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# (Corridor - Place) As A Comprehensive Approach for Street Pedestrianization: Case Studies in Cairo, Egypt

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Pedestrian-friendly Streets; Street Pedestrianization; Walkability; Livable Streets; Commercial Streets; Street for people; Street Activities.

**Abstract:** Nowadays urban planning trends of walkability and sustainable mobility hope to reintroduce human-scale development in cities and strengthen communities, and one approach that has achieved a growing amount of popularity is the pedestrianization of commercial streets. These streets have the potential to be pleasant places for people to travel through and to visit while achieving sustainability goals at the same time. The design of theses streets especially in developing countries such as Egypt is a key factor that contributes to flourishing economy and better quality of urban life. However, currently, there are no street environments that are pedestrian-friendly and that integrate both the social and physical functions of the street. This research develops a comprehensive 'Corridor-Place' approach for commercial street pedestrianization, integrating the street's dual functions. Employing a mixed-methods analysis—field observation, surveys, questionnaires, and in-depth interviews—the study evaluates the applicability of pedestrianization on two Egyptian commercial streets. The aim is to establish replicable urban quality criteria, encompassing location, accessibility, diversity, and physical and visual attributes, for transforming these streets into sociable and walkable areas. Ultimately, this framework seeks to provide a model for successful pedestrianization projects.

## 1. Introduction

Nowadays when planning city streets, the multiple functions of the street are poorly integrated and, in the worst cases, are neglected. This traditional representation of the street as a corridor for vehicular movement has contributed to defining and using the street only through its physical/movement function, ignoring its social function as a place for people's activities where they can safely walk, stroll, bike, socialize, go shopping and interact with each other. The concept of dealing with streets as places for people is not new and has already been addressed by many theorists and urban planners since Jane Jacobs's first publications on the significance of streets and

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sidewalks as the main public places within cities [1]. Moreover, Whyte, 1980 argued that the reason for unsuccessful and unliveable streets is not the lack of pedestrians walking along them, rather it is the lack of social activities by people on the streets [2]. Commercial pedestrian streets have the potential to be a pleasant and stimulating places for people to travel through and to visit as destinations while achieving sustainability goals at the same time; socially, they provide inclusive places for local communities to participate in different activities and to meet each other's, economically, they provide a well-connected catchment area of customers for local businesses, and environmentally they enable people to walk and shop locally without vehicular use [3]. According to Gehl, the pedestrian street is the best designed public space for people for inviting them to the most optional and social activities [4]. Moreover, it provides for sustainable urban mobility since walking and sometimes cycling are the travel modes available along the pedestrian street. It promotes large range of human activities such as: standing, sitting, hanging around and watching. When discussing and studying public spaces particularly in Great Cairo Region, streets especially commercial ones, have a significant role due to the lack of other types of public spaces. However, currently, there are no street environments that are pedestrian-friendly and that integrate the social function of the streets as well as the physical one. Streets are functioning only as conduits for vehicular movement rather than being liveable places for people, and although many of them began as people-friendly streets, most have evolved to accommodate an ever-increasing number of vehicles. Accordingly, streets become wider while sidewalks become narrower. In the contrary, many developed countries started to address new balanced approaches of street design and management that have been suggested by most leading theorists and urban planners since the 1960s to reclaim streets for people's use over vehicles [5]. Following these approaches in developed countries, the Egyptian government carried out some pedestrianization projects in some commercial streets in downtown Cairo as part of the Khedivial Cairo Rehabilitation Project [6], aiming at reviving the urban heritage of Cairo's downtown while enhancing walkability and street life [7]. However, the pedestrianization projects lacked the integrated strategy of designing streets for people as movement corridors that enhance walkability as well as places for activities and social interaction, which if applied would have led to more successful outcomes regarding promoting walkability and enhancing street life and activities [8], that would consequently regenerate the urban heritage of the whole area. The main goal of this research is to formulate and develop a comprehensive (corridor – place) approach for commercial street pedestrianization in particular; an approach that integrates the dual functions of the street; the physical function as a movement corridor that promotes walkability as well as the social function as a place for people that enhances street life and activities.

The concept of the '15-minute city' has gained prominence in urban planning as a model for creating sustainable and liveable urban environments. The 15-minute city aims to provide residents with access to most of their daily needs within a 15-minute walk or cycle from their homes. This concept aligns strongly with the goals of the (Corridor – Place) approach, which seeks to enhance walkability and create vibrant, mixed-use streets [9]. Promoting walkability, a central tenet of the (Corridor – Place) approach, is fundamental to achieving the 15-minute city. By designing streets that prioritize pedestrians, encourage social interaction, and provide access to a variety of services and amenities, the (Corridor – Place) approach contributes to Increased Sustainability by reducing reliance on private vehicles and promoting active transportation, such as walking and cycling, decreases carbon emissions and contributes to a more sustainable urban environment [10],

Enhanced Livability by creating walkable streets fosters a sense of community, improves social interaction, and enhances the quality of life for residents [11]. This aligns with the 'place' function of the (Corridor – Place) approach, Economic Vitality because vibrant, walkable streets attract businesses, support local economies, and create a more resilient urban environment [1], and Social Equity by providing access to essential services and amenities within walking distance promotes social equity and reduces disparities in access [12]. The (Corridor – Place) approach provides a framework for designing streets that support the goals of the 15-minute city by prioritizing walkability, mixed-use development, and the creation of vibrant public spaces. By focusing on both the 'corridor' function (efficient movement) and the 'place' function (social interaction and activity), this approach contributes to creating more self-sufficient, walkable neighborhoods where residents can live, work, and play within close proximity.

## 2. Methods and tools

In order to examine the 'Corridor-Place' street design/pedestrianization approach, which integrates walkability (corridor function) and social activity (place function), this research began with a comprehensive literature review to identify urban qualities conducive to vibrant, pedestrian-friendly streets. This review informed the development of criteria for evaluating successful pedestrianization projects. The study employed a mixed-methods approach, conducted in two phases. First, the author conducted participant observation over one week to gain an initial understanding of the case study streets. Second, in-depth interviews were conducted with 20 participants, alongside a quantitative survey **(appendix 1)** of 55 residents, visitors, and shop owners. The survey aimed to quantify participant satisfaction with the streets' current conditions.

## 3. (Corridor-Place) Comprehensive Approach for Street Design/Pedestrianization

A theoretical framework of (corridor – place) approach as shown in **Table 1** was concluded; various qualities of street walkability and activities fall into the categories of urban qualities that include: usability, sense of safety and security, sense of comfort, attractiveness and sociability.
Each quality has some performance measures/indicators that have some similarities and differences while measuring walkability and street activities. These performance measures had been subdivided into three ranges according to their importance: most important, moderate important and least important. This degree of importance was concluded by researcher based on the theoretical contribution that relates each urban quality to its original theory, theorist or planner and explain each quality weather being corridor/walkability oriented, place/activities oriented or both.

The research then suggests a ‘two dimensional (corridor – place) street chart/evaluation tool’ as illustrated in **Chart 1** that was developed from the previously mentioned comprehensive (corridor – place) approach in Table 1; the social function of the street as a place for people’s activities is presented in the X-axis, while the physical function of the street as a corridor for people’s movement/walkability is presented in the Y-axis and the concluded urban qualities are placed on the chart according to their level of importance (relative weight) to the street as a place and as a corridor. Therefore, four zones are created within this two-dimensional chart as follows:

- **Less Place and Corridor Zone** where the street scores a (very poor-poor-fair) value as a place for activities and a corridor for movement/walkability as well. This zone is characterized by low walkability and street activities. The least successful (non-pedestrian-friendly) street for people is in this zone, with a very poor value as a place and a corridor.
- **Corridor over Place Zone** where the street in function as a corridor for movement more than a place for activities. This zone is characterized by high walkability (good-very good) and low street activities (very poor-poor-fair).
- **Place over Corridor Zone** where the street in function as a place for activities more than a corridor for movement. This zone is characterized by low walkability (very poor-poor-fair) and high street activities (good-very good).
- **Balanced Place and Corridor Zone** where the street scores a (good-very good) value as a place for activities and a corridor for movement/walkability as well. This zone is characterized by high walkability and street activities. The most successful (pedestrian-friendly) street for people is placed in this zone, with a very good value as a place and a corridor. A successful pedestrian street that enhances street activities and promotes walkability should be in this balanced place and corridor zone.

**Table 1: CORRIDOR-PLACE comprehensive approach [Developed by Author]**

| URBAN THEORIES, THEORISTS & PLANNERS / URBAN QUALITIES | | KEVIN LYNCH, 1960 | J. JACOBS, 1961 | W. WHYTE, 1980 | APPLEYARD, 1981 | JAN GEHL, 1987 | N. URBANISM, 2002 | A. JACOBS, 1993 | PPS, 2008 | JAN GEHL, 2010 | JEFF SPECK, 2010 | V. MEHTA, 2007 | B. MCCANN, 2013 | V. DOVER, 2014 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Usability** | Location | | | | | | | | | | | | | |
| | Accessibility, Permeability and Integration | | | | | | | | | | | | | |
| | Diversity of Uses, Users and Activities | | | | | | | | | | | | | |
| | Sidewalk Functionality | | | | | | | | | | | | | |
| **Sense of Safety & Security** | Traffic / Pedestrian Conflict | | | | | | | | | | | | | |
| | Crossing Facilities | | | | | | | | | | | | | |
| | Sidewalk Facilities | | | | | | | | | | | | | |
| **Sense of Comfort** | Physical Comfort | | | | | | | | | | | | | |
| | Environmental Comfort | | | | | | | | | | | | | |
| | Social Comfort | | | | | | | | | | | | | |
| **Attractiveness** | Physical Qualities (Form & Scale / Design) | | | | | | | | | | | | | |
| | Visual Qualities | | | | | | | | | | | | | |
| **Sociability** | Social Interaction & Gathering | | | | | | | | | | | | | |
| | Places for Activities | | | | | | | | | | | | | |
| | Sit-able Places | | | | | | | | | | | | | |

Corridor / Walkability Oriented
Place / Activities Oriented
Corridor and Place /Walkability and Activities Oriented
Pre-Pedestrianization (Street Selection)
Pedestrianization (Street Re-design)

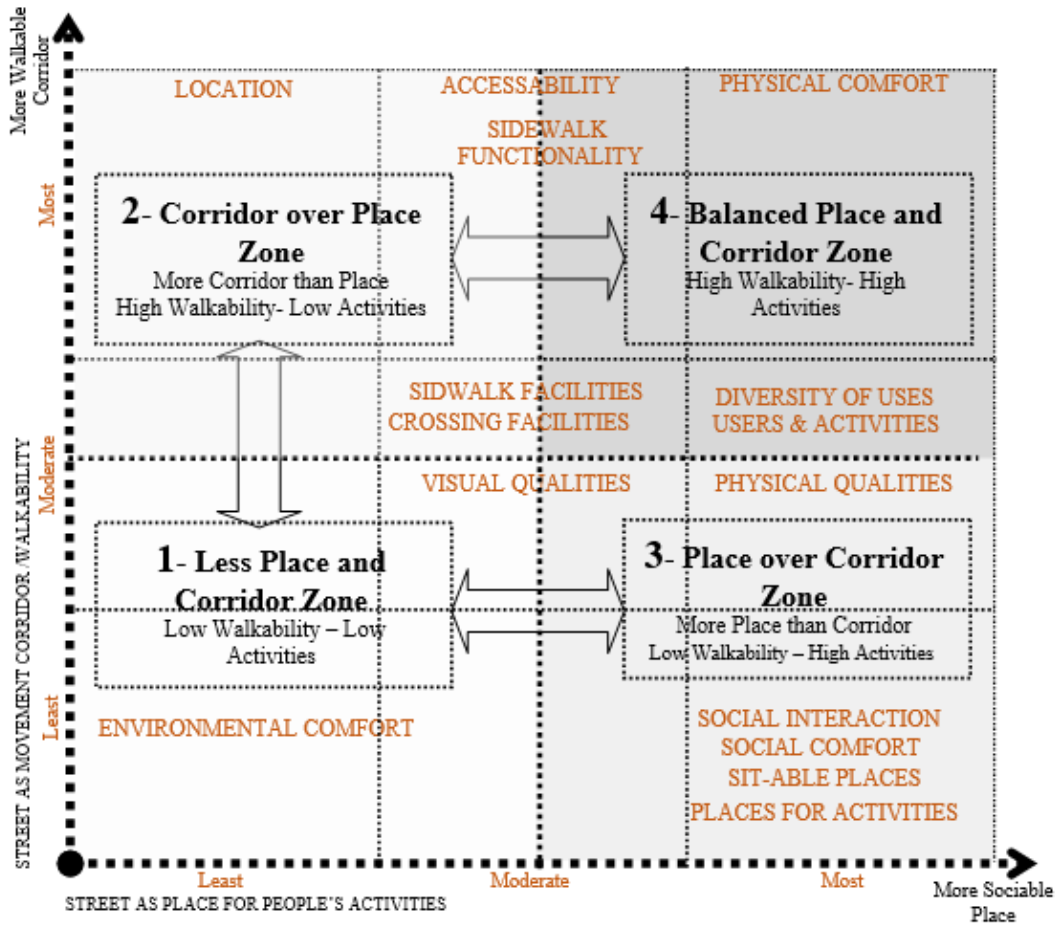



**Chart 1: A Two-Dimensional (Corridor- Place) Street Chart/Evaluation Tool [Developed by Author].**

The urban qualities of the street walkability and activities can be categorized within the comprehensive approach of street pedestrianization into two main phases as shown in **Chart 2:** the pre- pedestrianization phase; this phase started with the selection of the street. The urban qualities that contribute to this stage are the location of the street, proximity to public premises and landmarks, good accessibility, connections with public transit systems, connectivity with surrounding areas and activities, diversity of uses and activities along the street, physical and visual qualities of the buildings along the street. The second phase is the pedestrianization phase itself, it includes some urban qualities from the first phase that could be enhanced in the redesign process of the street such as: the accessibility, connections with public transit systems, diversity of uses and activities, physical and visual qualities, along with other urban qualities that are related to this phase such as: the sidewalks functionality, crossing facilities, sit-able places, places for activities and physical, environmental and social comfort.

### 3.1. First Stage of (Corridor-Place) Approach

The first stage of the (corridor-place) approach of street pedestrianization is a threshold that could help urban planners and designers to select the appropriate streets to be pedestrianized. It contains of five urban qualities, some of these qualities are most important and should exist in the selected street to be converted into a pedestrian one such as: location of the street, diversity of uses and activities and visual qualities along the street. While other qualities could be enhanced in the second stage such as: accessibility, physical qualities, visual qualities and diversity along the street.

| | |
|---|---|
| Pre-Pedestrianization (Street Selection) | • Location of the street, proximity to public premises and landmarks and connectivity with surroundings areas and activities.<br>• Accessibility and Integration with transit, pedestrian paths and bicycle routs.<br>• Diversity of uses and activities.<br>• Visual Qualities.<br>• Physical Qualities.<br>1 |
| Pedestrianization (Street Re-Design) | • Accessibility and Integration (to be enhanced).<br>• Diversity of uses and activities (to be enhanced).<br>• Sidewalk Functionality.<br>• Crossing and Sidewalk Facilities.<br>• Physical, Environmental and Social Comfort.<br>• Physical Qualities (to be enhanced).<br>• Visual Qualities (to be enhanced).<br>• Sit-able Places.<br>• Places for Activities.<br>2 |

**Chart 2: The Two Main Phases of (Corridor-Place) Approach of Street Pedestrianization [Developed by Author].**

While evaluating the street to be selected, there are four options for the street placing as shown in **Chart 3** where zone 4: is the target zone and is characterized by high level of accessibility, location, diversity of uses/activities, physical and visual qualities which means that the street is well qualified and has the potential to be pedestrianized, zone 1: is the off-target zone and is characterized by low level of accessibility, location, diversity of uses/activities, physical and visual qualities which means that the street does not have any potential for pedestrianization, zone 2: means that location, accessibility and visual qualities are at high level however, diversity of uses/activities and physical qualities should be enhanced to reach zone 4 (target zone) and zone 3: means that visual qualities, diversity of uses/activities and physical qualities are good however, accessibility should be enhanced to reach zone 4 (target zone).

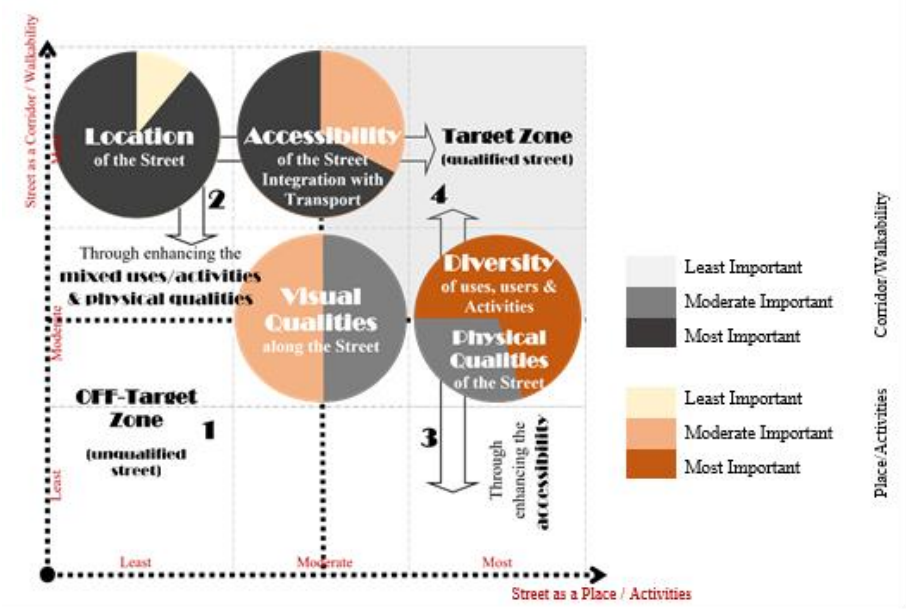



**Chart 3: Two-Dimensional (Corridor- Place) Street Chart for first stage (street selection) [Developed by Author].**

### 3.1.1. Location

The location of the street is among the major considerations that are related to where the street should be located within the city, its relationship and connectivity with the surroundings and its proximity to public landmarks [2]. According to literature, location is a most important performance measure while evaluating the street as a corridor and a least one while evaluating the street as a place.

#### 3.1.2. Accessibility, Permeability and Integration

The accessibility of the street, that refers to the degree the street is easy accessed by variety of transportation modes, is very crucial while designing the street [13] [14]. A successful street should be well integrated within pedestrian networks as well as bicycle routs [15]. Accessibility is most important when evaluating walkability because it creates a symbiotic relationship with transit, and moderate in case of street activities.

#### 3.1.3. Diversity of Uses, Users and Activities

People and activities are both needed to create a liveable street [16]. Jacobs pointed out that a diversity of activities is needed to support outdoor spaces [1]. Whyte raised a particular emphasis on the importance of food services as a great way to draw people into the street [2]. Accordingly, diversity of uses and users is most important when evaluating the street as a place and moderate when evaluating the street as a corridor.

#### 3.1.4. Physical Qualities (Form / Scale / Design)

Attractiveness on the street can be achieved physically through the form, scale and design of the street and the buildings on it [17] [11]. Appleyard stated that the buildings should also be of a human-scale [16]. Therefore, physical qualities are most important in case of street as a place and moderate in case of street as corridor.

#### 3.1.5. Visual Qualities

Visual qualities on the street can be achieved through the layout of the street itself and the treatment and details of building facades and proportions [11] [18]. Visual qualities are considered as moderate important.

## 4. Results and Discussion

### 4.1. Street as a Corridor that enhances Walkability

Lynch, 1960 stated that for many people, the path (street) is the predominant element in their image while recognizing the city. While people move within the city, they perceive environmental elements, urban function, districts and edges through streets. He suggested some principles that contribute to the quality of the street. These principles include accessibility, continuity, enclosure, directional quality, hierarchy and identity [19]. New Urbanism advocates the creation of pedestrian friendly environments to reduce vehicular use and solve the problems of congestion and urban sprawl. Walkability is the most significant principle of the New Urbanism. In traditional neighbourhoods, streets are designed to accommodate pedestrian movement providing for safety and meeting the pedestrian's needs in terms of the design and the accessibility. This type of street design needs narrower streets and wider sidewalks with trees and street furniture and no on street parking and roadways with interesting building facades and an enclosed street space [20]. In his general explanation of the concept of walkability, Speck stated that to be favoured, walking must satisfy four essential qualities that are: usefulness, safety, comfort, and interesting. Each of these four conditions is fundamental and none alone is sufficient. These four conditions add up to a complete vision for making cities more walkable. The principles of complete streets as suggested by McCann are capitalized in providing for wide sidewalks with bicycle routes that cater for accessibility and create a safe pedestrian environment near a variety of opportunities and integrated land uses while creates access to a variety of transportation modes [21].

### 4.2. Street as a Place for Activities and Social Interaction

Jacobs argued that successful and liveable neighbourhoods in general and streets, should have four main urban principles; mix of land uses and activities that promotes diversity, contributing to the street being active and a live during the whole day, high residential and compact density that results in active streets with many shop owners, residents, and street visitors that creates passive surveillance that, consequently, enhances safety and economic activities [1]. Moreover, the crowded sidewalks create excitement and interaction [21]. Whyte stated that planners should set back their buildings rather than creating plazas to cater for wider corridors that allow movement of the crowd and allow for air and sunlight. He found that there are small details that will draw people to a space, such as sit-able places that is directly dependent on degree of using a public space by people, giving control to the people, and the availability of food and drink [22]. Moreover, he suggested narrower streets for cars and wider sidewalks [23], with as many shops as possible on the ground floor to attract the people as well as the activities that define the street and bring life to it. He also proposes that there should be trees or overhangs to provide shade and shelter. The visual quality of the street is an important element too that contribute to attracting people. At last, the location of the street is crucial, it should be physically as well as visually accessible so that people enter it. In analysing and assessing thousands of public spaces around the world, PPS has stated that to be successful, public spaces including streets should share the following four qualities: they are accessible; its connections to the surroundings, both visual and physical, people are engaged in activities there; having something to do gives people a reason to come to a certain place and return, the place is comfortable and has a great image; this includes perceptions about safety, cleanliness, and the availability of places to sit and finally, it is a sociable place, where people meet each other and spend time there [24]. Gehl called for increasing attention to pedestrians and bike riders and addressed the pedestrian streets and their significant role in enhancing people's activities. He suggested some urban qualities such as providing more benches to fulfil people's need to sit. He also suggested an integrated transportation, connection to transits and to deal with bike riders and pedestrians as a part of the urban life.

### 4.3. Street as a Corridor and Place

Appleyard, 1981 argued that the street is the most important component of the urban environment as it is the place where people live, as an extension to their houses. Streets should therefore be safe from high-speed vehicles, walkable and safe for pedestrian and cyclists, it should not be polluted with vehicle noise and vibrations or gases and most important should cater for places where people can socialize, and children can safely play. There are certain physical conditions, of which all need to be existed in an environment in order to be liveable as well as walkable. These conditions are a public space that is well defined by buildings creating an enclosure, a high residential density and variety of land uses and an integrated mix of uses and activities. People and activities are both needed to create a liveable street where there is diversity and street life [16]. The integration of land uses and activities cater for diversity and bring in an identity for the community that consequently brings life to the street. The buildings of the street should provide for spaces for pedestrians to ensure street activities that are accessible, and people can interact. According to Appleyard and Allan Jacobs, 1987 stated that there are seven principles that are fundamental for a liveable environment. These seven principles are: liveability, authenticity and meaning, layout and public realm, access to opportunity, joy and imagination, identity and control [25]. Gehl, 1987 has raised

the importance of the street as a place for people's activities and has explored methods to make it attractive for both residents and visitors. The variety and mix of uses and activities that occur in the streets are influenced by their physical characteristics. He suggests placing elements such as shops and restaurants in places where people pass, as it provides for the perception that walking distances are shorter and more enjoyable [4]. While walkability should be enhanced by providing for compact and direct routes that are not too wide, with clear hierarchy that helps people understand which spaces are more important [26].

Gehl has raised the importance of the street as a place for people's activities and has explored methods to make it attractive for both residents and visitors [26]. He categorized the outdoor public activity, based on a street scene, into three main categories. These categories are necessary, optional and social activities [11]. Each one has different conditions for the physical environment. The quality of the environment has an important impact on the type of activities that will take place in any street. There are different urban qualities that contribute to creating great streets. These qualities have been identified by Jacobs as trees, beginnings and endings of a street, length, contrast, changes in elevation, diversity of buildings, amenities such as fountains, benches and canopies, places along the street, such as plazas or parks, accessibility, density and time as it brings diversity over the years. The street has a symbolic, social, political, and economical function and is not limited to act as a movement corridor or to provide access [27]. If designers can redesign streets to be attractive places that are fulfilling people's needs, one-third of the city will have been transformed and this will have a great impact on the whole image of the city [13]. Mehta has analysed three of the neighbourhood main commercial streets, trying to find out their ability to support walkability and social interaction between people. The findings stated that people were equally concerned with the social and physical aspects of the street. Seven categories of human needs on neighbourhood commercial streets were identified based on case study streets analysis. It was suggested that desirable neighbourhood commercial streets would be ones that provide a sense of safety, a sense of belonging, environmental comfort, appropriate and physical comfort, a sense of control over the environment, sensory pleasure, and opportunities for social contact and interaction [28]. Streets that cater to the first six categories of human needs in public space are likely to attract more people and are therefore likely to create possibilities for satisfying the need for walking and social interaction [29].

## 5. Case Studies

The comprehensive (corridor-place) approach and the suggested two-dimensional street chart was tested through its first stage (street selection); two Egyptian commercial streets were evaluated using participant observations by researcher to find out whether they have the potential to be pedestrianized or not. The two selected streets are: Baghdad Street in Heliopolis and Banks Centre Street in 5th settlement (**Figure 1** provides for the streets locations). The selection of Baghdad Street and Banks Center Street as case studies is crucial to the research's aim of developing and testing a comprehensive (Corridor – Place) approach for commercial street pedestrianization.

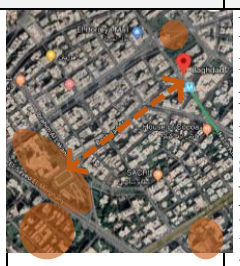
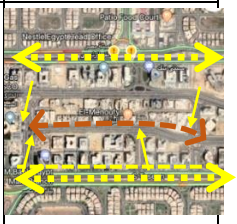
These two streets present contrasting characteristics, representing different urban development patterns within Greater Cairo, and therefore allow for a more robust evaluation of the proposed approach. Baghdad Street, located in the historical district of Heliopolis, embodies the characteristics of an older, established commercial area. It features a rich history, a unique

architectural identity, and a mix of traditional commercial activities. In contrast, Banks Center Street, situated in the newer 5th Settlement, exemplifies a more modern, suburban commercial development. It is characterized by contemporary architecture, a focus on newer commercial functions, and a different urban layout. This deliberate contrast facilitates a comparative analysis, enabling the research to examine the applicability and effectiveness of the (Corridor – Place) approach across diverse urban contexts.

By applying the (Corridor – Place) approach to both an older, organically developed street and a newer, planned street, the research can identify key factors that influence pedestrianization potential in different urban settings. This comparative methodology strengthens the validity and broadens the applicability of the research findings, making the developed approach more relevant for urban planners and designers working in a variety of contexts, not only in Cairo but also in other cities with similar development patterns. Furthermore, examining the contrasting characteristics of the two streets will help in comparing the applicability of the suggested Corridor-Place Corridor to the old and new planning strategies for street design. **Table 2** provides for the street's analysis using the research (corridor-place) approach, while **Chart 4** provides for their evaluation using the Two-Dimensional (Corridor- Place) Street Chart/Evaluation Tool developed by author.


**Fig. 1: Baghdad and banks center Streets locations within greater Cairo.**

**Table 2: Testing the first stage of (corridor-place) approach through evaluating case studies (street selection) [Developed by Author].**

| CORRIDOR- PLACE APPROACH | | Performance Measures: CORRIDOR / WALKABILITY | Performance Measures: PLACE / ACTIVITIES | Baghdad Street – Korba - Heliopolis - Cairo | | Banks Centre Street – 5th Settlement – New Cairo | |
|---|---|---|---|---|---|---|---|
| Usability | Location | Connectivity to surrounding area.<br><br>Continuity.<br><br>Proximity to landmarks and opportunities. | Connectivity to surrounding area.<br><br>Continuity. | Baghdad street is located in a very strategic area at Heliopolis, it starts at "Ittihadia Presidential Palace" at the west and has many nearby famous landmarks such as (Our Lady of Heliopolis Co-Cathedral – Heliopolis Sporting Club- Baron Palace). |  <br>**Very Good Location** | Banks Centre street is parallel to the most famous street in New Cairo, 90th street. However, it has no nearby landmarks except for "Al-Shokri" Mosque that is located at the beginning of the street, otherwise it's full of office buildings and well-known restaurants. |  <br>**Fair Location** |
| | Accessibility, Permeability and Integration | Number of access points /entrances<br>Integrated with pedestrian networks.<br>Integrated with bicycle routs.<br>Integrated with transit system.<br>Nearby parking.<br>Directional quality of the street. | Number of access points /entrances.<br>Integrated with pedestrian networks.<br>Integrated with bicycle routs.<br>Integrated with transit system.<br>Nearby parking.<br>Traffic Calming. | The street has many access points (9).<br>It ends with a metro station (El Ahram) and public transits are available along it as well as the two main adjacent streets. Parking lots are available in the small, intersected streets. It used to be closed to traffic on Fridays creating a place for festivals and activities. No clear integration with pedestrian paths or bicycle routs. |  <br>  <br>**Good Accessibility "could be enhanced"** | The street has access points only at the beginning and the end of it. No public transit is available on the street or even on the adjacent streets. It is only available in 90th street the one that is parallel to it. Parking areas are available along the street however, no integration with any pedestrian paths or bicycle routs. The only way to reach the street is by private car. |  <br>  <br>  <br>**Poor Accessibility** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | **Diversity of Uses, Users and Activities** | Diversity of activities along the street.<br><br>Continuity of diverse activity.<br><br>High housing density and mixed use. | Diversity of users.<br><br>Diversity of transportation modes.<br><br>Diversity of land uses.<br><br>Restaurants and cafes. | Baghdad Street is one of the most interesting shopping streets in Al-Korba. It has a diversity of uses and activities along it (High end Cloths outlets – Galleries – Restaurants – Cafes – Jewellery Stores – Boutiques – Souvenir Stores – Book Stores). It used to be closed to traffic on Fridays to host El-Korba festival. |  <br>  <br>  <br>**Very Good Diversity** | The street is well known for its recreational function as a spot for many formal restaurants (Hosny – Taataa – Menofy – Ibn el Sham) as well as its financial function as a spot for many banks and financial institutions. Only one mega retail store is available along it (Hussein Youssef). No residential units are available along the street. |  <br>  <br>**Fair Diversity** |
| **Attractiveness** | **Physical Qualities (Form and Scale / Design)** | Width of street.<br>Height of buildings.<br>Human Scale.<br>Suitable street furniture.<br>Landmarks/ Focal element.<br>Clearly defined center and edges. | Width of street.<br>Height of buildings.<br>Human Scale.<br>Landmarks/ Focal element (fountain – Sculpture-Clock).<br>Clearly defined center and edges. | Buildings heights to street width creates a sense of enclosure and a human scale is created using the arcades at sidewalk zone that is assigned for window shopping. There are no landmarks along the street itself. No street furniture available except for lighting fixture and trees. |  <br>  <br>**Fair Physical Qualities** | The street is very wide with low buildings that does not create a sense of enclosure or a human scale. No landmarks available along the street. Edges and center are not clear identified. No street furniture available except for lighting fixtures. |  <br>**Poor Physical Qualities** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | **Visual Qualities** | Architectural style and identity. Buildings details, proportions and skyline. Pedestrian-level facade transparency/ Soft and active façade. Landscaping, planting. | Architectural style and identity. Buildings details, proportions and skyline. Visual Pleasure. Pedestrian-level facade transparency/soft and active facade. Landscaping, planting. Diversity of activities along the street. | Baghdad street has a unique identity and architectural style that is a mixture of the Moorish, Arabic, Islamic and European styles, taking the Moorish façades with Arabic cross sections and European floor plans gave it a uniquely aesthetic. It has many historical buildings with unique proportions and details. Trees and transparent facades. |   **Very Good Visual Qualities** | No specific or unique architectural style is available along the street, only contemporary eclectic buildings. No historical buildings. No trees or landscape. |  **Poor Visual Qualities** |

Least Important  Moderate Important  Most Important

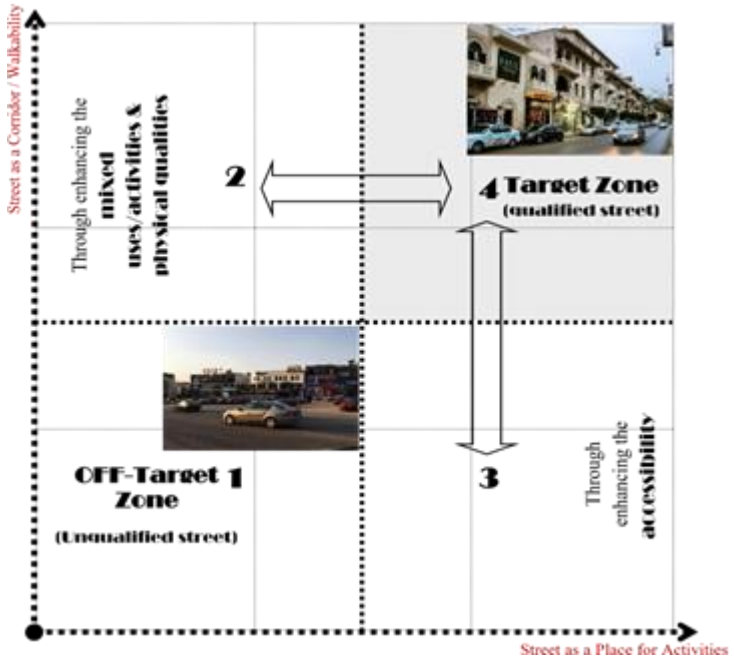



**Chart 4: Streets Evaluation by The Suggested Two-Dimensional (Corridor- Place) Street Chart/Evaluation Tool [Developed by Author].**

## 6. Conclusions

By analyzing Baghdad Street and banks center street using the first stage of (corridor-place) comprehensive approach in table 2 and allocating both streets in the two dimensional (corridor-place) street chart (chart 4), Baghdad street was placed in zone 4 which is the target zone, what means that it is well qualified as a corridor and a place and that it has a great potential to be pedestrianized and converted into a successful pedestrian street that caters for street walkability and activities. It has a very good location, diversity of uses and activities as well as visual qualities identified in the unique architectural style. The accessibility of the street is good however; it could be easily enhanced. The physical qualities of the street are fair however, it could be enhanced through adding street furniture, some landmarks and focal point, adding to modifying the scale of the space. Banks Center street was placed in zone 1 which is the off-target zone, what means that it is unqualified as a corridor as well as a place and that it has no potential to be pedestrianized and converted into a successful pedestrian street. The street is poor in terms of accessibility and integration with different modes of transportation, location and proximity of landmarks and public premises, visual and physical qualities of the street identified in scale, style, furniture, and diversity of uses and activities that is limited to banks, restaurants and cafes.

The Analysis of the case studies confirmed the first stage of the (corridor-place) approach of street pedestrianization as a threshold that could help urban planners and designers to select the appropriate streets to be pedestrianized. The research concluded five urban qualities that should be taken into consideration while selecting a street to be pedestrianized that are: location, accessibility, diversity, physical qualities and visual qualities. While the location of the street, diversity of uses/activities and visual qualities along the street are most important and should exist in the selected street, accessibility, physical qualities, visual qualities and diversity along the street still could be enhanced in the second stage of the street pedestrianization.

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# Appendix 1

**Street Evaluation Questionnaire**
**Thank you for participating in this survey to help us understand and improve our street!**
**Please indicate your role:**

☐ Resident

☐ Shop Owner

**Section 1: Location and Connectivity**

1. How would you rate the street's connection to the surrounding area?
   ☐ Very Poor ☐ Poor ☐ Fair ☐ Good ☐ Very Good
2. How easy is it to move from this street to other parts of the neighborhood?
   ☐ Very Difficult ☐ Difficult ☐ Neutral ☐ Easy ☐ Very Easy
3. Are there any significant landmarks or opportunities (e.g., parks, schools, businesses) easily accessible from this street? If yes, please list them.
4. Do you feel there is a good continuity of the street? (Does it flow well?)

☐ Yes ☐ No, please explain.

5. Rate the proximity of the street to important locations.
   ☐ Very Poor ☐ Poor ☐ Fair ☐ Good ☐ Very Good

**Section 2: Accessibility, Permeability, and Integration**

1. How many access points/entrances are there to this street?
   ☐ Very Few ☐ Few ☐ Moderate ☐ Many ☐ Very Many
2. How well integrated is this street with pedestrian networks?
   ☐ Not at all ☐ Poorly ☐ Moderately ☐ Well ☐ Very Well
3. How well integrated is this street with bicycle routes?
   ☐ Not at all ☐ Poorly ☐ Moderately ☐ Well ☐ Very Well
4. How well integrated is this street with the public transit system?
   ☐ Not at all ☐ Poorly ☐ Moderately ☐ Well ☐ Very Well
5. Is there sufficient nearby parking?
   ☐ No ☐ Limited ☐ Adequate ☐ Ample
6. How would you describe the directional quality of the street (how easy is it to navigate)?
   ☐ Very Confusing ☐ Confusing ☐ Neutral ☐ Clear ☐ Very Clear
7. If Applicable, how effective is the traffic calming measures on this street?
   ☐ Not Effective ☐ Somewhat Effective ☐ Effective ☐ Very Effective ☐ Not Applicable.

**Section 3: Diversity of Uses, Users, and Activities**

1. How diverse are the activities along this street?
   ☐ Not Diverse ☐ Slightly Diverse ☐ Moderately Diverse ☐ Diverse ☐ Very Diverse
2. Is there a continuous flow of diverse activities along the street?
   ☐ No ☐ Limited ☐ Moderate ☐ Yes, consistently
3. How would you rate the housing density and mixed-use development on this street?
   ☐ Very Low ☐ Low ☐ Moderate ☐ High ☐ Very High
4. How diverse are the users of this street (e.g., age, background)?
   ☐ Not Diverse ☐ Slightly Diverse ☐ Moderately Diverse ☐ Diverse ☐ Very Diverse
5. How diverse are the transportation modes used on this street?
   ☐ Not Diverse ☐ Slightly Diverse ☐ Moderately Diverse ☐ Diverse ☐ Very Diverse
6. How diverse are the land uses on this street (e.g., residential, commercial, recreational)?
   ☐ Not Diverse ☐ Slightly Diverse ☐ Moderately Diverse ☐ Diverse ☐ Very Diverse
7. How would you rate the presence and quality of restaurants and cafes on this street?
   ☐ Very Poor ☐ Poor ☐ Fair ☐ Good ☐ Very Good

**Section 4: Physical Qualities (Form and Scale/Design)**

1. How would you rate the width of the street?
   ☐ Too Narrow ☐ Narrow ☐ Adequate ☐ Wide ☐ Too Wide
2. How would you rate the height of the buildings along this street?
   ☐ Too Low ☐ Low ☐ Appropriate ☐ High ☐ Too High
3. Does the street feel human-scaled?
   ☐ Not at all ☐ Somewhat ☐ Moderately ☐ Yes, it does
4. How suitable is the street furniture (benches, lighting, etc.)?
   ☐ Very Poor ☐ Poor ☐ Fair ☐ Good ☐ Very Good

5. Are there any significant landmarks or focal elements (e.g., fountains, sculptures) on this street? If yes, please describe them.
6. Are the center and edges of the street clearly defined?
   ☐ Not at all ☐ Somewhat ☐ Moderately ☐ Yes, clearly

**Section 5: Visual Qualities**

1. How would you rate the architectural style and identity of the buildings on this street?
   ☐ Very Poor ☐ Poor ☐ Fair ☐ Good ☐ Very Good
2. How would you rate the building details, proportions, and skyline?
   ☐ Very Poor ☐ Poor ☐ Fair ☐ Good ☐ Very Good
3. How would you rate the visual pleasure of walking down this street?
   ☐ Very Unpleasant ☐ Unpleasant ☐ Neutral ☐ Pleasant ☐ Very Pleasant
4. How would you rate the pedestrian-level facade transparency/soft and active facades (e.g., storefronts, windows)?
   ☐ Very Poor ☐ Poor ☐ Fair ☐ Good ☐ Very Good
5. How would you rate the landscaping and planting on this street?
   ☐ Non-Existent ☐ Poor ☐ Fair ☐ Good ☐ Very Good

**Additional Comments:**

Please provide any additional comments or suggestions for improvement:

**Thank you for your valuable feedback!**