

Urban Transitional Zones in Greater Cairo Region: Problems and Opportunities

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Abstract:

Cairo has developed over time according to an incremental process. Each increment was added at a certain stage or era during the development and growth of the city and most of them have their own distinctive character. This paper attempts to analyse the evolution of these distinctive increments and the development of the so called ‘Urban Transitional Zones (UTZ)’, which are zones (gaps) that exist between two or more distinct and well defined urban areas.

The sequential urban additions that Cairo has been experiencing over time were sometimes quite limited and in other times they were surprisingly massive (Abu-Lughod, 1971). Yet, the fast growth of urbanisation of Cairo towards the East and West necessitates that town planners prepare for the expected consequences¹. One of these consequences is the informal development of the Urban Transitional Zones (UTZ) in the areas in between, and adjacent to, the newly urbanized parts of Cairo.

Various segregated internal zones have been neglected in the previous city development plans and thus had become barriers and physical constraints between various parts of the city. Therefore, the concern of this paper is to identify the properties, opportunities and problems occurring from the segregation of the UTZ.

¹ *For example, the growth of urbanisation on the scarce agricultural land and thus risking the country's food supply, the breakdown of urban services and facilities as a result of the growth of the city, etc.*

1. Introduction:

The term 'transitional zones' has been widely used in the modern urban and regional planning arenas referring to different concepts of area definition and function. In the Greater Cairo Region the transitional zones have been created out of neglect or informal development of peripheral areas. Therefore, this paper aims at understating the emergence of these areas in Cairo and to trace their development from the early times till the present-day. It then points to a key factor that has been affecting and influencing the UTZ, which is the land ownership pattern of peripheral areas. The paper then arrives at defining the UTZ and highlights their problems and opportunities and will argue for the need for special planning considerations to complement the efforts of the development strategies for the Greater Cairo Region (GCR).

2. Transitional Zones In Theory and In Practice:

Transitional zones in theory have various definitions. For some (e.g.: DCRPC, 1997; CDD-PD, 2001; Gabrielson *et. al.*, 2001) these transitional zones are used as means of controlling growth of urban settlements especially in peripheral areas. For others (e.g.: PELB, 1996; PD-CCB, 2002; PRMS-TD, 1998; WWGMHB, 1999) transitional zones are just intermediate areas that act as mediators of activities, urban settings or social compositions. The term UTZ is not only used in the urban planning discipline, but also it is more widely used in the field of landscape and ecological planning for the purpose of preserving natural resources including wild life and green and open areas, especially in areas adjacent to, and thus threatened by, existing urban settlements.

UTZ are defined as areas, which witness a distinguished change related to time and to significant external force. For example in the Marietta Street Artery, Bellwood District, Atlanta the industrial and retail activities moved to other places in the 1950s and 60s. This has resulted in creating vacant buildings and spaces and caused an 'urban slump' to exist. Eventually, shops and lower middle class houses were demolished to give space to commercial activities that bring better economic returns.

Moreover, in the Program for the Protection of Land and Endangered Species (Senate Department of Urban Development, 2001), the UTZ were mainly described as areas, which have mixed use activities and were planned to preserve and develop distinctive urban sections, landscapes and green elements to enhance the organization of the city.



Figure 1- The corner of Marietta Street and Bankhead Ave. in the 1950s and 1998. In the old photo one can see the trolley tracks wearing the asphalt as well as overhead wires. In the more recent photo one can see the majority of the east side of Marietta Street towards Georgia Tech has been torn down to make room for businesses with parking lots and Georgia Tech has expanded into a residential area once located behind the demolished storefronts.

Source: Marietta Street Artery Neighborhood Directory, 2001

Furthermore, the Countywide Comprehensive Plan of Jackson County, (2001) describes the classification of ‘Mixed Use Urban Transitional Areas’ as “transitional areas for urban service area expansion adjacent to industrial parks, prisons, large industrial facilities, airports, municipalities, and similar land uses.” (Policy 2.3, No. 2) It further nominates the function of these areas to “provide a gradient of densities and intensities of compatible land uses.” (ibid) In order for this plan to ensure that the dedicated uses of its land plots are implemented as planned, certain land uses were allowed with restrictions on the size of the development. These include agricultural activities, small-scale industries, commercial activities, residential activities, and community facilities and services.

The above-mentioned examples show that there could be different interpretations and functions of the UTZ. The examples also show that the UTZ are factors affecting the implementation of the objectives of the more comprehensive city plans and are influential zones that affect the growth of a city. Indeed, there is a strong relationship between urban transitional zones and the growth of cities. Gabrielson *et. al.* (2001) see the use of transitional zones on the periphery of cities as a cause of low density housing spreading into rural areas. On the other hand non-transitional zoning would create

“moderate and high density and intensity land use in entire urban areas, that in turn would create nodal developments, particularly around transit routes and multi-modal intersections. They would reduce or eliminate low and very low densities within urban containment areas and eliminate low-density development in resource areas and on environmentally sensitive lands” (ibid: 9).

Contrary to Gabrielson *et. al.* (2001) who used the non-transitional zoning as a

containment of growth, the land use bylaw of Drumheller town² (PRMS-TD, 1998) uses the urban transitional districts with their stated purpose of reserving lands on the periphery of the developed areas of the city which are intended as future urban growth areas. The permitted uses in transitional districts could be parks, and accessory buildings. Subdivisions are not, at all, permitted in these districts and residential areas are only allowed if in the form of a single-family house per land plot. It is argued that applying such regulations would preserve lands.

Cities that exist in countries that are experiencing transitional stages of adopting changing development policies such as in China and Egypt have distinctive urban transitional zones. This has been raised by Deng (2002) in studying some of the Chinese cities that were affected by the transitional period between China's adoption of the socialist policies between 1949 and 1978 and its adoption of the 1982 Constitution of the Privatisation Reform Committee (PRC), under which all urban lands were to be allocated to private sector developers and not controlled or run by the government itself. This had created a state of transition in the urban situations of most of the Chinese cities. A state which resembles, to a large extent, the case of Egyptian cities including Cairo. Indeed, the Chinese example is similar to the case of the Greater Cairo Region (GCR) which has been experiencing the privatisation of publicly owned lands and also an urbanization expansion towards the peripheral areas as a result of the government action of involving the private sector in providing residential and economic activities.

In the following section, the paper will examine and analyse the existence of, both planned and coincidental, transitional zones or areas in the GCR. The objective is to reach a better understanding of the morphological composition of today's GCR. The analysis also aims at reaching recommendations that are conscious to the nature of these transitional areas, which as argued in this paper, have a significant influence on the success of the city and its ability to effectively function as a complete and integrated whole rather than fractions or patches of urban situations.

3. Transitional Areas During the Development of Cairo:

Cairo's UTZ are defined as areas that exist between distinguished urban districts. In other words they are the areas located on the periphery of the city at one stage of

² Bylaw no. 36-98, which considers urban transitional "UT" district regulations and that was published December 1998 and prepared by Palliser Regional Municipal Services and the Town of Drumheller.

time. Salheen (2001) identified some of the UTZ in Cairo during his analysis of Space Syntax on parts of the GCR. Salheen (2001) noticed that several areas have relatively low levels of *interaction* ('integration' in the terms of Space Syntax Methodology) with the rest of the city compared with their geometrical location either globally central or are adjacent to areas with high levels of global interaction. The circumstances of the development of these areas and their properties are the main interest of this paper.

3.1 Transitional Areas in Pre-Khedives Cairo:

The transitional areas in Pre-Khedives Cairo were a result of the successive establishments of the four Muslim Capitals Al-Fustat, Al-Askar, Alkata'e and Al-Qahira. Together with the ancient Roman Fortress of Babylon they all form the medieval Cairo that once existed but has little remains of its original pattern.

Al-Fustat was the first Muslim Capital in Egypt and was planned and built by Amr Ibn Al-Aas who had selected a location that was approximately 420 metres to the North of the old Roman Fortress of Babylon. This location, being at the Delta tip, has been the most strategic location in Egypt to control water resources and movement routes. The land was divided and distributed among fifty military groups. The total area of Al-Fustat was 600-800 Hectare. It formed groups of inappropriately connected residential districts, which were allocated according to the distribution of tribes rather than for implementing a complete urban system. Nevertheless, a group of people gathered and formed what is called Ahl Al-Raya (People of the flag) and occupied the city center with the Mosque of Amr Ibn Al-Aas at its central position.

The consequent stages in the history of Cairo's urbanization growth were mostly the outcome of the ambition of every new ruler of the country who aimed at establishing a new government seat away from the original city to ensure security and control (Raymond, 1994). This happened when the Abbasids established Al-Askar (2700 meters to the North of Al-Fustat). It happened again when the Tolouneeds established Al-Kata'e (1300 to the Eastern North of Al-Askar). The fourth of these cities, Al-Qahira (Cairo), was built by the Fatimids adjacent to Al-Kata'e (Moselhy, 1988).

The physical layout of the first three cities was similar: a central location for the governor's house, and around it the contained districts were distributed and given to the military groups. The Egyptian civilians lived in the old Al-Fustat and its extensions until the great fire of Al-Fustat in the period of Ibn Toloun. The great fire,

together with the spread of fatal diseases in Al-Fustat, had forced the people to move to inhabit the other three cities, with special concentration in Al-Qahira (Cairo) being the most modern and civilised city. The areas in between the four cities (the UTZ) were randomly occupied with housing and buildings of an irregular pattern, which was characterised by its clustering around the social groups and paid little attention to the spatial system or distribution of activities that existed in the cities.

What might have even helped in the quick development of these areas was the rush in providing new houses and construction to replace those either burnt down in the fire of Al-Fustat or been deserted to escape the danger of infection from the plague. Moreover, the change in the land available for expansion due to the retrieval of the River Nile had contributed to the expansion of those areas as shown in figure 2. The construction of bridges that crossed the Egyptian Canal to the West of the city had facilitated the inhabitation of the lands formed from the retrieval of the Nile. It was especially in the period of the Mamluks when many of these bridges were built allowing the massive expansion of the city towards the West as shown in figure 3.

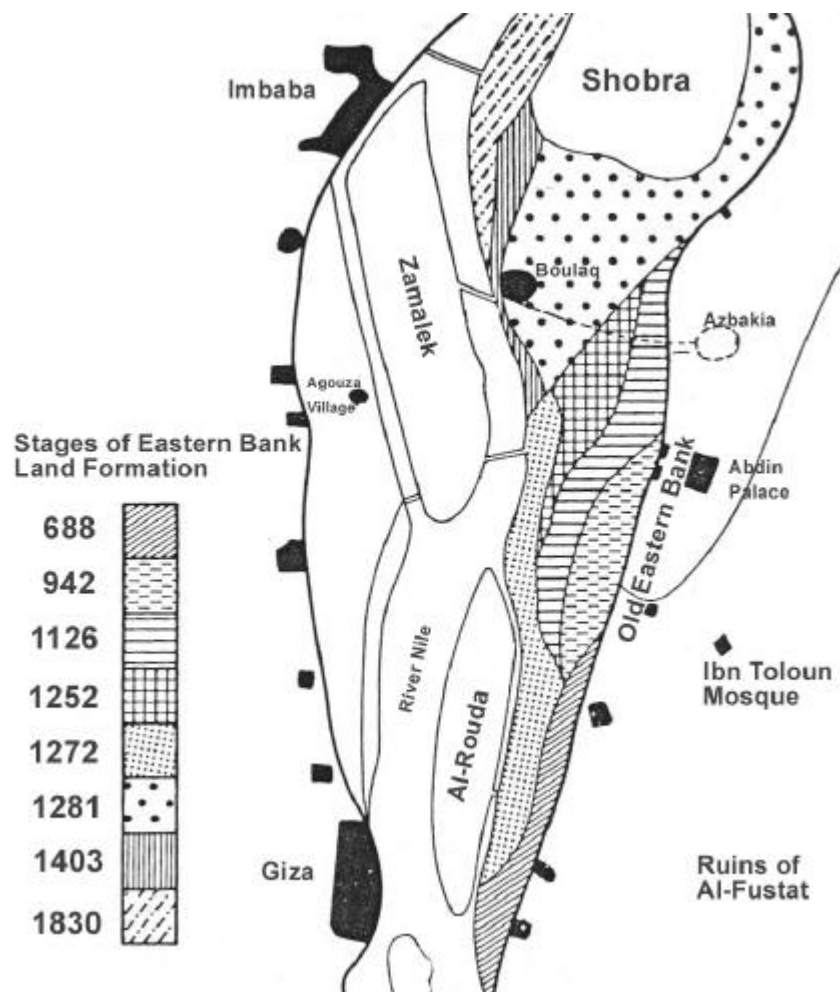


Figure 2 – The evolution of the Eastern Bank of The Nile due to salutation.
Source: Adopted from Moselhy, F.M., 1988: 74, with modifications

According to Moselhy (1988) the urban pattern of Al-Fustat and Al-Askar resembles the pattern of some southern parts of the Arabian Peninsula, which are characterised by their narrow and winding streets. He specifies Al-Kata'e and Al-Qahira as Royal Cities, which enjoy wider straight streets and have many squares and public gardens.

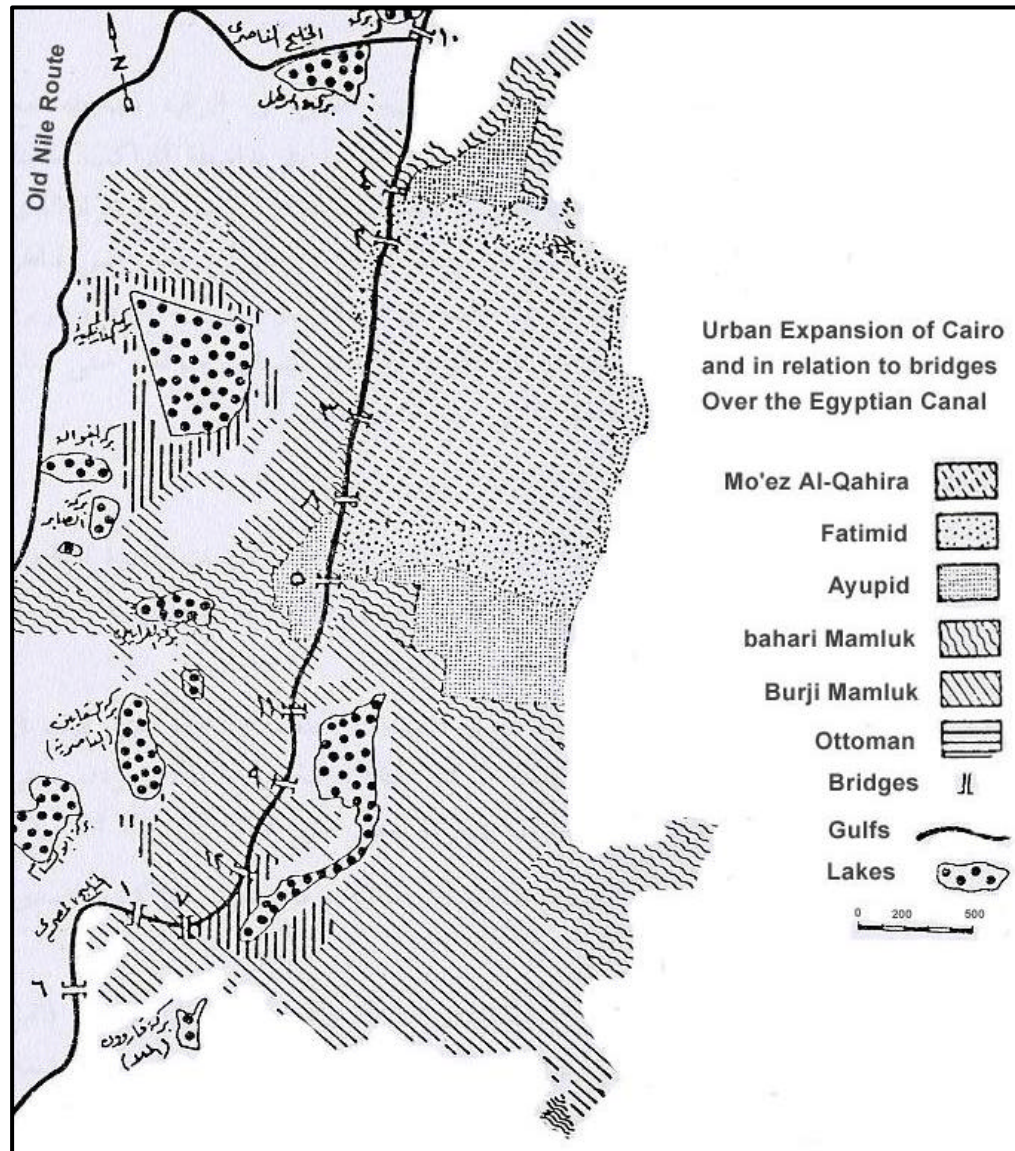


Figure 2 – The Development of Cairo during the pre-khdivic period.
Source: Adopted from Moselhy, F.M., 1988: 125, with modifications.

3.2 Transitional Areas in Khedive Cairo:

In 1807 and after two years of his arrival to power, Mohamed Ali moved his government seat to Cairo's Castle. Cairo had witnessed very few construction works during Mohamed Ali's Regime, who gave most of his attention to Alexandria and other parts of the country. The administrative bodies that were introduced in Cairo to manage the urban environment are seen as the most important changes in the city's

urban development field. The initiation of Shobra district, which was established on Gizirat Al-Feel was also a major addition to Cairo's urban agglomeration. However it was not aimed to be a new residential district but was planned as a place for luxurious residences of the royal family and was surrounded with large agricultural areas (Abu-Lughod, 1971). In addition to Shobra district, Bolaq district was the most growing part of Cairo in the period of Mohamed Ali because of the attention that he had given to shipbuilding and commerce which Bolaq was a centre for. Two other important changes were the opening of the new streets: Al-Sekkah Al-Gadedah and Mohamed Ali Street. The former street links Al-Azhar with Al-Moski, where the latter links the Mohamed Ali Castle with Al-Azbakia Garden.

Mohamed Ali's successors (Abbas and Said) had contributed little to the growth of Cairo, but had each introduced a new seed for future development. Abbas the first (1848-1854) had established Al-Abbasia district as a suburb in the north-eastern part of Cairo, which was initially a military camp. It was later inhabited with the civilian population after Abbas had distributed some lands to the private sector and built a hospital, school and a palace within it. Said Pasha (1854-1863) made use of the land that was reclaimed after the change in the path of the River Nile in the West of Old Cairo and established Kasr El-Neel Army Campus, which encouraged his successor Ismail Pasha (1863-1879) to establish El-Ismailia: the seed of modern Cairo.

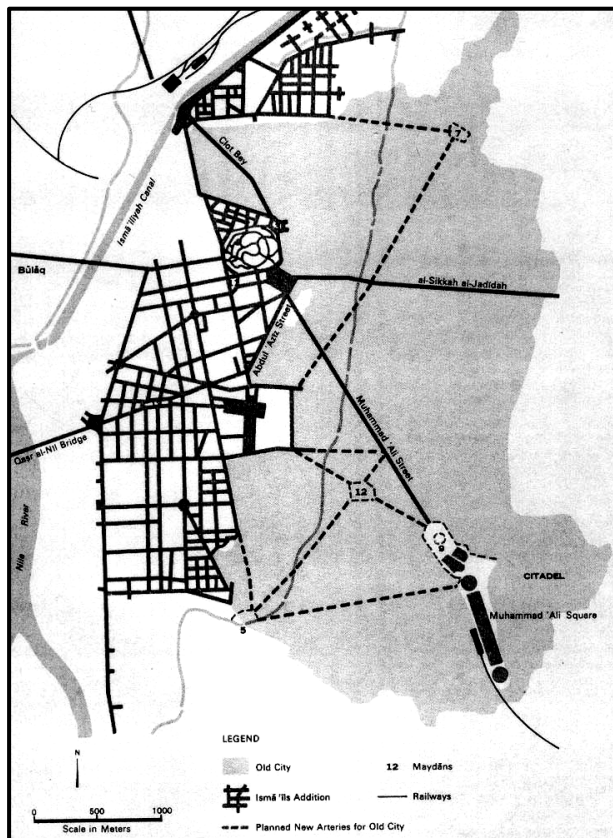


Figure 4 - Reconstruction of the master plan of Cairo showing various streets that were planned cut through the urban fabric of old Fatimid Cairo.

Source: Abu-Lughod (1971: 111) after the text of Ali Mubarak in his book *Al-Khitat*.

Ismail Pasha had strong ambitions to establish Cairo as a modern city. In one of his visits to Paris, he attended an exhibition showing Houseman's planning schemes for Paris and decided to implement a similar plan for Cairo. Accordingly, he Commissioned Grand Beck, a French planner and a student of Houseman, to prepare a new planning scheme for Cairo over the land between old Cairo and the Nile. The outcome of the plan had been the present downtown area of Cairo as shown in figure ?(insert figure). This was like a kick off shot for the continuous expansion of Cairo that continued until the present-day. What was remarkable in the plan of Ismail Pasha was the marginal attention given to connect the old city with the new city. This had created a duality that still exists and which was a first clear patchy development that is inconsistent with the existing morphology of the city. Although this was the first precedent in Modern Cairo's history, it later had many successive examples in the GCR. Sadly Ismail's regime ended with the British occupation, which lasted from 1882 to 1936.

3.3 Transitional Areas in the mid Twentieth Century in Cairo:

Despite the changes in the political system (e.g. from colonisation to a free state), in governments, and in the national policy (e.g. from socialism to capitalism), all such changes had contributed to the fragmentation of Cairo's newly added parts. In addition, such changes had contributed to the weak connection with the original body of the city and its original urban pattern. This had continuously created fragmentation in activities and had negatively affected the ability of the activities to function efficiently.

In the following section, two distinguished districts are analysed according to their contribution to the integration or fragmentation of the city and the way that the transitional areas between them and the original part of the city were dealt with. The two districts are Heliopolis and Nasr City, which were chosen because of their similarity in scale and circumstances of establishment. This review aims at understanding the UTZ phenomenon, and to reflect on the recent expansions of Cairo in both the East and West directions.

- 1) Heliopolis (built in 1905) was the first Satellite City to be built after the British occupation. It is located to the north-eastern part of Cairo and was planned to be a suburb to the old city and linked together with a tramline. It was planned to be a land subdivision project but was transferred to build and rent to encourage people

to move to it. After about 20 years, people were attracted to Heliopolis searching for a better quality of life and affordable rents. The character of the district was kept intact due to the initiation and running of the project by a private company fully devoted to the project. On the scale of the Cairo City, Raymond (1984) says that Heliopolis was a foreign body from the city and that the areas between it and the city (UTZ) were filled with urban expansions in the second half of the twentieth century.

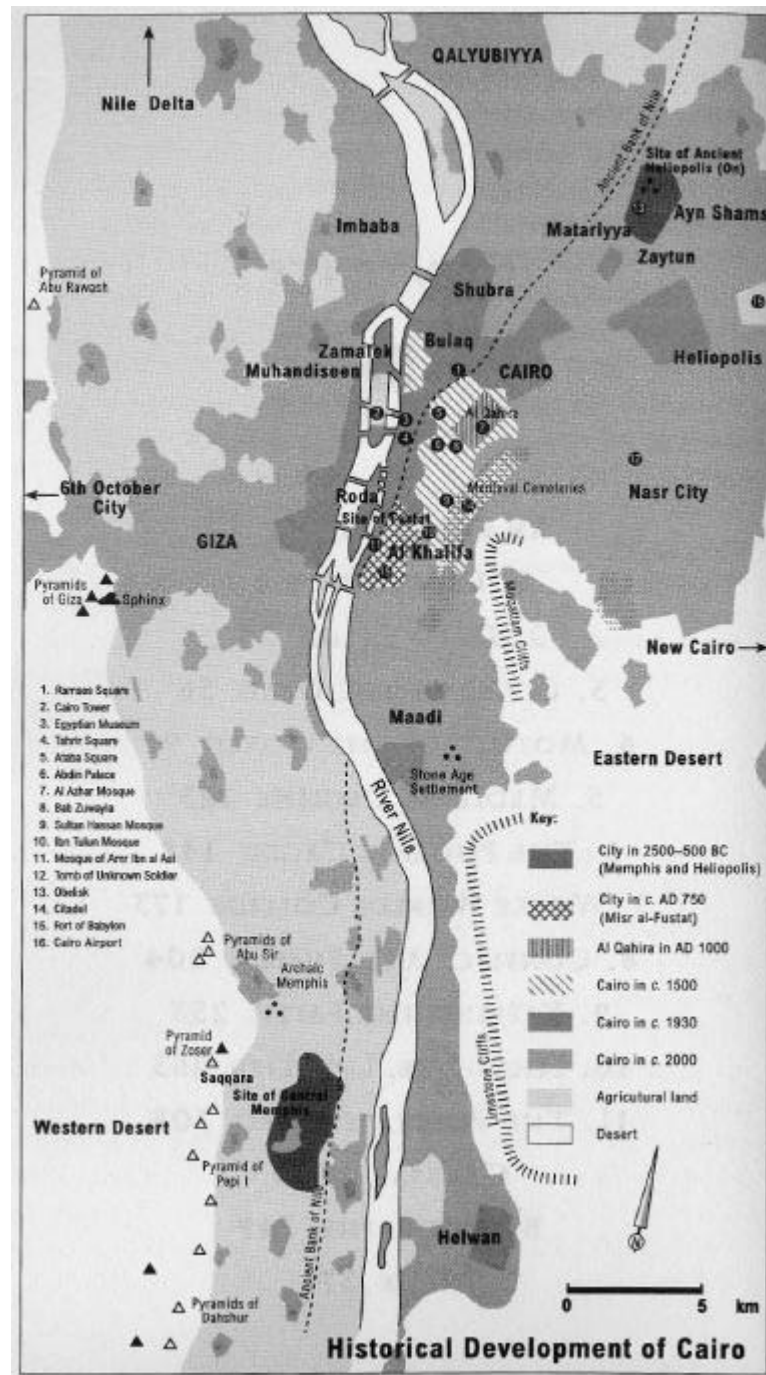


Figure 5 : Historical Development of Cairo until early 1990s.
Source: Rodenbeck, M. (1998): VIII.

- 2) Nasr City (built in 1959) was established after the 1952 revolution as a response to the socialist policy of solving Cairo's housing problems. It was planned to accommodate half a million inhabitants mainly from the middle class. Unlike Heliopolis, Nasr City was planned to include an industrial area and many administrative and ministerial institutions. The growth of the city was initially slow and was not controlled by management or administrative authorities. The private sector, particularly the wealthy Egyptians working in the Arabian Gulf countries, were the main driving forces for the district's growth. However, the high land price encouraged most of the owners to violate the rules and regulations of height and setbacks, causing the district to attract more than double the population and activities that were conceived for it. Although Nasr City was also planned as a desert new suburb like Heliopolis, its links with the city (UTZ) were not occupied with urbanized areas as in the case of Heliopolis because of the military functions that were located in the linking areas.

3.4 Transitional Areas in the Late Twentieth Century in Cairo:

The expansion of Cairo to the East, towards New Cairo and the other new urban settlements, and to the West, towards the 6th of October City and its adjacent areas, have all been built with no specific reference to their original plans as individual isolated urban settlements. There is more emphasis on the East due to the historic and geographic tendency of the GCR to expand towards the East³ and due to the existence of wide areas of desert lands that lack proper land use planning.

The original plan for these areas has considered the allocation of a buffer area between them and the original mass of GCR to avoid the fusion between the urbanized areas, which would cause a massive urban mass with additional urban problems (Attia and Salheen, 2003). In addition a ring road around the GCR had been implemented to limit the growth of the city and a buffer green area was proposed along the ring road to prevent the urbanization. However, the internal buffer areas between the existing urban agglomeration and the newly developed areas in the East and West had attracted the population and the new activities to occupy these buffer

³ Because of the River Nile and the Railway Route to the West which prohibits full connectivity with the extensions in that direction.

areas and thus the original mass of the GCR had been transformed into just another set of unplanned transitional areas (UTZ)

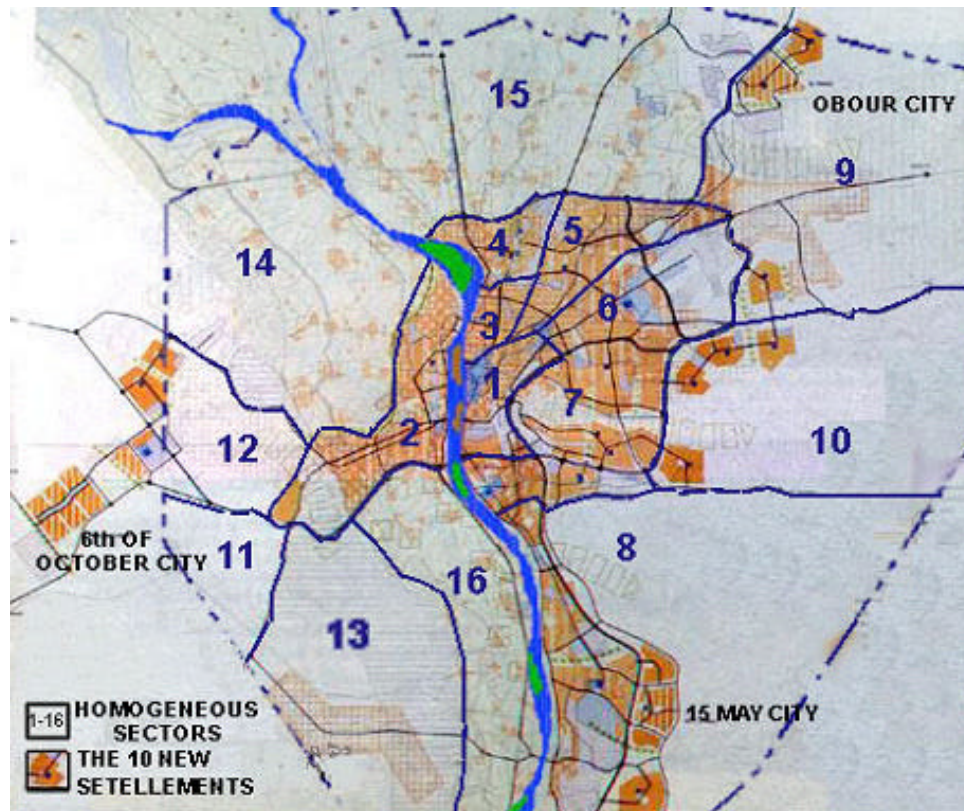


Figure 6 - The Location of the new settlements and cities around GCR in the original plan of 1983-1987 (Note the ring road defining the main cluster of the city).

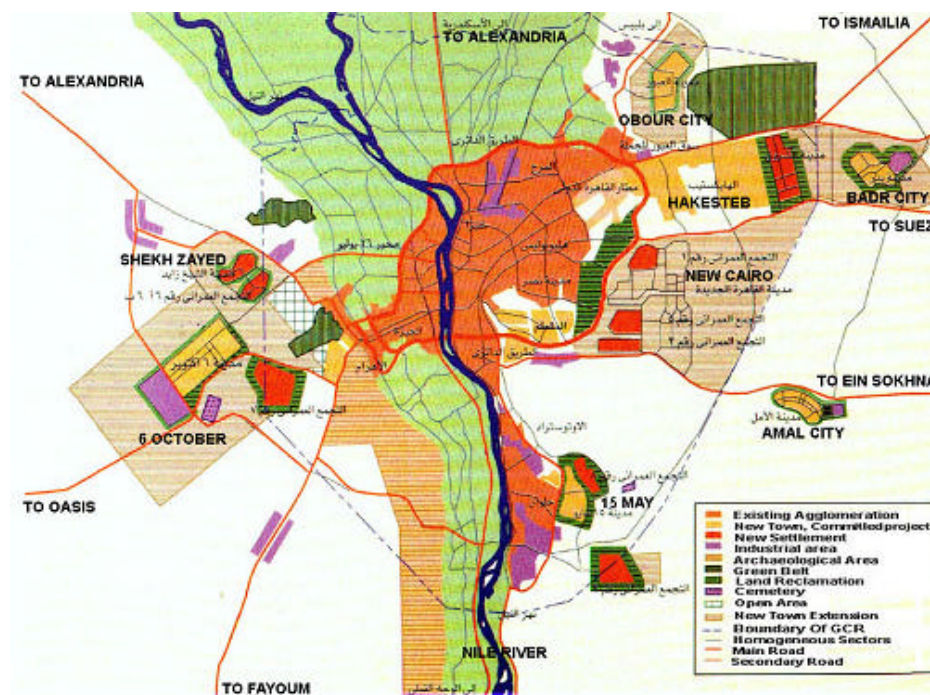


Figure 7 - The melting of the new settlements and cities with the main body of GCR by the end of the twentieth century (The eastern arc of the ring road became an intermediate road edged with Cairo to the West and new Cairo to the East).

4. The Influence of Land Ownership Patterns on the formation and development of The UTZ:

One of the most crucial problems that had ever existed in Cairo with reference to transitional areas and which had been challenging the urban development policies and plans is land ownership. In Egypt all desert lands have been under the control of the Ministry of Defence. The transitional areas between Heliopolis District and Nasr City and Cairo City Centre are all occupied with military functions. They were once located on the peripheral areas of Cairo, but are now found in the heart of the city. They have been affecting and reducing the interconnectivity of the city and its ability to function in totality and not as isolated urban patches. The same case exists in the areas between the GCR and the newly developed areas around it.

The existing UTZ in Cairo could be classified according to their ownership into areas owned by the Ministry of Defence, areas owned by the Ministry of Housing, Infrastructure and Urban Communities, and areas owned by the private sector which had acquired large land plots due to the land privatisation process that has been adopted since 1993. This privatisation (simply a selling process) did not adopt a clear and comprehensive plan from the beginning, rather it followed an incremental process which was determined according to the investors private interests (which are usually in conflict with market forces or public needs).

The illegal ownership and informal occupation of the peripheral areas had been creating several urban gaps and UTZ within the existing urban agglomeration. Examples of these zones include the areas between Old Cairo and Shobra such as El-Sabtiyyah and Arab El-Torgoman in Central Cairo and El-Deweka to the West of El-Mokattam. In more recent periods other areas have been appearing such as the 4.5Km areas and Ezbet El-Haggana between Nasr City and New Cairo in the East, and the areas to West of El-Sudan Street in the West.

5. Problems and Opportunities of the Urban Transitional Zones

As mentioned before, the problems of the UTZ include the weak connection between the existing urban agglomeration and the newly developed areas, and the fragmentation of activities, which in turn, negatively affects the ability of the activities to function efficiently. However, as Mattingly and Budds (1999) point out that ecological systems contain processes which link or conflict with those of other systems, creating environmental consequences, which can be a problem or

opportunity for the UTZ. For example in the case of the transitional agricultural zones, which are continuously being lost to urban areas, common problems would include the threats to valuable ecological sites, the increased soil erosion, and the depletion of soil by excessive use of fertilizers occasioned by intensive farming catering to urban markets. However, the city expansion over such areas can make possible access to piped water and municipal waste collection, and consequently better environmental conditions. Moreover, the UTZ usually offers opportunities for the absorption and neutralisation by rural and natural ecosystems of certain amounts of urban pollution and solid wastes. There are also possibilities that urban wastes may have productive uses in agricultural systems as fertilisers.

6. Recommendation for the Transitional Areas in the Twenty First Century in Cairo:

One of the great difficulties ahead for those working on UTZ is identifying effective structures for adequately representing the interests of the poor in the process of strategic environmental planning and management of the UTZ. Practice shows as Mattingly and Budds (1999) argue that it is hard enough just to bring together some of the actors who must cooperate and coordinate if the problems and opportunities of the UTZ are to be managed.

Moreover, in order to avoid the expected problems of miscommunication and lack of interconnectivity that would arise as a result of the UTZ and to capitalize on the opportunities that these zone could provide, it is necessary to define the areas which need to be urgently considered in the structural planning of the GCR. The definition of the land ownership patterns of the UTZ is the first step towards solving the problems that they are causing and identifying the opportunities, which may be invested.

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