 12** SWOT of government district in the new administrative capital (NAC). *Source* The Authors

### 5.2 Second Results: Informed Decision-making

Based on previous analysis, the strategies for enhancing the sense of identity of public places in the administrative areas of Greater Cairo, Fig. 13 (identity enhancement strategies—IES) can be designed in three categories as following: enhancing identity through the environment’s elements, enhancing identity by impressing people, and finally, enhancing identity by strengthening the interaction between the environment and people positively.

## 6 Conclusion

This paper concluded by presenting strategies that enhance the sense of identity in public places. The strategy came in three categories: enhancing identity through the environment’s elements, enhancing identity by impressing people, and finally, enhancing identity by strengthening the interaction between the environment and people positively. To achieve those results, the study was carried out in three stages. The theoretical study included a review of

the concept of place identity in the literature and ended with identifying place identity components emanating from the reliable literature that could be used for assessing identity in public places. Then, the empirical study evaluated two cases study of public places in administrative areas in Greater Cairo. The evaluation was based on three types of data, archives and available documents of those places, site visits (observation), and interviews with experts by authors as well. Based on the evaluation and analysis of the results, the strategies were set to enhance identity in public places in Greater Cairo. However, the results of this study need to be supported through a survey of users’ opinions of those places and compared with the study’s outputs. These strategies require multi-stakeholders serious work translating them into policies that can help government officials, urban planners, and academics alike comprehend, gauge, and provide practical solutions to enhance identity. This paper gives a theoretical foundation that can be starting point to design projects and city-wide programs in the future. The added value of this study is that its methodology can be followed to evaluate and develop other places with different functions and characteristics.

**Table 4** Points of strength and weakness of identity from case studies

Component	Strength	Weakness
Physical	Narrow-shaded streets. Lagoons and fountains. A variety of forms and colors of vegetation. Open scene	No natural views and no hydrography elements. The lack of shading
	The landmarks, individual semantics, and symbols. The place is designed in a pattern and respects the human scale Iconic, heritage, and unique buildings. And rich urban furniture: fountains, sculptures, stairs, lights, paving, etc	Place needs to respect the human scale
Function	Archeological, iconic, and unique places Transportation is, evolving and diverse, and infrastructure is adaptable with time and history Accessibility is vividness and openness, free, secure, and pedestrian friendly	Accessibility is fortified and not pedestrian friendly
Quality	Subway, monorail, bikes stations and road, solar energy, and there is water recycling to use to irrigate the gardens	There are no elements of intelligent technology in the public space
Sensation	The mental image is imageable, coherent, singular, and unforgettable. The place is tranquil The gardens make the smell likable. The touch of the place materials in place is diverse and valuable	The place could be quieter The multi-use buildings and the traffic density often make the smell unlikable
Management	The place encourages social engagement, and the human spatial experience is clear. Ownership is clearly defined	Ownership is vague. The human spatial experience is dispersed
Physical appearance	Physical appearance is comfortable and amusing	Physical appearance is surprising and shocking
Social practices	The design supports community participation and civic initiatives	Lack of community participation and civil initiatives
Social style	The affinity of different social styles supports localism	–
Ideas and beliefs	Progress, prosperity, originality, and richness	–
Values and visions	Cultural and historical Heritage, and Smart and sustainable societies	–
Feeling	Feeling safe and relaxed	Feeling of isolation and insignificance
Attitude and behavior	Social practices, activities, understanding, and acceptance	The overlap of activities and the users' goals
Efficacy of place	Design the place to its function, flexible and caters to its different needs	Reusing buildings and various activities
Duration of stay	Humanscale, and rich experience	Monumental scale, and discomfort
Walkability	Plaza and unique views	The congestion
Memories	Old places have memories that could be imageable and memorable	New places have no memories
Stories and myths	Stories reflect warmth and richness	New places need more depth of in-place experience
Esthetics	The design gives the impression of elegance, pride, and Glory	–
Experience	Old places are comfortable and familiar	New places need more depth of in-place experience



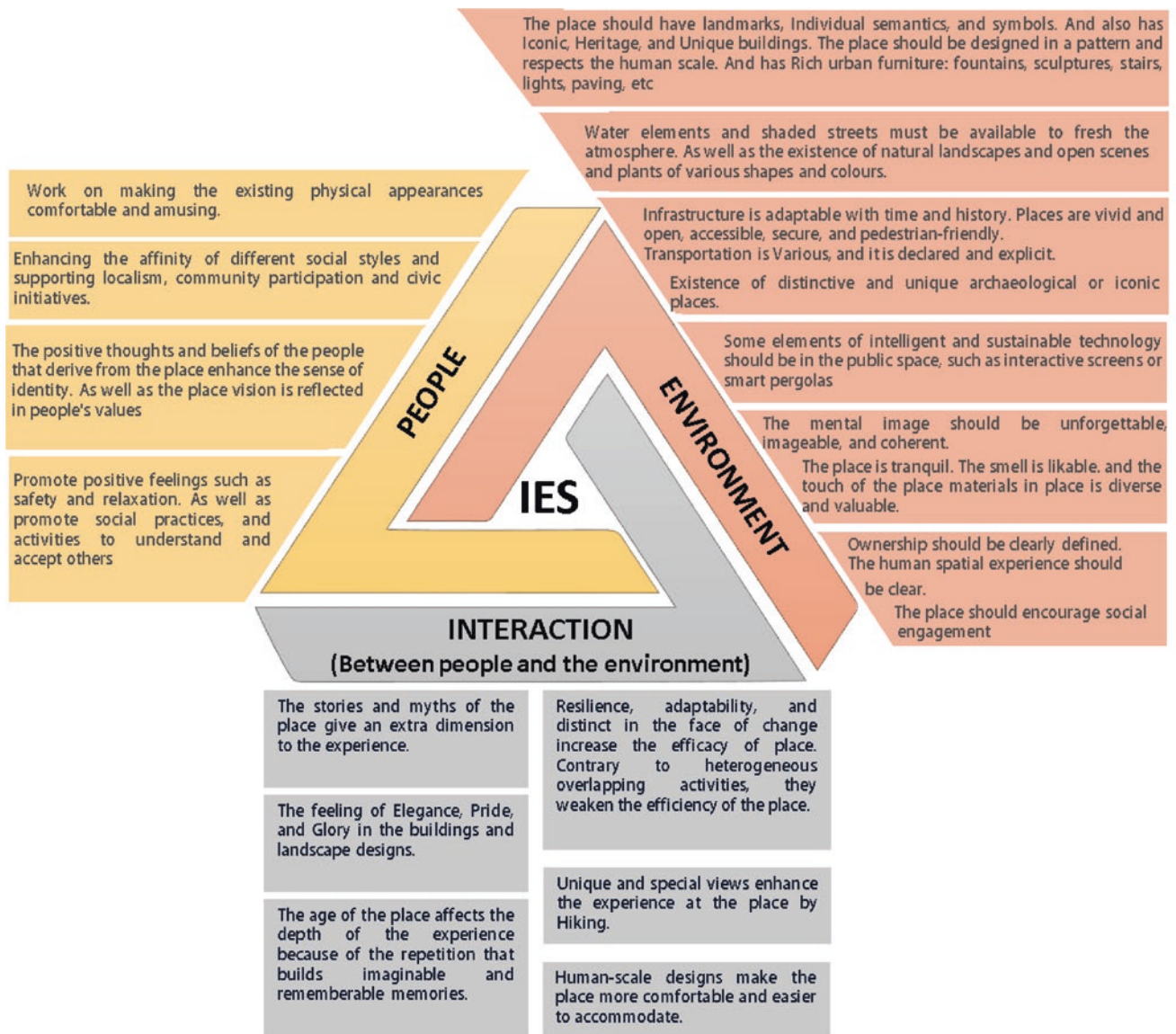


Fig. 13 Identity enhancement strategies. Source The Authors

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