

**THE EASTERN NECROPOLIS IN CAIRO
AND ITS BUFFER ZONE**
TOWARDS A SUSTAINABLE CONSERVATION STRATEGY



by

GHADA MOHAMED ATTIA

A Thesis Submitted to the
Faculty of Engineering - Cairo University
in Partial Fulfillment of the Requirements for the Degree of

MASTER OF SCIENCE
in
ARCHITECTURAL ENGINEERING

FACULTY OF ENGINEERING, CAIRO UNIVERSITY
GIZA – EGYPT
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Title of Thesis:

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Key Words: The Eastern Necropolis, World heritage, Regional planning, Field work survey, Sustainable conservation strategy, Base map.

Summary:

The Eastern Necropolis (the City of the Dead) is part of the World Heritage of Old Cairo in the URHC 2010-2012, for its Heritage and cultural value. Due to its unique position in the middle between Old Cairo and Manshiet Naser (one of the most populated slums in the world of an about one million inhabitant) the area is acting as a separator between them. It underlies a diversity of forces and conflict of policies that lead to urban informality that could ruin the sky line of Old Historic Cairo. Preserving the sky line of Historic Cairo is the aim of this study, by applying A SUSTAINABLE CONSERVATION STRATEGY FOR THE EASTERN NECROPOLIS & ITS BUFFER ZONE, which will supposedly slow down further slum formation and . The research is divided into: 1)Observations: visual studies, 2)Theoretical and documentary studies; Conservation of heritage areas as an approach to regional planning, 3)Applied international studies; comparative studies 4) Field Work and Survey; Evaluation for the study zone and creating a Base Map for the Eastern Necropolis of scale 1/800, 5)Research results; Final conclusion, Proposed conservation strategy for the Eastern Necropolis and the Base Map for the Eastern Necropolis in Cairo

ACKNOWLEDGMENTS

I would like to express my deepest appreciation to my supervisors; Professor Dr. Mohammed El Barmelgy for his support and wisdom, Professor Dr. Soheir Zaki Hawas and Dr. Shaimaa Ashour for their guidance and advice.

I am in deepest gratitude for my family for their great help, support and patience.

I would like to send special regards to Dr. Shaimaa Ashour who was so energetic, inspirational, showed concern and always motivated , and guided me to the way of how to do things.

DEDICATION

I would like to dedicate this work to the soul of my parents (Prof. Dr. Mohammed Attia, Prof. Dr. Sohair Salem), also to the soul of my Uncle (Prof. Dr. Mohammed Halim Salem) who will always inspire me as long as I live. I will never stop learning from them and recall all their sincerity and love they gave to the people around them and to everything they did; they also inspired me how to give it all for everything I do . I also dedicate this effort to the love of my Aunt (Prof. Dr. Nabila Salem) who always encouraged, taught me to be ambitious and to rely on no one but God.

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ABSTRACT

The Eastern Necropolis, the City of the Dead, El-Ghafir and Qaytbay cemeteries, صحراء المماليك, الجبانة الشرقية, the Northern Cemeteries are all alternatives to the name of the same spot. It is part of the World Heritage of Old Cairo in the URHC report 2010-2012, for its Heritage and cultural value; "*which is host to both a huge and special historical and architectural heritage and at the same time to a residential environment which is unique of its kind*" Paola Bellaviti, Living in the City of the Dead. A research-action project for an exceptional informal habitat, Sep 12, 2012, p.7.

Due to its unique position in the middle between Old Cairo and Manshiet Naser (one of the most populated slums in the world of an about one million inhabitant) the area is acting as a separator between them. It underlies a diversity of forces; residential, cultural values, heritage, working force demand and recreation. Any unplanned and informal growth or development in this zone could be catastrophic; as it could ruin the sky line of Old Historic Cairo.

World Heritage "property area" proposed by URHC includes the following(21):

"The landscaped area between the northern cemetery and the southern Fatimid nucleus, including al-Azhar Park and the undeveloped areas surrounding the Citadel. This area ensures the visibility of the fortifications, as well as the skyline of the city with its "thousand minarets" – another feature that justified the property's inscription on the World Heritage List."

Therefore preserving the sky line of Historic Cairo is the aim of this study, by applying "A SUSTAINABLE CONSERVATION STRATEGY FOR THE EASTERN NECROPOLIS & ITS BUFFER ZONE", this will supposedly stop or slow down further growth and formation of slum areas on the eastern side. The conservation strategy should be preceded by understanding the cultural significance of the area of study and its physical condition. The strategy should safeguard the authenticity of the place, as well as making sure that this very unique and peculiar area of the world is going to blend and fit well with the modern society that surround it. It should grow and prosper in a healthy pattern that insures its livelihood.

The research is divided into the following:

- 1) Observations: which is visual studies to spot the urban changes that has been happening along the boundaries of, and within the study zone during one year span of time; Land Use change over time - Mixed Uses - Activities. Then analyze the observations to determine and identify the problem.
- 2) Historical and theoretical literature: historical background for the study zone and conservation of heritage areas as an approach to regional planning
- 3) Applied international cases; comparative study with Egypt.
- 4) Field Work and Survey; Evaluating the study zone and creating a Base Map for the Eastern Necropolis

Research Results

- 5) Final conclusions
- 6) Proposed conservation strategy for the Eastern Necropolis and its Buffer Zone
- 7) Base Map for the Eastern Necropolis in Cairo of scale 1/800

PART I

CHAPTER I

1. INTRODUCTION

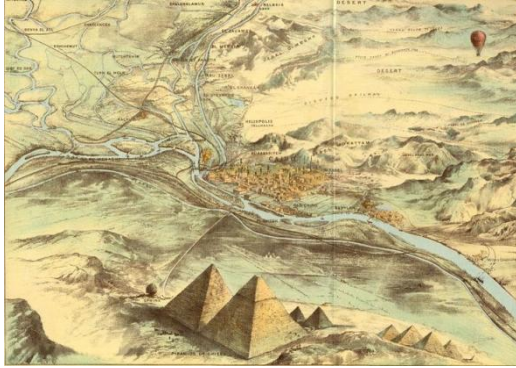


Fig. (1) Aerial map of Historic Cairo. Source: LessEgypt Antiques, Ancient Places, Cartography, Cairo 1882, Ancient Maps, Ancient Egypt, Extraordinary Egypt, Aerial Maps, Cairo Time, Ancient map of Cairo, Historic Aerial map of Cairo (1882), (Google Earth).

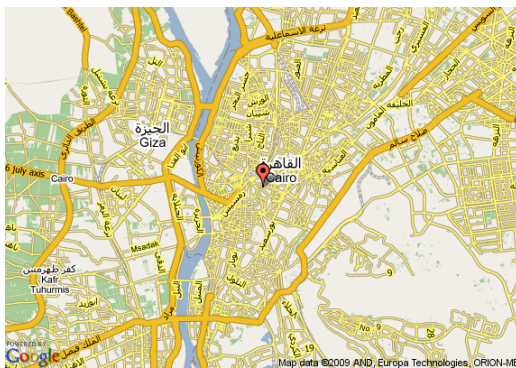


Fig. (2) Map of Cairo, by Google Earth. It shows the urban expansion that happened to Cairo over time



Fig. (3) view from el-Azhar Park looking over the unplanned urban expansion of Cairo. Photo taken by researcher, date taken: 10/31/2014 3:00 PM.

For five thousand years, Cairo has been Egypt's capital on the very same site present today, earlier cultures thousands of years old have been absorbed into the Fatimid metropolis. The Cairo's Islamic heritage, with its masses, its rich cultures, its minarets, domes and historical monuments are considered to be one of the world's most important heritage, and is being subjected to great danger due to unplanned urban expansion. As Cairo approaches its 18 million population (including slum dwellers) the city approaches its transition from megacity of 10 million population to hyper-city of 20 million inhabitants. People migrate to Cairo from suburbs and other Provinces to search for a new life and seek shelter in a city that is already exploding. Millions of people tend to afford shelter in informal housing and settlements and those who cannot afford it seek shelter in grave yards and warren like structures.(12)

“Every month you see more new buildings,” explains the UNDP’s Arafa “They start building them in the middle of the night so that there’s a structure of sorts by the morning. By law an existing structure cannot be torn down.” (Aus AID, UN-Habitat, IRIN, 2007, PP.78). Before it gets too late, to solve continuously growing problems in the ever evolving historical Cairo, we are today at a crucial juncture to treat the negative effects of the massive urban expansion that has been happening.(11) Courageous and real solutions are needed to the informal and illegal housing which is becoming very challenging. ***“It’s a Catastrophe,”*** says GTZ’s Dessouki. ***“The government has no long-term vision to deal with it, they just spend their time firefighting.”***



Fig. (4) View taken from el- Azhar Park looking over the Fatimid Cairo which is lost within the urban expansion. Photo taken by researcher, date taken: 10/31/2014 - 3:00 PM.

1.1. WORK SHEET

1.1.1. Point of Research

In July 2010, the WHC together with the Egyptian Government launched the project “Urban Regeneration project for Historic Cairo (URHC)”; one of its tasks was to define the World Heritage property and its buffer zone. (21)

Although, according to URHC Report 2010-2012; the Cemeteries area is included in the Heritage property and despite that it has not been evaluated or graded (unlike the rest of Historical Cairo) for security reasons, it has been given the same proposal for protection measures.

“The monumental cemeteries include the northern and southern necropolis, which have been partially transformed

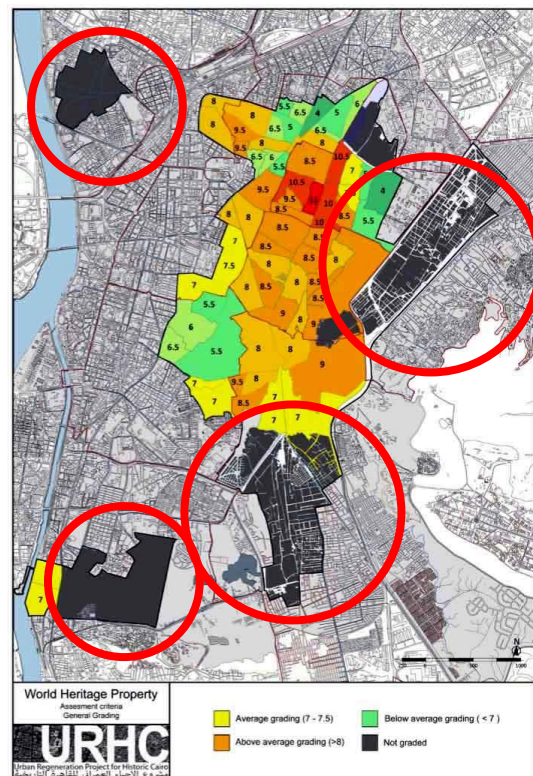


Fig. (5): The assessment of Urban Heritage values where the cemeteries area is stated that it is not graded, World Heritage Property (2011)

into consolidated residential areas, as well as other minor burial areas next to the northern city walls "

"It is further proposed to subdivide Zone 3 which include the cemeteries into the following subzones:

- 1. Cemeteries with a historically consolidated residential fabric interacting with the burial areas and a high concentration of monuments.*
- 2. Cemeteries historically consisting of burial areas with scattered monuments, recently affected by residential developments". (Urban Regeneration Project for Historic Cairo, year 2011, p.56)*

1.1.2. Question

Can we change unplanned development into planned development?

1.1.3. Aim

Preserving the sky line of Historic Cairo is the aim of this study, by applying "**A SUSTAINABLE CONSERVATION STRATEGY FOR THE EASTERN NECROPOLIS & ITS BUFFER ZONE**", which accordingly will supposedly stop or slow down further growth and formation of slum areas on the eastern side.

The conservation strategy should be preceded by understanding the cultural significance of the study zone and its physical condition. There should be respect for the existing fabric, and minimal physical intervention. Any future intervention should not be implemented against the will of the inhabitants, but through their direct involvement and participation, to ensure the survival and continuity of the heritage and to insure the long term benefit of the surrounding community. The strategy should safeguard the authenticity of the place, as well as making sure that this very unique and peculiar area of the world is going to blend and fit well with the modern society that grew vastly around it. It should grow and prosper in a healthy pattern that insures its livelihood.

1.1.4. Hypothesis

Following a sustainable conservation strategy can change people's behavior, and can help stop further growth of slum areas inside the Eastern Necropolis, which if left un-dealt with will destroy the skyline of Historic Cairo on the eastern side.

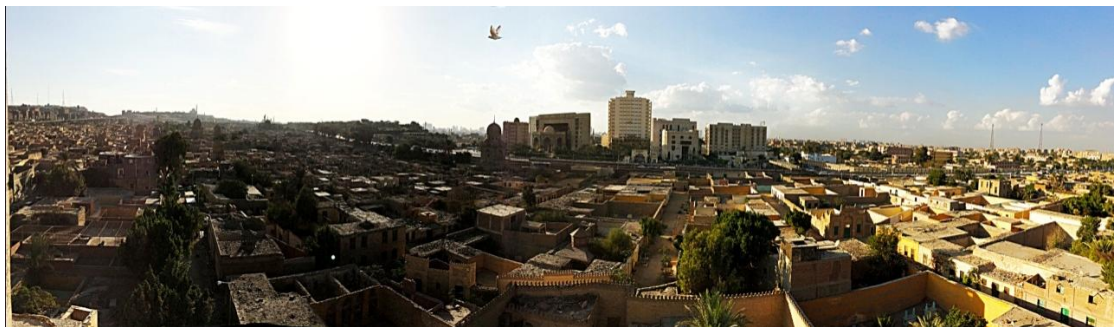


Fig. (6) Panoramic view taken from the minaret of Ahl El Safa mosque inside el-Ghafir cemeteries looking over the cemeteries and far way appear Salah Salem road and el-Azhar el Sherif. Photo taken by researcher, date taken: 11/3/2014 - 4:41 PM.

1.1.5. Objective

It has been preferred to choose the **EASTERN NECROPOLIS** out of the rest of the Cemeteries area that surround Historic Cairo due to its crucial position and its direct impact on the rest of Historic Cairo. Any unwise informal development in that spot will have an extremely strong negative impact on the heritage of Historic Cairo and its skyline, therefore it is proposed to carry on further studies to try to evaluate the cemeteries area for the purpose of proposed conservation strategy. From an urban planning point of view, this research is an attempt to have a wider view on to that spot and an attempt to reach conservation measures for such an important area in the heart of Cairo. Therefore the objective of this research is to propose sustainable conservation strategy for the Eastern Necropolis which has been proceeded by evaluating the Eastern Necropolis using the following parameters according to the Criteria set by:

- UNESCO criteria to evaluate the world heritage of Historic Cairo:
 - a. Architectural Heritage
 - b. Persistence of Historic Street Alignment
 - c. Persistence of Traditional Land Sub-division Patterns
 - d. Continuity and Compactness of the Urban Fabric
 - e. Activities and Uses of Urban Space

- Principles of Conservation Areas in the City of LONDON (general guide lines)
 - a. Form and Structure
 - b. Uses and Pattern of Activity
 - c. Traffic and Transport
 - d. Built Fabric
 - e. Historical Reference
 - f. Detail and Material

Then creating a Base Map for the Eastern Necropolis in Cairo for the purpose of documentation and for further field survey studies.

1.1.6. Results

- a. Conclusion
- b. Recommendations: Proposed conservation strategy for the Eastern Necropolis and its Buffer Zone
- c. Base Map of scale 1/800 for the Eastern Necropolis in Cairo



Fig. (7) General view of the northern cemeteries (The Eastern Necropolis) looking over the Azhar Park and the Citadel. Urban Regeneration Project for Historic Cairo-Assessment of the heritage values of the Urban Fabric-Field Survey year 2011

2. METHODOLOGY

The methodology applied in this research was as follows:

Pilot study → Inductive approach : historical and documentary → Field work and survey → Applied approach → Deductive approach: Results

First: Pilot study for the study zone and has been divided into three stages:

- Over view about the study zone:
 - definition of the study zone
 - variables
 - extension potentialities
 - forces acting on the study zone
- Visual observations:
 - change of land use over time (before and after)
 - mixed land use
 - activities on border sides and inside the study zone
- Analytical studies to determine the problems

Second: Inductive approach is then divided into the following:

- Historical background for the study zone and describing the evolution and the changes that had occurred on historic Cairo and the cemeteries.
- Theoretical background for urban conservation trends and charters
- Conservation as an approach to regional planning

Thirds: Field work and survey and is divided into the following:

- Process for creating the Base Map for the Eastern Necropolis for the purpose of documentation and further field studies
- Evaluation and grading for the study zone by using the same criteria that the UNESCO has applied over Historic Cairo, and also by using the same criteria that has been applied over the city of London as guide lines to follow when evaluating the study zone of the Eastern Necropolis.

Fourth: Applied International cases for developing countries and comparative approach with Egypt

Fifth: Deduction of the previous studies that led to the following:

- Introduction Towards a Sustainable Conservation Strategy for the Eastern Necropolis and its Buffer Zone
- Research results:
 - Final conclusion
 - Recommendations
 - Base Map for the Eastern Necropolis

2.1. RESEARCH STRUCTURE

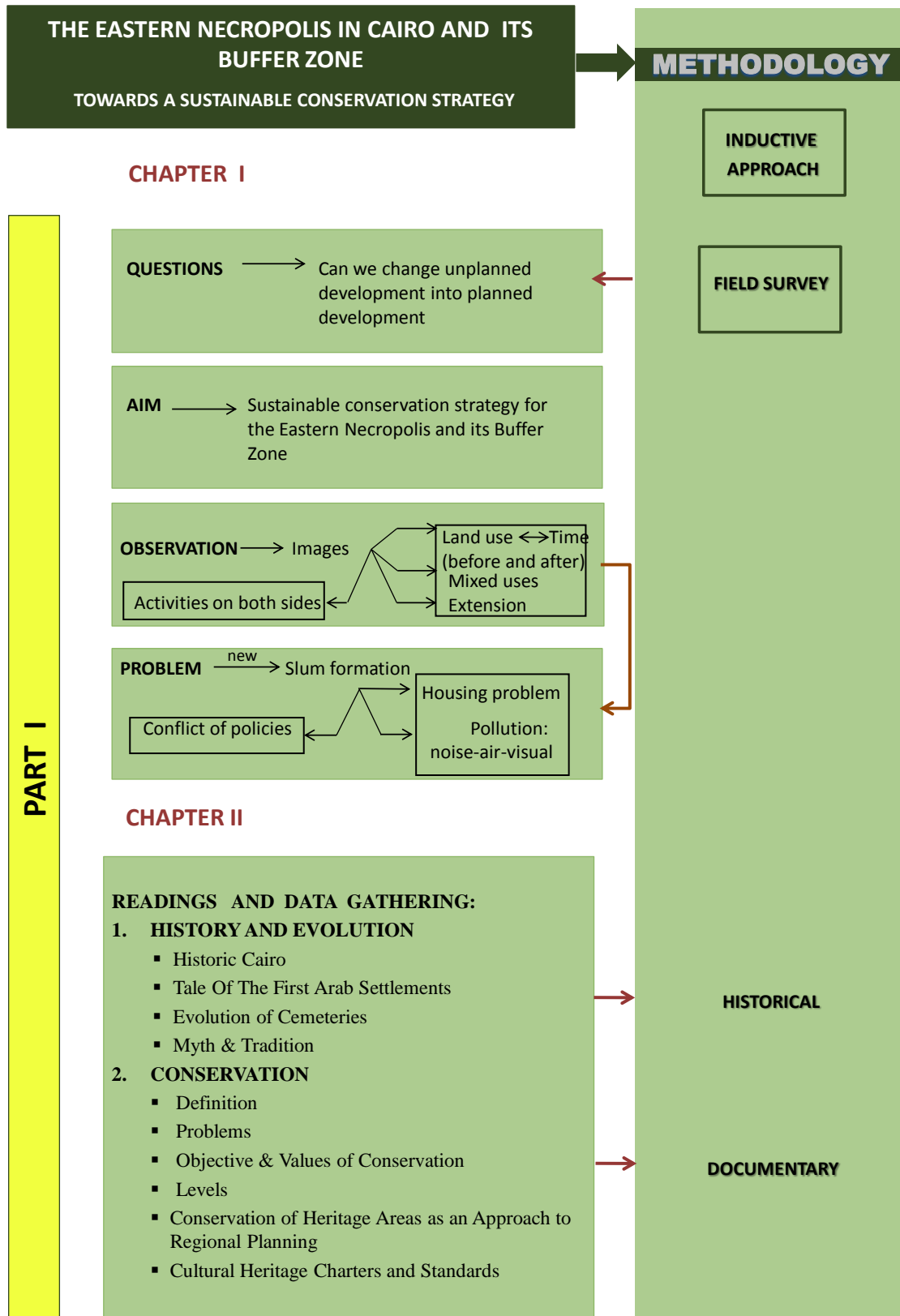


Fig. (8): Methodology followed in the present work by researcher

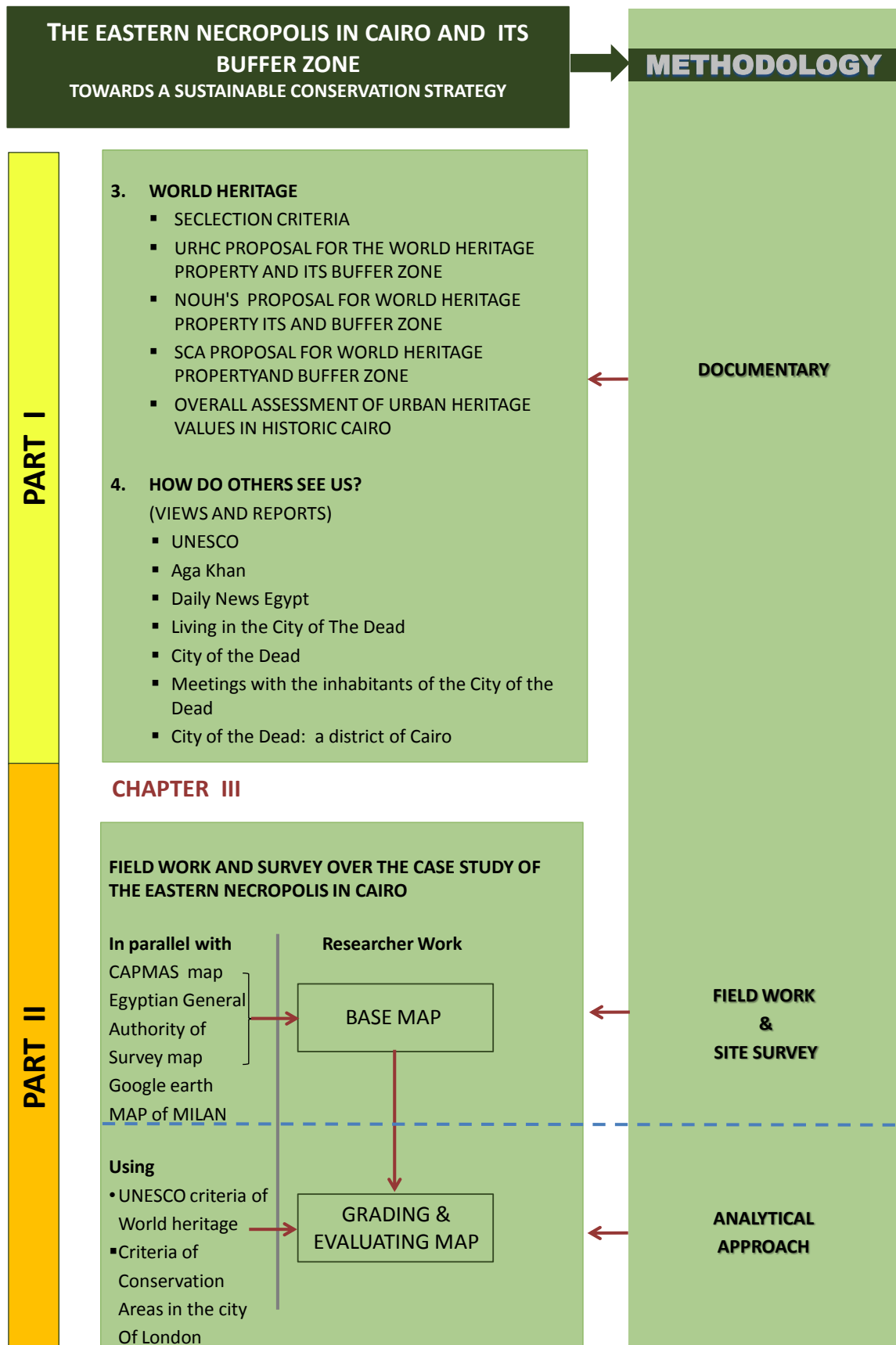


Fig.(9): Methodology followed in the present work by researcher

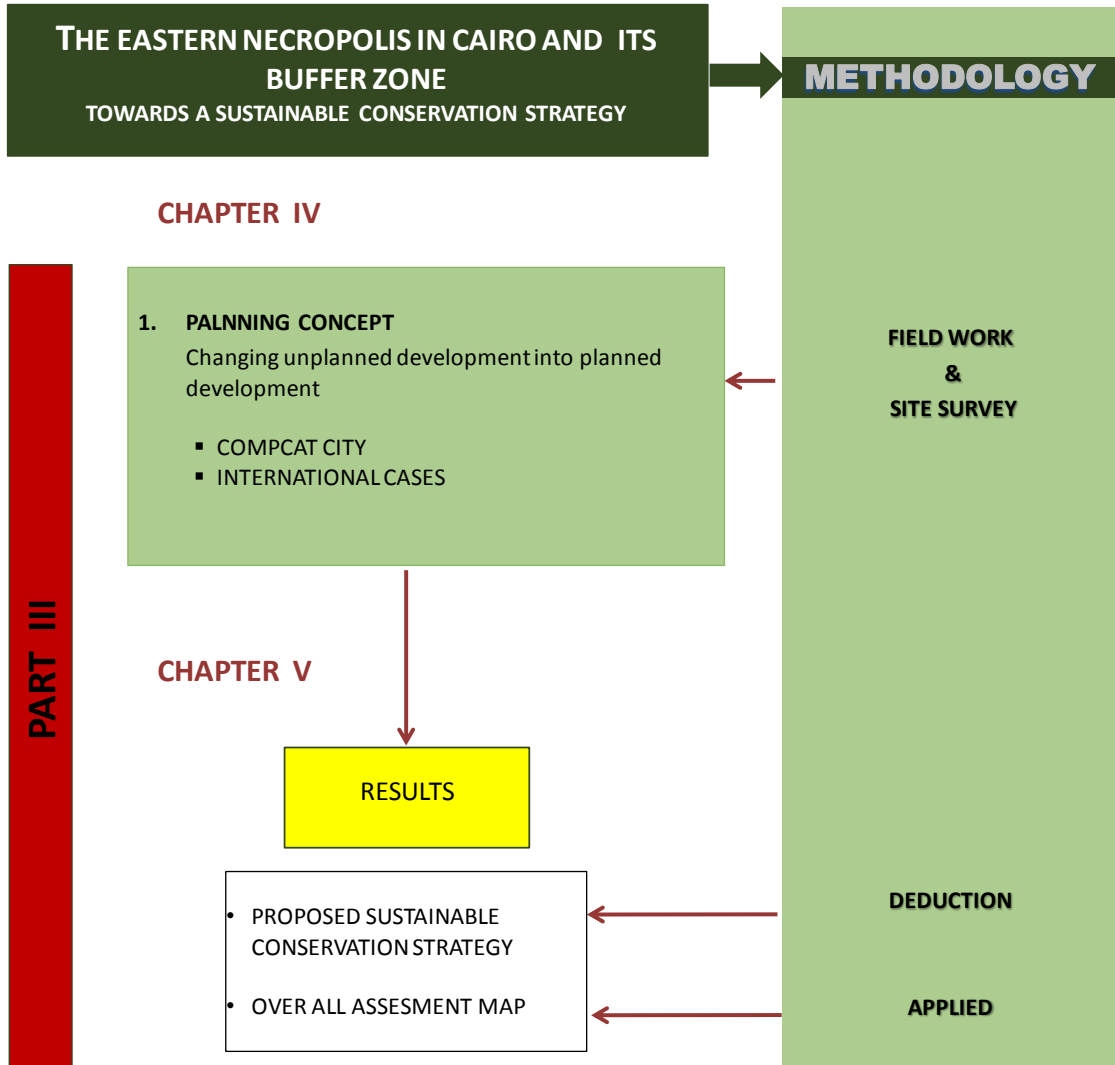


Fig. (10): Methodology followed in the present work by researcher

3. PILOT STUDY

3.1. DEFINITION OF THE STUDY ZONE



Fig. (11): Zones of the Eastern Necropolis in Cairo, by researcher

3.1.1. Over View

The Northern Cemetery which together with the Southern one, Comprises Cairo's historic necropolis (once a single settlement), the cemeteries were separated by the construction of new roads in the late 1960s.

The necropolis is divided into three zones:

el-Migawreen:

Is characterized by the presence of some scattered monuments absence of residential settlements, with a prevailing presence of burial structures and areas.

Qaytbay:

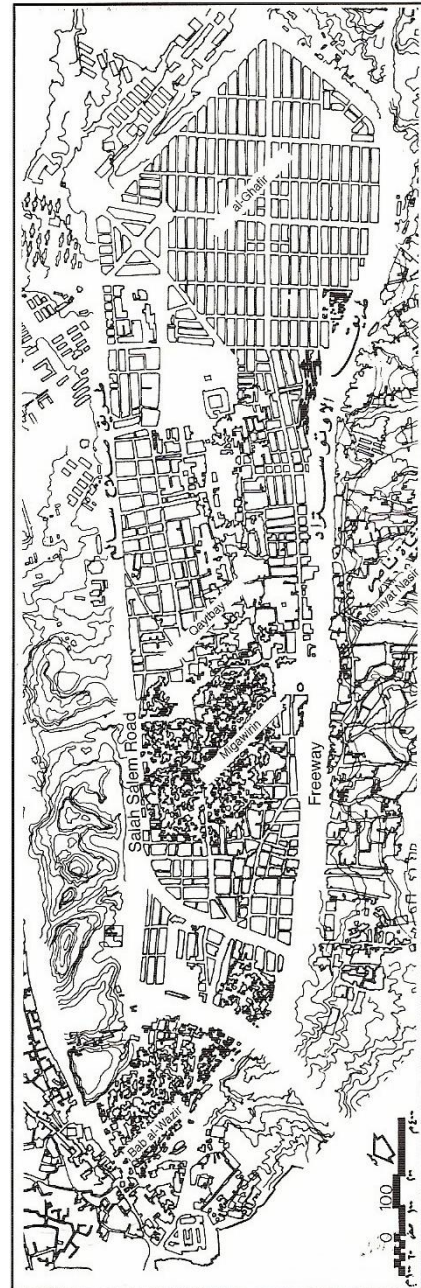
Is characterized by prevailing residential buildings, high concentration of important religious monuments together with tombs and burial structures in the same historic settlements.

al Ghafeer:

Prevailing non historic burial areas with absence of monuments and residential buildings.

3.1.2. Variables

- Construction of Salah Salem Road had a considerable impact as far as the cemeteries were concerned. The Naser government in order to build highway, built a public housing project with infrastructure and facilities to compensate the people living in the towns demolished and the land taken.
- Those who were not compensated found refuge in the cemeteries or went to build new homes, illegally, on the Moqattam hills, thus founding the new, unplanned settlement of Manshiet Naser.
- With Manshiet Naser to the east and al Basatein to the south, the number of people leaving were compared to those flooding in. The result was an increase in the overall population of the cemeteries.(2)
- Although the area is cut off from any public transportation; nevertheless its main roads are asphalted and accessible to motorized traffic.
- Nearby very strong Working and Trading center of Old Cairo (el Gamalia, el Darb el Ahmar, el Azhar.....).
- Nearby and very close Recreation center (Al Azhar Park and the Citadel).
- Heavy traffic penetrating the cemeteries, which speeds up the deterioration of the tombs.
- Across the street of the Nassr free way a very heavily populated district (Manshiet Nasser), which is ready for growth and expansion, is restricted eastward, due to the natural constraint of the steep edge of el Moqattam hills.
- Complete absence of Government regulations and no clear guiding vision for the area.
- The social heterogeneity of the place didn't seem to affect the kind of activities or the livelihood surrounding the place (complete coherence with living with the dead; you can see above the room and building's roof lots of satellite dish, you can see hair dressers next to the walls of the cemeteries....).
- Encroachments of informal buildings are more evident from the side of el Nasr rd rather than from Salah Salem st., this could be attributed to the exposure to more activities, heavy traffic and the closeness to Manshiet Naser.
- Ahwashes are available in suitable areas (starting from hundred to few hundred) and surrounded with a grid of paved streets, which makes it suitable to build upon.



*Fig. (12) Spatial separations
(drawing by G.El Kadi, Base
map SFS/IGN, France, 1978.*



The eastern necropolis is surrounded by Salah Salem Road to the east and the Nasr st. to the west and further down lies Manshiet Nasr, which is considered to be one of the largest slum areas in the world, and also which has a very strong impact on the cemeteries area.



Fig. (14): Left is the Nasr rd. which bounds the cemeteries westwards. Source: photo taken by the researcher. Right shows Salah Salem road which is on the east side of the side of the cemeteries. Source: internet.

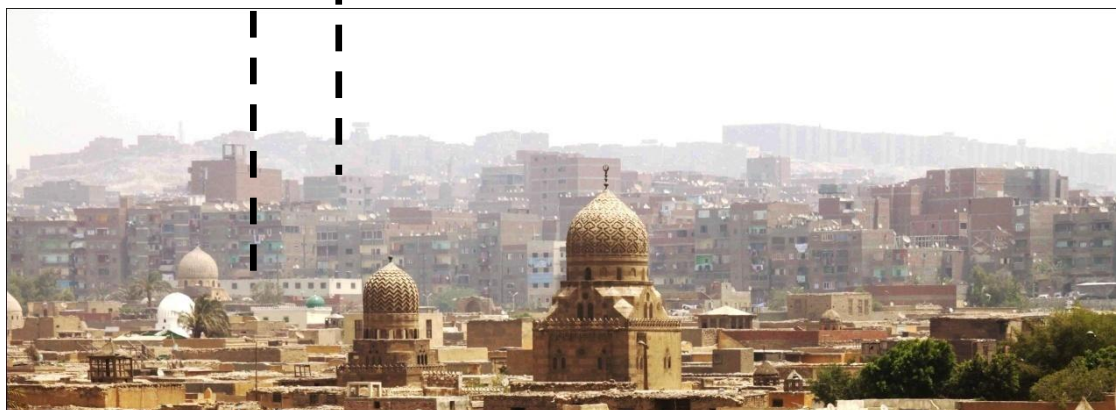


Fig (15) Photo taken by researcher from Salah Salem road looking across the cemeteries and far away appears Manshiet Naser on the other side. (Date taken: 28/04/2013 - 12:11 PM)

Variables

- High Land Value
- Very high activities
- Well connected all around
 - Nasr Road
 - 3 pedestrian crossing over bridges
 - Salah Salem St.
- Political turbulence before the 1st Revolution (25-1-2011)
- Political turbulence after the 2nd Revolution(30-6-2013)
- Political turbulence after the absence of Law and Order

Top right consequently:

Fig. (16) The revolution, (25/1/2011).

Source: www.rcinet.ca

Fig. (17) The revolution, (25/1/2011).

Source: www.atnenmmsr.blogspot.com

Fig. (18) Photo taken by researcher, showing one of the crossings over pedestrian bridges on Nasr st., which connects between Manshiet Naser and the cemeteries. (Date taken: 03/11/2014 - 3:30 PM)

Below:

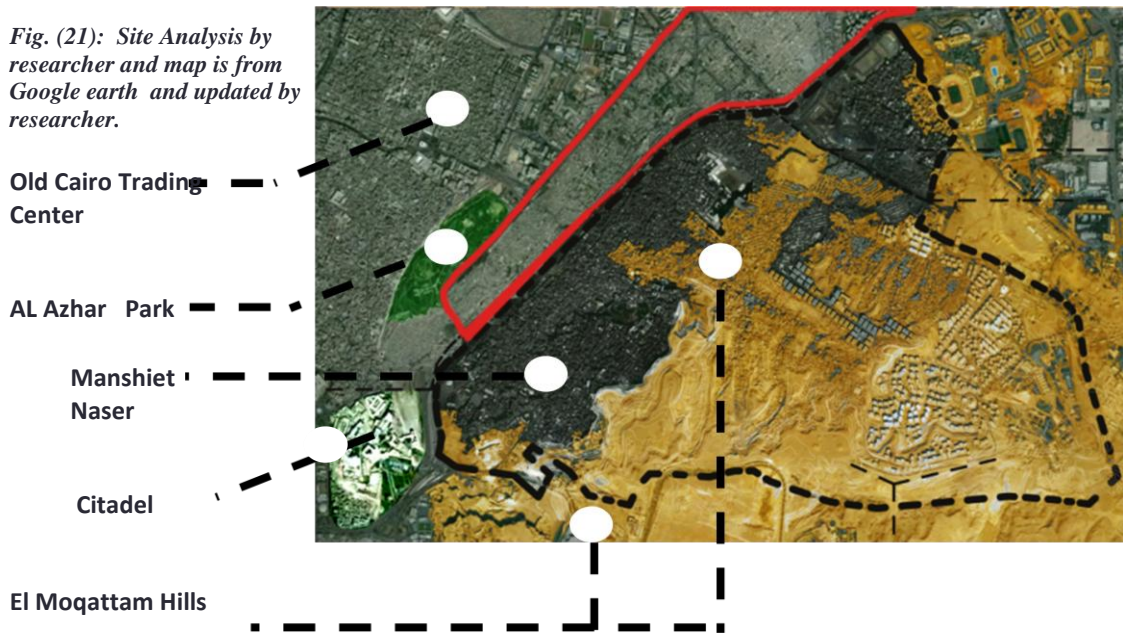
Right: Fig.(19) Photo taken by researcher, which shows the heavy traffic on Nasr st. (Date taken: 03/11/2014 - 3:31PM)

Left: Fig. (20) Photo taken by researcher, which shows the project that belonged to the late capitalist Mohammed Nosseir. It lies in front of the Citadel, and is an indication of the high land value of that area. (Date taken: 08/11/2014 - 12:15PM)



3.1.3. EXTENSION POTENTIALITIES (Analytical Studies)

Fig. (21): Site Analysis by researcher and map is from Google earth and updated by researcher.



- The Eastern Necropolis is a strip of land about 600 meters wide x 3.5 km in length; 2.1 square km.
- From its highest point at the foot of the Citadel is 65 meters above sea level and slopes northwards between the city to the west and the Moqattam hills to the east and towards the Abbasiya some 12 meters below.
- The gradient of the slope eases off towards the north.

West: Fatamid Cairo, Salah Salem Road

North: Tayaran Street & the old railway

East: Al-Nasr St. free way provides an even faster North-South route. Opened in 1985, it arches round Cairo in the tracks of the old rail road, which were built to service the quarries.

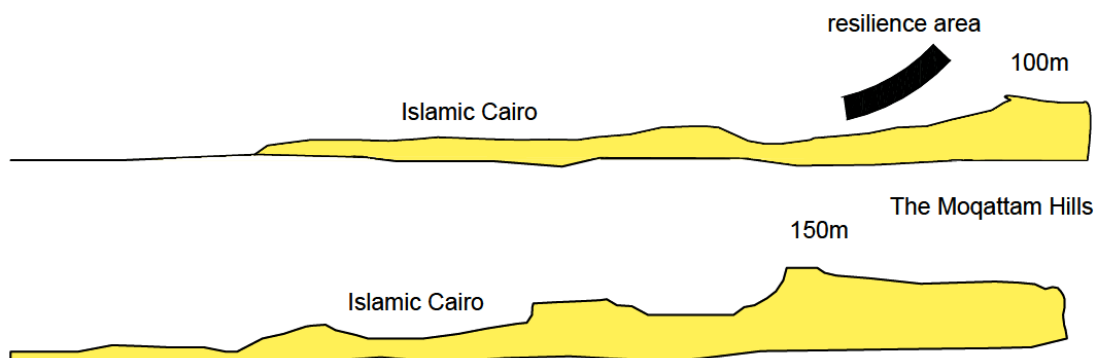


Fig.(22): Cross section for the Mokattam Hills by Ahmed El-Helo , participatory workshop in Sariyer, Istanbul - April 2011

Further East:

The old railway and in the foot hills of Moqattam – otherwise known as the Red Mountains – the terraced squatter of Manshiet Naser & Moqattam Hills.

South: Moqattam Road

3.1.4. External Forces Acting on the Study Zone

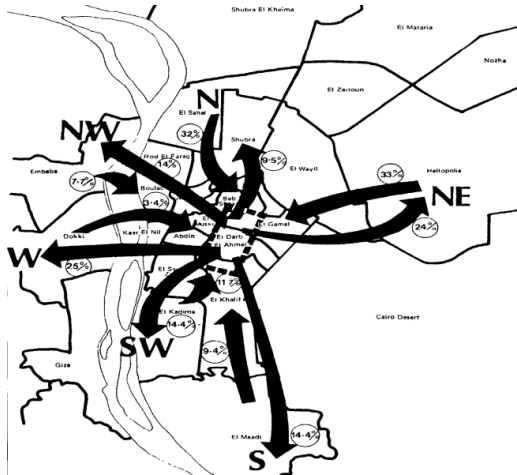


Fig. (23): Socio-Economic Commuting. Source: *The Conservation of the Old City of Cairo, 1985.*

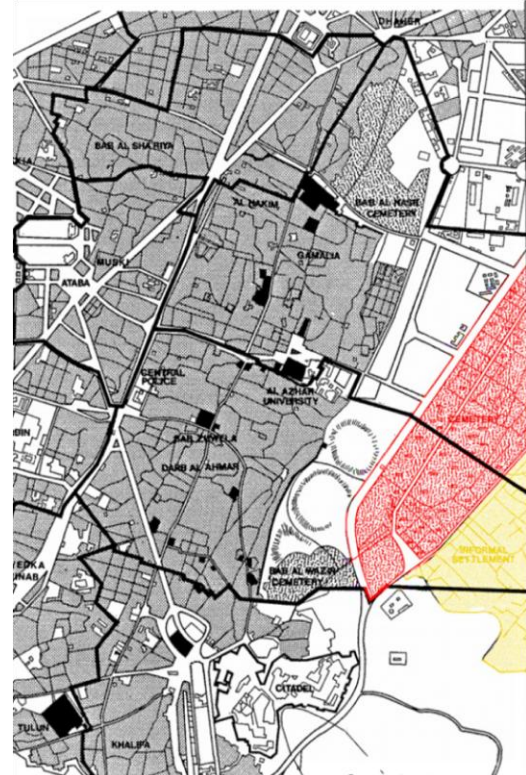


Fig. (24): Road Penetrating the Northern cemetery. Source: *The Conservation of the Old City of Cairo, 1985.*

The Old Cairo Trading Centre:

" extensive commuting, and workers move in and out of the area twice a day. Much of this commuting is a direct result of the Centre to periphery migration. Most of the inward migration to work comes from the new peripheral residential development districts. The distribution of activities creates considerable traffic movement".(The Conservation of the Old City of Cairo, 1985).

Manshiet Naser which stands on the other side of Old Cairo is directly linked to it through the Eastern Necropolis by crossing through narrow streets and alleyways, thus encouraging working trips in and out of the zone of study towards Old Cairo. In addition to function as dormitory settlements the cemetery evolved into centers of production and absorbed the overflow of artisans and small manufacturers spilling out of the old town.

- **Analysis For the Working Forces Acting on the Study Zone**



Fig. (25): Analysis, by researcher, showing the external working forces acting on the study zone, and the natural boundaries which limits the extension of the study zone.



Very strong boundaries due to the steep edge of el Moqattam mountain, which makes it very hard for the residents of Manshiet Naser to expand up on it.

Pressure exerted by the residents of Manshiet Naser due to their need for future expansion.

Workers move in and out of the area through main streets and also narrow winding streets and alleys. Being near to the trading center of Old Cairo offers job opportunities and services to the inhabitants.

Very strong and steep barrier created by Moqattam Hills, that constraints the safe and easy expansion of the massive population of Manshiet Naser.

Narrow winding streets and alleys that are recently redeveloped, heavy traffic pass through it.

- **Analysis For the Recreation Forces Acting on the Study Zone:**

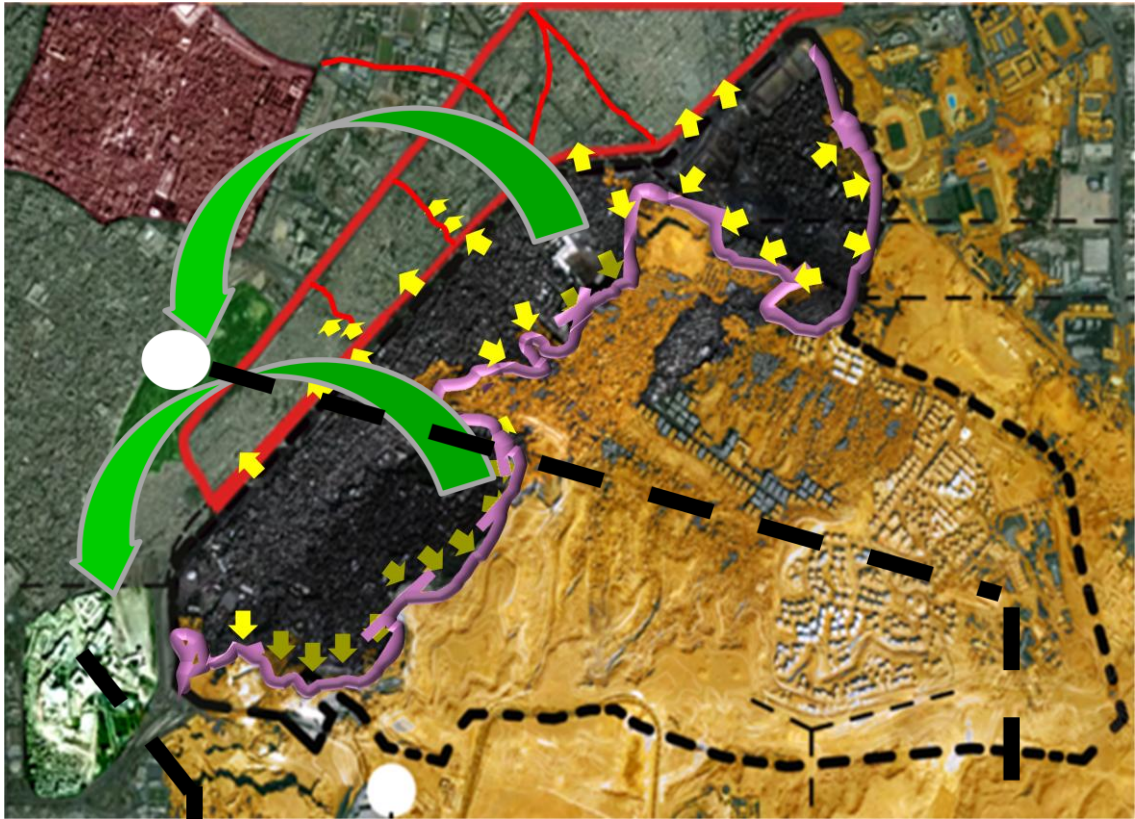


Fig. (26): Analysis, by researcher, showing the recreation activities acting on the study zone.

The Citadel



Fig. (27); Above photo taken by researcher for the Azhar Park overlooking the Cemeteries and below view of the Citadel next to the Azhar Park, Source: [www.199 countries.com](http://www.199countries.com)

AL Azhar Park



Fig. (28): Above, is an Ariel view of the Azhar Park source: elma3mar.blogspot.com and below view of Al Azhar Park, source: www.greenprophet.com

3.2. VISUAL STUDIES (OBSERVATIONS)

3.2.1. Change of Land Use Over Time (before and after 2013-2014)

CASE I BEFORE (2013)



Above: Fig. (29) photo, taken by researcher, shows a double story building; in the first level are workshops, above seems to be residential, and adjacent to it, Below: Fig (30) is a single story height building; tire repair shops which later on has been demolished and replaced by a 7 story high residential building as shown on Fig.(23) .Photo taken by researcher, date taken: 28/04/2013 - 11:58 AM



AFTER (2013)

Top: Fig. (31) Presents the changes that happened within one year time span. A 7 story building was constructed in place of the single height building that was previously shown in Figs 20,21.

Below: Fig. (32) Shows the evolution of new activities (café), which was not present before. Also the old tire workshop in the old building reopened in the new one as well. Photo taken by researcher, date taken: 24/06/2014 - 1:00 PM.



**CASE II
BEFORE (2013)**

Top: Fig.(33) Photo taken by researcher shows the distinguished historical cemetery of El Khedewi Tawfeek and his family, that used to appear as you walk through the main road (Nasr st.)

Below: Fig. (34) Shows the same historical cemetery standing next to the workshops presented in the previous photos. Photo taken by researcher, date taken: 28/04/2013 - 12:02 PM.



AFTER (2013)

Above: Fig.(35) Photo taken by researcher, it shows a (most probably, illegal) newly built mosque on the main road (Nasr st.) right before the distinguished historical cemetery of El Khedewi Tawfeek

Below left: Fig. (36) Shows the position of the historical cemetery, and how it has now disappeared due to the newly built mosque that now stands right before it. It is now no longer visible from afar.

Below right: Fig. (37) Shows how the historical cemetery which disappeared as you walk along the street, by the newly built mosque. Photo taken by researcher, date taken: 08/11/2014 - 12:10 PM.



**CASE III
BEFORE (2013)**

Below: Fig. (38) Shows an informal residential building, standing inside the walls of the cemeteries and appears as you walk along the Nasr st. Photo taken by researcher, date taken: 28/04/2013 - 12:00 PM.



AFTER (2013)

Below: Fig.(39) Shows the same informal residential building, and now it has been extended from the side toward the direction of the arrows(as shown above). Photo taken by researcher, from the Nasr st., date taken: 08/11/2014 - 12:10 PM.



**CASE IV
BEFORE (2013)**

Below: Fig. (40) Photo taken by researcher, it shows an old cemetery standing behind the wall of the cemeteries, and in front of it stands an old violation of a workshop that penetrates the walls of the cemeteries. Date taken: 28/04/2013 - 12:00 PM.



AFTER (2013)

Below: Fig. (41) A new attempt to build another informal building on the main road (Nasr st.). Their attempt has failed due to Government intervention. Far away stands the same distinguished building which specifies the location of the new violation. Date taken: 08/11/2014 - 12:10 PM.





Above: Fig.(42), Photo is taken by researcher. It shows the steps that people follow when violating the law. They managed to build a stair case, that rises over the present wall, to make an entrance on the main road (Nasr st.). Then the rest of the building is constructed inside the cemeteries inside one of the existing hawshes. Date taken: 08/11/2014 - 12:10 PM.

3.2.2. MIXD USES



Above: Fig.(43), Photo is taken by researcher from Salah Salem St. Near are the cemeteries, far away appears the residential area inside the cemeteries and further away appear Manshiet Naser and on top of El Moqattam Hills stand formal residential buildings. Date taken: 11/08/2014 - 12:19 PM.

Below: Fig.(44), Photo shows the mixed uses between the historical cemeteries and new residential buildings. It also shows how people extend vertically over the existing rooms inside the Ahwashees to live in it. Photo taken by researcher, date taken: 04/28/2013 - 12:14 PM.





Fig.(45) Shows a small informal workshop for decorative plastering and gypsum forms standing right next to a graveyard that is exposed and located directly on the main road (Nasr st.)



Fig. (46) Shows a small kiosk that provide services for drivers going along the main street (Nasr st.) and adjacent to it is a group of burial grounds that are located on the main road (Nasr st.)



Fig. (47) Is a photo taken inside Qaytbay cemeteries and shows how residential buildings are overlooking the burial grounds.



Left: Fig. (48) Is a photo taken from Salah Salem side shows a side road penetrating the cemeteries and the mix between the cemeteries and residential buildings, further away at the back stands a school.

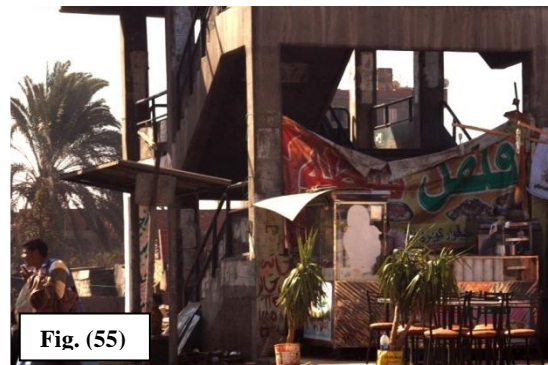


Fig. (49) shows a grave yard, a monumental cemetery and along the walls is a cafe where drivers of minibuses get their rest. Alongside the wall of the cemeteries, there is a large paved area used as a parking lot for minibuses, there is also a fire station and workshops for repairing cars.

All photos above are taken by researcher

3.2.3. ACTIVITIES ON BORDER SIDES (SALAH SALEM Rd.- & NASR St.)

- **Activities on NASR St.** (along the cemeteries wall)



Figs. (50) till (56) show the different kind of activities that exist along the cemeteries wall on Nasr St. side. They are mostly tire repair shops, cafes, other small workshops, fruit & vegetable peddlers. All photos above are taken by researcher.



Fig (57) shows a peddler selling drinks for pedestrians and passing cars.



Fig.(58) Shows a laborer displaying his work (gypsum forms) on the walls of the cemeteries, for passing by people on the main st. (Nasr st.)



Fig. (59) Shows workshops for repairing tires, that opened recently underneath an illegally newly built building, and there appears microbuses and a taxi driver waiting for their turn.



Fig.(60) Shows a small tyre repair shop in front of a grave yard standing on the main road (Nasr st.).



Fig.(61) People use the cemeteries as storage areas.

All photos are taken by researcher.

- **Activities on SALAH SALEM ROAD (along the cemeteries side)**

Figures (62 to 65) show the difference in the level of activities between the Nasr St. and Salah Salem Rd. Activities on Salah Salem Rd. are mainly high and fast traffic. The fast traffic and the absence of residential areas hinder the formation of activities on its sides. While on Nasr St., the very high and slow traffic results in the presence of a highly populated area on the other side of the st. (Manshiet Naser), and also encourage the evolution of different activities.

Figs.(62), (63), (64) Shows part of Salah Salem Rd. as it passes by the cemeteries (on the right) and passes by Mashiekt El Azhar, Dar el Efta on the left



Fig.(65) Shows the architectural front of the cemeteries that lies on Salah Salem Rd. (on Nasr St. the cemeteries are just surrounded by deteriorated wall.

All photos are taken by researcher.

3.2.4. Activities Inside the CEMETERIES

"Finally the authorities recognized the de facto situation and extended some municipal services, including water, electricity, schools, bus lines and even police station. Mean while the residents of the cemeteries have engaged in normal activities found in similar popular quarters of Cairo: groceries, bakeries and other service shops opened, and even some traditional industries such as glass-blowing were established there."(The Expanding Metropolis Coping With the Urban Growth of Cairo, The Aga Khan Award, 1984)

Figs. (66) to (69) show the diversity of activities and mixed land uses. All photos are taken by researcher.



As we can see new electrical posts stand, which have been extended by the official authorities



Fig. (66)



Fig. (67)



Fig. (68)



Fig. (69)

3.3. PROBLEMS

"There is currently no coherent overall policy or plan for the guidance of the future development of the old city". (Antoniou et al, 1984, pp.15)

"Efforts to introduce urban conservation in Historic Cairo have been made mainly on the theoretical level".(Sedky, 2009, pp.220)

"There is considerable confusion and overlapping responsibilities between the various authorities with roles in the study area related both to the historical monuments and to the general administration of the old city"(Antoniou et al, 1984, pp.15)

3.3.1. Conflict of Policies

3.3.1.1. UNESCO World Heritage Centre - Management of World Heritage Sites in Egypt-Urban Regeneration Project for Historic Cairo - FIRST REPORT OF ACTIVITIES - July 2010-June 2012(21)

In July 2010 The World Heritage Center (WHC) launched the "Urban Regeneration Project for Historic Cairo", whose task was to define the perimeters of the World Heritage property and its buffer zones and to establish protection measures for the urban areas.

Project Task:

- Definition of the World Heritage property and its buffer zone.
- Creation of a shared information system.
- A strategic planning and management system.
- Conservation and development planning.
- Consultations with the relevant administrations.
- Raising awareness amongst the public

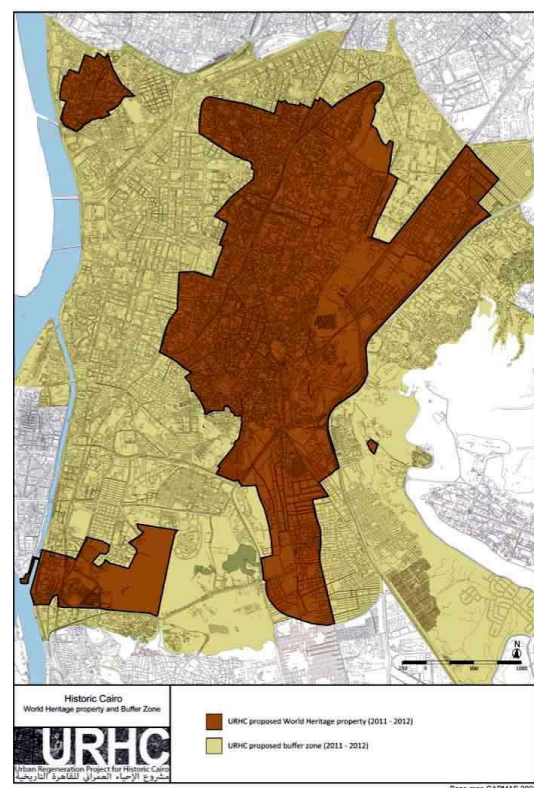


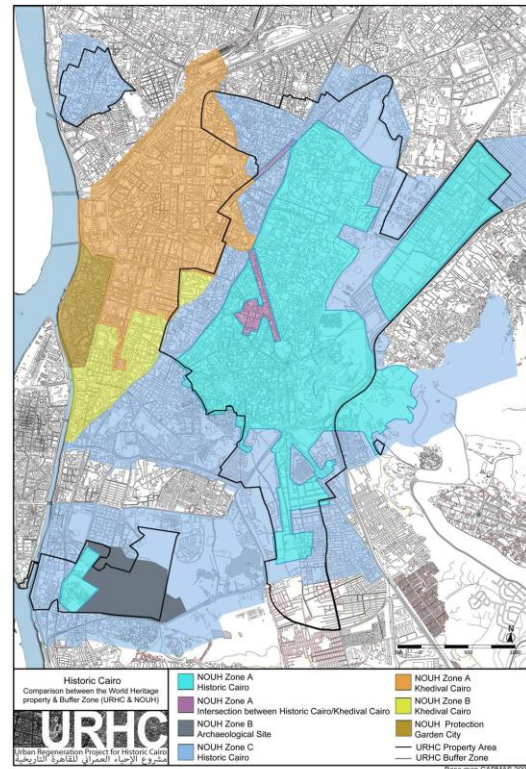
Fig. (70) Map of the URHC proposal for world heritage property and buffer zone. Source: Urban Regeneration Project for Historic Cairo, July 2010-June 2012.

NOUH Perimeters (21)

Building Law, 119/2008 empowered NOUH to identify “areas of peculiar value” throughout Egypt. The law and its executive regulations (Ministerial Decree No. 144 of the year 2009, published in the Al-Wakaye Al-Maesreya/ Government Bulletin - Issue no. 82 (Supplement A), 8th of April 2009) also defined planning tools, established rules for the land divisions and empowered NOUH to prepare “the bases and requirements for maintaining the areas, buildings and establishments of peculiar value. (Article 32 - Chapter-2- Areas of peculiar value, in Building Law, 119/2008.)” (UNESCO-First Report 2010-2012, PP.30))

Conflict of Legislation and laws:

The area surrounding the citadel is considered also to be of important heritage value, since it provides panoramic view over the sky line and of the historic city.



Above: Fig. (71) Comparison NOUH, Decree N.144/2009 with URHC proposed perimeter. Source: Urban Regeneration Project for Historic Cairo, July 2010-June 2012.



Left : Fig. (72) Major Project , that belongs to the late business man Mohammed Nosseir, stands on the other side of the Citadel had been stopped by HOUH. It shows how the NOUH is empowered by law to stop any activities that harm the historic urban areas. This is a clear example of how different governmental authorities act against each other. This project must have had an official permit from the governorate of Cairo before it was built. Photo taken by researcher

Conflict of Measures

The proposed boundaries of the World Heritage property by the UNESCO do not completely correspond with the “area of peculiar value” of Historic Cairo outlined by NOUH (see the map below). Also the proposed conservation zones and sub-zones within the World Heritage property do not correspond with the articulation of protection levels established by NOUH. This **conflict** is the result of the different methodologies¹⁵ and different planning tools developed and adopted by NOUH and URHC.

SUB-ZONE 3B: MONUMENTAL CEMETERIES WITH PREVAILING BURIAL AREAS

Sub-zone 3B is historically characterized by a lower concentration of monuments and residential settlements, with a prevailing presence of burial structures and areas. In the last few decades, a low density housing¹³ development has occurred in the cemeteries, merging with the historical settlement and forming an almost continuous fabric.

In this sub-zone, a high level of protection has to be applied; therefore, no new constructions should be allowed before the approval of the conservation plan or other approved planning tools (detailed plans, action plans).

¹³ Some of the housing is the result of modifications and additions to burial structures and areas.



Eastern Cemetery, Manshiet Nasr, 2011

Besides the application of the general protection measures, the following measures are proposed for interventions:

SUB-ZONE 3B: Monumental Cemeteries, Prevailing Burial Areas	
PARAMETER	REGULATIONS
STREET PATTERN AND ALIGNMENTS	The same measures as in sub-zone 3A.
BUILDING HEIGHTS	Building heights should not exceed seven metres.
LAND SUBDIVISION	<ul style="list-style-type: none"> The surface area of new buildings should not exceed the surface of the pre-existing building. The surface area of new buildings should not exceed 50 percent of the plot area, while the remaining surface may be left for inner courtyards, back gardens or light wells.

Besides the application of the general protection measures, the following measures are proposed:

SUB-ZONE 1A: Monumental Cemeteries, Mixed Burial Residential Area	
PARAMETER	REGULATIONS
STREET PATTERN AND ALIGNMENTS	The continuity of existing street fronts must be enhanced, and reconstructions should be adapted to the prevailing street front alignment.
BUILDING HEIGHTS	The same measures as in sub-zone 1A. However, building heights should not exceed 10 metres.
LAND SUBDIVISION	<p>The same measures as in sub-zone 1A, except for the following:</p> <ul style="list-style-type: none"> The surface area of new buildings should not exceed that of the pre-existing building. The surface area of new buildings should not exceed 60 percent of the plot's area. However, the remaining surface may be left for inner courtyards, backyards or light wells.
LAND USE	<ul style="list-style-type: none"> Existing residential buildings should not be used for commercial, industrial or warehouse activities. Only small retail and craft activities should be allowed on the ground floor, if compatible with the prevailing residential function. Residential use mixed with craft and retail activities, which do not affect the burial grounds, may be allowed in interventions in residential parts of these areas. Existing industrial and wholesale structures may be transformed into craft, retail or service structures. Hotels, as well as new industrial and wholesale activities, should not be allowed.
ARCHITECTURAL GUIDELINES	The same measures as in sub-zone 1A.
OTHERS	The same measures as in sub-zone 1A.

Fig. (73) The URHC proposal for protection measures for the Eastern Necropolis. Measures were set although, for security reasons, it was not possible to perform a field survey to assess the heritage values of the cemeteries and thus the zone was neither evaluated nor graded. Source: Urban Regeneration Project for Historic Cairo, July 2010-June 2012.

2.3.1.2. The New Strategic Plan for CAIRO (Cairo 2050)(37)

- Moving the cemeteries areas in west and east of the region and compensating the owners with new ones.
- Conservation of monuments and historical buildings inside the cemetery area, and the construction of handicrafts centre.
- Upgrading the existing housing area and rehabilitating the residents of the cemetery area.
- The cemeteries areas are to be developed as public open spaces, parks and gardens with the addition of some recreational activities (restaurants, cafeterias, small size hotels).



Fig. (74) The 2050 New Strategic Plan for Cairo and it shows the conflict of vision for the Eastern Necropolis. All Figs. from (74) to (77) are taken from THE NEW STRATEGIC PLAN FOR CAIRO (Cairo 2050) report.

El Azhar Parks (Salah Salem Cemeteries Area)



Fig. (75)

El Azhar Parks (Salah Salem Cemeteries Area)

El Azhar Parks – Cairo Khan (Salah Salem Cemeteries Area 2700 Feddan)

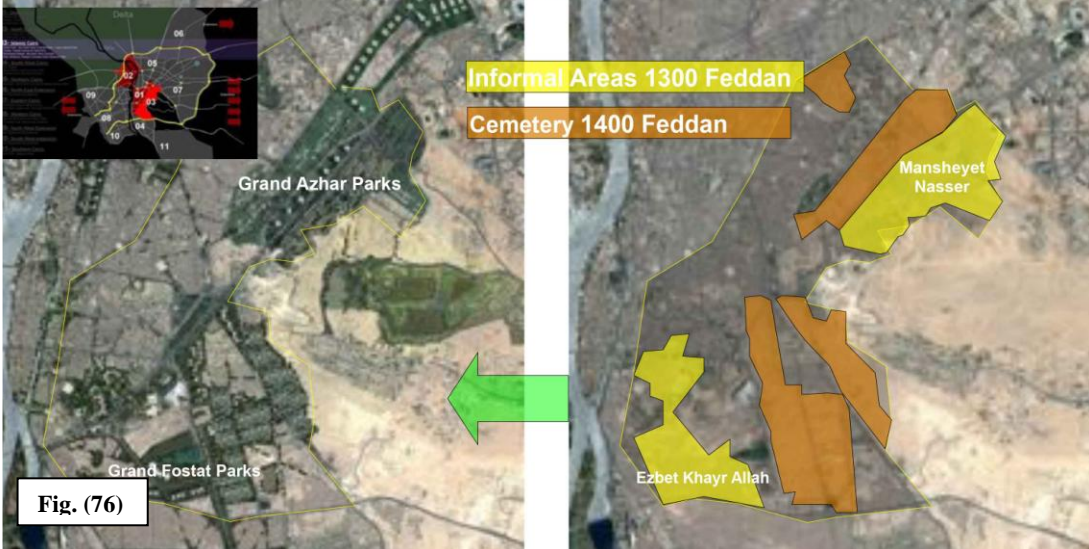


Fig. (76)

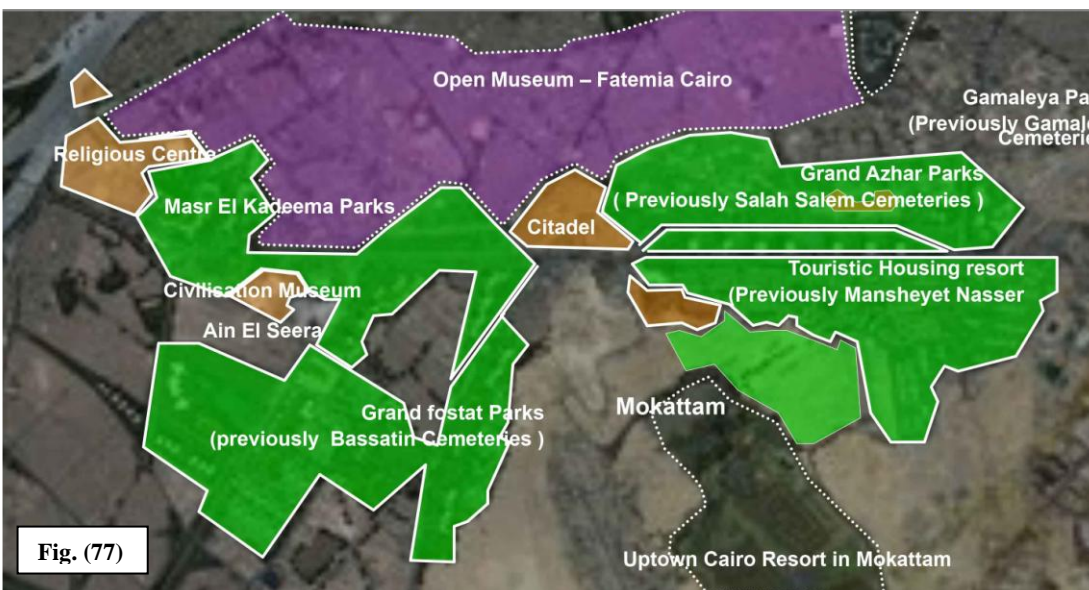


Fig. (77)

3.3.1.3. LIVEINSULMS NGO(36)

Partner with:

Archplan (2006-2008)

Facoltà di Architettura Politecnico di Milano (2006-2008)

FEDA Ain Shams University Cairo (2006-2008) American University Cairo (2009-2010)

Desert Development Center (2009-2010)

Green Cairo (2010-2011)

Università degli Studi di Milano Facoltà di Agraria (2010-2011)

Master Paesaggi Straordinari Naba-Politecnico (2010-2011)

In 2007 Liveinslums NGO, together with Politecnico di Mialno and FEDA-Faculty of Engineer, Design and Architecture of Ain Shams university in Cairo, started a multidisciplinary research project in the Eastern Necropolis; which aims to preserve the anthropological and architectural heritage of the city of the Dead.

First: Creating informal meeting points for cultural and social events, (e.g.workshops, exhibitions, meetings with the residents).

Second: In 2009 a sustainable tourism has been developed (slow tourism). The project is planned by a group of research group formed by architects, anthropologists, sociologists , film makers and photographers (who act as mediators between visitors and local community)

The project included the following:

- **The formation of local tourist guides:** the guides are residents in the City of

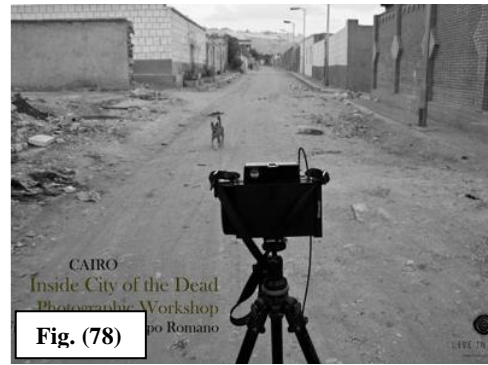


Fig. (78)



Fig. (79)



Fig. (80)



Fig. (81)



Fig. (82)



Fig. (83) Shows Neighborhood Laboratories aim to listen to the requests of the local community and to make people participate in the reconstruction of the urban spaces and social fabric

the Dead and are attending a tourist training to become guides.

- **Publication of a travel guide** for visiting the City of the Dead.
- **Join the Project:** giving the traveler the chance of adding their own experience

Third: The first micro-garden pilot has been set up in 2010 in collaboration with the Master "Extraordinary Landscape" Naba Politecnico di Milano and with the company Green Environment Consultant as local partner. These are vegetable gardens without soil which are grown up through techniques of hydroponic culture or with the use of mineral substrates in place of fertile soil:

1. Transportable boxes are made of recycled material which makes it more sustainable as shown in figs. 84 to 87
2. The methodology of "Cultivation Without Soil" provides an alternative solution to the problem of fertilization of the sandy soil.
3. Allowing the use of the ground without the violating the sacrality of the burial grounds.
4. The quality of life is gradually improved, by having additional income through selling the products grown in their own micro- garden inside the district or to the neighbors.



Fig. (84)



Fig. (85)



Fig. (86)



Fig. (87)

Figs. from (78) to (87) Livein slums NGO presents its plantation method in the cemeteries

3.3.1.4. Previous Urban Conservation Projects in Historic Cairo:(21)

According to the UNESCO First report (2010-2012) several conservation studies and action plans have been prepared in recent years, and didn't meet any success in implementation due to several reasons mentioned earlier. Some of those attempts are(21):

A. UNESCO PLAN, 1980: “The Conservation of the Old City of Cairo”

Carried out by the UNESCO consultants between February and August 1980. It suggested planning and conservation proposals including adjacent historic areas ; Northern and Southern cemeteries, the Fustat archaeological zone, the Coptic area and Bulaq. The plan remained a 'paper project' and was not put into action.

B. Al-Darb Al-Asfar Alley Rehabilitation Project, 1994-2001

Documentation and establishment of a conservation strategy for the area was carried out in 1994 by the MoC (Ministry of Culture) and SCA (Supreme Council of Antiquity) which began the

C. UNDP Report, 1997: “Rehabilitation of Historic Cairo”

A development program was undertaken by the (UNDP) and the SCA in 1997 in order to define a consistent strategy of urban conservation for Historic Cairo.

D. Historic Cairo Restoration Project (HCRP)

According to the UNDP Study on Historic Cairo the Government established an eight years plan (from 1998 to 2006) “Historic Cairo Restoration Project”, and in 1998, a decree¹² was issued by the Prime Minister to form a working group at the ministerial level to perform the restoration of 147 listed and 48 unlisted historic monuments.

E. The Old Cairo Rehabilitation Project: Mugamma’ al Advan, 1999-2002

A conservation project in the al-Fustat area of Old Cairo, financed by the Ministry of Tourism (MoT) and carried out in cooperation with the Cairo Governorate.

F. Al-Darb Al-Ahmar Revitalisation Project

In 1997, a series of projects combining social and economic initiatives with the physical improvement of the al-Darb al-Ahmar area, on the eastern edge of the World Heritage property with reference to UNDP report on Historic Cairo, has been developed by the Aga Khan Trust for Culture (AKTC) and its partner funding agencies, with support from the Cairo Governorate, the SCA and the community.

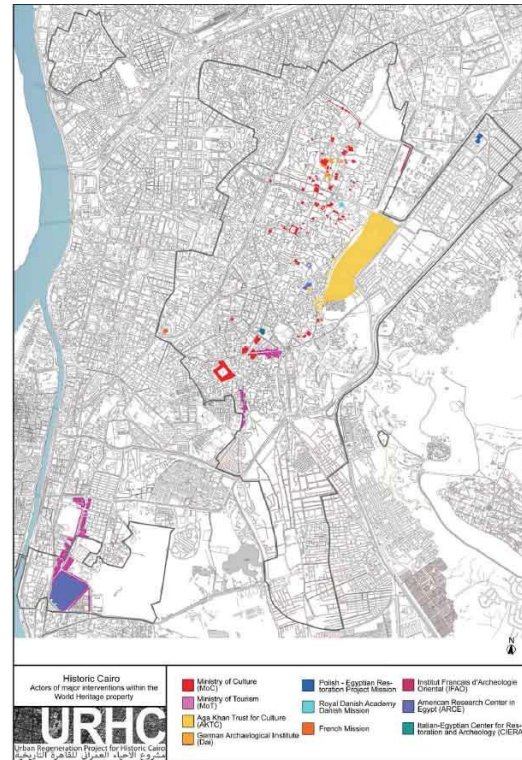


Fig. (88) URHC Map of architectural and urban conservation projects which shows the different interdisciplinary approaches in Historic Cairo. Source: Urban Regeneration Project for Historic Cairo, July 2010-June 2012.

G. Al-Sayeda Zeinab Revitalization Project

In 1998, the Egyptian MoT, in cooperation with the Cairo Governorate, carried out an urban conservation project in al-Sayeda Zeinab area (located to the south of the World Heritage property). The project was concerned with the upgrading of the infrastructure, and residential houses, shops and open spaces in the area. It consisted of five phases, two of which were implemented between 2002 and 2004.

H. The General Organisation and Physical Planning (GOPP) and Institut d'Aménagement Urbain et Régional de l'Île de France (IAURIF) Plans, 1988–1991

Around the same time, in 2002, the Governor of Cairo became interested in a participatory rehabilitation project being carried out by the City of Paris (Mairie de Paris) to protect its historic city from socio-economic pressures. French-Egyptian planning and research named the IAURIF/GOPPP launched three projects to rehabilitate the Sayeda Zeinab Quarter in the south, the Gamaliya Quarter in the north and the Darb al Asfar Quarter in the east. (11), (21)

❖ In the new Strategic Plan for Cairo (Cairo 2050), where demolition exceeded restoration in favor for the redevelopment of 2700 feddan (1400 cemeteries areas-1300 of informal housing). The plan foreshadows nearly the total demolition of the area and the relocation of the residents without any regard for their activities and their relation to the place. This ill-conceived approach fail to take into account the social, financial and cultural costs.

A previous similar strategy was proposed in the GOPP/IAURIF scheme for the Gamaliya Project where *"cemetery partly occupied by squatters was to be transformed into a park but keeping some significant tombs such as that of Ibn Khaldoun. However, this never occurred as a result of disputes*



Fig. (89) photo taken by researcher, showing the residential area inside the cemeteries.

over compensation to cover the evacuation and demolition of the tombs". (Sutton, 2001, p83)

According to Sedky, many of the planning efforts were doomed to failure because of the 'top-down' approach. While one of the approaches call for large scale demolition for the traditional spaces and buildings and the replacement with modern structures, the other calls for 'beautifying' traditional houses and monuments and turning the historic area into an open air museum. Some individual efforts were made to develop a theoretical frame work to facilitate the legitimacy and the sense of urban conservation.

Governmental policies remain insufficient and fragmentary with a tendency to favor tourist oriented projects; if the government has its own way, historic Cairo will be an open air museum. While the public authorities are on a weak position to maintain adequate control over the area, the local participation remains largely ignored, which contributes further to social exclusion and urban degradation.(6), (18)



Fig. (90)



Fig. (91)



Fig. (92)



Fig. (93)

Above right; Fig. (90) Shows new burial sites that have been extended on the side walk (Is it legal? Has it been authorized?).

Figs.91,92: Show a new building which has been exquisitely finished, and shows a new rising category of people living inside the cemetery and also shows the weak grip of the authorities on the area, (Has this building been authorized?)

Fig. 93: An example of one of the local NGO working inside the cemetery. All photos are taken by researcher.

Below; Fig. (94) Shows the vast area of the Eastern Necropolis that needs to be redeveloped . Far away at the right shows Masheikh Al Azhar and left shows consolidating residential area interacting with the burial areas, beyond at the far left side end stands Manshiet Naser and behind it El Moqattam Hills.



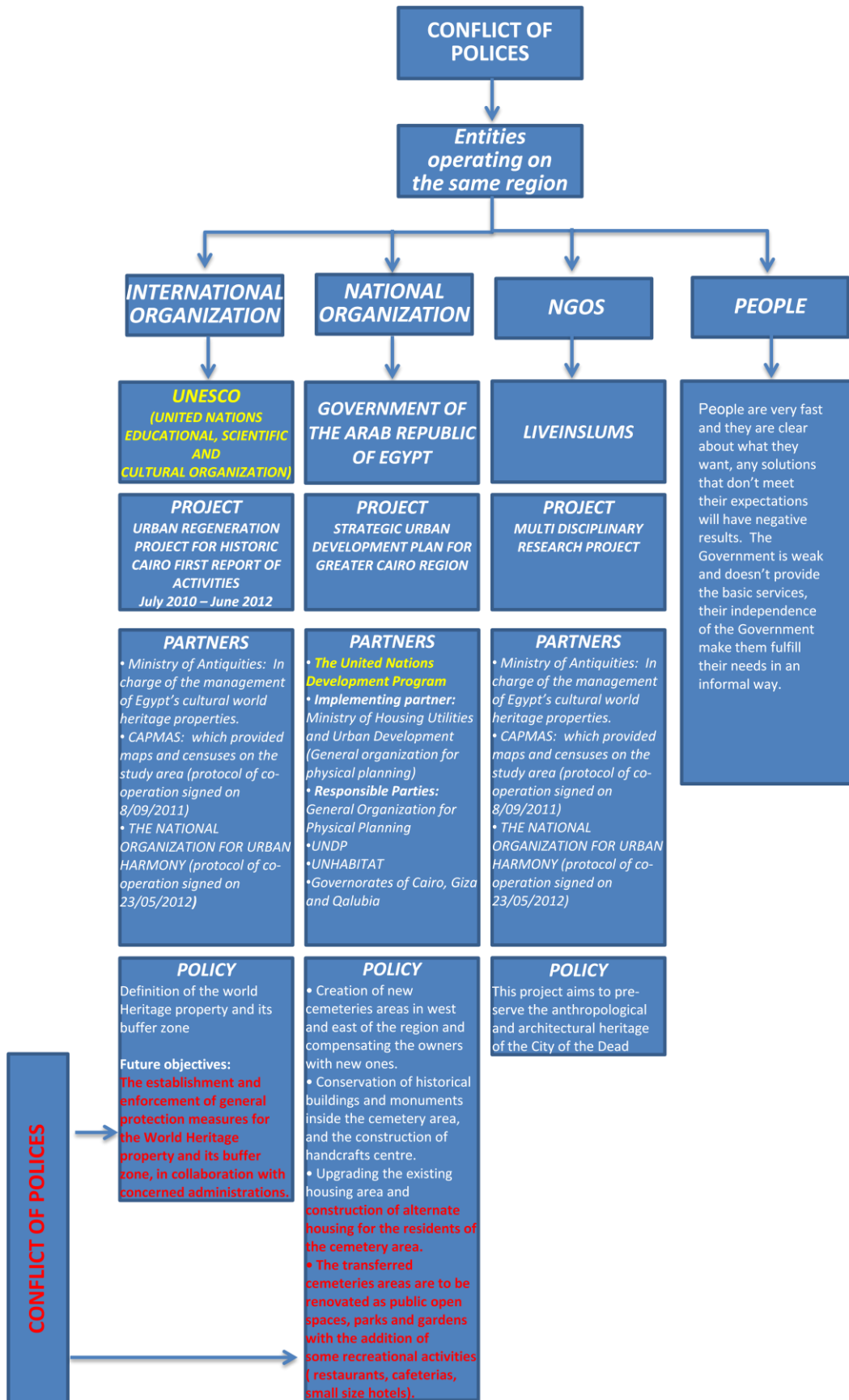


Fig. (95): Diagram summarizing the Conflict of Policies, by researcher

3.3.2. Pollution (noise, visual, air, traffic)

The main problem is the physical deterioration of the ancient urban fabric, which can be attributed to several variables:



Fig. (96): Shows the deterioration that happened to the historical monument of el seven sisters, photo taken by researcher

- residents can be blamed for the litter, defacement of the walls by posters and advertisements, the misuse of public property, law violation, and the unsuitable activities that endanger historic structure.
- Planners and decision makers can be blamed for the insensitive planning bureaucracy.
- Governance of Cairo and the public authorities can be blamed for the negligence, insufficient service provision, corruption.
- Inadequate infrastructure with the increase of the number of inhabitants led to the increase in ground water levels which threaten the safety of the monuments and buildings of architectural values. It also increases humidity in the air and thus creating health problems for the inhabitants and the living environment.
- The heavy traffic that penetrates the cemeteries speeds up the deterioration of the tombs.
- The compactness of the urban fabric reduces air speed, while the lack of green spaces increases the concentration of most pollutants.

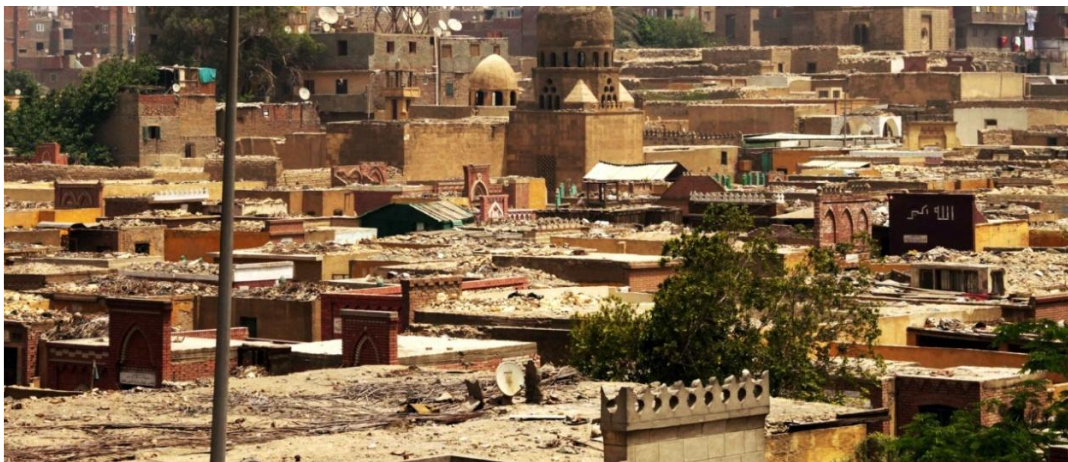


Fig. (97): Shows the garbage accumulating on roof top of the cemeteries, photo taken by researcher



Fig. (98)



Fig. (101)



Fig. (102)



Fig. (99)



Fig. (103)



Fig. (100)



Fig. (104)



Fig. (105)

Figs from. (98 to 105) Shows the different problems that area suffers from (water sewage, litter, deterioration of historical monuments and other environmental issues). All photos are taken by researcher.

According to Le Wcock (1990) the multiplicity of problems disperses the efforts and diffuses the attention. Thus creates confused policies and creates deceptive ideologies about priorities, and thereby causing false barriers and obstacles in the face of the real sustainable conservation strategies.(17)

CHAPTER II

READINGS

(HISTORICAL, THEORETICAL AND DOCUMENTARY)

4. HISTORY AND EVOLUTION



Fig. (106) Ancient Cairo. Source: Ancient city maps-Google

Cairo - the Mother of the world -is a home and a place of work, trade and amusement for more than twenty two million people. The importance of Cairo as the dominant political cultural and religious centre of the Islamic world is the result of an exceptional historical development, its streets and picturesque sights, have never lost its links with the past, and have thus become the focus and under the protection of different governmental and international organizations. In order to make sustainable conservation plan for the study area, which is part of the Historic fabric, it is important to understand the history, social and cultural factors that have an impact on it. (6),(17)

4.1. HISTORIC CAIRO.

The pre-modern city of Historic Cairo is known as that which evolved before the 19th century and whose urban fabric have survived through a series of events, and has thus become testament to values and is full of splendid works of architecture.(3),(20)

Medieval sources differentiate between "Old Cairo" (Fustat) and Cairo (al-Qahira), which Scholars call 'Historic', 'Medieval' Cairo or Fatimid Cairo and which was founded by Gawhar El-Siqilli, commander of the Fatimid troops in 969.(4)

4.2. TALE OF THE FIRST ARAB SETTLEMENTS

The new towns of Islam have been classified into two main types; army camps which eventually developed into permanent cities; the city of Fustat which evolved from the army camp of Amr Ibn el-As in 640, is an excellent example of the first type; and the princely towns; Al-'Askar, founded by the Abbasids in 750, Al Qatai, founded by the ambitious Ahmed Ibn Tulun in 870, and finally Al Qahira which was founded by the new Fatimid dynasty in 969, are all examples of the second type.

4.2.1. El- Fustat (Amr Ibn el-As, 640 - Umayyads era):

The city of Fustat established, in 640, by Amr Ibn Al-As, around the Bayblon fortress. A temporary camp that consisted of different ethnic groups and tribes, was transformed later into a permanent commercial as well as military settlement. Amr erected the first mosque in Africa, which was surrounded by commercial markets that usually accompanied the central mosque in Islamic cities.

The city was constantly enlarged by the succession of powerful ruling dynasties until it became the biggest Islamic city in medieval times. Fustat was an important city serving administrative and commercial functions, it was a melting point of Eastern and Western cultures. Its main sources of income were trade and the export of agricultural goods; ships were coming from the east and the red sea bringing goods from as far as India and China as well as North Africa and Andalusia.(1), (4)

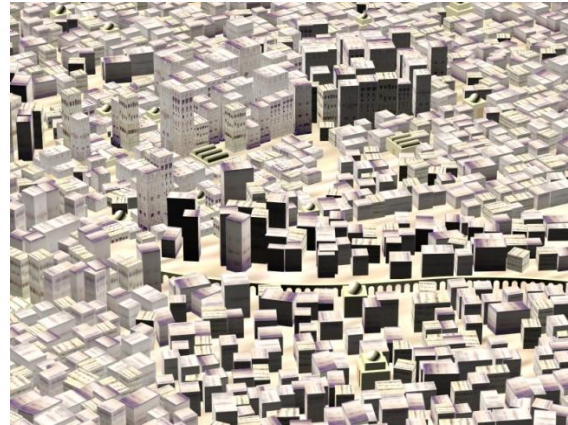


Fig. (107) 3D construction of the city of Fustat.
Source: www.ucl.ac.uk/museums-static/digitalegypt/3d/fustat.html



Fig. (108) The archaeological site of El- Fustat ruins after it had been burnt down. Source: www.vetogate.com/319932

The Persian traveler 'Nasir-i-Khusraw' (11th century) described El-Fustat as *"having building 14 stories high.....its wealth was impossible to count or estimate....*, he added *if he tried to list or describe it, his words might not be believed"* (Old Cairo, p.275)

4.2.2. Al-Askar (750 - Abbasids era)

An internal struggle between the Umayyads and the Abbasids ended by the victory of the Abbasids, who seized control over the born Islamic empire. The center of power was then shifted northeast from Fustat to the new administrative district of al Askar. Dar al-Imarah, together with the central mosque, around which were the markets,

formed the typical nucleus of the settlement. Surrounding this nucleus were the luxurious residents of the court and various regiments whose first priority was to defend the administrative suburb and to repel any attack on Fustat. The two communities (Fustat and Al-'Askar) fused together and thus contributing to the growing power of Al-Fustat region. At the same time, the century witnessed the descend of the 'Abbasid empire.

4.2.3. Al-Qatai' (Ahmed Ibn Tulun, 870 - Tulunid era)

The Turkish descent Ahmad IbnTulun, who came to al-'Askar as deputy for the governor of Egypt, gained independence from the 'Abbasid Caliphate and built a new residential town Al-Qatai' covering 270 hectar; it was located northeast of Al-Fustat and Al-'Askar and extended north to Birkat al-Fil and east to what was to become later on the Citadel, and which served as the capital of his newly founded Tulunid dynasty. At the heart of the city were the palaces of the ruler and his deputies, central *maydans* for sports and tournaments and stood the splendid mosque of Ibn Tulun which begun in 876 and completed in 878. While al Qatai attracted to itself the markets for luxury consumer goods, the main economic activities remained in Fustat.

In 905 the Abbasid troops destroyed al-Qatai' to revenge from the Tulunid's independence and only the magnificent mosque of Ibn Tulun still survives to witness the site of the dead city.(1), (11), (12)

4.2.4. Al-Qahirah (Jawhar el Saqalli, 969 - Fatimid era)

By 909-910 in Tunisia, Said ibn Husayn (Ubaydullah al-Mahdi) has established the Shiitie Fatimid Caliphate, it was not until 969 that the movement gathered enough power in Egypt. At the head of the Fatimid dynasty was its fourth Caliphate, Muizz el-Din, who had



Fig. (109) Ibn Tulun Mosque stands in the heart of Cairo. Source:

http://islamicarchaeology.blogspot.com/2012/02/blog-post_27.html

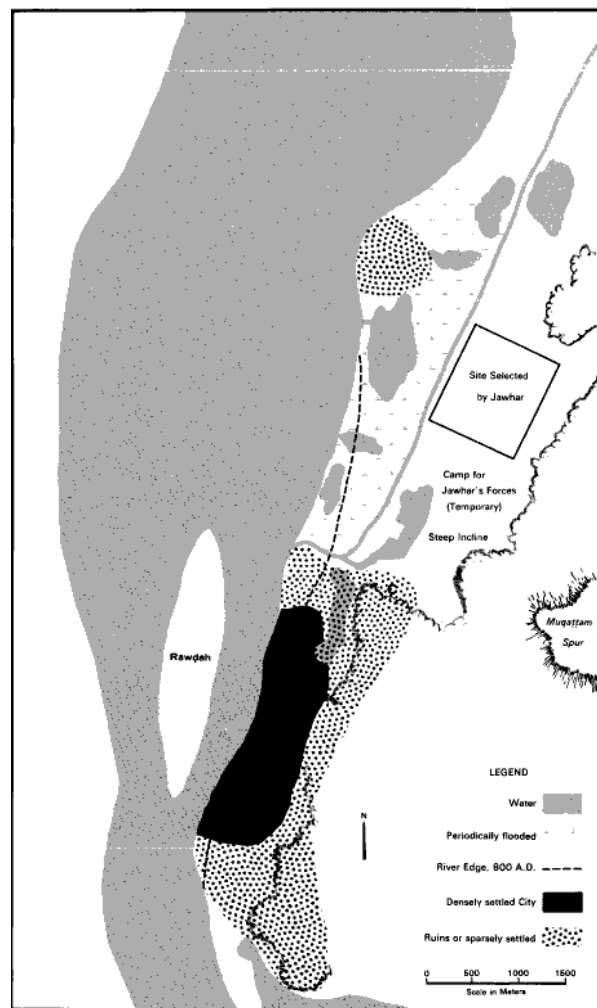


Fig. (110) shows the location that Gawhar chose to build el-Qahirah and it shows also the square shape of the city. Source; Cairo:1001 years of the city victorious. Abu-Lughod, Janet L., 1971.

selected a brilliant general and administrator, Jawhar el Saqalli, to lead his forces and establish the new city The Victorious (al-Qahirah)

Al-Qahira was founded as a walled capital city for the Fatimid Royal family, their officers and troops. During the thirteenth, fourteenth and fifteenth centuries, the city of al-Qahirah expanded to almost five times its original size, and despite its beauty, lavishness and intellectual vitality Al-Qahirah remained a princely city, while El-Fustat remained the dominant transport, productive and commercial metropolis of Egypt.

During the eleventh century Al-Fustat and Al-Qatai underwent political and natural disasters (plague, earthquake, seven years famine) that led to their destruction; In 1168 the Crusader forces, already occupying the Birkat al-Habash, were going to use the indefensible Fustat as a base from which to launch their attack on fortified Cairo, and therefore the opportunistic wazier Shawar ordered that the city of Fustat would be burnt down to the ground. Later on political power had shifted to the new city of Al-Qahirah and gradually economic power began to move there as well.

The Fatimids claiming to be the true Calipha established themselves as the major power of the region. (1), (2), (11)

4.2.4.1. Heritage of Fatimid city planning

Fatimid city planning has set the standards for the architecture of the following dynasties, the architectural splendor of this new foundation is still to be witnessed.

Fatimid presented social and physical elements, that influenced the formation of the medieval city, that still have an impact on its physical pattern, which cannot be understood without examination of their roots:

During the late Roman and Byzantine empire commercial activities were closely regulated by the state throughout of compulsory membership into organized corporation or "guilds". By the end of the ninth century the Arab conquerors added to the previous system public regulation over merchants, trades and artisans. Eventually, this social organization led to physical order through the formation of the "**Occupational Cells**"; specialized markets were distributed through the city each of which had been associated with its own quarter in which trading, production and distribution, were combined with residences for tradesmen and inns for transient merchants. This was especially evident in early Fustat. This form of organization continued to play a role in structuring the urban environment of the city and thereby influencing its physical pattern. This social and physical pattern were Cairo's heritage from the past. (1)

Fatimids' Social and Physical elements which influenced the form of Medieval Cairo:

The Fatimid plan for the suburb was regular and rectangular at the most. It consisted of two important elements required to make medieval Cairo an outstanding but hardly a unique example of city building in the Middle East. Those elements are:

- a. The core, which consists of extensive palaces, gardens, cemetery, mosque and marked squares, and the other element is

- b. The formation of the harat, the suburb contains from ten to fifteen harat; which is a group of persons usually unified by ethnic and/or occupational characteristics and are separated socially and physically from the subgroups of the city and they politically form a unit of administration and control. This ethnic-occupational segregation was still operative in early nineteenth century Cairo.

The heritage of medieval Cairo from its Fatimid antecedent was this essential social constitution *"which gave to medieval cities throughout the Islamic lands a similar physical pattern. This pattern has been described by a number of scholars, all of whom have stressed the intimate connection between the physical organization of the city and its social constitution."*(Abu-Lughod,, 1971.,p25)

4.2.4.2. Rise and fall of Medieval Cairo 1170-1340:

During the Ayyubid era, the rise of Medieval Cairo started with the accession of Salah al-Din el Ayyubi to the leadership of Sunni Islam. It is not until after the death of Nur El Din, in 1174, that Salah el Din got in control over the city which was nominally still ruled by the Fatimid Siities. The next following years witnessed the over throw of the Fatimids and the establishment of the Sunni Ayyubids. Salah el-Din had an ambitious plan to connect al Fustat and al Qahirah by building an extensive fortification centering in the Citadel built in 1176; he opened the City to the people who needed space, especially after the destruction of the Fustat . In their need of space, people constructed everywhere; major palaces and villas were torn down and replaced by schools mosques and shops. The economic life revived and the city witnessed expansion southwards.(1)

The Ayyubid empire began to dissolve and by 1250 the Mamluks started to take over; the first Mamluk troops that stayed on the island of Rawdah are called Mamluk Bahari, it is from their location that they derived their name, while the later Circassian Mamluks whose power concentrated in the Citadel and it's from it they also derived their name Mamluk Burji. It was during the period (1260-1382) that corresponds to the rule of the Bahri Mamluks, that Cairo experienced her greatest growth and development during the medieval era. After the fall of Baghdad to the Mongols the seat of the Caliphate was transferred to Cairo (1261) and consequently was regarded the main centre of Islam. In this period Cairo reached its climax as a metropolis.

The shift to Mamluk rule was much more than a simple change, it represented a social revolution of deep significance which, although lead to the flourishing of medieval Cairo, it held within it its own seeds of decline:

4.2.4.3. Mamluks' Social and Physical elements which influenced rise and fall of Medieval Cairo:

At the time of Arab Conquests, all land that had been taken by force were later on distributed to their military forces and what's left were farmed by their former proprietors in return for taxis upon non-Muslims. As time passed some lands became hereditary and landlords claimed political power and administrative responsibilities in

addition to their financial role. By the late Ayyubid period the iqta' (fief) system started to flourish and was functioning as a unit of administration. While under the Mamluks regime feudalism prevailed and fiefs were already being assigned as a source of revenue rather than units of administration. This military feudalism system insured the consolidation of a military caste system which prevailed until and even beyond the Ottoman conquest.

Rise:

A consequence of this military feudalism system, the Mamluks lacked involvement with the land, except as a form of wealth to be exploited. This tended to further concentrate all power in Cairo, where the important Mamluk amirs lived during intervals of peace. The wealth, then, of the entire countryside tended to converge upon the Capital city. Enjoying such a position of central dominance, the city of Cairo was able to grow and to flourish, even after economic decline. The importance of the city based partly on the country's monopoly of the Red sea trade - this was demonstrated through several architectural complexes which still today dominate Cairo's skyline with their high facades, elaborate minarets and domes. In this period Cairo reached its climax as a metropolis. Meshullam Menahem writes in 1481 that *"if it were possible to place all the cities of Rome, Milan, Padua and Florence together with four other cities, they would not contain the wealth and population of the half of Misr (al-Qahirah)"*(see the account of Meshullam Ben R. Menahem in Elkan N. Adler, ed. *Jewish Travellers* (George Routledge and Sons, Ltd., London: 1930; p 166 and discription of Misr continues through p.171).(1)

Fall:

The peak of the progress was achieved during the era of Sultan al-Nasir Ibn Qalawunn in 1340. But, Plague, famine, renewed Mongol invasions and political instability were all certainly chief factors in the decline of the city.

Temporary revival had begun during the reign of Barquq (1382-1399), who became in 1382 the first Circassian Sultan and the founder of the Burji Mamluk dynasty that was to rule Egypt till the Ottoman conquest in 1571. After his death his son al-Nasir Faraj 13 years old took over and according to al-Maqrizi he was the most "ill-omened" of all the rulers of Islam. By his mismanagement he brought ruin upon all the land of Egypt and Syria, and his failures were completed by the defeat at the hands of Tamerlane.

Ruins were everywhere around the Citadel and al-Qahirah and once again the two cities, al Qahirah and al-Fustat, were separated by dusty plains and rubble.

The other major factor that had a great impact upon the decline of the city was the shifting of the trade route, which removed the foundation stone of Mamluk prosperity and left Cairo with a depleted economic base; Oriental spice trade with Europe was monopolized by Venetian traders whose rooted their commercial exchanges through Egypt. Only within a decade the Portuguese had taken over the East-West trade out of the hands of the Venetians, they established a monopoly for their traders in India and at the same time they gained control over the Persian Gulf and the Red Sea.....by 1503 commerce through Egypt had decreased incredibly that the Mamluk's were unable to raise sufficient force to hold back the Ottoman Turkish troops in 1571.(1), (11)

It is concluded from the previous historical background the following

1. **"Occupational Cells"**:. Specialized markets should be distributed through the City of The Dead, each of which to become associated with its own quarter in which trading, production and distribution, become combined with residences for tradesmen and for transient merchants.
2. **Regular and Rectangular shape**: is a Fatimid heritage planning for the suburb ; try to maintain the same urban form and pattern of the streets because it is of hereditary, cultural value and that form have already existed for such a long time so it keeps within it its potential for further survival.
3. **Creation of new functions and activities that should be compatible with the character of the historic town or urban area**: the area used to be home to a unique craft: the weaving of silk chord. . The chord is usually brought by tribes in the Western Desert and Libya, and used to decorate their vests and other clothing. A handful of craftsman in the cemeteries are still trained in this craft, although demand for it is dying. Such craft can be revived and become of economic advantage for the area.

4.3. EVOLUTION OF CEMETERIES

The former settlements (al-Fustat, al-Askar, al-Qatai) have left useless land on which they stood before their destruction, and they prevented the expansion of the city to the south. The southern parts of the city are of two kinds: kharab and cemeteries (city of the dead) as shown in the map, these cemeteries are; *"bounded by the kharab on the west and the sharp incline of the Muqattam range on the east, the Khalifah City of the Dead stretches in an elongated U from its gateway, the Bab al-Qarafah between the Mosque of Ibn Tulun and the Citadel, to its southernmost tip almost three-quarters of a mile away"* (Abu-Lughd,1971, p22).

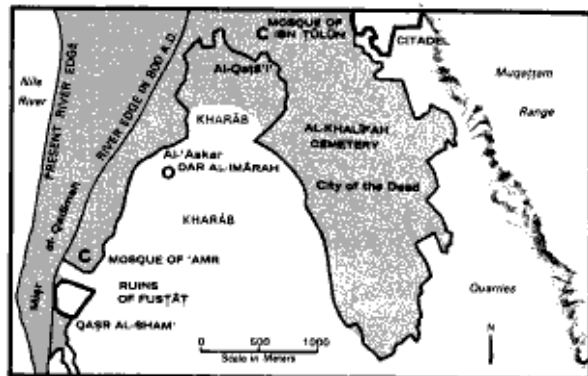


Fig (111) shows how the evolution of the cemeteries on the ruins and the undeveloped land of the destroyed Fustat and el-Qata'. Source; Cairo:1001 Years of the City Victorious. Abu-Lughod, Janet L., 1971.

These cemeteries contain some rare examples of Mamluk and Ottoman architecture and form modern Cairo's heritage from the pre-medieval period, causing it unfit for future development although they occupy a large area of precious land.

Medieval Cairo demonstrated, as mentioned before, ethnic-occupational segregation which continued to influence land use patterns; among the uses are open recreational uses which were located outside in the west and north of the city, the governmental administrations which were concentrated in the Citadel and the segregation of the Cemeteries was even more marked than in any other country in the world.(1),(7)

4.4. MYTHS AND TRADITION

4.4.1. Myth about Moqattam Hills

The plains at the foot of the Moqattam Hills were once considered hallowed land. Egyptians believed that they were blessed by burying their dead at Moqattam because it was a part of heaven. It has been said that the Chief of Copts "Al Muqauqas", after the invasion of Amr Ibn elAs troops, has offered the Islamic conqueror to purchase part of the Moqattam foreground because the place there is part of heaven and the trees that grew there on the heights were trees of Paradise, but Amr refused his request. People would come from far and wide to receive special blessings and that their prayers would be answered. Many Sufi sheikhs and imams were also buried in East Al-Qarafa, like Ibn Al-Fared and Al-Shafei.(1), (2)

4.4.2. Burial Tradition

"The Egyptian attitude to death has sent tentacles of influence through time and space influencing Christianity through Plato, himself a visitor to Heliopolis. The influence persists in modern Cairo, whose burial customs are unique in the Islamic world."(Great Cairo Mother of the World, p.25)

This concern with tombs was not Arabian nor of Islamic origin. The Prophet Mohammed (SAS) himself was buried under the floor in his wife's room, and his dictum was *"the best grave is one you can rub away with the hand"*. Also, ten years later after the death of Abdul Aziz Ibn Saud (founder of the modern Saudi Arabia) it is recorded that, no one could tell where he was buried.

The early Islamic tombs were so plain and anonymous that the living had little to do in the cemeteries. The great early mosques such as that of Amr Ibn elAs, Ibn Tulun had been places for congregational prayers, for the hearing of sermons and for religious lessons and discussions, and later on Al Azhar (El Muizz le Din Allah, 970) became a mosque and a university where scholars would lecture students inside the mosque; dormitories were added where students from all over the world would stay. It was not until the Fatimids in 969 that sparked a revival of the death culture, and this led to a spectacular building boom in the Qarafa. The Fatimids built a lot of mausoleums for Shii scholars and became an important pilgrimage center around the Muslim world for the burial of members of the family of the Prophet, "the ahl el bayt", and "el awaliya"; such that of El Sayeda Naffisa, Rokaya, Ateka, El Gafary and Badr el Gamaly and became known as el Mashahed such as that of the Alaweyeen. Building spectacular mosques and mausoleum have thus become a sign of power and of religious impact.

When the Ayyubid (Sunni) came to power they wanted to drive away the Shii's religious impact on people by starting to build mausoleums to Sunni's Emams; after the death of el Emam El Shaffii, the Sultan el Kamel's mother built a dome over his mausoleum, and ran hallowed water on it. From that time on people started to build their mausoleum next to El Emam El Shaffii and returned to the cemeteries for festivals and funerals. The number of places devoted to prayer and learning continued to grow, ceremonies and festivals could go on for days and even months, people needed services and facilities and therefore residential buildings and shops started to appear, especially around schools and madras. The Mamluks later on overdone their

predecessors through building magnificent tombs larger than any other which later on led people to settle in the cemeteries. The Mamluks fascination with mausoleums may be driven from the Turkish, who in turn took it from the Chinese culture. The most splendid mausoleums of which were built by rulers of Turkish origin; Taj Mahal and early Ottoman tombs at Bursa. It was only when the Turkish came to power that the competition of building mosques as tombs began to dominate.(1),(7),(11)

It is concluded from the previous readings of myths and traditions the following:

1. **Building splendid mausoleums used to be a significance of religious power, but it no longer is:** and this belief has disappeared and no longer exists. So, it is just the spectacular architecture, and the historical value of the place that remains. Therefore, the cemetery area should be re-evaluated according to the Operational Guide Lines of the World Heritage Convention to define what is of great contribution to humanity and what is of outstanding universal significance
2. **Visiting Ahl el Bayt and el Awliya is still a culture that prevails in Egypt:** as well as holding the ceremonies, festivals and funeral traditions that could go on for days, using the mosque as a madrasa also still revives, all of which contribute to the livelihood of the cemeteries area and encourage people to stay there. These are strong traditions which are not likely to vanish soon, and should be kept in mind when making future conservation planning for the area.

5. CONSERVATION OF URBAN PLANNING

Historic cities are made up of buildings, streets and infrastructure representing different periods that create various cultural and urban layers over time, and offer irreplaceable qualities of urban culture absent from most new cities and suburbs. They reflect the history of intersection between society, place, culture, and technology, and they have acquired meaning over time.

"Urban conservation provides a set of values and methods by which to preserve and renew the important elements of the city from which it derives its unique sense of place and that often represent the world's multicultural heritage. Planning for urban conservation assures that the cities of the world-will be sustained in their irreplaceable role as the realm of vibrant life, culture and civil society." (Watson, 2003, p.4.4-10).

5.1. DEFINITION of URBAN CONSERVATION

"Urban conservation is a long-term commitment to maintain a city's cultural and historic identity while also accommodating inevitable transition growth and new uses." (Watson,2003, p.4.5-1)

In the "**American Heritage Dictionary**"

Conservation (**Noun**) is:

1. The act or process of conserving

2.
 - a. Preservation or restoration from loss, damage or neglect
 - b. The protection, preservation, management or restoration
 - c. The maintenance of a physical quantity

Conservation - **Science Definition:**

"The protection, preservation, management or restoration of natural environments and ecological communities that inhabit them. Conservation is generally held to include the management of human use of natural resources for current public benefit and sustainable social and economic utilization."(American Heritage dictionary)

5.2. PROBLEMS of URBAN CONSERVATION

According to Salama conservation problems could be assigned to physical and socio/cultural economic factors(19)

Historic cities are influenced by different but related transformations:

- Population growth
- Rapid urbanization
- Rising demand for more housing and emergence of informal settlements and move toward techno cities

Physical problems according to Lewcock (1990):

- Lack of maintenance
- Poor solid waste and sewage disposal
- Inadequate repair of historic buildings
- Environmental pollution

Socio/Economic problems according to El Safty, 1986 and Abdel Fattah,1997:

- Increasing poverty
- Illiteracy
- Ignorance of the local populations
- Insufficient articulated laws and regulations

Sedky (2009) summed up the urban problems into(6):

Lack of public awareness → Lack of know how → Lack of aesthetic values

Lack of active legislation → Loss of distinctive character → lack of aesthetic values

Lack of active legislation system → loss of distinctive character → lack of basic hygiene

Political problem → economic problem → housing crisis in Cairo → cemetery inhabitants

Lack of active legislation → ownership problem → individual vandals → absence of aesthetic values → absence of hygiene

Bureaucracy and negligence → conservation problem → stagnant environment → lack of aesthetic values

5.3. OBJECTIVE & VALUES of URBAN CONSERVATION

First the objective of a conservation project should be defined and then next is to identify the values in the project(17):

Objective:

The aim of urban conservation is to reach a coherent urban culture through promoting urban life characterized by a strong sense of historic and cultural vitality and continuity.

Values:

According to Feilden (1982) the values can be classified under three main headings: Emotional, Cultural and Use values. These values need to be analyzed and then synthesized in order to define the significance of the historical site.(17)

1. Emotional values:

Symbolic and spiritual values depend on cultural awareness that come from past and present statements of the monument and its site. It may be difficult to differentiate between various emotional values, but they can be taken collectively and graded from weak to very strong.

- a) Wonder
- b) Identity
- c) continuity
- d) Respect and veneration
- e) Symbolic and spiritual

2. Cultural values:

Include aesthetic, art historical documentary, archeological, architectural, technological, scientific, landscape and urban space and are appreciated by educated persons, and are defined by specialists and scholars:

- a) Documentary
- b) Historic
- c) Archaeological and age
- d) Aesthetic and architectural values
- e) Townscape
- f) Landscape and ecological
- g) Technological and scientific

3. Use values:

- a) Functional
- b) Economic (including tourism)
- c) Social (also including identity and continuity)
- d) Educational
- e) Political

5.4. LEVELS of URBAN CONSERVATION

According to Feilden (1982) there are seven degrees of intervention(19):

a) Prevention of decay:

Prevention is about protecting cultural property by controlling its environment.

Regular inspections are the first step in preventive maintenance and repair of cultural property. Such inspections are the basis of prevention of deterioration.

c) Preservation:

Repairs must be carried out only when necessary to prevent further decay, and where the object is to be kept in its existing state.

d) Consolidation:

Is the physical addition or application of adhesive or supportive materials into the actual fabric of cultural property.

e) Restoration:

Is to revive the original concept or legibility of the object. Contributions from all periods must be respected.

f) Rehabilitation:

The best way of preserving buildings is to keep them in use, where the original use is generally the best for conservation of the fabric as it means fewer changes. A practice which may involve what the French call (*mise en valeur*) or modernization with or without adaptive alteration.

g) Reproduction

h) Reconstruction

Urban conservation and planning approaches in **North African Cities** have fallen into three main categories(20):

Restoration:

It tends to focus on certain individual significant buildings while neglecting the lesser buildings, the result is an open 'museum town' for tourists rather than for residents.

Renovation:

It means that modern buildings and architecture replace vernacular houses and styles of building, and thus the renovation process becomes associated with demolition and renovation.

Rehabilitation:

It does not aim to reproduce the past and seeks to rehabilitate the society and economy as it is now.

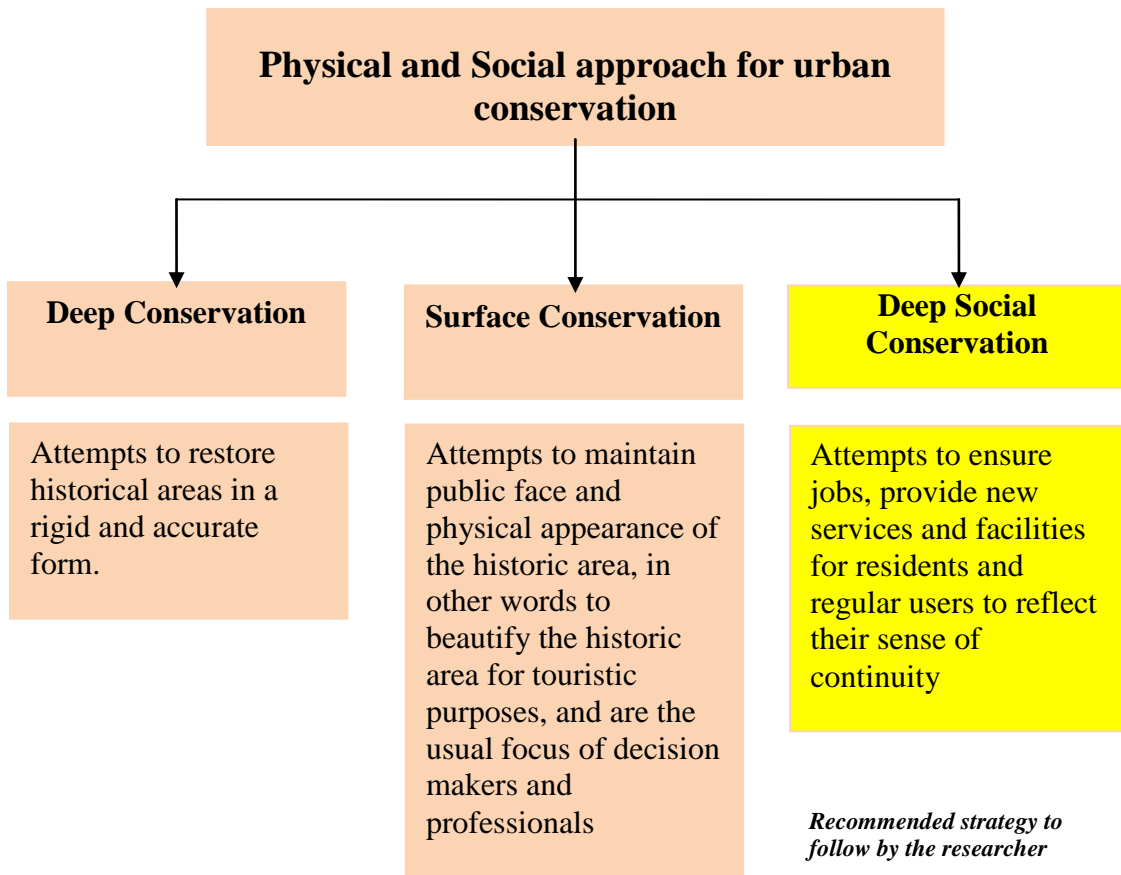


Fig (112): Different levels of physical and social approach of conservation, by researcher

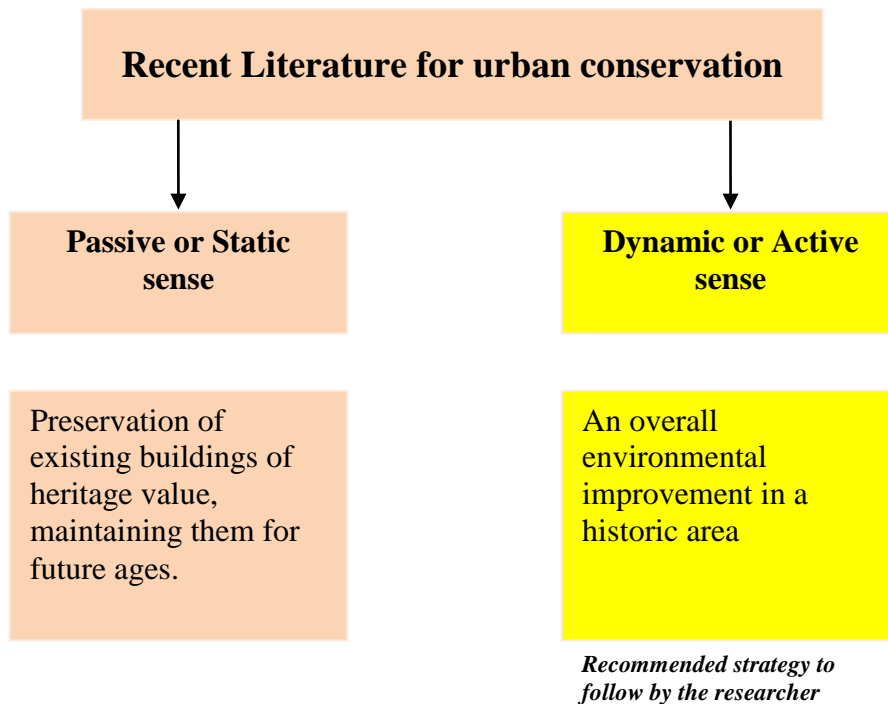


Fig (113): The most recent approaches for urban conservation, by researcher

5.5. CONSERVATION of HERITAGE AREAS as an APPROACH to REGIONAL PLANNING

Why is there such growing interest in dealing with community development and historic preservation?

How does heritage development differ from traditional regional planning?

Does the heritage area movement hold promise for urban designers, planners and community development leaders?

Urban conservation is an approach to planning to preserve, revitalize and transform the historic elements of cities into hubs of urban life and activity. Heritage urban planners believe that economic development, regional action and cultural development are closely related, and that new economic activity that follows a modern pattern could wipe off the distinctive character of the place. The rarity and importance of historic buildings and urban values can serve as an economic lever. People can get together around the heritage area issue and overcome traditional conflicts—at least temporarily to achieve *"a lot of little"* as Gallaher puts it. According to the Urban designer and planner Tom Gallaher *"Project plans in heritage areas tend to be holistic and flexible, they welcome appropriate growth and manage change in an orderly manner. They really are addressing regional issues in new way."* (*Time Saver Standards For Urban Design, pp. 5-6-3*)

The heritage corridor has been viewed, by the New York's Mohawk Valley Heritage Corridor Commission (MVHCC) and its leader F.X. Matt the head of the historic Matt Brewery in Utica and other business leaders, as a natural vehicle for regional cooperation in a part of the country where such cooperation is rare. Heritage areas may be messy and hard to describe, but at the same time they seem to possess solid spirit and great vitality that is very healthy for development. They also seek a balance between preservation and economic development.(34)

Constraints:

Conservation is a very wide, ambiguous field, which involves vastly different approaches and techniques in dealing with conservation issues. Each case has its special character and circumstances that makes it unique in itself and distinctive, and thus should be treated separately in order to preserve and maintain its very special qualities. It is therefore very difficult to reach a unified approach that would be used as a standard for all countries.

Historic Cairo is a unique case and in particular the Cemeteries (The City of the Dead), there is nothing like it in the whole world and is a case that is related only to Historic Cairo. Therefore, it is quite irrelevant to search for similar International Cases to benefit from their experience. The present study addresses in the following section the international conventions, charters and analyze them to come up with localized measures that suits our case. It may be very difficult to reach an agreement about the best action to follow, there could be a lot of debates and arguments which have not been mentioned because it is out of the scope of this research.

5.6. CULTURAL HERITAGE CHARTERS and STANDARDS

International charters and standards for cultural heritage provide fundamental guiding principles towards particular conservation issues, and not as an instant and all-inclusive prescriptions. The following factors form the basis of most of the documents: (6), (19)

- comprehensive analysis of the place,
- minimum intervention in the historic fabric,
- precise documentation, respect for contributions from all periods,
- maintenance of authenticity and the requirement to take a holistic view of the historic environment.

5.6.1. The Venice charter (Annex 1)

Is an important modern milestone for the conservation of monuments and sites. It builds on the basic principles set out in the Athens charter (1931). The Venice charter was adopted by the ICOMOS (International council on monuments and sites; an international nongovernmental organization which promotes the study of the theory, methodology and technology of conservation as applied to monuments, historic areas and sites) and published by it in 1966. The Venice Charter stresses mainly on the importance of the following

- respect for original fabric,
- precise documentation of any intervention,
- the significance of contributions from all periods to the building's character,
- the maintenance of historic buildings for a socially useful purpose.

5.6.2. The Washington Charter for the Conservation of Historic Towns and Areas (1987) (Annex 2)

It considers broad principles for the planning and protection of historic urban areas.

5.6.3. The Australian ICOMOS Charter for the Conservation of Places of Cultural Significance (1981) (The Burra Charter) (Annex 3)

It introduces description of conservation principles, processes and practice which are defined as good practice. It includes a list of definitions such as:

- | | |
|------------------|----------------------------------|
| ▪ place | ▪ compatible use |
| ▪ fabric | ▪ cultural significance |
| ▪ conservation | ▪ aesthetic |
| ▪ maintenance | ▪ historic |
| ▪ preservation | ▪ scientific or social value for |
| ▪ restoration | past, present or future |
| ▪ reconstruction | generations |
| ▪ adaptation | |

5.6.4. Charter for the Conservation of Places of Cultural Heritage Value (ICOMOS New Zealand, 1992, Revised 2010) (Annex 4)

This charter sets out principles to guide the conservation of places of cultural heritage value in New Zealand. It follows the spirit of the International Charter for the Conservation and Restoration of Monuments and Sites (the Venice Charter - 1964). It aims to provide guidelines for professional practice; including owners, guardians, managers, developers, planners, architects, engineers, craftspeople and those in the construction trades, heritage practitioners and advisors, and local and central government authorities. It offers guidance for communities, organizations, and individuals involved with the conservation and management of cultural heritage places.

5.6.5. Preservation Charter for the Historic Towns and Areas of the United States of America (US ICOMOS, 1992)

The charter states what should be done to tackle preservation issues in a coherent and thorough manner. It emphasizes preservation as integral to community planning, it sees property owners and residents as playing a key role in the protection of historic towns, participating in the planning process. It outlines the components of a successful preservation program for historic towns, including studies of the history, culture, architecture and other appropriate fields in order to understand the historic context as well as considerations about the future of the area. Principles include:

- a harmonious relationship between the historic area and its surrounding region,
- thorough study and documentation prior to any changes,
- involvement of residents in planning,
- retaining sound, affordable housing and avoiding displacement of residents, and
- respecting the scale and character of the surrounding built environment in new construction.

Driven by the past observations and our acquaintance with our own national problems, concerning conservation matters and problems related to how to intermingle between the past Historical culture and our present and future urban fabric without running the inherited cultural values, the following is concluded from the previous mentioned charters and conventions stressing only about the missing or weak points that we lack in our home strategies:

Before starting any conservation strategies the problem has to be defined clearly, define the objective of a conservation project and the next is to identify the values in the project.

1. Any conservation strategies or planning for historic cities and urban areas should be part of coherent policies of economic, social development and urban and regional planning at each level; This planning should be preceded by multidisciplinary studies: social, economic, architecture and cultural.
2. The conservation plan should ensure the harmonious relationship between the historic urban areas and the city as a whole.

3. Deep social conservation should be followed; an overall environmental improvement includes deep social development by ensuring jobs, services, facilities for the residents, as well as maintaining and beautifying the physical appearance of the historic area.
4. Any conservation planning should be empowered by the residents of the historic area, as it is their first concern after all, and they are the milestone that guarantees the success of the conservation program. *"The Golden rule : is that working the street with people has its own rhythm which calls for flexibility and patience from both the conservation team and the people"* (Sedki)
5. Improvement of housing should be one of the basic objectives of the conservation process.
6. The objective of the conservation should be clearly stated to all parties involved as well as the legal, administrative and financial measures necessary to attain them.

6. WORLD HERITAGE

In 1965 a White House Conference called for a "World Heritage Trust" for the preservation of unique natural and historical areas for present and future generations over all the entire world. In 1972 all parties involved reached an agreement upon a convention concerning the World Cultural and Natural Heritage, which was adopted by the General Conference of UNESCO in 16 November 1972. The Convention came into action in December 1975. (Annex 5)

In 2014, 1007 sites are listed: 779 cultural, 197 natural, and 31 mixed properties, in 161 states parties. The greatest number of World Heritage Sites is Italy with 50 sites, followed by China (47), Spain (44), France (39), Germany (39), Mexico (32) and India (32).....Egypt (7).

6.1. SELECTION CRITERIA

Until the end of 2004, there were six criteria for cultural heritage and four criteria for natural heritage. In 2005, this was modified to only one set of ten criteria, such that any nominated sites must be of "outstanding universal value" and meet at least one of the ten criteria. The present work is concerned only in the Cultural criteria and are as follows:

Cultural criteria

I. "represents a masterpiece of human creative genius"

- II. "exhibits an important interchange of human values, over a span of time, or within a cultural area of the world, on developments in architecture or technology, monumental arts, town-planning, or landscape design"
- III. "to bear a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared"
- IV. "is an outstanding example of a type of building, architectural, or technological ensemble or landscape which illustrates a significant stage in human history"

V. "is an outstanding example of a traditional human settlement, land-use, or sea-use which is representative of a culture, or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change"

VI. "is directly or tangibly associated with events or living traditions, with ideas, or with beliefs, with artistic and literary works of outstanding universal significance"

Based on the recommendations of the International Council for Monuments and Sites (ICOMOS), Islamic Cairo was inscribed as the World Heritage List in 1979, its inscription was based on criteria I), V) and VI of the World Heritage Operational Guidelines. In 2007, the Egyptian Government submitted a request to modify the name of the "Islamic Cairo" to Historic Cairo, by presenting four maps which incorporated five zones including the Fatimid City, parts of the Northern, Southern Necropolis and al-Fustat area. However, the Government proposed an unclear definition of the "property area" and the "buffer zone". Furthermore, in July 2010, the WHC together with the Egyptian Government launched the project "Urban Regeneration project for Historic Cairo (URHC)" after obtaining approval for a detailed proposal on technical assistance from, funded through a UNESCO Special Account dedicated to safeguarding Egypt's cultural heritage.

The project tasks were identified as follows:

- 1. Definition of the World Heritage property and its buffer zone.**
2. Creation of a shared information system.
3. A strategic planning and management system.
4. Conservation and development planning.
5. Consultations with the relevant administrations.
6. Raising awareness amongst the public.

6.2. URHC PROPOSAL FOR THE WORLD HERITAGE PROPERTY AND ITS BUFFER ZONE

Based on the criteria mentioned before, the World Heritage “property area” proposed by URHC includes the following (21):

- The urban area that has persisted since 1807, including focal points, street patterns, and built-up and undeveloped areas. This includes the historical suburbs north of the city gates of Bab al-Futih and Bab al-Nasr, as well as the historical harbours of Bulaq and Fustat.

- The monumental northern and southern cemeteries, as well as the cemeteries adjacent to the northern city walls.

- The archaeological site of al-Fustat. The archaeological site of Burg al-Zafar along the northeastern city wall.

- Mashad al-Juyushi, located on the Moqattam Hills, a significant monument mentioned in the nomination file.

- The southern tip of al-Rawda Island with the Nilometer, as well as the pedestrian bridge over the Nile, which provides a connection between al-Rawda Island and the al-Fustat urban area.

- **The landscaped area between the northern cemetery and the southern Fatimid nucleus, including al-Azhar Park and the undeveloped areas surrounding the Citadel. This area ensures the visibility of the fortifications, as well as the skyline of the city with its “thousand minarets” – another feature that justified the property’s inscription on the World Heritage List.**

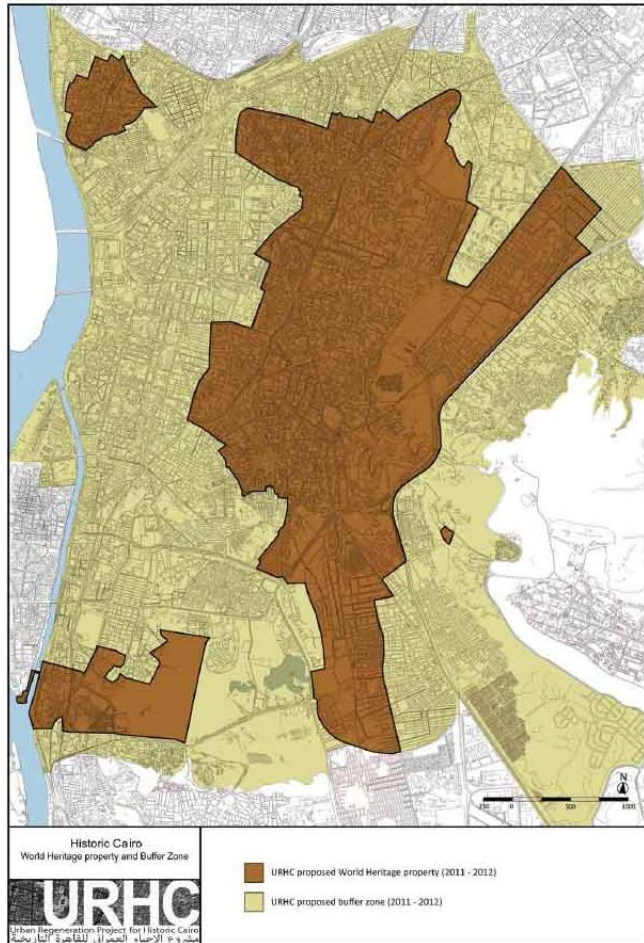


Fig. (114): The proposed perimeter of Historic Cairo, as identified by URHC, overlaps significantly with the “areas of peculiar value” identified by NOUH.



Above Fig.(115) : is an exterior view before renovation, 1989, shot taken by photographer Nsser Rabbat

The al-Juyushi mosque was excluded in the perimeters proposed by the SCA in 2007, although it is still listed in the World Heritage.

- The area that developed through the reclamation of lakes such as Birkat al-Fil in the late 19th century.

The “buffer zone” proposed by URHC includes:

- The slopes of the Moqattam Hills, to prevent high rise developments that harm the skyline of the historic city.
- The northern tip of al-Rawda Island, including Mohamed Ali Palace and its garden, which is classified within the “areas of peculiar value” proposed by NOUH for al-Rawda.



Fig. (116): Shows the defacement of the World Heritage property after renovating it by unprofessional people.

"Legislative and regulatory measures at national and local levels should assure the survival of the property and its protection against development and change that might negatively impact the Outstanding Universal Value, or the integrity and/or authenticity of the property. States Parties should also assure the full and effective implementation of such measures."(Operational Guidelines for the Implementation of the World Heritage Convention, p. 25)

The proposed perimeter of Historic Cairo, as identified by URHC, overlaps significantly with the “areas of peculiar value” identified by NOUH.

6.3. NOUH'S PROPOSAL FOR WORLD HERITAGE PROPERTY ITS AND BUFFER ZONE

Building Law, 119/2008 empowered NOUH to prepare the proper planning, legislative tools and requirements that are suitable for maintaining the areas, buildings and establishments of peculiar value.” throughout Egypt.(21)

The map for Historic Cairo shows the ‘area of peculiar value’ and it is divided into three categories according to the level of protection afforded to each:

- A. Zone A includes the historical fabric of the Fatimid city and “focal areas” mentioned in the Nomination, **including the Citadel area at the foot of the Moqattam Hills and the monumental cemeteries.** **With the exception of the**

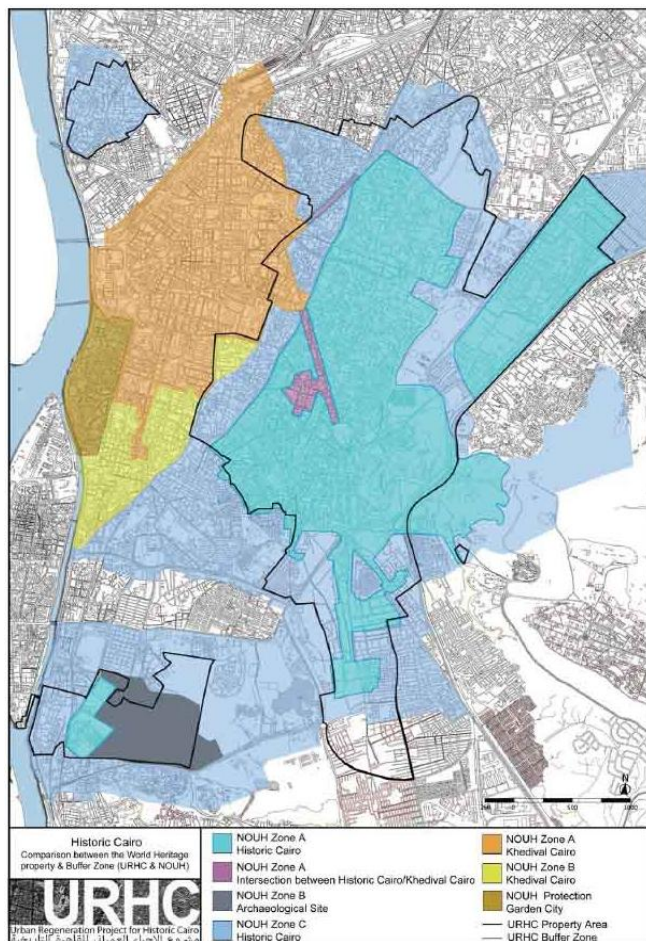


Fig. (117): NOUH Perimeters for Areas of Peculiar Value

northern cemetery, the perimeter defines a continuous area that includes the intersection between Historic Cairo and Khedivial Cairo.

B. Zone B, the archaeological site of al-Fustat.

C. Zone C, comprising the early modern fabric surrounding Area A of the historic city, the monumental cemeteries and al-Fustat.

6.4. SCA PROPOSAL FOR WORLD HERITAGE PROPERTY AND BUFFER ZONE (21)

The SCA map for Historic Cairo includes the urban fabric with the highest concentration of monuments, following zones are(20):

- Zone 1: Al-Fustat area (including the mosque of Amr, the Coptic Complex and the archaeological site)
- Zone 2: The Fatimid Nucleus together with the Citadel area and the area around the mosque of Ahmed Ibn Tulun
- Zone 3 : Al-Imam ash-Shafi'i Necropolis
- Zone 4: Al-Sayyeda Nafisa Necropolis
- Zone 5: The Qaytbay Necropolis

The official perimeter outlined by the SCA also varies from the “property area” and “buffer zone” proposed by URHC and that of NOUH for Historic Cairo. and it excludes the following:

- The pre-modern urban fabric that developed west of the former al-Khalij canal.
- The historical urban area of the Ottoman period
- The pre-modern settlements on the Nile banks: Bulaq and al-Fustat

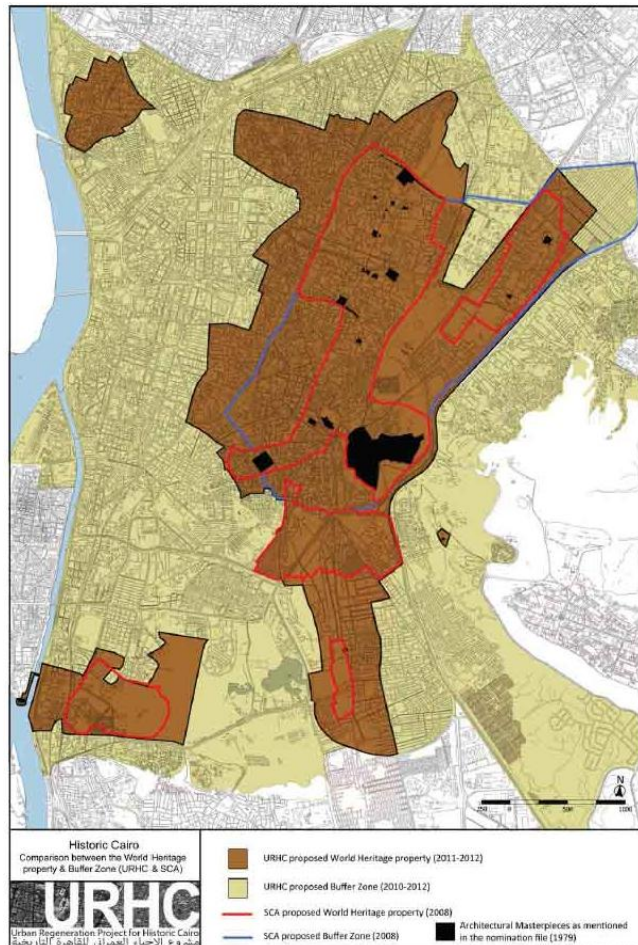


Fig. (118): SCA Perimeter for Historic Cairo

6.5. OVERALL ASSESSMENT OF URBAN HERITAGE VALUES IN HISTORIC CAIRO

In 2011 the URHC project team launched aimed to evaluate and make assessment of the World Heritage property.

Urban areas of High Heritage Value: 1A - 2A are urban areas of grading above average (7.5 points or higher), and which meet at least 2 points of the criteria mentioned above.

If only one of the previous criteria is satisfied then the area is considered to be sensitive as in 1A sensitive -2A sensitive.

Urban areas of Average Heritage Value : 1B - 2B are areas of grading below 7.5 points.

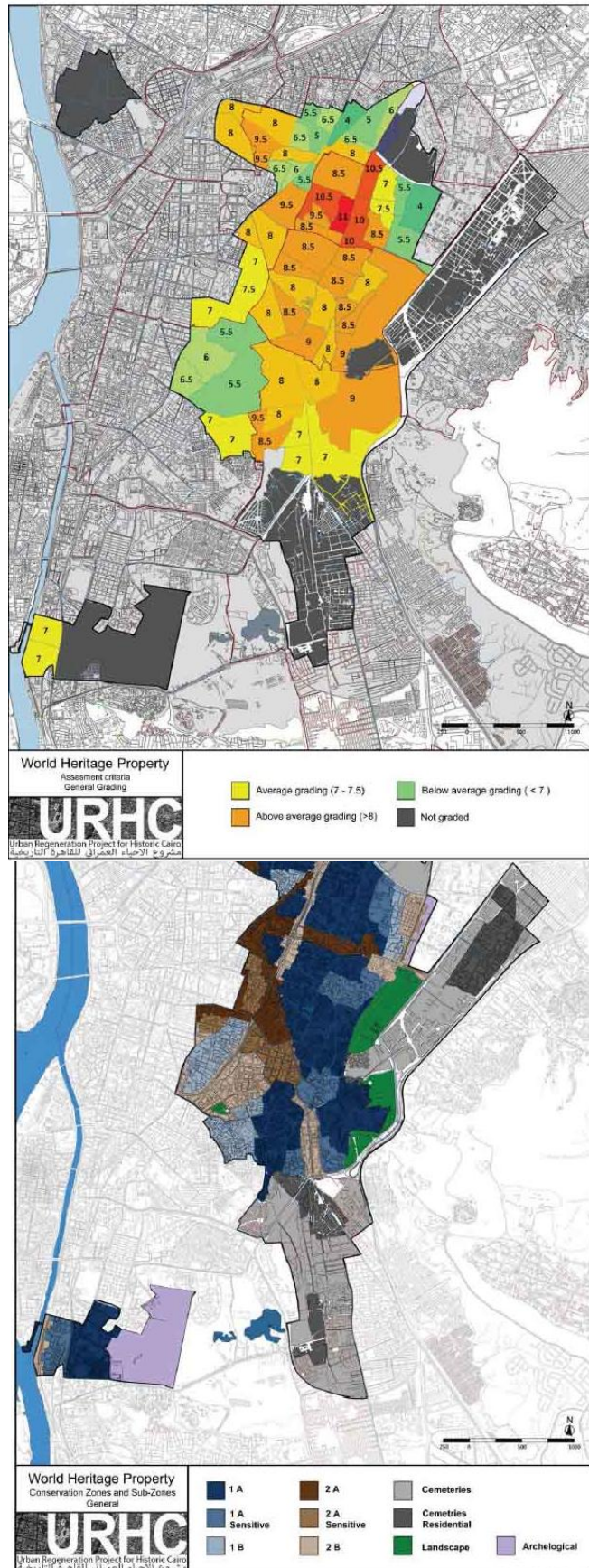
The final figures obtained are not considered as indicators of absolute values. Instead, they are useful indicators of relative values to be appreciated on a comparative basis.

The assessment showed that the Heritage value of the urban fabric have been lost except for some standing monuments, listed buildings with architectural significance and remaining heritage values.

We are only concerned with the cemeteries area and in specific the Eastern Necropolis. It is quite clear as shown in the maps that the cemeteries area have been left out without any grading nor given any assessment.(21)

Right above Fig. (119): The assessment of Urban Heritage values in the World Heritage Property,2011)

Right below Fig. (120): The Proposal of Protection Measures for the World Heritage Property,2011)



It is concluded from the previous readings about the world heritage that the Cemeteries area have not been graded nor evaluated, thus there is a great need for reassessment and to evaluate the heritage value in this area, in order to be able to make any future conservation plan. The Buffer Zone that was proposed by the URHC includes Manshiet Nasser, that stands on the other side in front of the Eastern Necropolis, and which is considered to be one of the most populous slum areas in the world of estimated one million inhabitants. It represents great danger and of negative impact on the World Heritage and all of Cairo (Pre-modern and Modern). Therefore developing the Buffer Zone could be of as great importance as conserving the World Heritage Property. Preserving the Sky line which has been mentioned before in the World Heritage property (which lies between the northern cemetery and the southern Fatimid nucleus, including al-Azhar Park and the undeveloped areas surrounding the Citadel) and developing the Eastern Necropolis is the greatest concern of the research.

7. HOW DO OTHERS SEE THE CEMETERIES AREAS IN CAIRO?

7.1. UNESCO World Heritage Centre - Management of World Heritage Sites in Egypt- Urban Regeneration Project for Historic Cairo- FIRST REPORT OF ACTIVITIES - July 2010-June 2012 p.33

" However, due to the contingent political situation and for security reasons, it was impossible to carry out the visits as planned in some areas, such as Bulaq and the cemeteries."

7.2. The Expanding Metropolis Coping With the Urban Growth of Cairo - Aga Khan Award for Architecture, November 11-15, 1984, p.31

" For the eastern section includes a freak residential are known as the Cemeteries of Cairo, referred to in foreign sources as "the City of the Dead".

7.3. <http://www.dailynewsegypt.com/2013/03/21/the-city-of-the-dead> , AbdelRahman Sherief

"Ibn-Batuta who visited Cairo in the fourteenth century, were impressed by the Al-Qarafa or Al-Gabana district. They were fascinated by the strikingly ornamented domes and mosques, its well-organized districts and gardens, and amazed by the fact that this pleasant neighborhood was established entirely for deceased residents..... the place was historically known as the city of domes due to the high number of domes and mosques."

7.4. Living in the City of the Dead. A research-action project for an exceptional informal habitat, Paola Bellaviti, p.7

'City of the Dead' is one of the most suggestive and controversial habitats of the Cairo megalopolis..... " It is a slum according to some definitions currently in use, but a very particular slum which is host to both a huge and special historical and architectural heritage and at the same time to a residential environment which is unique of its kind, in which a heterogeneous local society maintains the City of

the Dead 'in life', by means of a specific residential culture linked to the sepulchral nature of the places."

7.5. City of the Dead: Slum or Scenario of immaterial Egyptian heritage? Anna Tozzi Di Marco (p.20)

"one of the more liveable working class metropolitan districts, represents a stratification of traditions and customs that have accumulated in Egypt from the time of the Pharaohs until today. To unravel the complexity of that body of demographic, ethnic and anthropological values that are closely interwoven with the City's monumental heritage might be useful for further reflection on the future destiny of the City of the Dead."

7.6. Meetings with the inhabitants of the City of the Dead, Simona Sambati (p.37)

"The monumental cemetery of Cairo, Al Qarafa, is an anomaly in the urban area of the city. For the citizens of Cairo it is a foreign entity, but for those who inhabit it, it is where they live."

7.7. City of the Dead: a district of Cairo. Five interventions to enhance it, Maria Luisa Daglia and Alessandro Colli (p.50)

"The City of the Dead is to all intents and purposes a district of Cairo! Free from all the laws which seem to regulate other areas, it represents a possible exception and above all a great potential pool of resources for the sustainable development of all the city."

The general impression that has been acquired by analyzing the previous statements can be divided into two groups of positive and negative. The weak features should be treated and the strong ones should be empowered to give an overall positive image for the place.

Positive impressions like: Fascinating, strikingly, ornamented domes and mosques one of the most liveable working class, of great potential pool of resources for the sustainable development of all the city.

Negative impressions like: Lack of security, freak, most controversial, an anomaly in the urban area of the city, free from all laws.

Over all analysis of the previous chapter can be summed up in the following:

Key words

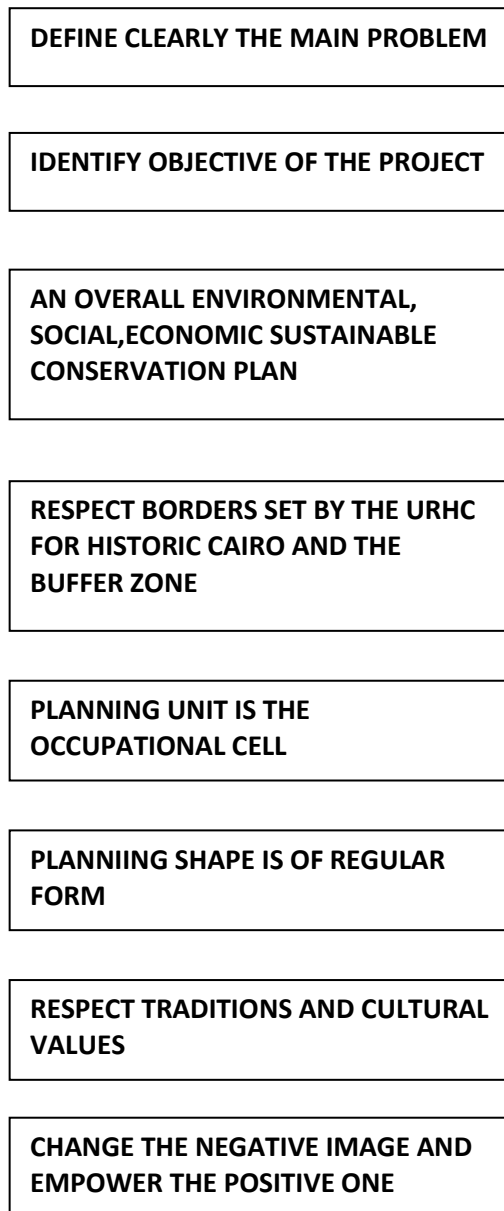
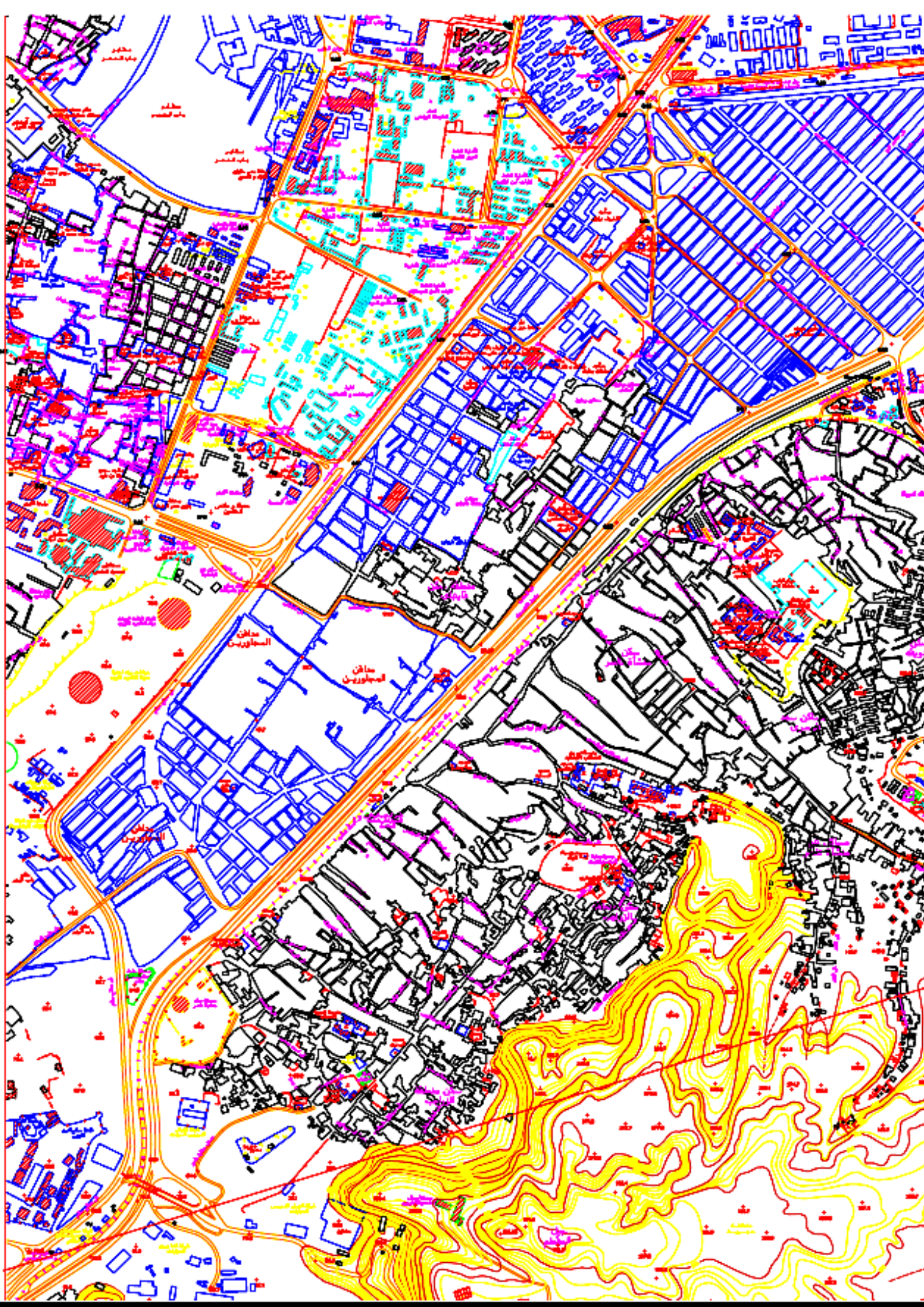


Fig. (121): Over all analysis of Chapter II



PART II

CHAPTER III

8. FIELD WORK AND SURVEY for THE EASTERN NECROPOLIS IN CAIRO

The field work and survey is divided into two phases as follow:

Phase one of the field survey:

Creating a Base Map for the Eastern Necropolis in Cairo for documentation, listing monuments and buildings of Architecture significance, creation of a shared information system and for carrying further futuristic studies, field survey and development. Creating the Base Map underwent several stages as listed below:

First: Data gathering of the previous maps that have been previously issued

Second: Comparing the previous maps with Google Earth to search for any recent significant changes that has occurred over the area in order to reach an overall unified map to work upon.

Third: Assembly stage for using shots taken by Google Earth to obtain a ,more detailed map of scale 1/800.

Fourth: Drafting stage by using the previous layers of maps to obtain a unified detailed Base Map of scale 1/800 for the Eastern Necropolis.

Phase two of the field survey:

Field visits to the study zone (The Eastern Necropolis) to observe the urban environment, the monuments, people, activities, transportation and services available and to evaluate the study zone by using the criteria set by the UNESCO in its report of URHC to evaluate Historic Cairo. Also another attempt of evaluation has been made by using the criteria set for the City of London and try to apply it over the study zone. This ends up by obtaining an overall evaluation for the study zone and an Evaluation Map is produced in the results where the area have been divided into 3 categories and where the monuments have been listed on it.

8.1. CREATING BASE MAP

The aim of creating a map for the Eastern Necropolis, is to have a unified detailed Base Map that shows the street pattern, the block divisions, sub divisions of the Ahawash, important Historical buildings, buildings of significant architectural importance. This map is drawn to a scale 1:800 in order to become a reference for any further studies and could be of use for any future action plan concerning the Historical area. On this map it would become possible for further studies to survey the exact no. of Ahwash, define their conditions (good, deteriorated, of Historical value, of significant value) and could create a complete land use map for any future action plan.

8.1.1. CAP MAS Map:

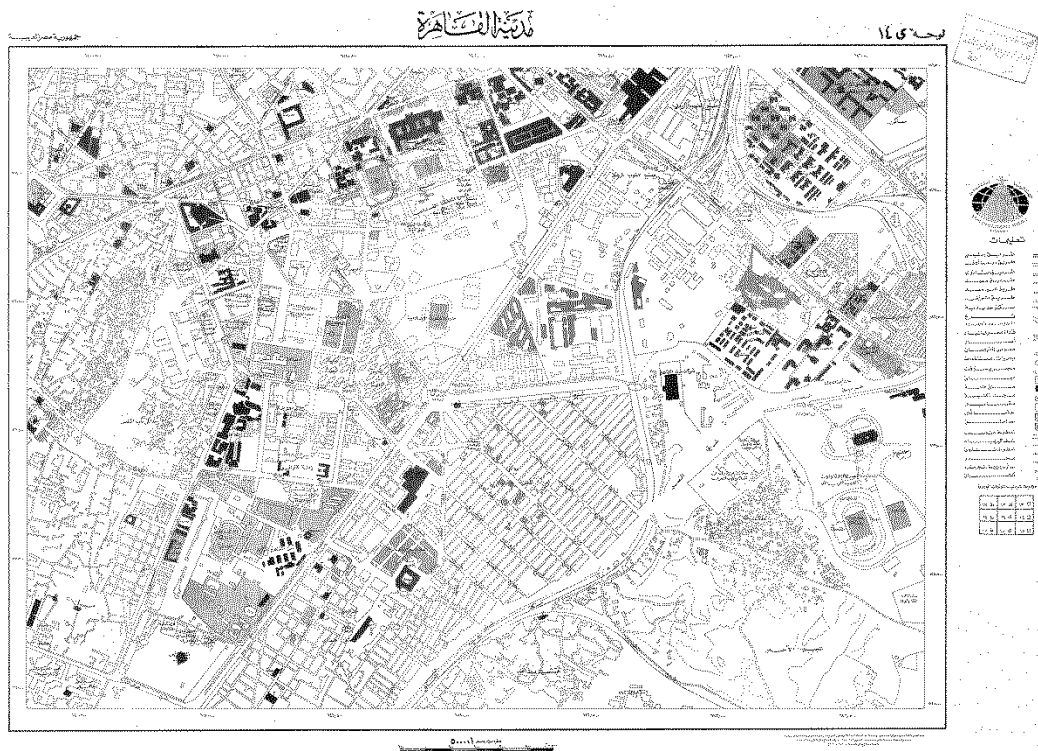
The map is an AutoCAD file of the Eastern Necropolis (El Ghafir cemeteries) drawn to scale 1:5000. It shows the street pattern and block divisions of El Ahawash, all the buildings of Historical importance that are listed in the Supreme Council of Antique (SCA) are located on the map.



Fig. (122): The ACAD map for el Ghafir and Qaytbay cemeteries by CAPMAS. Scale 1:5000.

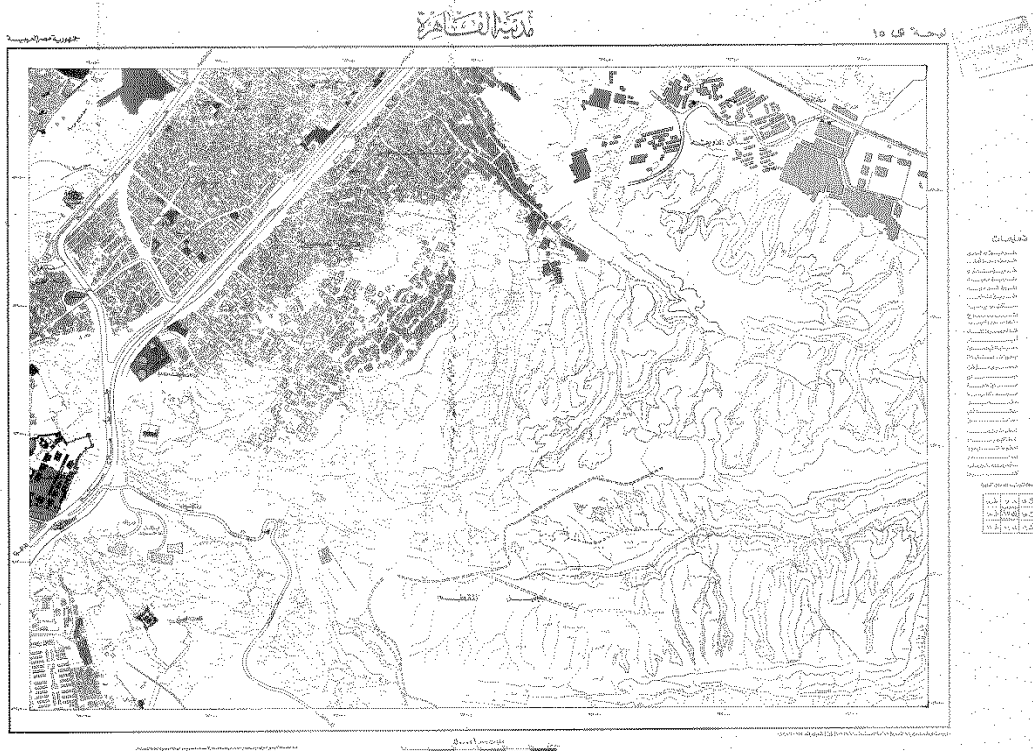
8.1.2. Egyptian General Survey Authority Map

It is an Aerial view of the cemeteries area and is to scale 1:5000. It also shows the Buffer zone of Manshiet Naser and el-Mokattam Hills.

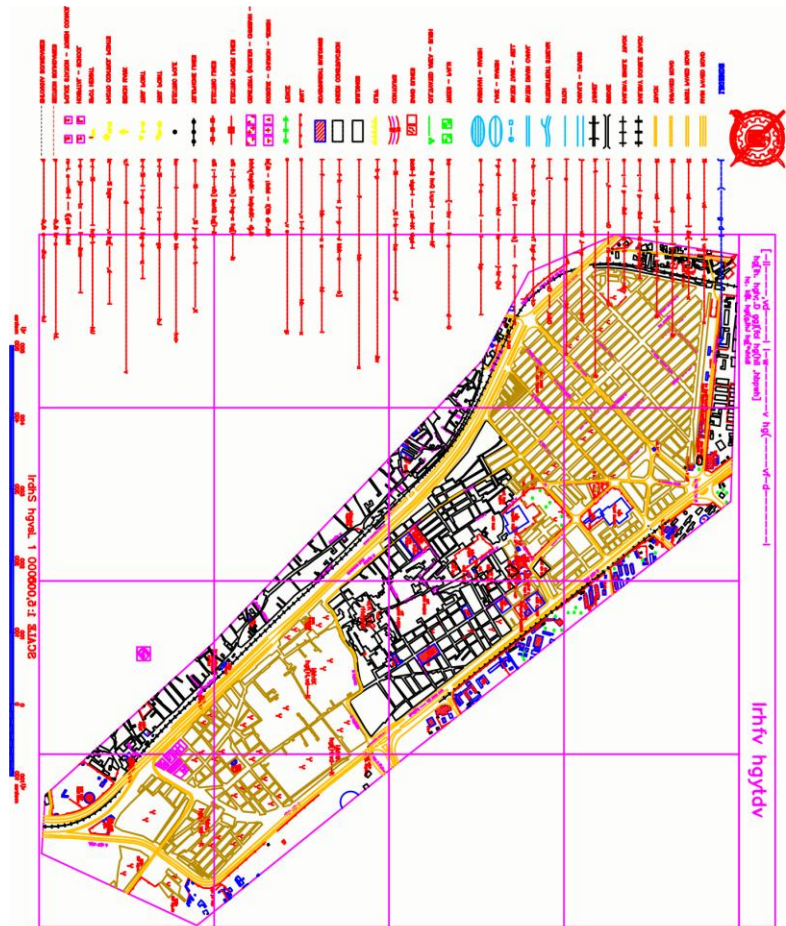


Above Fig. (123): Aerial Map Y14 for el Ghafeer and Qaytbay cemeteries by the Egyptian National Authority of Survey. Scale 1:5000

Below Fig. (124): Aerial Map Y15 for el Ghaeer and Qaytbay cemeteries by the Egyptian National Authority of Survey. Scale 1:5000

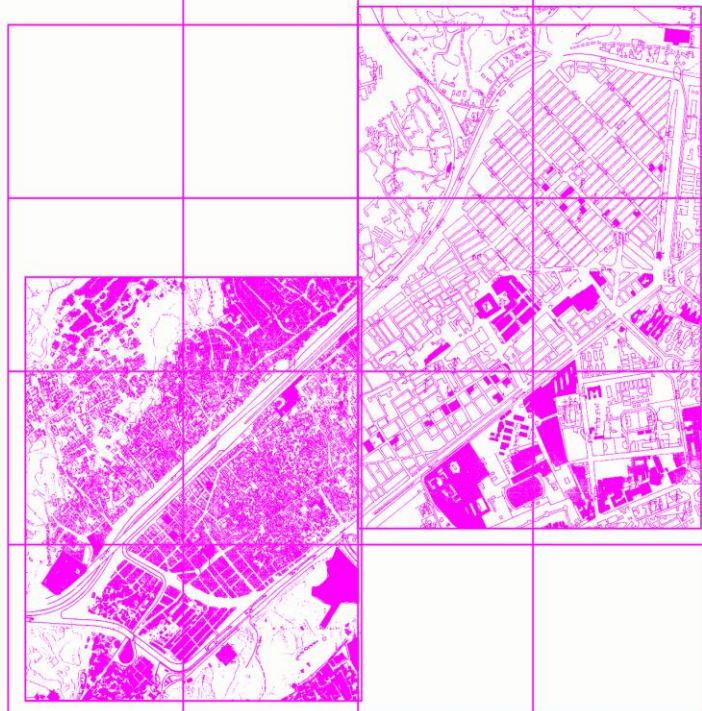


The map above is the ACAD map for el Ghafir and Qaitbay cemeteries by CAPMAS of Scale 1:5000, and below is the aerial map by the **Egyptian General Survey Authority** also of scale 1:5000 after it has been assembled on Photoshop then was sent to the Acad version to match them out. The assembled aerial map have been overlapped onto the AutoCAD map and have been found out that they are identical; most probably the AutoCAD map has been drafted from the aerial view map of the **Egyptian General Survey Authority**



*Fig. (125):
Top Right Shows the ACAD
map of el Ghafeer and Qaytbay
cemeteries by CAPMAS of scale
1:5000*

*Bottom Right is the aerial view
map by the Egyptian General
Authority of Survey of el
Ghafeer and Qaytbay cemeteries
of Scale 1:5000, after it has been
assemble on Photoshop.*



8.1.3. GOOGLE EARTH Shots by the Researcher

146 shots for el-Ghafeer and Qaytbay cemeteries of scale 1:800, have been taken by the researcher using Google Maps. Later on, those shots have been manually assembled by the researcher to give a complete map of the site of scale 1:800.

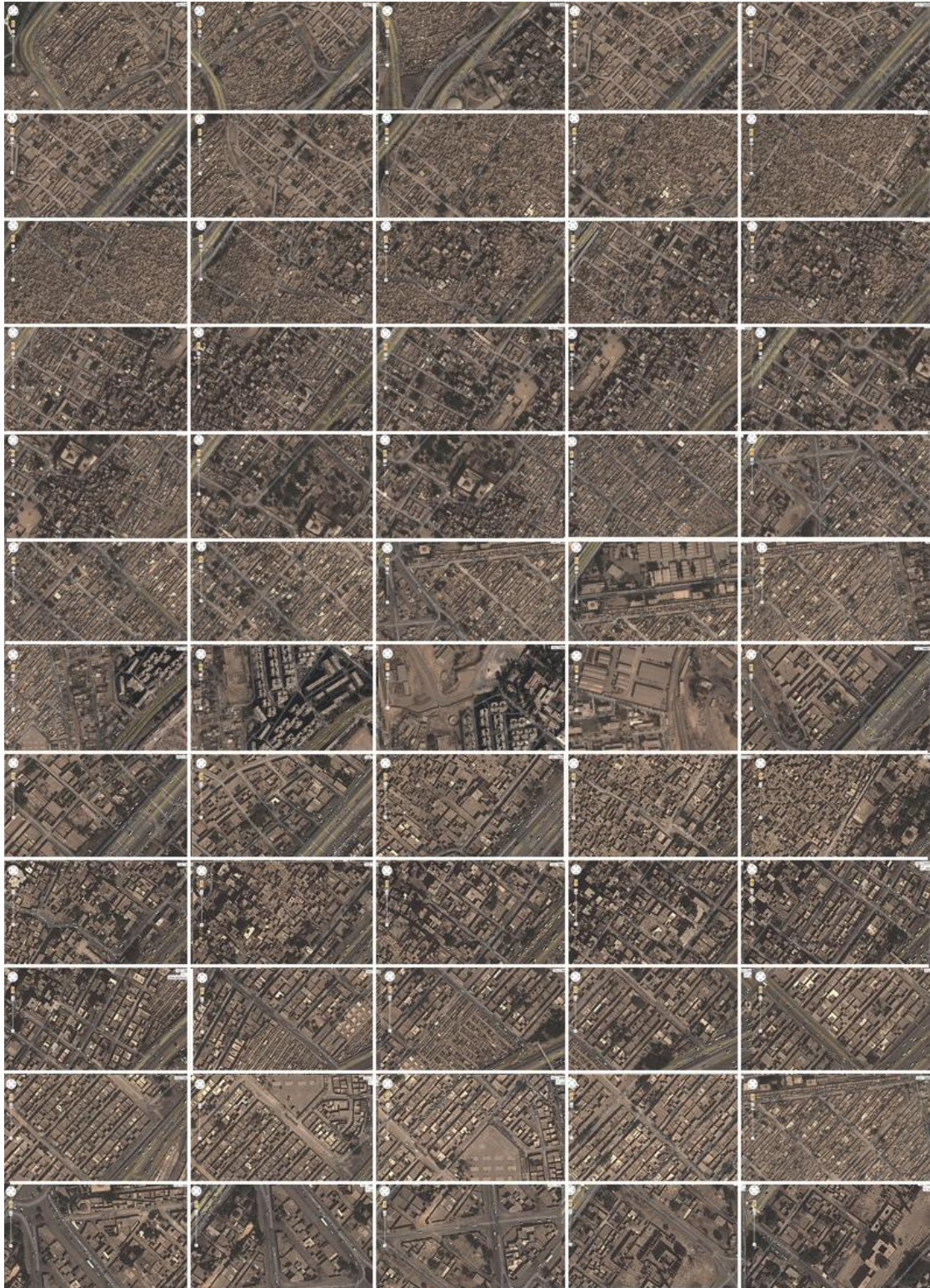


Fig. (126): Shots taken by the researcher using Google maps of the Eastern Necropolis of Scale 1:800 for the process of creating the Base Map

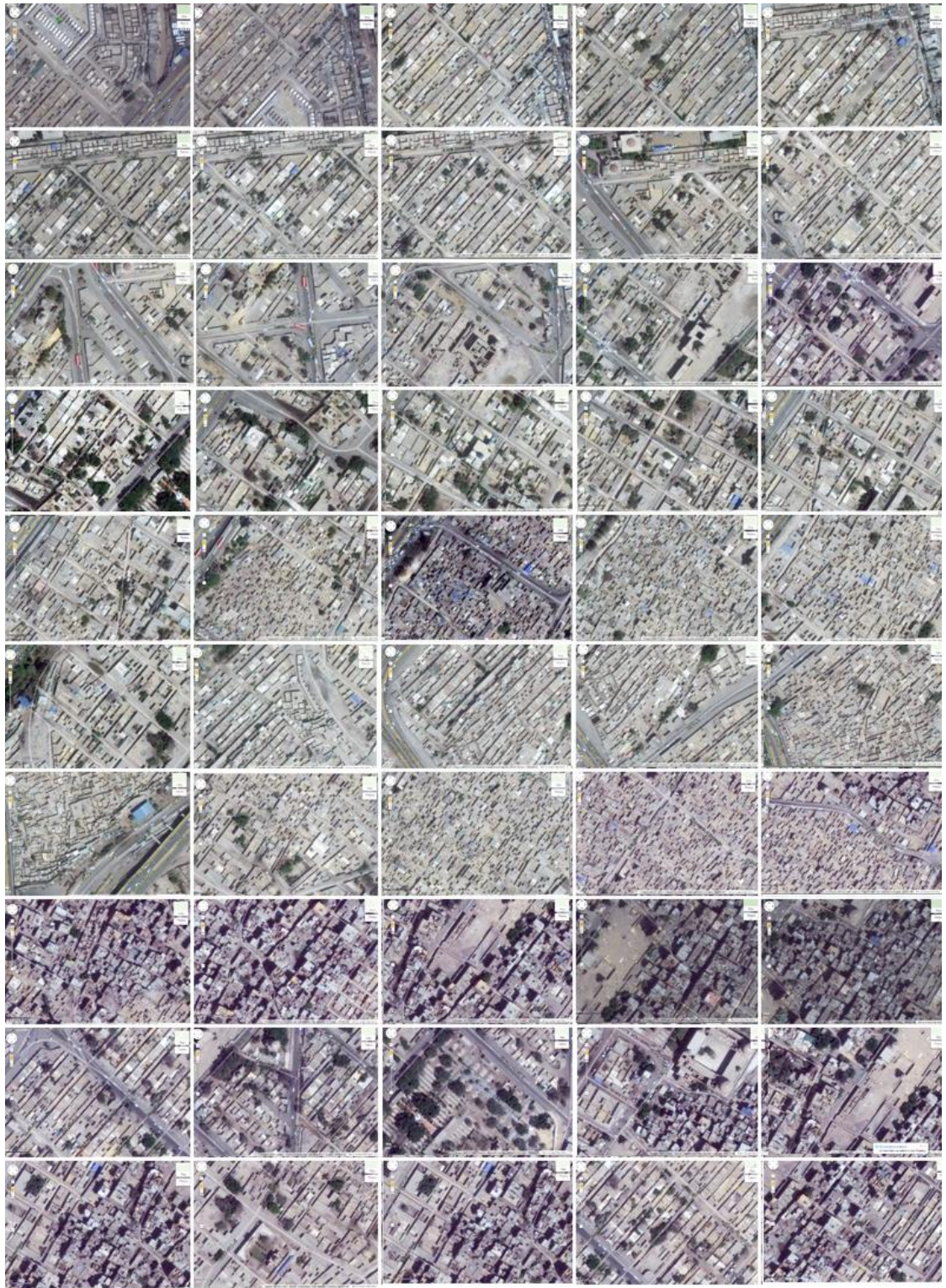


Fig. (127): Shots taken by the researcher using Google maps of the Eastern Necropolis of Scale 1:800 for the process of creating the Base

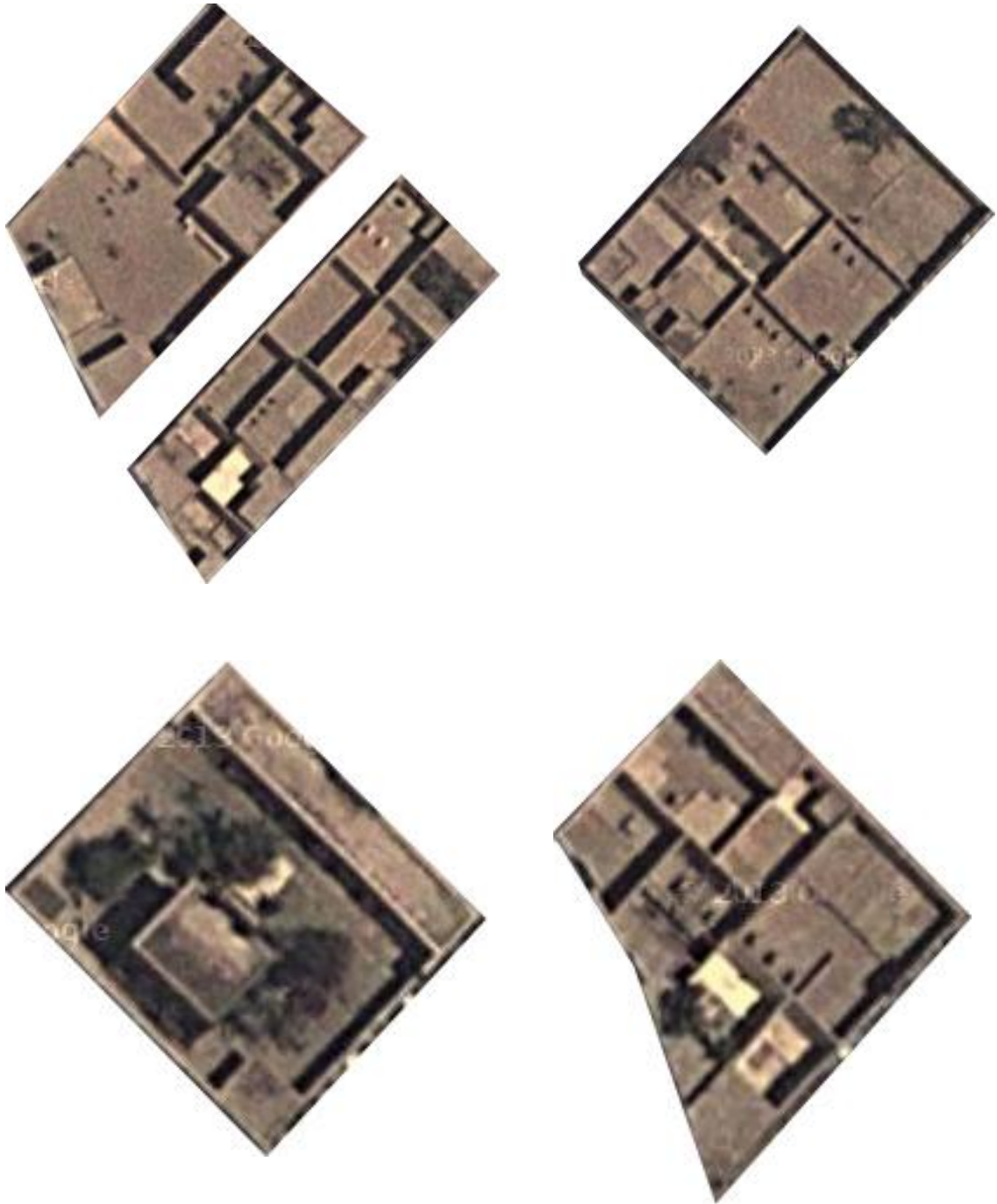


Fig. (128): Detailed Ahwash subdivision shots were taken by using Google Maps and Google Earth

The above shows enlarged detailed samples of the Ahwash, which later on were traced by the researcher to give the detailed divisions on the assembled map of scale 1/800 Fig. 128.

8.1.4. MILAN UNIVERSITY Map

LIVING IN THE CITY OF THE DEAD is a research that has been launched by Polytechnic University of Milan. Field survey map has been created in order to reconsider the negative vision about the City of the Dead as a "Plague" of Cairo.

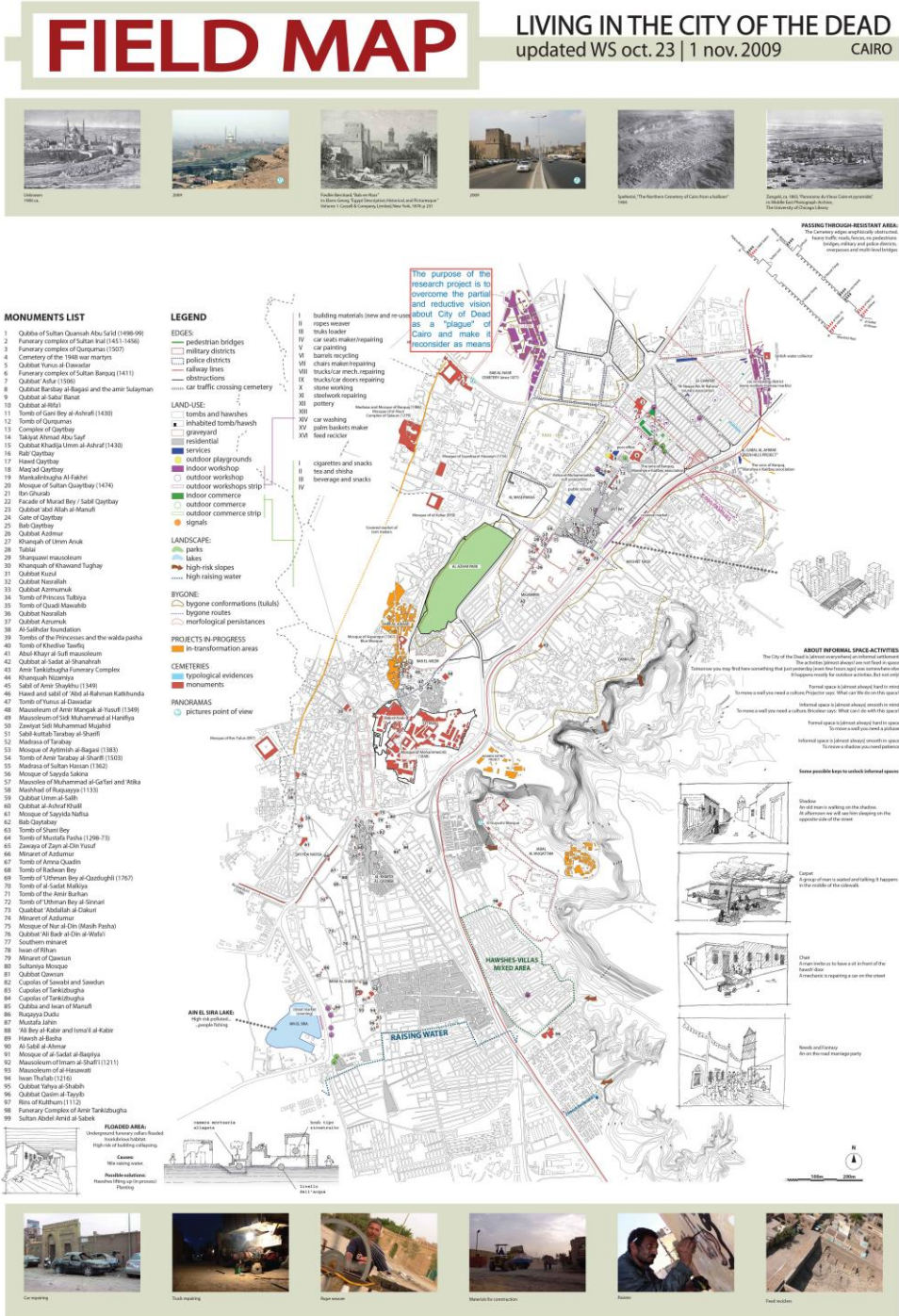


Fig. (129): Field Survey map by Polytechnic University of Milan.

8.1.5. HANDS ON (Traditional Crafts in "The City of the Dead" in Cairo)

"This web site has been created as part of a project carried out in 2014 in a section of Sultan Qaitbey's complex within the "City of the Dead" in CairoThe project was affiliated to the German Archaeological Institute,..... and was financed by the European Union Delegation to Egypt within its Egypt-Europe Cultural Cooperation programme. The conservation component was supervised by the Egyptian Ministry of Antiquities and Heritage.....The project is carried out by the Cairo-based architectural practice ARCHiNOS Architecture and draws on ARCHiNOS long experience in architectural conservation, design in historic settings, and public presentation of cultural heritage." <http://www.undeaddcrafts.com/#!map/c1ek>

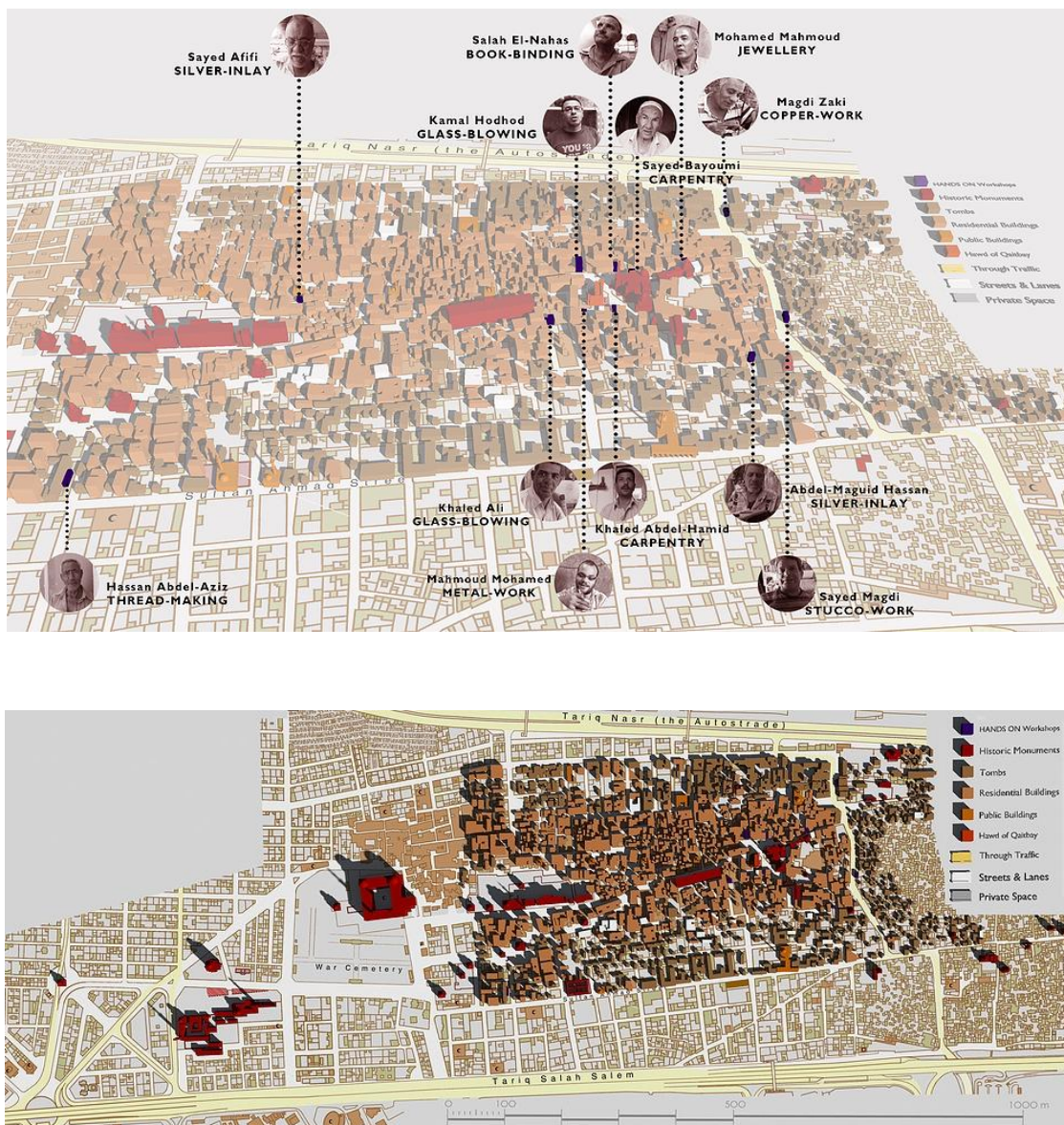


Fig. (130): Field Survey map by HANDS ON the top map is listing the monuments and below the map is listing the hand crafts that should be preserved in the Qaitbay Cemeteries

8.1.6. ASSEMBLED MAP by the Researcher as a Process Followed for Creating the BASE MAP

- **Field Survey Stage**

Visiting **CAPMAS** to get from the Maps department an ACAD map for el-Ghafir and el-Megawrin Cemeteries drafted to scale 1/5000.

Visiting the **EGYPTIAN GENERAL SURVEY AUTHORITY** to get the latest Ariel view map for el-Ghafir and el-Megawrin Cemeteries of scale 1/5000.

Using **Google Earth Maps** site to get an Ariel view for the whole area of scale 1/5000 and the more detailed shots are of scale 1/800.

Site survey to have an overall impression about the area; residential, historical monuments, street pattern and alignment, activities and graveyards subdivisions.

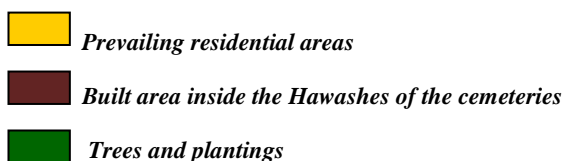
- **Comparison Stage**

Maps of the **CAPMAS** (ACAD map) and that of the **EGYPTIAN GENERAL SURVEY AUTHORITY** have been overlapped to compare them and it has been found out that they are identical and most probably the ACAD map of the **CAPMAS** have been drafted from the Ariel view map.

- **Assembly Stage**

By using 146 detailed shots of scale 1/800 of **Google Earth Maps** the base map has been assembled manually by the researcher to get a complete map of the site of scale 1/800.

Fig. (131): The map assembled of scale 1/800 by the researcher



- **Drafting Stage**

Then by over drafting the detailed shots of the Google Earth shots, a fully assembled detailed map of the site of scale 1/800 was obtained. It shows in detail the subdivisions of the graveyards, the streets, the residential areas and the historical monuments have all been manually over plotted and drafted. The new map will form a foundation to work on to obtain the Base Map.

8.1.7. THE BASE MAP by the Researcher

- The Base Map is the product of the Assembled map (Fig. 34) of scale 1: 800 and the ACAD map of CAPMAS Fig. 29, after it has been rescaled from 1:5000 to 1:800. The detailing of the street pattern, blocks divisions and subdivisions of el Ahwashes, Historical buildings, trees, plantations and Residential buildings have all been located and plotted over the ACAD MAP to produce a final
- The Base Map (Fig.35) of the site is of scale 1:800 which could be used as a base for further field survey studies of the site as well as any futuristic developing projects concerning the study area

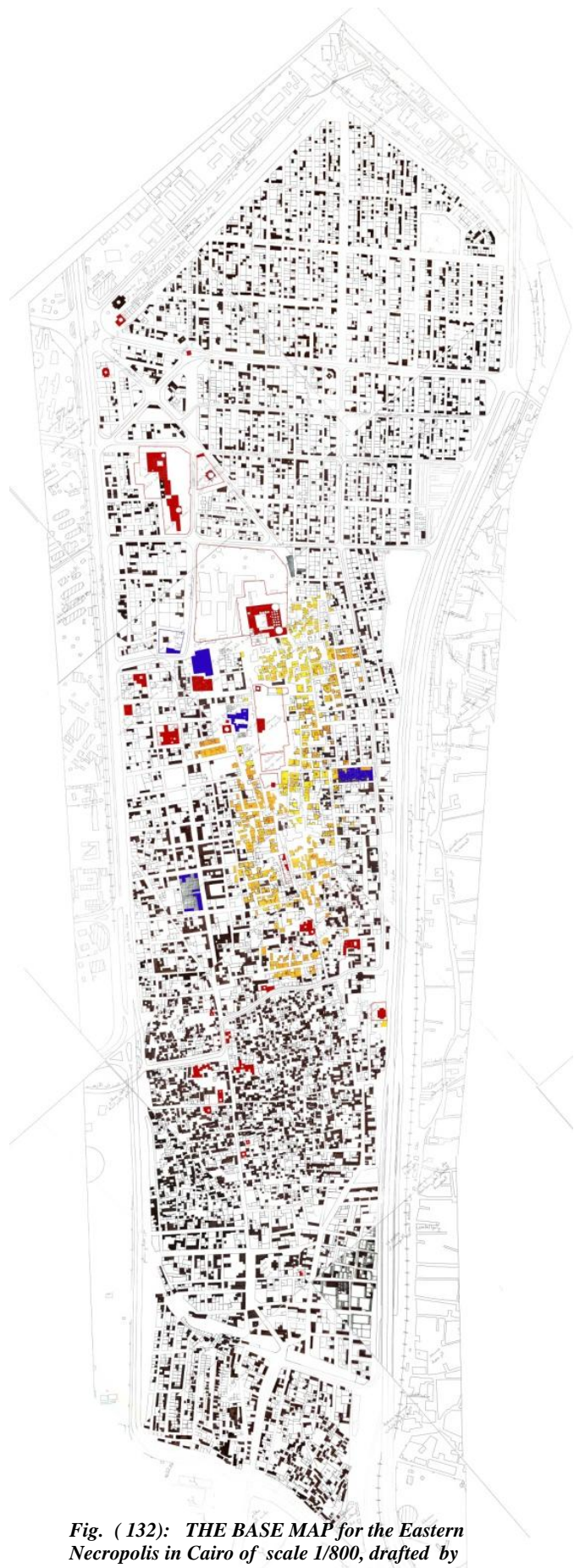
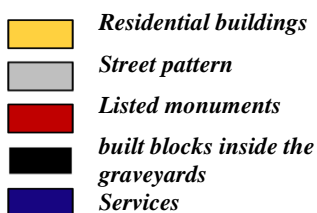


Fig. (132): THE BASE MAP for the Eastern Necropolis in Cairo of scale 1/800, drafted by the researcher

8.2. AN ATTEMPT TOWARDS GRADING AND EVALUATION THE EASTERN NECROPOLIS IN CAIRO

The unique character of the historical area, is derived from the interaction between its form, structure, uses, activities and its architectural fabric, over time which ensures its unique quality. The way these characteristics function and interact is essential towards understanding their role in creating the distinguished character of the place. There is a certain limit of change a conservation can bear before it loses its essential characteristics. *"The character of 'genius loci' of an area is perceived and understood using all the human senses"*(*Conservation Areas in the City of London - A General Introduction to their Character*)

8.2.1. UNESCO Criteria

This is an attempt to evaluate the character of the study area (the Eastern Necropolis) using the same criteria as those mentioned in the URHC, even trying to use the same format as that followed in the original reports.(21)

a. Architectural Heritage

This evaluation marks the presence or absence of buildings of significant architectural value as well as pre-modern buildings before the 19th century. Buildings of architectural value, that contributes to the overall urban fabric according to parameters mentioned in the Statement of Outstanding Universal value (SOUV) and the nomination file for world heritage that deserve protection.

b. Persistence of Historic Street Alignment

This parameter refers to the persistence or alteration of historic street front elevations which is crucial for defining the historical context and its spatial character.

c. Persistence of Traditional Land Sub-division Patterns

This parameter is to evaluate the changes occurred on the plot subdivisions with regard to their historical patterns and their width on street fronts. It is of importance to verify the texture of the urban fabric and to evaluate the persistence of their historic patterns.

d. Continuity and Compactness of the Urban Fabric

This parameter refers to distinctive landmarks (e.g. monuments) and important urban spaces that are of great morphological impact on the existing urban fabric.

e. Activities and Uses of the Urban Space

This criteria refers to the socioeconomic activities ; markets, craft's shops, retail shops, services. It is considered an indicator for liveliness and identity of the place, where land use control is necessary for urban conservation, and can affect the community as a whole.

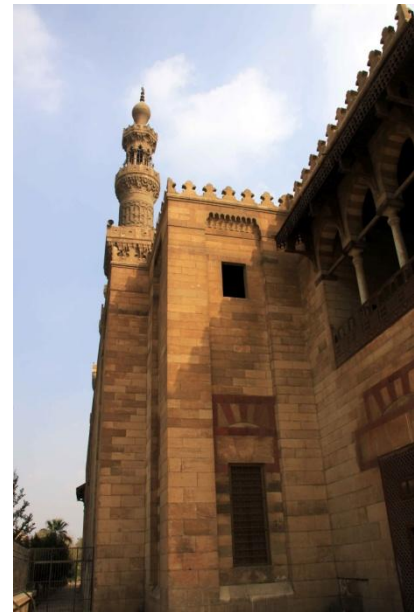
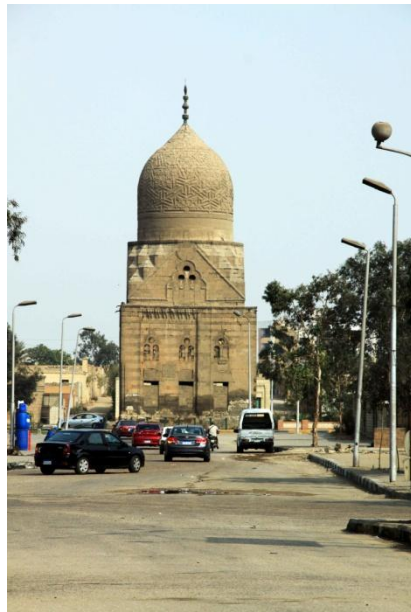
Grade Features Pictures: Criteria (a) Architectural Heritage (All shots and evaluation by researcher)

Right Fig.(133): Is the Masjid al Ashraf Inal Mosque and next to it is the Tomb of the Mamluk Emir Qurqumas .



Presence of listed buildings of high architectural and is considered to be a land mark in the urban fabric

Right Fig.(134): Is the Tomb of Abu el Makarem, next is the Khanqah and Mausoleum of Sultan Faraj ibn Barquq



The urban fabric includes buildings of high historical value

Right Fig.(135): Is the Khankah and Mausoleum of Sultan Faraj ibn Barquq, next Mausoleum of Shwekar wife of king Fouad 1st



Presence of parts of buildings of architectural significance

Right Fig.(136): Is the Gates of Ibrahim Pacha Palace



Grade Features Pictures (All shots and evaluation by researcher)

Presence of ruins of listed buildings of architectural and historical value

Right Fig.(137): The ruins of the seven girls. Islamic monuments.



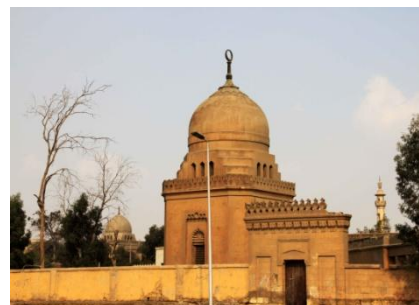
Presence of buildings of fair architectural significance

Right Fig.(138): Is an ordinary mausoleum, where the dome is a normal architectural feature, next is the mausoleum of Omar Makram



Presence of buildings of fair architectural significance

Right Fig.(139): Is part of the wall of the Gates of Ibrahim Pacha Palace, next is an ordinary Mausoleum where the dome is a dominant feature.



Right Fig.(140): Poor deteriorated environment with no architectural feature. This pattern prevails in most of the cemeteries with exceptional valuable heritage as those mentioned above



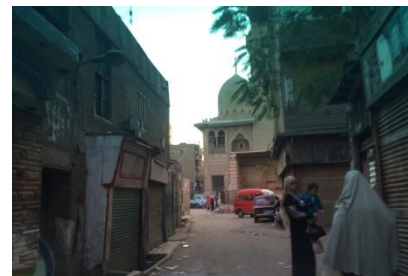
Grade Features Pictures: Criteria (b) Persistence of Historic Street Alignment (All shots and evaluation by researcher)

Total alteration of historic street alignments, due to informal buildings which change the historical feature of street alignment



Right Fig.(141): Some shots for modern street patterns inside the cemeteries

Prevailing informal buildings but not completely preventing the perception of historic street front



Right Fig.(142): Some shots for residential area with few historical monuments

Right Fig.(143): Is the main entrance of the Khankah and Mausoleum of Sultan Faraj ibn Barquq; it used to be originally surrounded by residential buildings, where the sufi students and visitors used to reside. Next is the Sultan Qaytbay complex was also a mausoleum and a madras and was also built adjacent to residential area.



Right Fig.(144): Significant historical monument of the Tomb of the Mamluk Emir Qurqumas, and next is the Mausoleum of el Khedewi Tawfik.



Grade Features Pictures: Criteria (c) Persistence of traditional land subdivision pattern (All shots and evaluation by researcher)

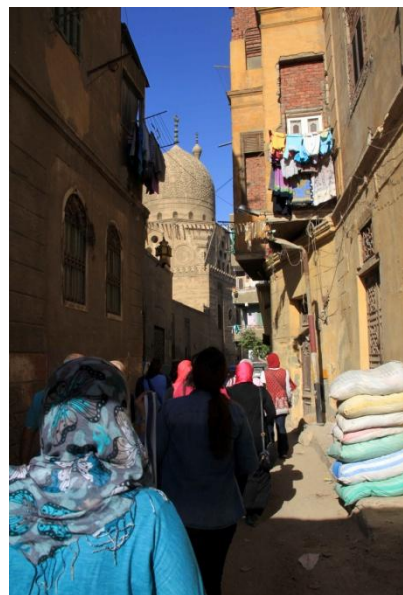
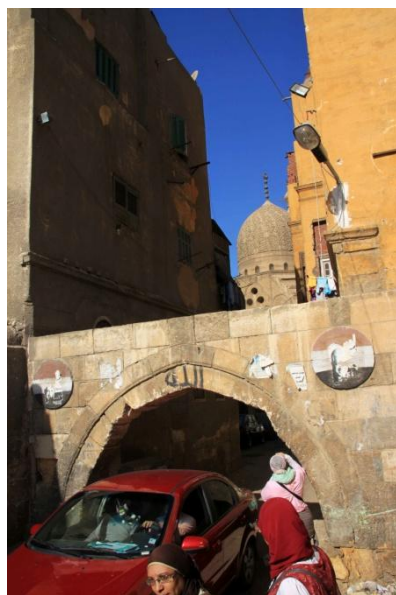
Persistence of the same historical sub-division, preserving the same traditional texture

Right Fig.(145): Part of the wall of the Gate of Ibrahim Pacha Palace, and next is the gate of Sultan al Ashraf Qaytbay



The narrow streets and the distance between the arch is an indicator to the preservation of the same historical land sub-division

Right Fig.(146): Shows the rab' or apartment block of Qaytbay's complex, north of the mosque



Total alteration in the historical and traditional subdivision due to the reconstruction of informal residential mixed land use

Right Fig.(147): Shows new informal residential building blocks inside the cemeteries with shops in the lower floor of the buildings.



Grade Features Pictures: Criteria (d) Continuity and Compactness of the Urban Fabric (All shots and evaluation by researcher)

Presence of vacant plots and ruins.
Vacant plots represent decay in the urban fabric, as well as potential for future environmental risk



Top Right Fig.(148): shots of vacant plots,.

Bottom right: Shots of continuous street alignment



Continuity of the urban fabric and relevance of vacant plots

Grade Features Pictures: Criteria (e) Activities and Uses of the Urban Space (All shots and evaluation by researcher)

No relevance of activities of any kind and absence of social interaction. Plot divisions for burial is the main feature of the place



Right Fig.(149): Shots show the lack of activities in the internal streets of the cemeteries.

Residential areas, with few scattered activities.
Absence of any apparent activities of heritage value that needs to be preserved.

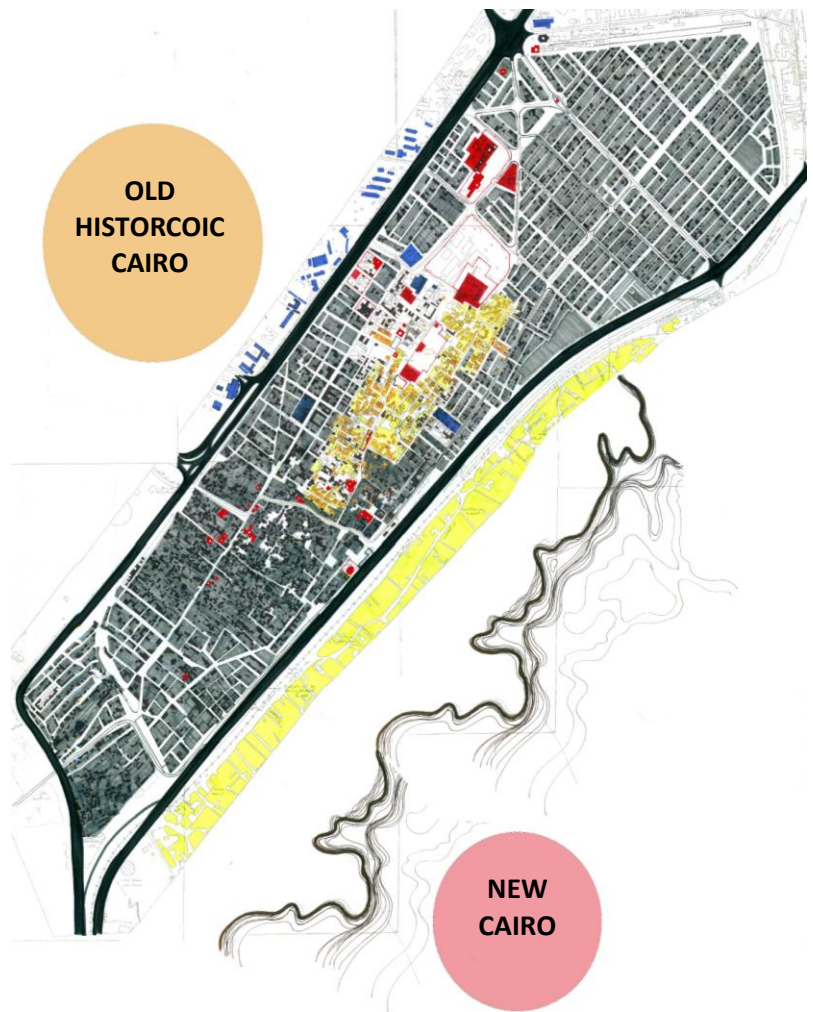


Right Fig.(150): Shots of a small cafe and next is a small kiosk.

8.2.2. Evaluation Using the Criteria of Conservation Areas in the City of LONDON(16)

The interaction of many characteristics is what defines the special qualities of any conservation area, which is briefly can be analyzed as follows:

- a. Form and Structure (by researcher):
Street pattern - Street block composition



*Right top Fig.(151):
Street Pattern (by
researcher)*

*Right below Fig.(152):
Street Block
Composition (by
researcher)*

b. Uses and Pattern of Activity (All shots and evaluation by researcher)

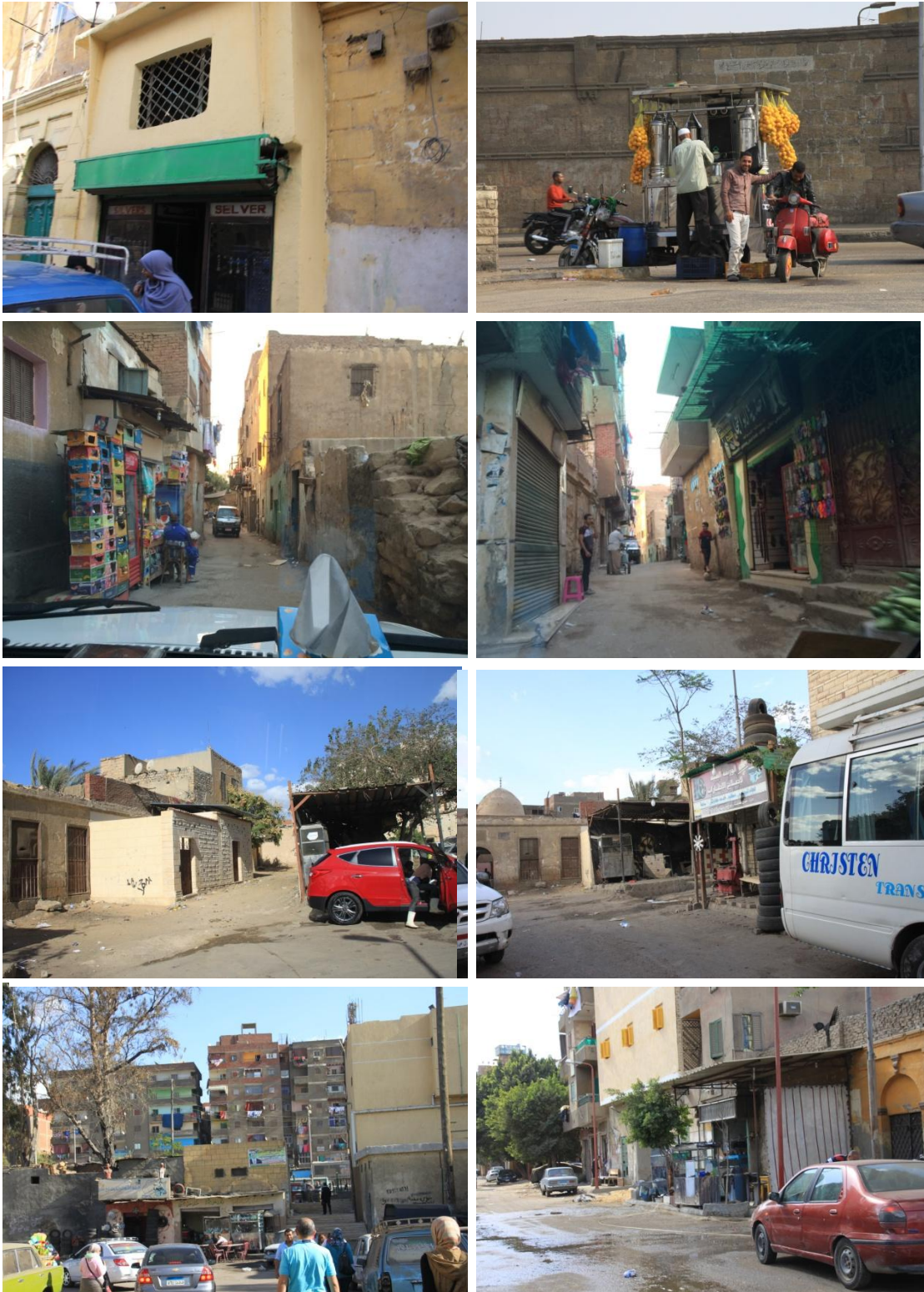


Fig.(153): Street activities

Presence of traditional mixed uses; small shops, peddlers, car repair, tyre repair, cafes, which all contribute to the liveliness of the street. Scattered commercial activities are either in the lower floors of the residential buildings, and inside or in front of el Ahwash of the burial ground. But still, there is no evidence of historical activities or traditions, and most of the recent activities evolved due to the informal change of land use that has occurred over time.

c. **Traffic and Transport** (All shots and evaluation by researcher)

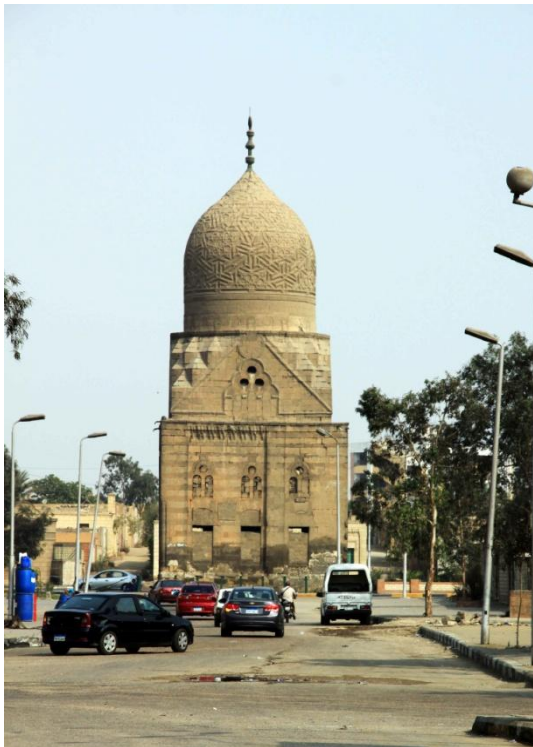


Fig.(154): El Zaher Barquok st.



Fig. (155): El Malek el Ashraf Enal st.



Fig. (156): El Shohada st.



Fig.(157): Off el-Sultan Ahmed st. towards Qaytbay complex



Fig. (158): Off el- Sultan Ahmed st. going towards Qaytbay complex

The presence of wide, well paved streets , which penetrate the cemeteries, attribute to the modernized appearance of some parts of the cemeteries and perform as major axis that joins Salah Salem and El Nasr road. But still , you can find narrow pedestrian street patterns of historical feature, that can hardly pass any cars. There is no evidence for public transportation, and most traffic consists of private cars, motor cycles and minibuses.

d. Built Fabric (All shots and evaluation by researcher)



Fig. (159): Khankah Sultan Faraj ibn Barquq



Fig. (161): Mausoleum of el Khedewi Tawfik



Fig.(160): Part of the Gate of Ibrahim Pacha Palace



Fig.(162): Residential area in front of Faraj ibn Barquq



Fig. (163): Informal residential buildings



Fig.(164): Deteriorated front of a historical mausoleum



Fig. (165): Absence of character and liveliness

Several characteristics such as; scale, style, materials, modulation, condition, use and identity are all features contribute to the character and appearance of the built fabric.. Some buildings are monumental and of distinguished architectural value, some are historical and used to be of social importance; such as that of Khanqah and Mausoleum of Sultan Faraj ibn Barquq, Complex of Sultan al-Ashraf Qaytbay, but

now they don't play any real role in the society as they used to be. Other areas are of residential prevalence over the cemeteries, other buildings are deteriorated and some areas are just deserted and of no living activities.

e. Historical Reference (All shots and evaluation by researcher)

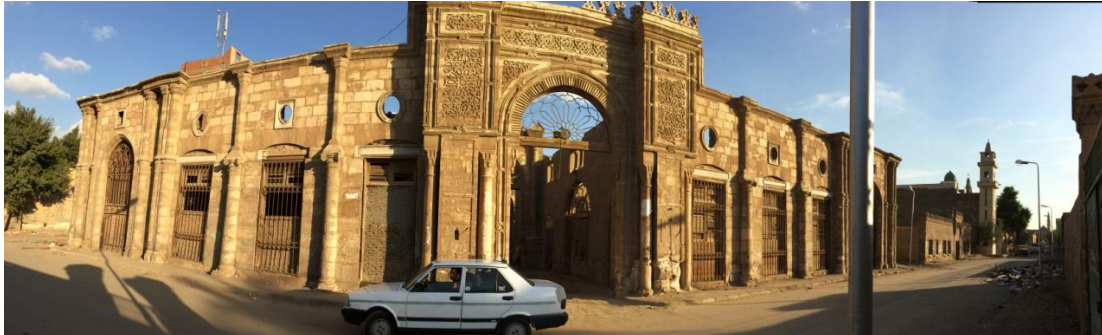


Fig.(166): The Gate of Ibrahim Pacha Palace, the Gate is an unlisted heritage



Fig.(167): The interior of Khankah and Mausoleum of Sultan Faraj ibn Barquq

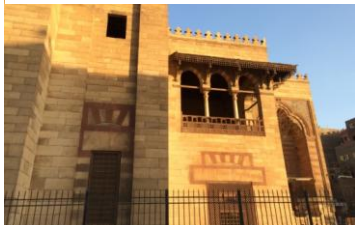


Fig. (168): Faraj ibn Barquq Ent.



Fig. (170): Sultan Qaytbay Complex



Fig. (169): Faraj ibn Barquq Ent.



Fig. (171): Qurqumas Mausoleum



Fig. (172): Abo el Makarem tomb

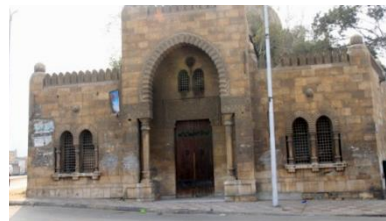


Fig. (173): Shwekar's Mausoleum



Fig. (174): Qaytbay's complex

Historical events, monuments and people all interact to contribute to the sense of history and character of the area. The area is full of historic mausoleums, mosques and monuments that hold within it stories and past events that add to the realm of the place and gives it a sense of maturity and uniqueness.

f. **Details and Material** (All shots and evaluation by researcher)



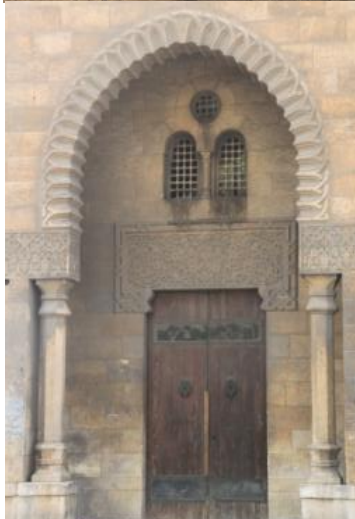
Shwekars's Mausoleum wall



Qaytbay's Khanka



Khedewi Tawfiq Mausoleum



Shwekars's Mausoleum Ent.



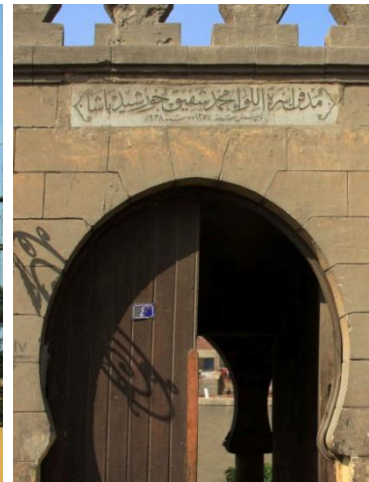
Khedewi Tawfiq Mausoleum



Gates of Ibrahim Pacha Palace



Omar Makram's tomb



Mausoleum of Khorshid Pacha

Fig. (175): Details and Materials

The physical and visual qualities; the use of particular stone, natural materials, color, tone and texture are all evidence of crafts and artistic skills that are rare today. The homogeneity, individuality and diversity of such architectural details that evolved over different periods of time, contribute to the quality and character of the space, and give the place its sense of uniqueness.

Conclusion:

The previous evaluation revealed the following:

The City of the Dead is a place full of diversity of interests and conflicts; it is rich with distinguished historical mausoleums and buildings of architectural significance (NOUH listed 600 buildings of significant architectural features). Residents there are strongly affiliated to the place and some of them represent the fourth generation; they were born there, went to school, got married and also their children go to the same school that they went to. Their whole life is in that place, and although it is full of conflicts and of very poor urban environment (like all the rest of the slums in Cairo), they are very much attached to it. The only difference than the rest of the slums, is that it is full of heritage, and the people there are part of that heritage.

The City of the Dead are divided into three sectors and can be evaluated as follows according to activities, heritage, street patterns:

El Megawreen



Fig. (176): Shot of El Megawreen Cemeteries and at the far end stands el Azhar Park (shot taken by researcher)

The first sector is a part of the historical cemeteries, but is completely lifeless and of no specific feature, with rare presence of residential buildings, significant monuments and absence of social interaction except for those of the graveyards keepers. The main feature of the place is narrow few, paved streets, poor built fabric with relatively deteriorated urban environment than the other sectors and there are of some scattered fairly significant mausoleums.

El-Ghafeer is of modern feature and is out of the World Heritage.

Qaytbay



Fig. (177): Shot of Qaytbay Cemeteries; where the historical mausoleum stands in the middle of the residential area (shot taken by researcher).

This sector is considered to be the most interesting of all; it is full of vitality, conflicts, heritage and residents all together with the dead, past events and history. Most of the historical mausoleums and complexes are present in this sector; they are of poor condition, most of them are locked up for years for renovation and lost their social role. The residential part is like any other ordinary slum in Cairo; absence of basic services; public transportation, health care and other facilities, absence of any greenery except for few scattered trees. Most of the streets are fairly wide, well paved and form main axis that cross the cemeteries from Salah Salem towards El-Nasr rd. Presence of scattered vacant plots and deteriorated graveyards that are of no apparent ownership; that could be important for future development and also if left ignored they would form more future informal buildings. Apparent activities are few and scattered and of no historical relevance, but other studies and field surveys have revealed otherwise, such as that project affiliated to the German Archaeological Institute and supervised by the Ministry of Antiques and Heritage; have presented some extinct crafts that need to be encouraged and revived, some of which are shown in what follows:



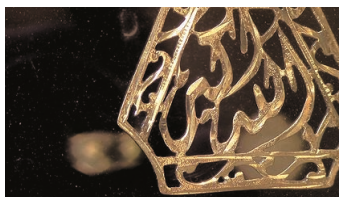
Glass blowing



Decorative Plaster



Wood-Work Crafts



Jewellery



Metal Work



Other Crafts



Fig. (178): Faraj ibn Barquq Dome



Fig. (179): Khedewi Tawfiq's Mausoleum Front Gate



Fig. (180): Mausoleum of Zeinab and Hessein Sherif

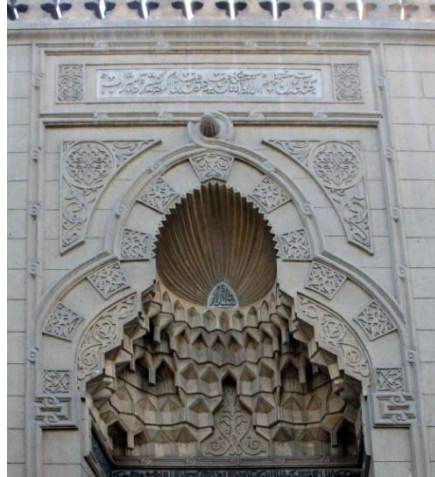


Fig. (181): Khedewi Tawfiq's Mausoleum main gate



Fig. (182): Children of the Cemeteries

The most precious values in the City of the Dead is the valuable heritage that is lost within the ruins and negligence. Also, the bright future that should be waiting for those children.

All photos in this section are taken by the researcher unless otherwise mentioned.

PART III

CHAPTER IV

9. CHANGING UNPLANNED DEVELOPMENT INTO PLANNED DEVELOPMENT (Theories and Concepts)

9.1. COMPACT CITY & DEVELOPING COUNTRIES

Since the 1980s strong debate arose, that there is a strong link between urban form and sustainable development, and that compact cities are the most sustainable urban form. Suddenly urban compaction became the most fashionable, especially after the Global warming. Compact city or city of short distance; is a means of good urban planning and design to achieve an overall more sustainable compact urban form, which could be achieved by, promoting relatively high density with mixed land use which in turn reduce the need to travel, and also by encouraging the use of public



Fig. (183): Fig presented in the UN Global Compact Cities Program for sustainable cities, July 25, 2014 BY Team Sustainable.

The Compact city concept had become very popular, after many European cities developed their historic Core. It is also considered to be an appropriate approach in developing countries, as an attempt to find a sustainable urban form to overcome their urban problems. While, in developed countries their main concern is with energy saving, by promoting urban compaction and public transportation, in developing countries their main concern remains with inadequate housing poverty and poor environmental conditions.

transportation. Sustainable urban forms could only be achievable by fulfilling social equity, economic livability as well as environmental improvement.

In the Open Meeting of the Global Environmental Change Research Community, Montreal, Canada, 16-18 October, 2003, Compact City was defined as shown below in Fig. 123.

The First definition of a compact city

*Dantzig and Saaty (1978)

Form of space	(1) High-dense settlements
	(2) Less dependence of automobile (<- high density)
	(3) Clear boundary from surrounding area
Space characteristics	(4) Mixed land use
	(5) Diversity of life (<- complex land use)
	(6) Clear identity
Function	(7) Social fairness (<- high dense settlements)
	(8) Self-sufficiency of daily life
	(9) Independency of governance (<- clear boundary)

Fig. (184): Presentation of the Compact City prepared in the Open Meeting of the Global Environmental Change Research Community, (2003).

9.2. INTERNATIONAL CASES FOR DEVELOPING COUNTRIES

"A recent study of urban densities in developing countries, conducted for the 1996 United Nations Conference on Human Settlements (Acioly and Davidson, 1996), concluded that there is no universal recipe for urban densities in terms of an ideal, or most appropriate density, particularly for residential development". (Compact Cities: Sustainable urban form for developing countries, edited by: Mike Jenks, Rod Burgens.)

A comparative analysis has been conducted between compaction process of Egyptian cities; in Cairo and Giza, and between selected cities in Brazil; Sao Paulo, Curitiba, Porto Alegre.



Fig. (185): Al Azhar park surrounded by very dense compact urban mass. Source: www.akdn.org.

As for the Egyptian model, compactness was the result of informal urbanization and illegal extension of buildings. This informality has led to overall physical features of most Egyptian cities; narrow roads, compact building blocks, traffic congestion mixed land use and activities which all resulted in a dense urban environment of inadequate accessibility, heavy air pollution levels, health hazards and of an overall environmental deteriorating conditions. Sustainable benefits of compactness were not achieved due to the absence of means and resources, political will, absence of administrative autonomy and weak consecutive governments that were unable to provide municipal services and unable to cope with problems such as road paving, garbage collection and upgrading of infrastructure.



Fig. (186): Cairo's traffic woes. Source: www.dailynewegypt.com

In contrast, compaction in selected Brazilian cities; Sao Paulo, Curitiba, Porto Alegre. was due to enabled through guided densification and urban intensification. The local government in Brazil is considered to be one of the highest degree of political, administrative and fiscal autonomy in the world. Local governments steered urban management tools which resulted in

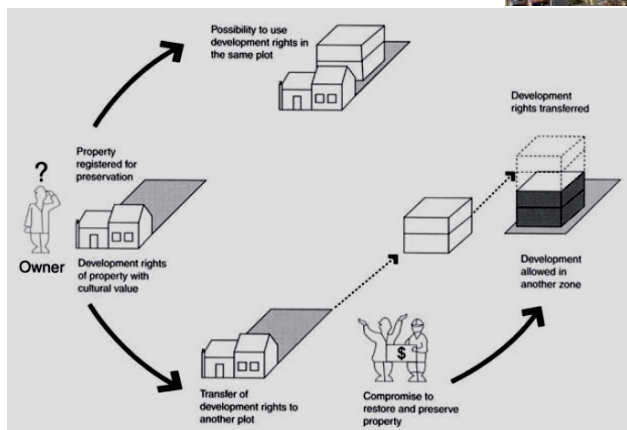


physical compactness and optimal use of infrastructure and land. Densification has been accomplished by increase of FAR (Federal Acquisition Regulation) and the modification of zoning land parcels through application of TDR.



TDR (the transfer of developments rights) is used widely in Brazilian

cities where property rights is being separated from the right to build. Owners of properties, that have been withheld by government acts either for their heritage value or for higher public interest, are allowed to sell to a third party (private sector) the development rights. This system ensures the preservation of historical sites and creates different



Top Fig. (187): Curitiba- Brazil-Skyscraper City Source: www.skyscrapercity.com

Middle Fig. (188): Porto Alegre of Brazil. Source: en.wikipedia.org.

Middle Fig. (189): Sao Paulo of Brazil. Source: en.wikipedia.org.

Left Fig. (190): TDR for preservation of architectural heritage in Curitiba, Brazil. Source: IPPUC, 1999.

land uses and activities. Also increase in the FAR should be preceded by thorough investigations about absorption capacity of infrastructure, impact on public transit and services and not to be applied unless densification will not have any negative impact.

Curitiba

Curitiba is internationally claimed as an environmentally friendly city. The plan of the inner city was transformed from a radial concentric to a linear urban growth pattern. This was accomplished through the creation of a north south axis core street layout of traffic and transportation, tangential to the inner city, that allowed for the expansion of the public transport network and the construction of other structural axis.

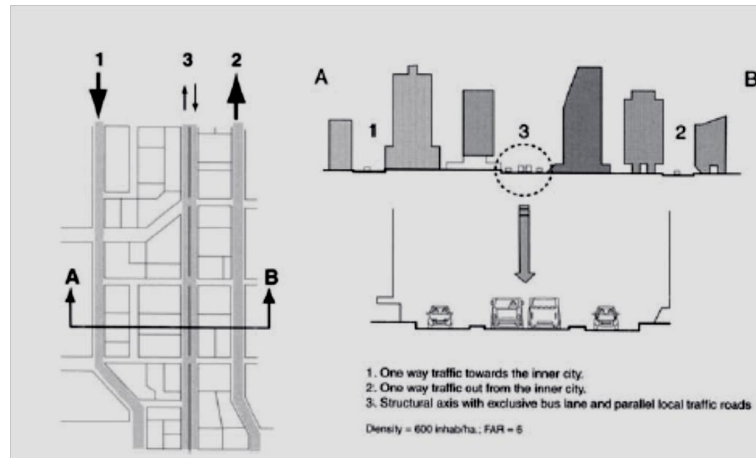


Fig. (191): The ternary system in Curitiba. Source: Compact Cities: Sustainable urban form for developing countries

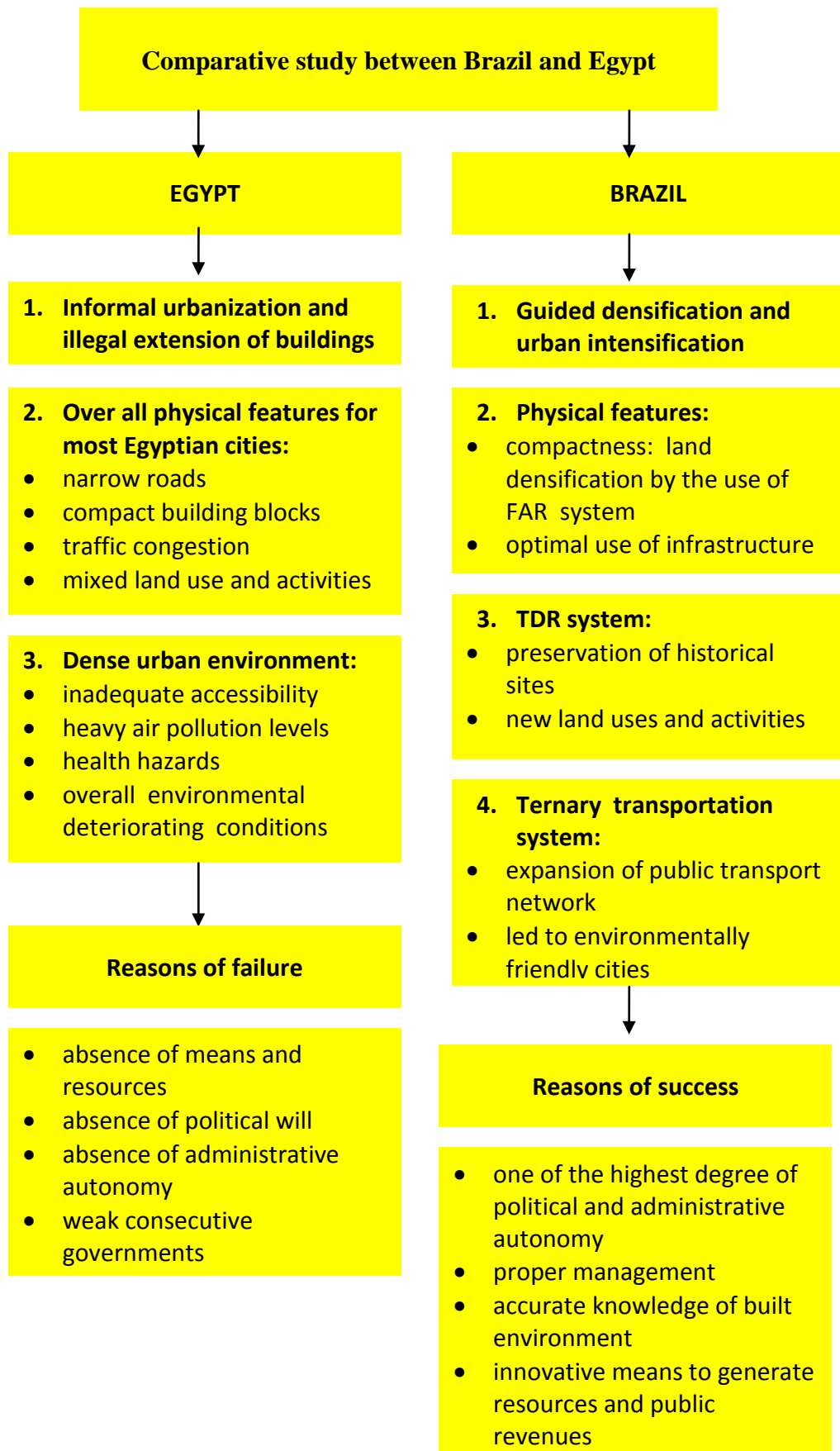
"This innovation has allowed the local government to implement one of the continent's most successful and efficient public transport systems based on buses. The system transports 1.3 million passengers a day out of a population of 1.6 million people, giving an energy saving ratio 30% higher than in other large Brazilian cities. This has been achieved in a city that has the second highest level of car ownership in Brazil (Acioly and Davidson, 1996; 1998)" (Compact Cities: Sustainable urban form for developing countries, edited by: Mike Jenks, RodBurgens.)



Fig. (192): The north south axis core street which is tangible to the inner city. Source; boiseplanning.wordpress.com

So successful has been the TDR in Sao Paulo, that the municipality of Curitiba has followed the same example. This innovative transportation system together with following a higher FAR, which rose the population density to be 600 inhabitants/hectare, have resulted in a city that contains one of the world's highest rates of green spaces per capita (50m²/inhabitant).

The experience of Brazilian cities has revealed that even cities that seem to be fully saturated have still more room for modifying the existing urban areas and for creating more compact urban environment. The final result are cities which contain key elements of compact cities; social and economic diversity, livability, social equity, urbanity, high densities and mixed land uses. This result would be very hard to achieve without the municipalities taking the driving seat. Without good governance the opposite is expected out of densification and compaction such as; congestion, deterioration of quality of life and decreasing air quality, as in the case of Egypt. Enabled strong governments dedicated to their population are the key towards resolving urban issues and maximizing the benefits of the compact city approach.





CHAPTER V

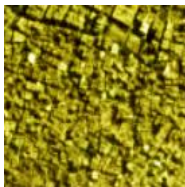
10. INTRODUCTION TOWARDS A SUSTAINABLE CONSERVATION STRATEGY FOR THE EASTERN NECROPOLIS and ITS' BUFFER ZONE

10.1. Constraints of Development

As mentioned in the previous literature, before stating any conservation policy we sum up the prime issues that is causing the major problem, as follows:



Fig. (193): shows the residential areas in Old Cairo, Cemeteries and Manshiet Naser. It also shows the overspill of Old Cairo to reside in Manshiet Naser and also the overspill of Manshiet Naser go and reside in the Cemeteries which inturn encourage housing in the Cemeteries. Map updated by researcher



Residential Mass

To the right stands Manishet Naser, one of the biggest slum areas in the world, with an estimated population one million. It forms a big challenge to any proposed development in the heart of Cairo. On the left opposite to it stands Old Cairo and in the middle the Cemeteries area which receives the overspill from both destinations.



El Moqattam Hills

Steep edge of el Mokattam mountain, which makes it very hard for any future extension for the residents of Manshiet Naser.



Overspill of Old Cairo

Shows the movement of residents away from Old Cairo ; which has become congested and overcrowded and where rents are very high, to reside in Manshiet Naser where rents are much lower.



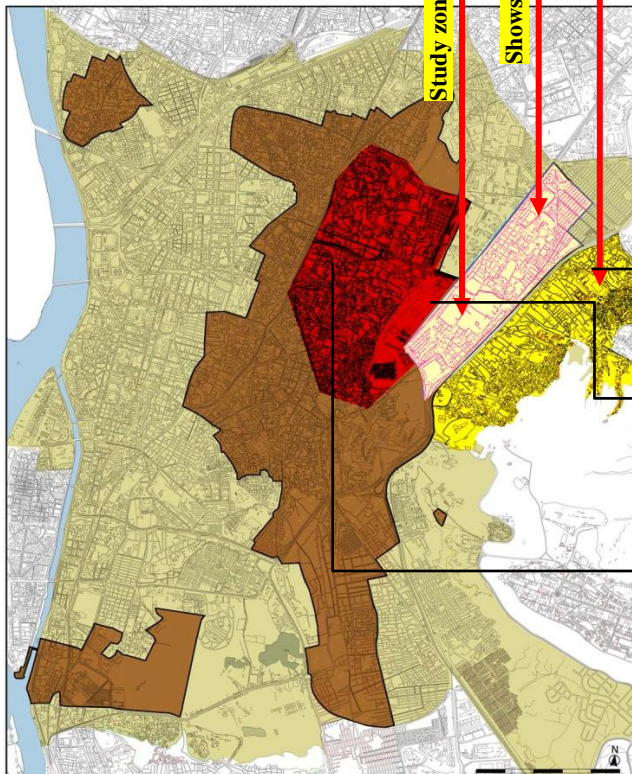
Overspill of Manshiet Naser

Shows the movement of residents of Manshiet Naser who cannot afford the rents there, to reside in the Cemeteries that stand opposite to it, where rents are much lower and Ahawash are more spacious, which makes it very attractive for people to go and live there.



Above Fig. (194): Shows el-Azhar Park overlooking the cemeteries area and at the far stands Manshiet Naser. Source: researcher

Below Fig. (195): World Heritage map updated by researcher that shows the world heritage property and its buffer zone.



- The Buffer Zone outlined by the URHC **PROPOSAL FOR THE WORLD HERITAGE PROPERTY AND ITS BUFFER ZONE** ; which includes Manshiet Naser one of the biggest slum areas in the world with an estimated population of one million.
- The Cemeteries area which is considered to be part of the world heritage property.
- The trade center in Old Cairo stands on the other side of the Cemeteries and Manshiet Naser

The Big Question is How Can You Make One Million People Stay in Their Place and limit their movement in order to avoid their bad impact on Historic Cairo and all of Cairo as a matter of fact?.



Fig. (196): shows Manshiet Naser standing overlooking the Cemeteries and behind it bounded by el Mokattam Hills from behind. Photo taken by researcher from el-Azhar Park.

From reviewing the previous literature and before continuing with the following discussion, reasons for past failures should be first determined and know why all the previous efforts haven't achieved their expected results. From the researchers point of view the elements that sabotage any efforts exerted are as follows:

- Unrealistic and Theoretical planning
- Away from the people; disregarding their needs , behavior, culture, traditions and their expectations.
- The absence of clear vision of the what should be really done and the process of implementation; in other words no clear Frame Work and defined pattern to follow.
- Absence of social equality; most of the previous proposed planning weren't in favor of the poor, which drives people to solve their own problems chaotically by themselves.

As mentioned before, Conservation planning should be first preceded by determining the Objective and the Values in any conservation plan.

10.2. Objectives of Conservation

Any conservation plan ought to be **FOR** the people and **BY** the people. Priorities should be given to the original inhabitants of the place, who are the real guarantee for the success of any future policies and conservation planning. They also, have to be the first to benefit from of the outcome of any development. Social equality should be sustained during the conservation process. Therefore a total sustainable environmental conservation policy, which is a part of wider regional planning, is recommended. Any conservation plan ought to ensure the well being of the residents; by providing proper education, job opportunities, improving their living conditions, as well as developing the physical form of the Study Area as well as maintaining its cultural values. A total sustainable environmental policy will encourage the inhabitants to discard any unethical behavior and leave the place willingly for better opportunities.

10.3. Values in Conservation

- Smooth, but firm change is recommended instead of abrupt and violent change.
- Clear Long vision planning and policies are to go in parallel with short term planning, and with clear Frame Work.
- Periodical evaluation and updating of the original plan should be carried out according to the changes and variables that might happen in the future.
- Constant field monitoring and inspection is essential to append any destructive or sabotaging behavior to the original plan.
- Accept the present situation; try to identify the pros and cons in it, the weak points are to be treated and the strong features are to be empowered. But in all cases we have to look at the people as a blessing of the space and as one of its strong features.

10.4. Target

- To stop further slum formation and growth in the cemeteries area in order to preserve the skyline of Historic Cairo, the city of thousand minarets, as recommended in the **URHC PROPOSAL FOR THE WORLD HERITAGE PROPERTY AND ITS BUFFER ZONE**. Stopping the slum formation is to be achieved by studying peoples behavior, understand their real cause for their illegitimate behavior and not just simplifying the problem as a housing shortage problem, because it is not.
- Separate between Old Cairo and Modern Cairo on the Eastern Side; allowing Modern Cairo to reform and expand eastwards towards el Maadi without destroying the unique cultural essence and value of Historic Cairo.

Present Residents Status



Target Residents Status



Above Fig. (197): Shows the Present situation for residents movement from Old Cairo to Manshiet Naser; People who cannot afford the high rents in Old Cairo move to live in Manshiet Naser where rents are much lower and the overspill from Manshiet Naser go in turn to reside in the Cemeteries area where lower rents and more spacious living areas in the Ahawash of the Cemeteries than Manshiet Naser. This lead to an increase of the demand for residential buildings in the cemeteries area which seems to be very attractive and presents normal extension for the expansion of Manshiet Naser.

Below Fig. (198): Targeting to reverse the residential movement, so that by developing Manshiet Naser would be attracting and not repelling excessive residents. Thus reducing the heavy residential impact on Old Cairo and also stopping more residential growth in the Cemeteries area. Source: researcher.



residents movement around Old Cairo, Cemeteries area and Manshiet Naser.

Present Workers Status



Target Workers Status

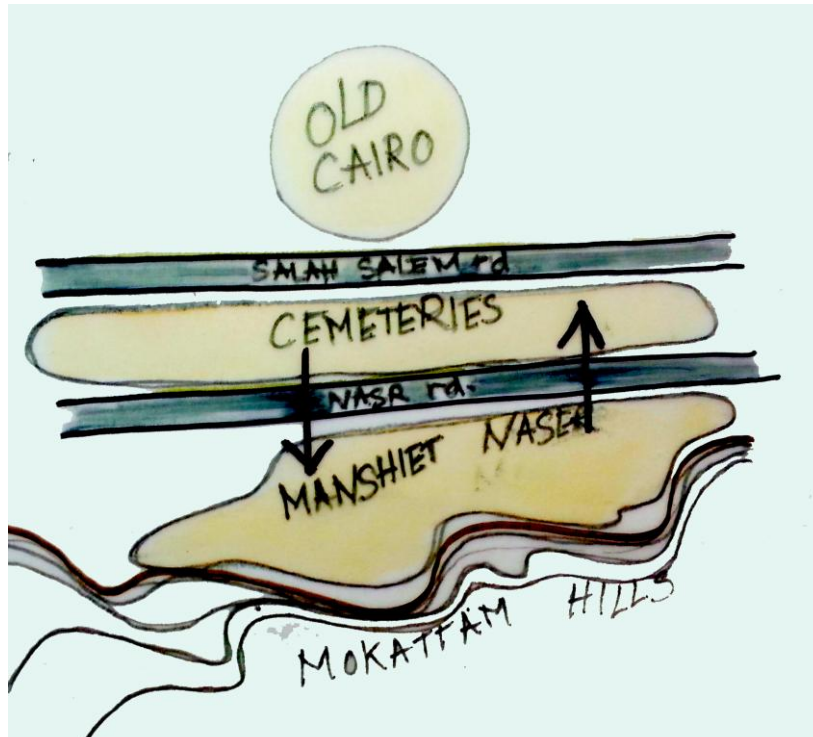


Above Fig. (199): Shows the Present situation for workers movement to Old Cairo center of trading and work opportunities for residents of Manshiet Naser; People who live in Manshiet Naser go to work in Old Cairo, while in the Cemeteries area people move to work in Manshiet Naser and in Old Cairo. This presents heavy traffic which have very bad impact on the Historic city.

Below Fig. (200): Targeting to reverse the working force movement, so that by developing Manshiet Naser would be attracting and providing more job opportunities for its own residents first of all, and also would provide job opportunities for the residents of the Cemeteries and perhaps Old Cairo. Thus reducing the heavy traffic and bad impact on Old Cairo and also stopping more residential growth in the Cemeteries area. Source: researcher



working force circulation within Old Cairo, Cemeteries area and Manshiet Naser.



Right Fig. (201): Is a sketch by the researcher, which shows the strong mutual impact of both sites; of the Cemeteries and Manshiet Naser on each other.

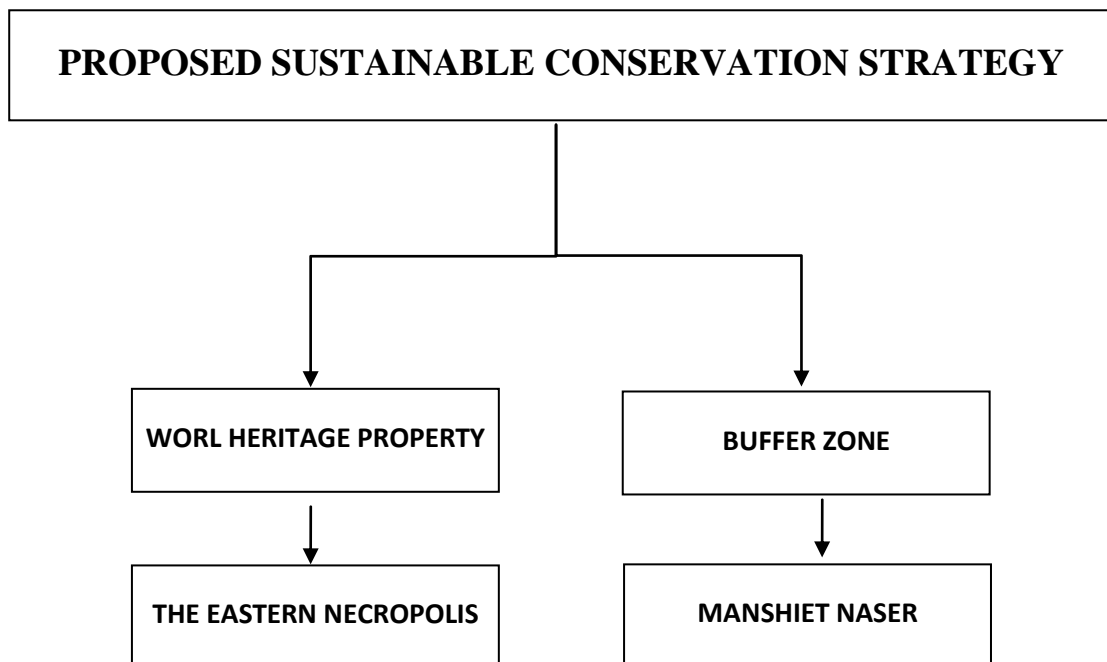
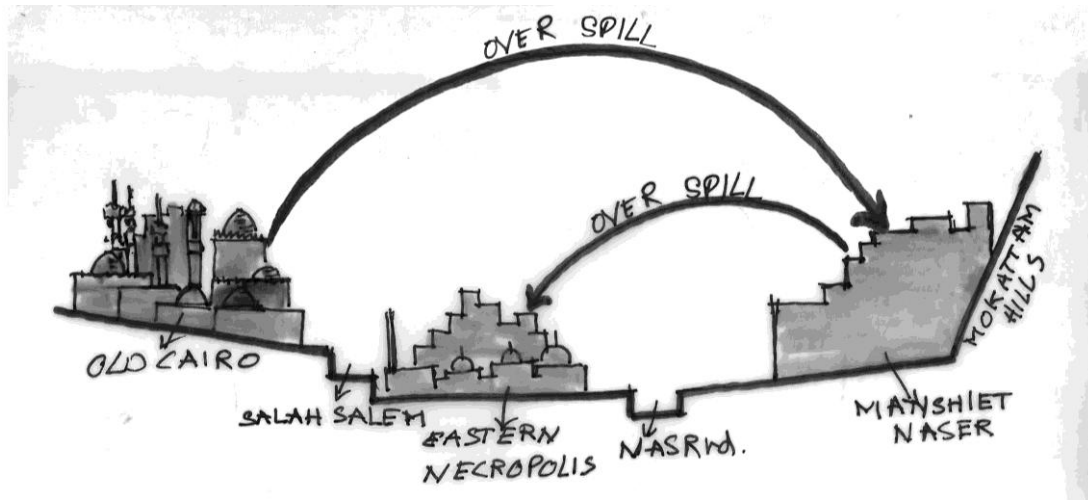
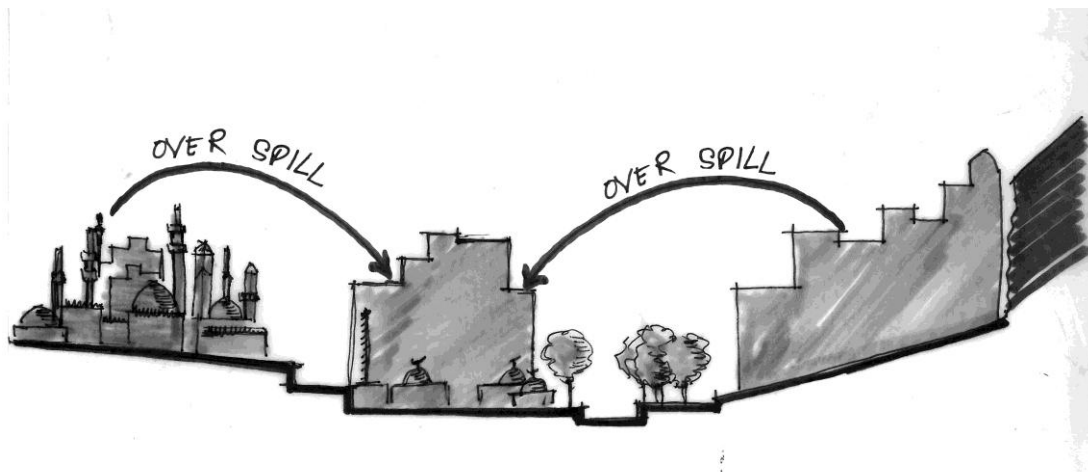


Fig. (202): Is a diagram by the researcher, which explains that the following proposed conservation strategy should go in parallel for both areas of the Cemeteries and Manshiet Naser.

Present Status (below) illustrated by researcher, shows the overspill of Old Cairo and Manshiet Naser and their impact on the Cemeteries



Expected Status (below) illustrated by the researcher, shows the overspill of Old Cairo and Manshiet Naser and their impact on the Cemeteries if present situation is left undealt with.



Target Status (below) illustrated by the researcher, shows the desired proposal for the Cemeteries after applying preservation and upgrading strategies.

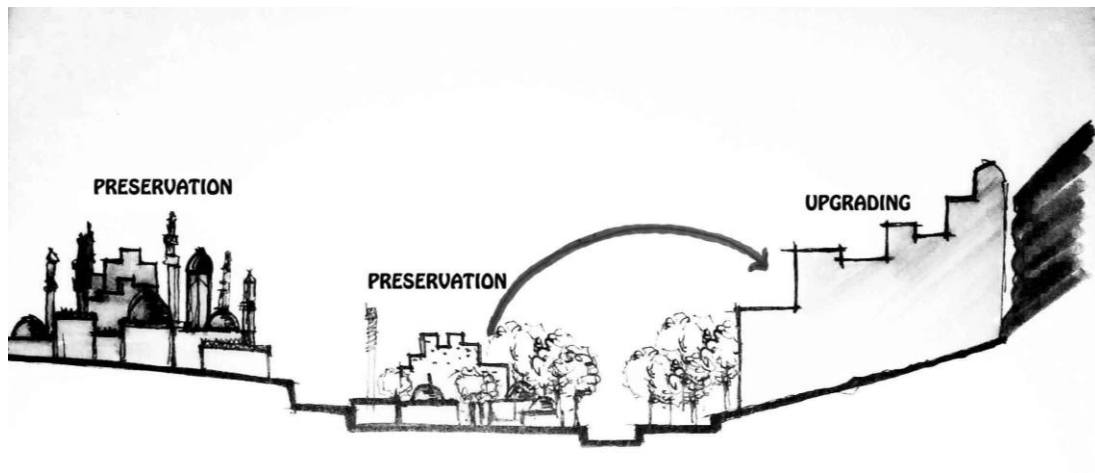


Fig. (203): Sketches by the researcher showing a cross section through Manshiet Nasser, El Nasr st., the Cemeteries, Salah Salem rd. and across Old Cairo. It also shows the different levels between them.

MANSHIET NASER COMPACT CITY



10.5. TOWARDS A SUSTAINABLE CONSERVATION STRATEGY FOR THE BUFFER ZONE (MANSHIET NASER)

As mentioned before, that the Buffer Zone defined by the World Heritage is as important as the World Heritage itself, for conservation purposes. In our case, the Buffer Zone that surrounds the Eastern Necropolis is Manshiet Naser, which is considered to be one of the largest slum areas in the world, and according to several reports of an estimated population of one million people. It has been preferred to start with the Buffer Zone due to its great impact on the Cemeteries and any strategy without being of no use.

Recommended Steps Towards Conservation Policy for Manshiet Naser:

- a. Accurate count for the exact population of Manshiet Nasr is to be achieved; for there are great contradictions between the official count by CAPMAS census which is 262000 (Annex 6) while in official reports the population is estimated to be of One Million; as mentioned in the report of TOMORROWS CRISIS TODAY of the UN-HABITAT for 2007, the PARTICIPATORY WORKSHOP IN SARIYER, ISTANBUL-APRIL 2011, also the report of MILAN university of LIVING IN THE CITY OF THE DEAD mentioned that there are 500,000 families living in Manshiet Naser,

- b. Upgrading Manshiet Naser so that to become a Compact City; By studying the definition of

The First definition of a compact city

*Dantzig and Saaty (1978)

Form of space	(1) High-dense settlements
	(2) Less dependence of automobile (<- high density)
	(3) Clear boundary from surrounding area
Space characteristics	(4) Mixed land use
	(5) Diversity of life (<- complex land use)
	(6) Clear identity
Function	(7) Social fairness (<- high dense settlements)
	(8) Self-sufficiency of daily life
	(9) Independency of governance (<- clear boundary)

Fig. (204): Is a diagram Prepared for presentation at the Open Meeting of the Global Environmental Change Research Community, Montreal, Canada, 16-18 October, 2003.

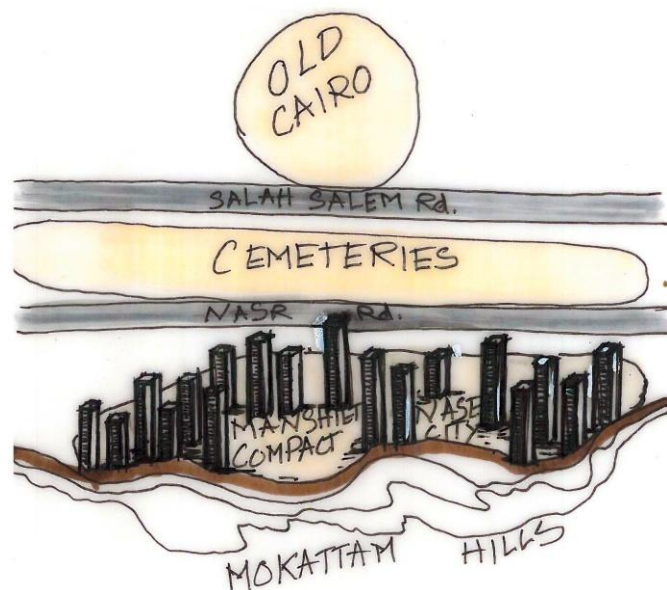


Fig. (205): Is a diagram which illustrates the researcher's vision of Manshiet Naser vertical upgrading to become a Compact City

compact city it is found that Manshiet Naser already fulfills 1,3,4,5,6 of the 9 points mentioned in the previous definition in Fig. 141. Therefore only the rest points of 2, 7,8, and 9 need to be fulfilled. So the following is recommended :



Fig. (206): Is a photo taken by the researcher from el-Azhar Park, which shows Manshiet Naser standing at the back of the cemeteries and behind it is el Mokattam Hills This photo presents the present situation .

- Upgrading the buildings vertically so as not to exceed the heights recommended by the URHC. This will make the new city absorb the overspill coming from Historic Cairo and will prevent any extension on the cemeteries area.
- Upgrading all the services facilities of health, educational, public transportation as well as upgrading the internal street pattern.
- Increasing the self image of the space and name it as Manshiet Naser City instead of naming it Manshiet Naser slum.
- Creating new job opportunities for the residents.



Fig. (207): Presents the researcher's vision for Manshiet Nasser after upgrading the buildings vertically using photoshop.

- Surrounding the area with a green belt will cause further segregation from the cemeteries and will overcome the bad environmental impact of the high population.
- It has been found out through taking shots from Google Earth, that the paved part of the Nasr rd. in front of Manshiet Naser is **26-27m** wide while further upward towards El-Manassa is **50m** wide, and on the other side Salah Salem rd. is **36m**

wide. Therefore, it is also recommended that the Nasr Road would be upgraded to become of the same width all over its sections, and that is to become of 50 m width. This will also speed up the traffic flow, which in turn will increase the segregation between Manshiet Naser and the cemeteries, and will in turn help to slow down any illegal activities on both sides. It is also recommended to become a ternary system as that in the Brazilian experience.



Fig. (208): Presents the researcher's vision for the green belt that should surround Manshiet Naser Compact City.

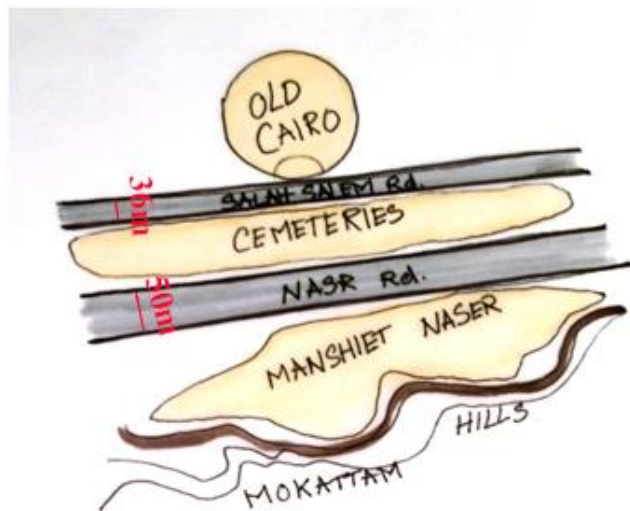


Fig. (209): Presents the researcher vision for upgrading the Nasr rd. in front of Manshiet Naser to become of the same width as the rest of its previous section in front of el-Manassa.



Fig. (210): Shows a shot taken by Google Earth for the Nasr rd. in front of Manshiet Naser and the cemeteries and their the width of the road has been measured to find out that it is of 26-27m.



Fig. (211): Shows a shot taken by Google Earth for the Nasr rd. further down in front of el-Manassa and their the width of the road has been measured to find out that it is of 49-50m..

10.6. TOWARDS A SUSTAINABLE CONSERVATION STRATEGY FOR THE EASTERN NECROPOLIS

- a. Forming a planning and administrative independent entity , that represents all official and nonofficial organizations (Government , NOUH, URHC, NGOs), and which is to become responsible only for the development of the Historical cemetery areas.

The Organization's task:

- To develop its own vision for the specified are after considering all diversity of plans and views.
- Any development or action plans should undergoes that organization before any implementation , in order to avoid contradiction of actions.
- All the legalities, property possessions, official documents should be under the possession of the Organization to avoid any manipulations and corruption.

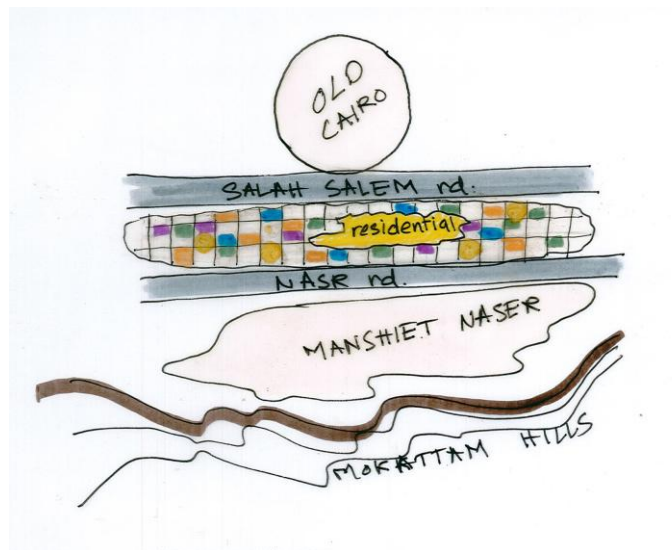


Fig. (212): Presents an imaginative land use plan for the cemeteries area, prepared by the researcher.

- b. Surveying all grave yards and Ahwash, and classify them into different categories:

- Good with clear ownership
- Vacant plots
- Old with clear ownership
- Deteriorated with non clear ownership
- Historical
- Of architectural significance.

That survey should precede any development plan, to have a real evaluation about the area.

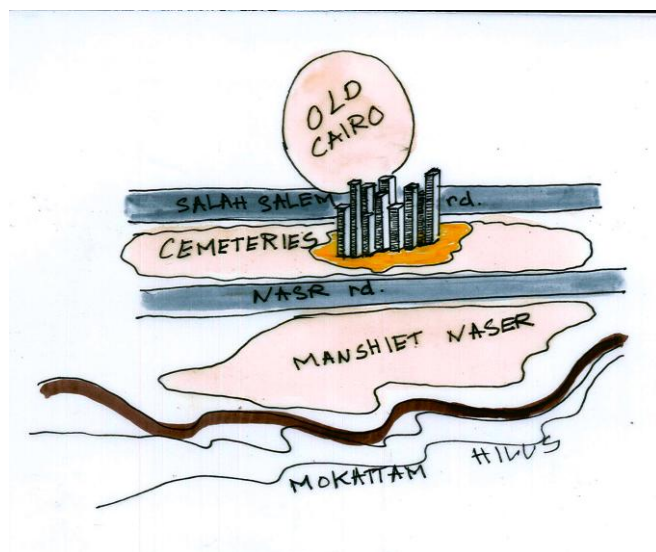


Fig. (213): Presents the researcher vision, for upgrading the residential buildings vertically that stand in the middle of the cemeteries.

- c. NOUHS have listed 600 mausoleums of architectural significance value they should be

protected together with the mausoleums protected by SCA. All Buildings of universal value should be located on the Base Map for protection. Protection measures should assure the survival of the property against development and change that might negatively impact the authenticity of the property.

- d. Generating a long term land use plan for the cemeteries, which is to be a part of a wider developmental regional plan.

- e. Stop any future burial activities for the next 50 years, to allow future development and transitional change of activities and land use.

- f. Present and future vacant plots will become reallocated according to the futuristic land use plan.

- g. Upgrading the present residential buildings vertically, so as not to exceed the heights mentioned in the preservation measurements of the URHC, and to absorb the residents moving out of the graveyards. As well as improving all the environmental condition of the area and the welfare of their inhabitants.

- h. All residents living inside the cemeteries would be encouraged to be reallocated in the adjacent residential area.

- i. Surrounding the residential area with a green belt to improve the environmental conditions, for its residents .

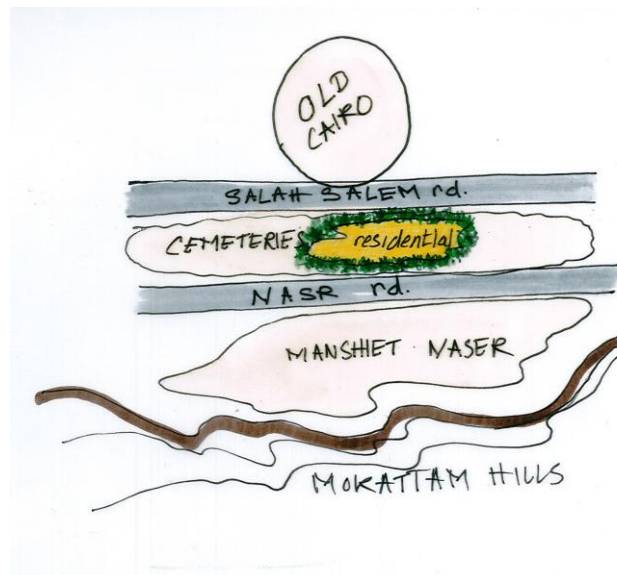


Fig. (214): Presents the researcher vision, for surrounding the residential zone with a green belt.



Fig. (215): Photo taken by the researcher, showing a tourist standing in the middle of El Naser Farag Barqouq

It will also withhold any future residential expansion in that zone, which is undesirable.

- j. Creating new job opportunities which does not affect the nature of the cultural values of the Historical place; such as reviving the handmade silk manufacturing and also the handmade glass craft. By inducing new specialized activities and craft. This would encourage tourism, and thus will improve the economic condition of the residents who are the real

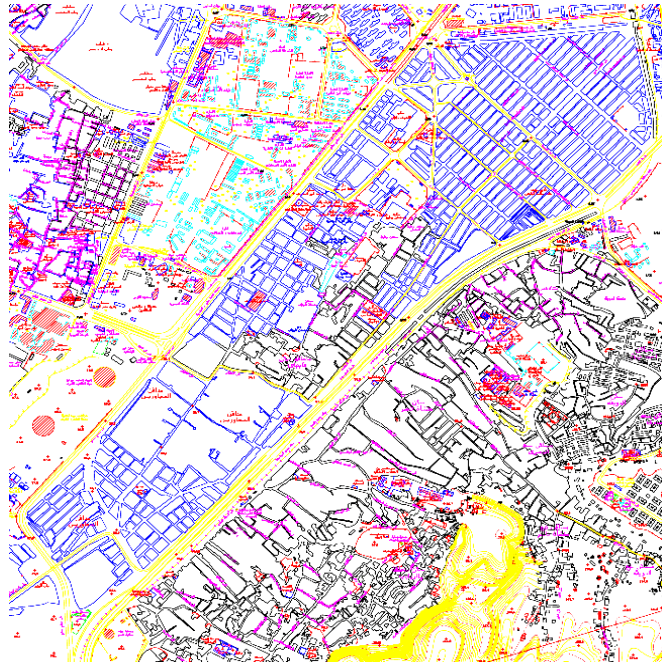


Fig. (216): It's a JPG map from CAPMAS, and shows the regular street pattern.



Left Fig. (217): Shows a photo taken by the researcher for the cemeteries and at the back stands the residential buildings in the middle. Date taken: 11/3/2014 3:23PM.

↑ ↑ shows the proposed vertical upgrading of the residential buildings.

Below Fig. (218): Shows the researchers' vision for the same area showing vertical upgrading for the residential buildings

guarantee for the success of any development plan.

- k. The Occupational Cell is the core of the planning unit for any future development; mixed land use was always present since the existence of the cemeteries. Therefore, it is important to keep the concept of the Occupational Cell which was originally originated by the Fatimids and persisted till date.



1. It is also recommended that any future planning should keep the Iron Grid pattern of the streets which was inherited from the Fatimid's planning era, which also persists a strong sense of place and identity.

"Clearly, there are groups of people of particular ages, occupations and levels of income who may choose high density, urban living, likewise there are high density urban areas - usually historically and architecturally interesting and socially exclusive - that remain popular through time."(The Compact City: A Sustainable Urban Form? Edited by Mike Jenks, Elizabeth Burton, Katie Williams)

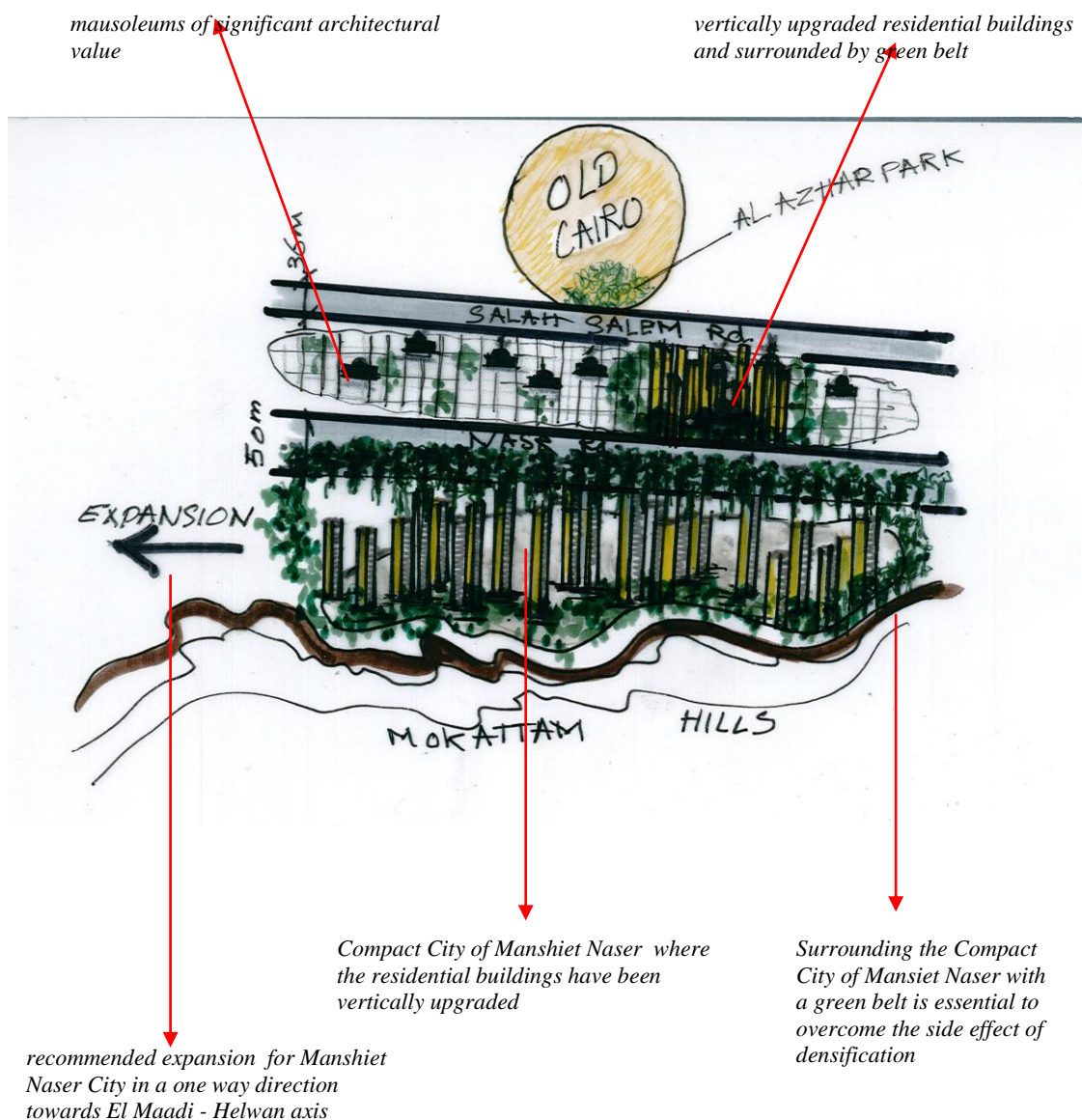


Fig. (219): Presents the researcher overall vision, for the upgrading of the whole area of the Eastern Necropolis and Manshiet Naser.

11. RESEARCH RESULTS

Conclusion for HISTORY AND EVOLUTION Any conservation policy should include the following

1. **Keep the "Occupational Cells":** should become the base unit for planning. Specialized markets should be distributed through the City of The Dead, each of which to become associated with its own quarter in which trading, production and distribution, become combined with residences for tradesmen and for transient merchants.
2. **Keep the Regular and Rectangular shape:** which is of Fatimid heritage for planning for the suburb ; try to maintain the same urban form and pattern of the streets because it is of hereditary, cultural value and that form have already existed for such a long time so it keeps within it its potential for further survival.
3. **Creation of new functions and activities that should be compatible with the character of the historic town or urban area:** The area used to be home to a unique craft: the weaving of silk chord. . The chord is usually bought by tribes in the Western Desert and Libya, and used to decorate their vests and other clothing. A handful of craftsman in the cemeteries are still trained in this craft, although demand for it is dying. Such craft can be revived and become of economic advantage for the area.

Conclusion for MYTHS AND TRADITION any conservation policy should include

1. **Building splendid mausoleums used to be a significance of religious power, but it no longer is:** and this belief has disappeared and no longer exists. So, it is just the spectacular architecture, and the historical value of the place that remains. Therefore, the cemetery area should be re-evaluated according to the Operational Guide Lines of the World Heritage Convention to define what is of great contribution to humanity and what is of outstanding universal significance
2. **Visiting Ahl el Bayt and el Awliya is still a culture that prevails in Egypt:** as well as holding the ceremonies, festivals and funeral traditions that could go on for days, using the mosque as a madrasa also still revives, all of which contribute to the livelihood of the cemeteries area and encourage people to stay there. These are strong traditions which are not likely to vanish soon, and should be kept in mind when making future conservation planning for the area.

Conclusion for CONSERVATION AND CHARTERS
Any conservation policy should include

1. **A long term commitment:** to maintain a city's cultural and historic identity.

2. **Provide a set of values and methods:**

- **Values:**
 - **Emotional**
 - **Cultural**
 - **Use values**
- **Methods: Deep Social conservation**
 - **Dynamic or Active sense of conservation**

3. **Charters common recommendations:**

- **Comprehensive analysis:** of the place
- **Minimum intervention:** in the historic fabric
- **Precise documentation:** respect for contributions from all periods
- **Maintenance:** of authenticity and the requirement to take a holistic view of the historic environment.

4. **Part of coherent policies:** economic, social development, urban and regional planning at each level; this planning should be proceeded by multidisciplinary studies: social, economic, architecture and cultural.

5. **Harmonious relationship:** between the historic fabric and the built environment that surrounds it in the city.

6. *"The Golden rule: is that working the street with the people has its own rhythm which calls for flexibility and patience from both the conservation team and the people"* (Sedki) : any conservation plan should be empowered by the people for they should be the first beneficial out of it, and they are the milestone that guarantees the success of the program.

7. **Improvement of Housing programs :** should be one of the objectives of the conservation process.

8. **Educating people :** the objectives of conservation should be clearly stated to all parties involved in the process as well as the legal, administrative and financial measures necessary to attain them.

**Conclusion for WORLD HERITAGE
any conservation policy should include**

1. **The Cemeteries area have not been either evaluated or graded in the URHC report 2010-2012:** therefore there is great need for reassessment and evaluation for the heritage value in this area in order before making any future development in this area.

2. **The Buffer zone that was drawn by the URHC report 2010-2012 includes Manshiet Naser:** which stands on the other side of the Eastern Necropolis, is considered to be one of the most populous slums in the world (estimated population according to UN reports of one million inhabitants. It represents a great danger and have negative impact on the World Heritage property and all of Cairo (Pre-Modern and Modern). Therefore developing the Buffer Zone is as important to develop as the World Heritage property itself.

3. **Preserving the Sky line:** which has been mentioned in the URHC report 2010-2012 is that the lies between the northern cemetery and the southern Fatimid nucleus, including the Azhar Park and the undeveloped areas surrounding the Citadel. Maintaining it is one of the great concern of the research for developing the Eastern Necropolis

**Conclusion for OTHERS VISION
any conservation policy should include**

Key words:

- Lack of security
 - Freak
 - Fascinating, strikingly, ornamented domes and mosques
 - Most controversial
 - One of the most liveable working class
 - An anomaly in the urban area of the city
 - Free from all laws
 - Of great potential pool of resources for the sustainable development of all the city
- ❖ The general impression that has been acquired should be analyzed and divided into two groups of positive and negative groups. The weak features should be treated and the strong ones should be empowered to give an overall positive image for the place

Pros:

- Fascinating, strikingly, ornamented domes and mosques
- One of the most liveable working class
- Of great potential pool of resources for the sustainable development of all the city.

Cons:

- Lack of security
- Freak
- Most controversial
- An anomaly in the urban area of the city
- Free from all laws

Conclusion for International Cases for Developing Countries
any conservation policy should include

EGYPT

1. Informal urbanization and illegal extension of

2. Over all physical features for most Egyptian cities:

- narrow roads
- compact building blocks
- traffic congestion
- mixed land use and activities

3. Dense urban environment:

- inadequate accessibility
- heavy air pollution levels
- health hazards
- overall environmental deteriorating conditions

Reasons of failure

- absence of means and resources
- absence of political will
- absence of administrative autonomy
- weak consecutive governments

BRAZIL

1. Guided densification and urban intensification

2. Physical features:

- compactness: land densification by the use of FAR system
- optimal use of infrastructure

3. TDR system:

- preservation of historical sites
- new land uses and activities

4. Ternary transportation system:

- expansion of public transport network
- led to environmentally friendly cities

Reasons of success

- one of the highest degree of political and administrative autonomy
- proper management
- accurate knowledge of built environment
- innovative means to generate resources and public revenues

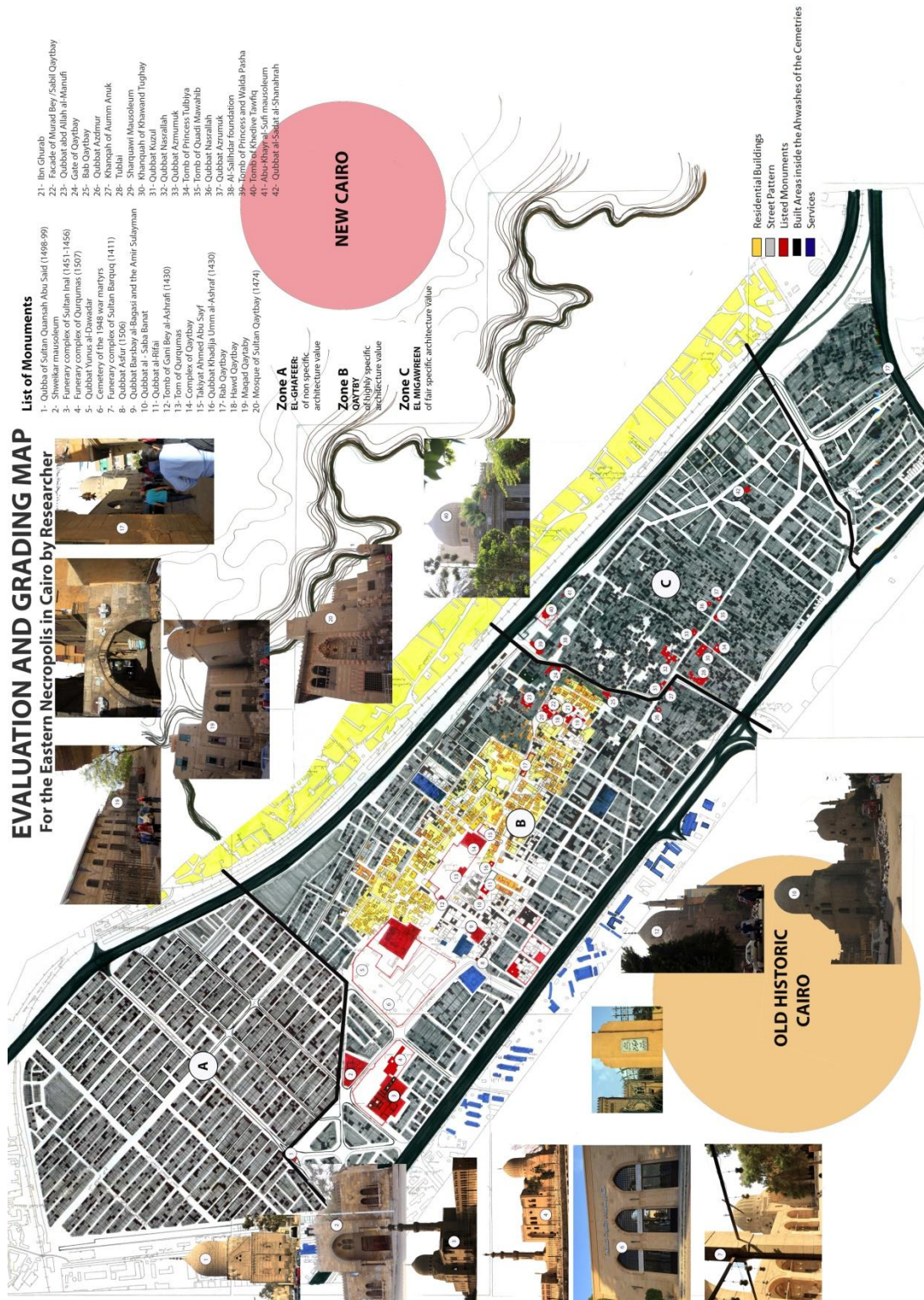
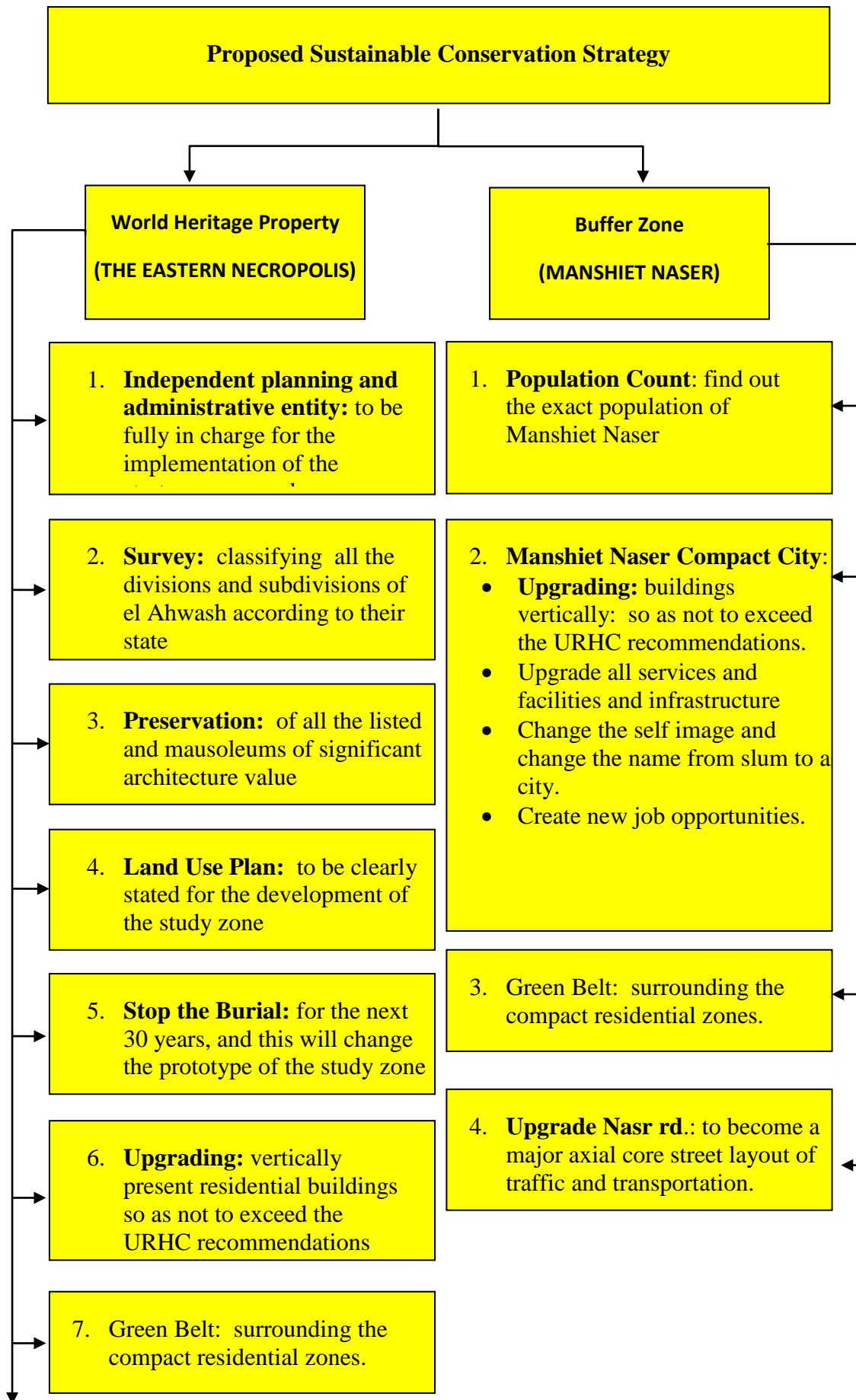


Fig. (220): Evaluation and Graduation Map for the Eastern Necropolis in Cairo by researcher



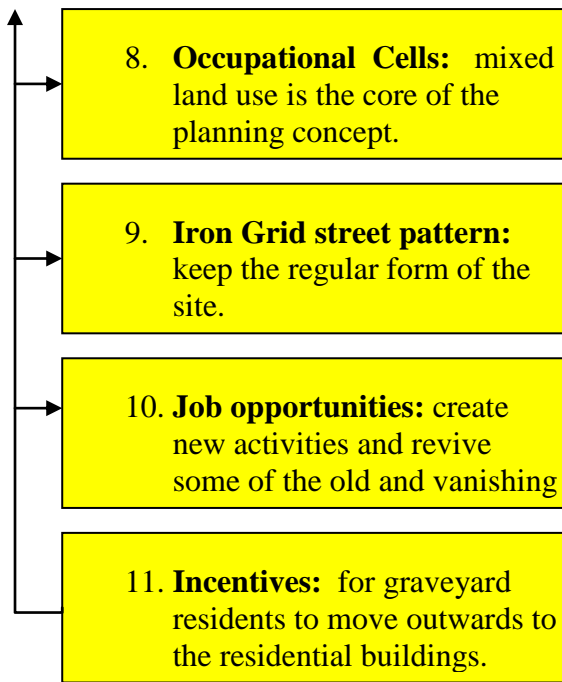







Fig. (221): The steps for the proposed sustainable conservation strategy for the Eastern Necropolis and its Buffer

The BASE MAP for The Eastern Necropolis in CAIRO (scale 1/800) by researcher

-  Residential buildings
-  Street Pattern
-  Listed monuments
-  Built rooms inside the graveyards
-  Services

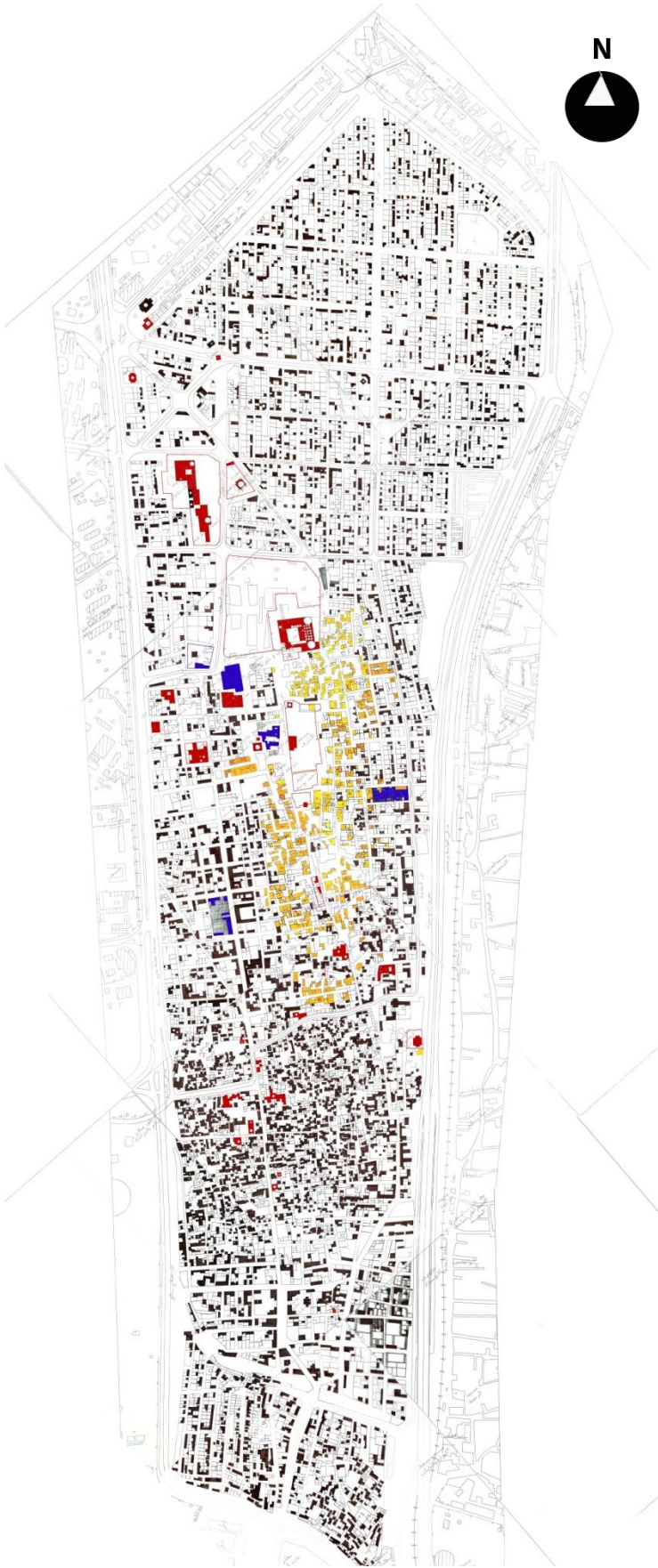


Fig. (222): The Base Map of the Eastern Necropolis by researcher



*Fig. (223): Close up for the top section
(el-Ghafeer cemeteries) by researcher*



Fig. (224): Close up for the middle section (Qaytbay cemeteries)by researcher



Fig. (225): Close up for the bottom section (el-Migawreen cemeteries)by researcher

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Maps

CAPMAS

Egyptian General Survey Authority

GOOGLE EARTH

MILAN University (Living in the City of the Dead)

Hand On (Traditional Crafts in the City of the Dead in Cairo)

Images

All images are taken by Ghada Mohamed Attia (the researcher) unless mentioned otherwise

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ANNEX 1

CONSEIL INTERNATIONAL
DES MONUMENTS ET DES SITES



INTERNATIONAL COUNCIL
ON MONUMENTS AND SITES

INTERNATIONAL CHARTER FOR THE CONSERVATION AND RESTORATION OF MONUMENTS AND SITES (THE VENICE CHARTER 1964)

IInd International Congress of Architects and Technicians of Historic Monuments, Venice, 1964.

Adopted by ICOMOS in 1965.

Imbued with a message from the past, the historic monuments of generations of people remain to the present day as living witnesses of their age-old traditions. People are becoming more and more conscious of the unity of human values and regard ancient monuments as a common heritage. The common responsibility to safeguard them for future generations is recognized. It is our duty to hand them on in the full richness of their authenticity.

It is essential that the principles guiding the preservation and restoration of ancient buildings should be agreed and be laid down on an international basis, with each country being responsible for applying the plan within the framework of its own culture and traditions.

By defining these basic principles for the first time, the Athens Charter of 1931 contributed towards the development of an extensive international movement which has assumed concrete form in national documents, in the work of ICOM and UNESCO and in the establishment by the latter of the International Centre for the Study of the Preservation and the Restoration of Cultural Property. Increasing awareness and critical study have been brought to bear on problems which have continually become more complex and varied; now the time has come to examine the Charter afresh in order to make a thorough study of the principles involved and to enlarge its scope in a new document.

Accordingly, the IInd International Congress of Architects and Technicians of Historic Monuments, which met in Venice from May 25th to 31st 1964, approved the following text:

DEFINITIONS

Article 1.

The concept of a historic monument embraces not only the single architectural work but also the urban or rural setting in which is found the evidence of a particular civilization, a significant development or a historic event. This applies not only to great works of art but also to more modest works of the past which have acquired cultural significance with the passing of time.

Article 2.

The conservation and restoration of monuments must have recourse to all the sciences and techniques which can contribute to the study and safeguarding of the architectural heritage.

Article 3.

The intention in conserving and restoring monuments is to safeguard them no less as works of art than as historical evidence.

CONSERVATION**Article 4.**

It is essential to the conservation of monuments that they be maintained on a permanent basis.

Article 5.

The conservation of monuments is always facilitated by making use of them for some socially useful purpose. Such use is therefore desirable but it must not change the lay-out or decoration of the building. It is within these limits only that modifications demanded by a change of function should be envisaged and may be permitted.

Article 6.

The conservation of a monument implies preserving a setting which is not out of scale. Wherever the traditional setting exists, it must be kept. No new construction, demolition or modification which would alter the relations of mass and colour must be allowed.

Article 7.

A monument is inseparable from the history to which it bears witness and from the setting in which it occurs. The moving of all or part of a monument cannot be allowed except where the safeguarding of that monument demands it or where it is justified by national or international interest of paramount importance.

Article 8.

Items of sculpture, painting or decoration which form an integral part of a monument may only be removed from it if this is the sole means of ensuring their preservation.

RESTORATION**Article 9.**

The process of restoration is a highly specialized operation. Its aim is to preserve and reveal the aesthetic and historic value of the monument and is based on respect for original material and authentic documents. It must stop at the point where conjecture begins, and in this case moreover any extra work which is indispensable must be distinct from the architectural composition and must bear a contemporary stamp. The restoration in any case must be preceded and followed by an archaeological and historical study of the monument.

Article 10.

Where traditional techniques prove inadequate, the consolidation of a monument can be achieved by the use of any modern technique for conservation and construction, the efficacy of which has been shown by scientific data and proved by experience.

Article 11.

The valid contributions of all periods to the building of a monument must be respected, since unity of style is not the aim of a restoration. When a building includes the superimposed work of different periods, the revealing of the underlying state can only be justified in exceptional circumstances and when what is removed is of little interest and the material which is brought to light is of great historical, archaeological or aesthetic value, and its state of preservation good enough to justify the action. Evaluation of the importance of the elements involved and the decision as to what may be destroyed cannot rest solely on the individual in charge of the work.

Article 12.

Replacements of missing parts must integrate harmoniously with the whole, but at the same time must be distinguishable from the original so that restoration does not falsify the artistic or historic evidence.

Article 13.

Additions cannot be allowed except in so far as they do not detract from the interesting parts of the building, its traditional setting, the balance of its composition and its relation with its surroundings.

HISTORIC SITES

Article 14.

The sites of monuments must be the object of special care in order to safeguard their integrity and ensure that they are cleared and presented in a seemly manner. The work of conservation and restoration carried out in such places should be inspired by the principles set forth in the foregoing articles.

EXCAVATIONS

Article 15.

Excavations should be carried out in accordance with scientific standards and the recommendation defining international principles to be applied in the case of archaeological excavation adopted by UNESCO in 1956.

Ruins must be maintained and measures necessary for the permanent conservation and protection of architectural features and of objects discovered must be taken. Furthermore, every means must be taken to facilitate the understanding of the monument and to reveal it without ever distorting its meaning.

All reconstruction work should however be ruled out "*a priori*". Only anastylosis, that is to say, the reassembling of existing but dismembered parts can be permitted. The material used for integration should always be recognizable and its use should be the least that will ensure the conservation of a monument and the reinstatement of its form.

ANNEX 2

CONSEIL INTERNATIONAL
DES MONUMENTS ET DES SITES



INTERNATIONAL COUNCIL
ON MONUMENTS AND SITES

CHARTER FOR THE CONSERVATION OF HISTORIC TOWNS AND URBAN AREAS (WASHINGTON CHARTER 1987)

Adopted by ICOMOS General Assembly in Washington, DC, October 1987.

PREAMBLE AND DEFINITIONS

All urban communities, whether they have developed gradually over time or have been created deliberately, are an expression of the diversity of societies throughout history.

This charter concerns historic urban areas, large and small, including cities, towns and historic centres or quarters, together with their natural and man-made environments. Beyond their role as historical documents, these areas embody the values of traditional urban cultures. Today many such areas are being threatened, physically degraded, damaged or even destroyed, by the impact of the urban development that follows industrialisation in societies everywhere.

Faced with this dramatic situation, which often leads to irreversible cultural, social and even economic losses, the International Council on Monuments and Sites (ICOMOS) deems it necessary to draw up an international charter for historic towns and urban areas that will complement the "International Charter for the Conservation and Restoration of Monuments and Sites," usually referred to as "The Venice Charter." This new text defines the principles, objectives, and methods necessary for the conservation of historic towns and urban areas. It also seeks to promote the harmony of both private and community life in these areas and to encourage the preservation of those cultural properties, however modest in scale, that constitute the memory of mankind.

As set out in the UNESCO "Recommendation Concerning the Safeguarding and Contemporary Role of Historic Areas" (Warsaw - Nairobi, 1976), and also in various other international instruments, "the conservation of historic towns and urban areas" is understood to mean those steps necessary for the protection, conservation and restoration of such towns and areas as well as their development and harmonious adaptation to contemporary life.

PRINCIPLES AND OBJECTIVES

1. In order to be most effective, the conservation of historic towns and other historic urban areas should be an integral part of coherent policies of economic and social development and of urban and regional planning at every level.

2. Qualities to be preserved include the historic character of the town or urban area and all those material and spiritual elements that express this character, especially:

- a)** Urban patterns as defined by lots and streets;
- b)** Relationships between buildings and green and open spaces;
- c)** The formal appearance, interior and exterior, of buildings as defined by scale, size, style, construction, materials, colour and decoration;

d) The relationship between the town or urban area and its surrounding setting, both natural and man-made; and

e) The various functions that the town or urban area has acquired over time.

Any threat to these qualities would compromise the authenticity of the historic town or urban area.

3. The participation and the involvement of the residents are essential for the success of the conservation programme and should be encouraged. The conservation of historic towns and urban areas concerns their residents first of all.

4. Conservation in a historic town or urban area demands prudence, a systematic approach and discipline. Rigidity should be avoided since individual cases may present specific problems.

METHODS AND INSTRUMENTS

5. Planning for the conservation of historic towns and urban areas should be preceded by multidisciplinary studies.

Conservation plans must address all relevant factors including archaeology, history, architecture, techniques, sociology and economics.

The principal objectives of the conservation plan should be clearly stated as should the legal, administrative and financial measures necessary to attain them.

The conservation plan should aim at ensuring a harmonious relationship between the historic urban areas and the town as a whole.

The conservation plan should determine which buildings must be preserved, which should be preserved under certain circumstances and which, under quite exceptional circumstances, might be expendable.

Before any intervention, existing conditions in the area should be thoroughly documented.

The conservation plan should be supported by the residents of the historic area.

6. Until a conservation plan has been adopted, any necessary conservation activity should be carried out in accordance with the principles and the aims of this Charter and the Venice Charter.

7. Continuing maintenance is crucial to the effective conservation of a historic town or urban area.

8. New functions and activities should be compatible with the character of the historic town or urban area.

Adaptation of these areas to contemporary life requires the careful installation or improvement of public service facilities.

9. The improvement of housing should be one of the basic objectives of conservation.

10. When it is necessary to construct new buildings or adapt existing ones, the existing spatial layout should be respected, especially in terms of scale and lot size.

The introduction of contemporary elements in harmony with the surroundings should not be discouraged since such features can contribute to the enrichment of an area.

11. Knowledge of the history of a historic town or urban area should be expanded

ANNEX 3

THE AUSTRALIA ICOMOS CHARTER FOR THE CONSERVATION OF PLACES OF CULTURAL SIGNIFICANCE (The Burra Charter)

Preamble

Having regard to the International Charter for the Conservation and Restoration of Monuments and Sites (Venice 1966), and the Resolutions of 5th General Assembly of the International Council on Monuments and Sites (ICOMOS) (Moscow 1978), the following Charter was adopted by Australia ICOMOS on 19th August 1979 at Burra Burra. Revisions were adopted on 23rd February 1981 and on 23 April 1988.

Definitions

Article 1. For the purpose of this Charter:

- 1.1 *Place* means site, area, building or other work, group of buildings or other works together with associated contents and surroundings.
- 1.2 *Cultural significance* means aesthetic, historic, scientific or social value for past, present or future generations.
- 1.3 *Fabric* means all the physical material of the *place*.
- 1.4 *Conservation* means all the processes of looking after a *place* so as to retain its *cultural significance*. It includes *maintenance* and may according to circumstance include *preservation*, *restoration*, *reconstruction* and *adaptation* and will be commonly a combination of more than one of these.
- 1.5 *Maintenance* means the continuous protective care of the *fabric*, contents and setting of a *place*, and is to be distinguished from repair. Repair involves *restoration* or *reconstruction* and it should be treated accordingly.
- 1.6 *Preservation* means maintaining the *fabric* of a *place* in its existing state and retarding deterioration.
- 1.7 *Restoration* means returning the EXISTING *fabric* of a *place* to a known earlier state by removing accretions or by reassembling existing components without the introduction of new material.
- 1.8 *Reconstruction* means returning a *place* as nearly as possible to a known earlier state and is distinguished by the introduction of materials (new or old) into the *fabric*. This is not to be confused with either re-creation or conjectural reconstruction which are outside the scope of this Charter.
- 1.9 *Adaptation* means modifying a *place* to suit proposed compatible uses.
- 1.10 *Compatible use* means a use which involves no change to the culturally significant fabric, changes which are substantially reversible, or changes which require a minimal impact.

Explanatory Notes

These notes do not form part of the Charter and may be added to by Australia ICOMOS.

Article 1.1

Place includes structures, ruins, archaeological sites and landscapes modified by human activity.

Article 1.5

The distinctions referred to in Article 1.5, for example in relation to roof gutters, are:

- maintenance — regular inspection and cleaning of gutters
- repair involving restoration — returning of dislodged gutters to their place
- repair involving reconstruction — replacing decayed gutters.

Conservation Principles

Article 2. The aim of *conservation* is to retain the *cultural significance* of a *place* and must include provision for its security, its *maintenance* and its future.

Article 3. *Conservation* is based on a respect for the existing *fabric* and should involve the least possible physical intervention. It should not distort the evidence provided by the *fabric*.

Article 4. *Conservation* should make use of all the disciplines which can contribute to the study and safeguarding of a *place*. Techniques employed should be traditional but in some circumstances they may be modern ones for which a firm scientific basis exists and which have been supported by a body of experience.

Article 5. *Conservation* of a *place* should take into consideration all aspects of its *cultural significance* without unwarranted emphasis on any one aspect at the expense of others.

Article 6. The conservation policy appropriate to a *place* must first be determined by an understanding of its *cultural significance*.

Article 7. The conservation policy will determine which uses are compatible.

Article 8. *Conservation* requires the maintenance of an appropriate visual setting: e.g., form, scale, colour, texture and materials. No new construction, demolition or modification which would adversely affect the setting should be allowed. Environmental intrusions which adversely affect appreciation or enjoyment of the *place* should be excluded.

Article 9. A building or work should remain in its historical location. The moving of all or part of a building or work is unacceptable unless this is the sole means of ensuring its survival.

Article 10. The removal of contents which form part of the *cultural significance* of the *place* is unacceptable unless it is the sole means of ensuring their security and *preservation*. Such contents must be returned should changed circumstances make this practicable.

Article 2

Conservation should not be undertaken unless adequate resources are available to ensure that the fabric is not left in a vulnerable state and that the cultural significance of the place is not impaired. However, it must be emphasised that the best conservation often involves the least work and can be inexpensive.

Article 3

The traces of additions, alterations and earlier treatments on the fabric of a place are evidence of its history and uses.

Conservation action should tend to assist rather than to impede their interpretation.

Article 6

An understanding of the cultural significance of a place is essential to its proper conservation. This should be achieved by means of a thorough investigation resulting in a report embodying a statement of cultural significance. The formal adoption of a statement of cultural significance is an essential prerequisite to the preparation of a conservation policy.

Article 7

Continuity of the use of a place in a particular way may be significant and therefore desirable.

Article 8

New construction work, including infill and additions, may be acceptable, provided:

- it does not reduce or obscure the cultural significance of the place
- it is in keeping with Article 8.

Article 9

Some structures were designed to be readily removable or already have a history of previous moves, e.g. prefabricated dwellings and poppet-heads. Provided such a structure does not have a strong association with its present site, its removal may be considered.

If any structure is moved, it should be moved to an appropriate setting and given an appropriate use. Such action should not be to the detriment of any place of cultural significance.

Conservation Processes

Preservation

Article 11. *Preservation* is appropriate where the existing state of the *fabric* itself constitutes evidence of specific *cultural significance*, or where insufficient evidence is available to allow other conservation processes to be carried out.

Article 12. *Preservation* is limited to the protection, *maintenance* and, where necessary, the stabilization of the existing *fabric* but without the distortion of its *cultural significance*.

Restoration

Article 13. *Restoration* is appropriate only if there is sufficient evidence of an earlier state of the *fabric* and only if returning the *fabric* to that state reveals the *cultural significance* of the *place*.

Article 14. *Restoration* should reveal anew culturally significant aspects of the *place*. It is based on respect for all the physical, documentary and other evidence and stops at the point where conjecture begins.

Article 15. *Restoration* is limited to the reassembling of displaced components or removal of accretions in accordance with Article 16.

Article 16. The contributions of all periods to the *place* must be respected. If a *place* includes the *fabric* of different periods, revealing the *fabric* of one period at the expense of another can only be justified when what is removed is of slight *cultural significance* and the *fabric* which is to be revealed is of much greater *cultural significance*.

Reconstruction

Article 17. *Reconstruction* is appropriate only where a *place* is incomplete through damage or alteration and where it is necessary for its survival, or where it reveals the *cultural significance* of the *place* as a whole.

Article 18. *Reconstruction* is limited to the completion of a depleted entity and should not constitute the majority of the *fabric* of a *place*.

Article 19. *Reconstruction* is limited to the reproduction of *fabric*, the form of which is known from physical and/or documentary evidence. It should be identifiable on close inspection as being new work.

Adaptation

Article 20. *Adaptation* is acceptable where the *conservation* of the *place* cannot otherwise be achieved, and where the *adaptation* does not substantially detract from its *cultural significance*.

Article 11

Preservation protects fabric without obscuring the evidence of its construction and use.

The process should always be applied:

where the evidence of the fabric is of such significance that it must not be altered. This is an unusual case and likely to be appropriate for archaeological remains of national importance;

where insufficient investigation has been carried out to permit conservation policy decisions to be taken in accord with Articles 23 to 25.

New construction may be carried out in association with preservation when its purpose is the physical protection of the fabric and when it is consistent with Article 8.

Article 12

Stabilization is a process which helps keep fabric intact and in a fixed position. When carried out as a part of preservation work it does not introduce new materials into the fabric. However, when necessary for the survival of the fabric, stabilization may be effected as part of a reconstruction process and new materials introduced. For example, grouting or the insertion of a reinforcing rod in a masonry wall.

Article 13

See explanatory note for Article 2.

Article 21. *Adaptation* must be limited to that which is essential to a use for the *place* determined in accordance with Articles 6 and 7.

Article 22. *Fabric of cultural significance* unavoidably removed in the process of *adaptation* must be kept safely to enable its future reinstatement.

Conservation Practice

Article 23. Work on a *place* must be preceded by professionally prepared studies of the physical, documentary and other evidence, and the existing *fabric* recorded before any intervention in the *place*.

Article 24. Study of a *place* by any intervention in the *fabric* or by archaeological excavation should be undertaken where necessary to provide data essential for decisions on the *conservation* of the *place* and/or to secure evidence about to be lost or made inaccessible through necessary *conservation* or other unavoidable action. Investigation of a *place* for any other reason which requires physical disturbance and which adds substantially to a scientific body of knowledge may be permitted, provided that it is consistent with the conservation policy for the *place*.

Article 25. A written statement of conservation policy must be professionally prepared setting out the *cultural significance* and proposed *conservation* procedure together with justification and supporting evidence, including photographs, drawings and all appropriate samples.

Article 26. The organisation and individuals responsible for policy decisions must be named and specific responsibility taken for each such decision.

Article 27. Appropriate professional direction and supervision must be maintained at all stages of the work and a log kept of new evidence and additional decisions recorded as in Article 25 above.

Article 28. The records required by Articles 23, 25, 26 and 27 should be placed in a permanent archive and made publicly available.

Article 29. The items referred to in Articles 10 and 22 should be professionally catalogued and protected.

Words in italics are defined in Article 1.

Article 25

The procedure will include the conservation processes referred to in Article 1.4 and other matters described in Guidelines to the Burra Charter: Conservation Policy.

GUIDELINES TO THE BURRA CHARTER: CONSERVATION POLICY

These guidelines, which cover the development of conservation policy and strategy for implementation of that policy, were adopted by the Australian national committee of the International Council on Monuments and Sites (Australia ICOMOS) on 25 May 1985 and revised on 23 April 1988. They should be read in conjunction with the Burra Charter.

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- 2.2 Fabric and setting
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1.0 PREFACE

1.1 Intention of guidelines

These guidelines are intended to clarify the nature of professional work done within the terms of the Burra Charter. They recommend a methodical procedure for development of the conservation policy for a place, for the statement of conservation policy and for the strategy for the implementation of that policy.

1.2 Cultural significance

The establishment of cultural significance and the preparation of a statement of cultural significance are essential prerequisites to the development of a conservation policy (refer to Guidelines to the Burra Charter: Cultural Significance).

1.3 Need to develop conservation policy

The development of a conservation policy, embodied in a report as defined in Section 5.0, is an essential prerequisite to making decisions about the future of the place.

1.4 Skills required

In accordance with the Burra Charter, the study of a place should make use of all relevant disciplines. The professional skills required for such study are not common. It cannot be assumed that any one practitioner will have the full range of skills required to develop a conservation policy and prepare the appropriate report. In the course of the task it may be necessary to consult with other practitioners and organisations.

2.0 THE SCOPE OF THE CONSERVATION POLICY

Introduction

The purpose of the conservation policy is to state how the conservation of the place may best be achieved both in the long and short term. It will be specific to that place.

The conservation policy will include the issues listed below.

2.2 Fabric and setting

The conservation policy should identify the most appropriate way of caring for the fabric and setting of the place arising out of the statement of significance and other constraints. A specific combination of conservation actions should be identified. This may or may not involve changes to the fabric.

2.3 Use

The conservation policy should identify a use or combination of uses, or constraints on use, that are compatible with the retention of the cultural significance of the place and that are feasible.

2.4 Interpretation

The conservation policy should identify appropriate ways of making the significance of the place understood consistent with the retention of that significance. This may be a combination of the treatment of the fabric, the use of the place and the use of introduced interpretative material.

In some instances the cultural significance and other constraints may preclude the introduction of such uses and material.

2.5 Management

The conservation policy should identify a management structure through which the conservation policy is capable of being implemented. It should also identify:

- (a) those to be responsible for subsequent conservation and management decisions and for the day-to-day management of the place;
- (b) the mechanism by which these decisions are to be made and recorded;
- (c) the means of providing security and regular maintenance for the place.

- 2.6 Control of physical intervention in the fabric**
The conservation policy should include provisions for the control of physical intervention. It may:
- (a) specify unavoidable intervention;
 - (b) identify the likely impact of any intervention on the cultural significance;
 - (c) specify the degree and nature of intervention acceptable for non-conservation purposes;
 - (d) specify explicit research proposals;
 - (e) specify how research proposals will be assessed;
 - (f) provide for the conservation of significant fabric and contents removed from the place;
 - (g) provide for the analysis of material;
 - (h) provide for the dissemination of the resultant information;
 - (i) specify the treatment of the site when the intervention is complete.
- 2.7 Constraints on investigation**
The conservation policy should identify social, religious, legal or other cultural constraints which might limit the accessibility or investigation of the place.
- 2.8 Future developments**
The conservation policy should set guidelines for future developments resulting from changing needs.
- 2.9 Adoption and review**
The conservation policy should contain provision for adoption and review.
- 3.0 DEVELOPMENT OF CONSERVATION POLICY**
- 3.1 Introduction**
In developing a conservation policy for the place it is necessary to assess all the information relevant to the future care of the place and its fabric. Central to this task is the statement of cultural significance. The task includes a report as set out in Section 5.0. The contents of the report should be arranged to suit the place and the limitations of the task, but it will generally be in three sections:
- (a) the development of a conservation policy (see 3.2 and 3.3);
 - (b) the statement of conservation policy (see 3.4 and 3.5);
 - (c) the development of an appropriate strategy for implementation of the conservation policy (see 4.0).
- 3.2 Collection of information**
In order to develop the conservation policy sufficient information relevant to the following should be collected:
- 3.2.1 Significant fabric —**
Establish or confirm the nature, extent, and degree of intactness of the significant fabric including contents (see Guidelines to Burra Charter: Cultural Significance).
- 3.2.2 Client, owner and user requirements and resources —**
Investigate needs, aspirations, current proposals, available finances, etc., in respect of the place.
- 3.2.3 Other requirements and concerns —**
Investigate other requirements and concerns likely to affect the future of the place and its setting including:
- (a) federal, state and local government acts, ordinances and planning controls;
 - (b) community needs and expectations;
 - (c) locational and social context.
- 3.2.4 Condition of fabric —**
Survey the fabric sufficiently to establish how its physical state will affect options for the treatment of the fabric.
- 3.2.5 Uses —**
Collect information about uses, sufficient to determine whether or not such uses are compatible with the significance of the place and feasible.
- 3.2.6 Comparative information —**
Collect comparative information about the conservation of similar places (if appropriate).
- 3.2.7 Unavailable information —**
Identify information which has been sought and is unavailable and which may be critical to the determination of the conservation policy or to its implementation.
- 3.3 Assessment of information**
The information gathered above should now be assessed in relation to the constraints arising from the statement of cultural significance for the purpose of developing a conservation policy. In the course of the assessment it may be necessary to collect further information.
- 3.4 Statement of conservation policy**
The practitioner should prepare a statement of conservation policy that addresses each of the issues listed in 2.0, viz.:
- fabric and setting;
 - use;
 - interpretation;
 - management;
 - control of intervention in the fabric;
 - constraints on investigation;
 - future developments;
 - adoption and review.
- The statement of conservation policy should be cross-referenced to sufficient documentary and graphic material to explain the issues considered.
- 3.5 Consequences of conservation policy**
The practitioner should set out the way in which the implementation of the conservation policy will or will not:
- (a) change the place including its setting;
 - (b) affect its significance;
 - (c) affect the locality and its amenity;
 - (d) affect the client, owner and user;
 - (e) affect others involved.

4.0 IMPLEMENTATION OF CONSERVATION POLICY

Following the preparation of the conservation policy a strategy for its implementation should be prepared in consultation with the client. The strategy may include information about:

- (a) the financial resources to be used;
- (b) the technical and other staff to be used;
- (c) the sequence of events;
- (d) the timing of events;
- (e) the management structure.

The strategy should allow the implementation of the conservation policy under changing circumstances.

5.0 THE REPORT

5.1 Introduction

The report is the vehicle through which the conservation policy is expressed, and upon which conservation action is based.

See also Guidelines to the Burra Charter: Procedures for Undertaking Studies and Reports.

5.2 Written material

Written material will include:

- (a) the statement of cultural significance;
- (b) the development of conservation policy;
- (c) the statement of conservation policy;
- (d) the strategy for implementation of conservation policy.

It should also include:

- (a) name of the client;

- (b) names of all the practitioners engaged in the task, the work they undertook, and any separate reports they prepared;

- (c) authorship of the report;

- (d) date;

- (e) brief or outline of brief;

- (f) constraints on the task, for example, time, money, expertise;

- (g) sources (see 5.4).

5.3 Graphic material

Graphic material may include maps, plans, drawings, diagrams, sketches, photographs and tables, clearly reproduced.

Material which does not serve a specific purpose should not be included.

5.4 Sources

All sources used in the report must be cited with sufficient precision to enable others to locate them.

All sources of information, both documentary and oral, consulted during the task should be listed, whether or not they proved fruitful.

In respect of source material privately held, the name and address of the owner should be given, but only with the owner's consent.

5.5 Exhibition and adoption

The report should be exhibited and the statement of conservation policy adopted in accordance with Guidelines to the Burra Charter: Procedures for Undertaking Studies and Reports.

GUIDELINES TO THE BURRA CHARTER: PROCEDURES FOR UNDERTAKING STUDIES AND REPORTS

These guidelines for the preparation of professional studies and reports were adopted by the Australian national committee of the International Council on Monuments and Sites (Australia ICOMOS) on 23 April 1988. They should be read in conjunction with the Burra Charter.

Contents

- 1.0 Preface
- 2.0 Agreements between client and practitioner
- 3.0 Responsibility for content of report
- 4.0 Draft report
- 5.0 Urgent action
- 6.0 Additional work
- 7.0 Recommendations for further investigations
- 8.0 Exhibition and comment
- 9.0 Adoption and review of report
- 10.0 Further evidence
- 11.0 Accessibility of information

1.0 Preface

These guidelines make recommendations about professional practice in the preparation of the studies and reports within the terms of the Burra Charter.

Attention is also drawn to the advice about ethical, procedural and legal matters provided in the practice notes issued by various professional bodies.

2.0 Agreements between client and practitioner

Before undertaking a study or report, the client and the practitioner should agree upon:

- (a) the extent of the task, for example, up to the preparation of a statement of significance, up to the preparation of a statement of conservation policy or up to the preparation of a strategy for implementation;
- (b) the boundaries of the place;
- (c) any aspect which requires intensive investigation;
- (d) the dates for the commencement of the task, submission of the draft report and submission of the final report;
- (e) the fee and the basis upon which fees and disbursements will be paid;
- (f) the use of any joint consultant, sub-consultant or other practitioner with special expertise;
- (g) the basis for any further investigation which may be required, for example, within the terms of 7.0 below or section 3.3 of Guidelines to the Burra Charter: Conservation Policy;
- (h) the representative of the client to whom the practitioner will be responsible in the course of the task;
- (i) the sources, material or services to be supplied by the client including previous studies or reports;
- (j) any requirements for the format or reproduction of the report;
- (k) the number of copies of the report to be supplied at each stage;
- (l) copyright and confidentiality;
- (m) how the authorship will be cited;

- (n) the condition under which the report may be published or distributed by the client, the practitioner or others;
- (o) the procedure for any required exhibition of the report;
- (p) the basis for comment upon the report and any consequent amendment;
- (q) the responsibility for effecting archival storage in accordance with Article 28 of the Burra Charter.

3.0 Responsibility for content of report

The content of the report is the responsibility of the practitioner. The report may not be amended without the agreement of the practitioner.

4.0 Draft report

It is useful for the report to be presented to the client in draft form to ensure that it is understood and so that the practitioner may receive the client's comments.

5.0 Urgent action

If the practitioner believes that urgent action may be necessary to avert a threat to the fabric involving, for example, stability or security, the practitioner should immediately advise the client to seek specialist advice.

6.0 Additional work

Where it becomes clear that some aspect of the task will require more investigation or more expertise than has been allowed within the budget or the terms of the agreement, the practitioner should advise the client immediately.

7.0 Recommendations for further investigations

In respect of major unresolved aspects of cultural significance, conservation policy or of strategies for implementation of conservation policy, recommendations for further investigation should be made only where:

- (a) the client has been informed of the need for such investigation at the appropriate stage and it has been impossible to have it undertaken within the budget and time constraints of the task;
- (b) further information is anticipated as a result of intervention in the fabric which would not be proper at this stage, but which will become appropriate in the future.

Such recommendations should indicate what aspects of cultural significance, conservation policy or implementation might be assisted by such study.

8.0 Exhibition and comment

The report for any project of public interest should be exhibited in order that interested bodies and the public may comment and reasonable time should be allowed for the receipt and consideration of comment. Where public exhibition is not appropriate, comment should be sought from relevant individuals, organisations and specialists.

9.0 Adoption and review of report

Recommendations should be made for the formal adoption of the report and for any subsequent review.

10.0 Further evidence

If after the completion of the report further evidence is revealed, for example, by intervention in the fabric or information from other sources, it is desirable for this evidence to be referred to the original practitioner so that the report may be amended if necessary.

11.0 Accessibility of information

All material relating to the cultural significance of the place should be made readily available to increase the common pool of knowledge. Publication by the client and/or practitioner should be encouraged.

ICOMOS New Zealand Charter for the Conservation of Places of Cultural Heritage Value

Revised 2010

Preamble

New Zealand retains a unique assemblage of **places of cultural heritage value** relating to its indigenous and more recent peoples. These areas, **cultural landscapes** and features, buildings and **structures**, gardens, archaeological sites, traditional sites, monuments, and sacred **places** are treasures of distinctive value that have accrued meanings over time. New Zealand shares a general responsibility with the rest of humanity to safeguard its cultural heritage **places** for present and future generations. More specifically, the people of New Zealand have particular ways of perceiving, relating to, and conserving their cultural heritage **places**.

Following the spirit of the International Charter for the Conservation and Restoration of Monuments and Sites (the Venice Charter - 1964), this charter **sets out** principles to guide the **conservation of places of cultural heritage value** in New Zealand. It is a statement of professional principles for members of ICOMOS New Zealand.

This charter is also intended to guide all those involved in the various aspects of **conservation** work, including owners, guardians, managers, developers, planners, architects, engineers, craftspeople and those in the construction trades, heritage practitioners and advisors, and local and central government authorities. It offers guidance for communities, organisations, and individuals involved with the **conservation** and management of cultural heritage **places**.

This charter should be made an integral part of statutory or regulatory heritage management policies or plans, and should provide support for decision makers in statutory or regulatory processes.

Each article of this charter must be read in the light of all the others. Words in bold in the text are defined in the definitions section of this charter.

This revised charter was adopted by the New Zealand National Committee of the International Council on Monuments and Sites at its meeting on 4 September 2010.

Purpose of conservation

1. The purpose of conservation

The purpose of **conservation** is to care for **places of cultural heritage value**.

In general, such **places**:

- (i) have lasting values and can be appreciated in their own right;
- (ii) inform us about the past and the cultures of those who came before us;
- (iii) provide tangible evidence of the continuity between past, present, and future;
- (iv) underpin and reinforce community identity and relationships to ancestors and the land; and
- (v) provide a measure against which the achievements of the present can be compared.

It is the purpose of **conservation** to retain and reveal such values, and to support the ongoing meanings and functions of **places of cultural heritage value**, in the interests of present and future generations.

Conservation principles

2. Understanding cultural heritage value

Conservation of a **place** should be based on an understanding and appreciation of all aspects of its **cultural heritage value**, both **tangible** and **intangible**. All available forms of knowledge and evidence provide the means of understanding a **place** and its **cultural heritage value** and **cultural heritage significance**. **Cultural heritage value** should be understood through consultation with **connected people**, systematic documentary and oral research, physical investigation and **recording** of the **place**, and other relevant methods.

All relevant **cultural heritage values** should be recognised, respected, and, where appropriate, revealed, including values which differ, conflict, or compete.

The policy for managing all aspects of a **place**, including its **conservation** and its **use**, and the implementation of the policy, must be based on an understanding of its **cultural heritage value**.

3. Indigenous cultural heritage

The indigenous cultural heritage of **tangata whenua** relates to **whanau**, **hapu**, and **iwi** groups. It shapes identity and enhances well-being, and it has particular cultural meanings and values for the present, and associations with those who have gone before. Indigenous cultural heritage brings with it responsibilities of guardianship and the practical application and passing on of associated knowledge, traditional skills, and practices.

The Treaty of Waitangi is the founding document of our nation. Article 2 of the Treaty recognises and guarantees the protection of **ino rangatiratanga**, and so empowers **kaitiakitanga** as customary trusteeship to be exercised by **tangata whenua**. This customary trusteeship is exercised over their **taonga**, such as sacred and traditional **places**, built heritage, traditional practices, and other cultural heritage resources. This obligation extends beyond current legal ownership wherever such cultural heritage exists.

Particular **matauranga**, or knowledge of cultural heritage meaning, value, and practice, is associated with **places**. **Matauranga** is sustained and transmitted through oral, written, and physical forms determined by **tangata whenua**. The **conservation** of such **places** is therefore conditional on decisions made in associated **tangata whenua** communities, and should proceed only in this context. In particular, protocols of access, authority, ritual, and practice are determined at a local level and should be respected.

4. Planning for conservation

Conservation should be subject to prior documented assessment and planning.

All **conservation** work should be based on a **conservation plan** which identifies the **cultural heritage value** and **cultural heritage significance** of the **place**, the **conservation** policies, and the extent of the recommended works.

The **conservation plan** should give the highest priority to the **authenticity** and **integrity** of the **place**.

5. Respect for surviving evidence and knowledge

Conservation maintains and reveals the **authenticity** and **integrity** of a **place**, and involves the least possible loss of **fabric** or evidence of **cultural heritage value**. Respect for all forms of knowledge and existing evidence, of both **tangible** and **intangible values**, is essential to the **authenticity** and **integrity** of the **place**.

Conservation recognises the evidence of time and the contributions of all periods. The **conservation** of a **place** should identify and respect all aspects of its **cultural heritage value** without unwarranted emphasis on any one value at the expense of others.

The removal or obscuring of any physical evidence of any period or activity should be minimised, and should be explicitly justified where it does occur. The **fabric** of a particular period or activity may be obscured or removed if assessment shows that its removal would not diminish the **cultural heritage value** of the **place**.

In **conservation**, evidence of the functions and intangible meanings of **places** of **cultural heritage value** should be respected.

6. Minimum intervention

Work undertaken at a **place** of **cultural heritage value** should involve the least degree of **intervention** consistent with **conservation** and the principles of this charter.

Intervention should be the minimum necessary to ensure the retention of **tangible** and **intangible values** and the continuation of **uses** integral to those values. The removal of **fabric** or the alteration of features and spaces that have **cultural heritage value** should be avoided.

7. Physical investigation

Physical investigation of a **place** provides primary evidence that cannot be gained from any other source. Physical investigation should be carried out according to currently accepted professional standards, and should be documented through systematic **recording**.

Invasive investigation of **fabric** of any period should be carried out only where knowledge may be significantly extended, or where it is necessary to establish the existence of **fabric** of **cultural heritage value**, or where it is necessary for **conservation** work, or where such **fabric** is about to be damaged or destroyed or made inaccessible. The extent of invasive investigation should minimise the disturbance of significant **fabric**.

8. Use

The **conservation** of a **place** of **cultural heritage value** is usually facilitated by the **place** serving a useful purpose.

Where the **use** of a **place** is integral to its **cultural heritage value**, that **use** should be retained.

Where a change of **use** is proposed, the new **use** should be compatible with the **cultural heritage value** of the **place**, and should have little or no adverse effect on the **cultural heritage value**.

9. Setting

Where the **setting** of a **place** is integral to its **cultural heritage value**, that **setting** should be conserved with the **place** itself. If the **setting** no longer contributes to the **cultural heritage value** of the **place**, and if **reconstruction** of the **setting** can be justified, any **reconstruction** of the **setting** should be based on an understanding of all aspects of the **cultural heritage value** of the **place**.

10. Relocation

The on-going association of a **structure** or feature of **cultural heritage value** with its location, site, curtilage, and **setting** is essential to its **authenticity** and **integrity**. Therefore, a **structure** or feature of **cultural heritage value** should remain on its original site.

Relocation of a **structure** or feature of **cultural heritage value**, where its removal is required in order to clear its site for a different purpose or construction, or where its removal is required to enable its **use** on a different site, is not a desirable outcome and is not a **conservation** process.

In exceptional circumstances, a **structure** of **cultural heritage value** may be relocated if its current site is in imminent danger, and if all other means of retaining the **structure** in its current location have been exhausted. In this event, the new location should provide a **setting** compatible with the **cultural heritage value** of the **structure**.

11. Documentation and archiving

The **cultural heritage value** and **cultural heritage significance** of a **place**, and all aspects of its **conservation**, should be fully documented to ensure that this information is available to present and future generations.

Documentation includes information about all changes to the **place** and any decisions made during the **conservation** process.

Documentation should be carried out to archival standards to maximise the longevity of the record, and should be placed in an appropriate archival repository.

Documentation should be made available to **connected people** and other interested parties. Where reasons for confidentiality exist, such as security, privacy, or cultural appropriateness, some information may not always be publicly accessible.

12. Recording

Evidence provided by the **fabric** of a **place** should be identified and understood through systematic research, **recording**, and analysis.

Recording is an essential part of the physical investigation of a **place**. It informs and guides the **conservation** process and its planning. Systematic **recording** should occur prior to, during, and following any **intervention**. It should include the **recording** of new evidence revealed, and any **fabric** obscured or removed.

Recording of the changes to a **place** should continue throughout its life.

13. Fixtures, fittings, and contents

Fixtures, fittings, and **contents** that are integral to the **cultural heritage value** of a **place** should be retained and conserved with the **place**. Such fixtures, fittings, and **contents** may include carving, painting, weaving, stained glass, wallpaper, surface decoration, works of art, equipment and machinery, furniture, and personal belongings.

Conservation of any such material should involve specialist **conservation** expertise appropriate to the material. Where it is necessary to remove any such material, it should be recorded, retained, and protected, until such time as it can be reinstated.

Conservation processes and practice

14. Conservation plans

A **conservation plan**, based on the principles of this charter, should:

- (i) be based on a comprehensive understanding of the **cultural heritage value** of the **place** and assessment of its **cultural heritage significance**;
- (ii) include an assessment of the **fabric** of the **place**, and its condition;
- (iii) give the highest priority to the **authenticity** and **integrity** of the **place**;
- (iv) include the entirety of the **place**, including the **setting**;
- (v) be prepared by objective professionals in appropriate disciplines;
- (vi) consider the needs, abilities, and resources of **connected people**;
- (vii) not be influenced by prior expectations of change or development;
- (viii) specify **conservation** policies to guide decision making and to guide any work to be undertaken;
- (ix) make recommendations for the **conservation** of the **place**; and
- (x) be regularly revised and kept up to date.

15. Conservation projects

Conservation projects should include the following:

- (i) consultation with interested parties and **connected people**, continuing throughout the project;
- (ii) opportunities for interested parties and **connected people** to contribute to and participate in the project;
- (iii) research into documentary and oral history, using all relevant sources and repositories of knowledge;
- (iv) physical investigation of the **place** as appropriate;
- (v) use of all appropriate methods of **recording**, such as written, drawn, and photographic;
- (vi) the preparation of a **conservation plan** which meets the principles of this charter;
- (vii) guidance on appropriate **use** of the **place**;
- (viii) the implementation of any planned **conservation** work;
- (ix) the **documentation** of the **conservation** work as it proceeds; and
- (x) where appropriate, the deposit of all records in an archival repository.

A **conservation** project must not be commenced until any required statutory authorisation has been granted.

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- (viii) specify **conservation** policies to guide decision making and to guide any work to be undertaken;
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- (vi) the preparation of a **conservation plan** which meets the principles of this charter;
- (vii) guidance on appropriate **use** of the **place**;
- (viii) the implementation of any planned **conservation** work;
- (ix) the **documentation** of the **conservation** work as it proceeds; and
- (x) where appropriate, the deposit of all records in an archival repository.

A **conservation** project must not be commenced until any required statutory authorisation has been granted.

16. Professional, trade, and craft skills

All aspects of **conservation** work should be planned, directed, supervised, and undertaken by people with appropriate **conservation** training and experience directly relevant to the project.

All **conservation** disciplines, arts, crafts, trades, and traditional skills and practices that are relevant to the project should be applied and promoted.

17. Degrees of intervention for conservation purposes

Following research, **recording**, assessment, and planning, **intervention** for **conservation** purposes may include, in increasing degrees of **intervention**:

- (i) **preservation**, through **stabilisation, maintenance, or repair**;
- (ii) **restoration**, through **reassembly, reinstatement, or removal**;
- (iii) **reconstruction**; and
- (iv) **adaptation**.

In many **conservation** projects a range of processes may be utilised. Where appropriate, **conservation** processes may be applied to individual parts or components of a **place of cultural heritage value**.

The extent of any **intervention** for **conservation** purposes should be guided by the **cultural heritage value** of a **place** and the policies for its management as identified in a **conservation plan**. Any **intervention** which would reduce or compromise **cultural heritage value** is undesirable and should not occur.

Preference should be given to the least degree of **intervention**, consistent with this charter.

Re-creation, meaning the conjectural **reconstruction** of a **structure** or **place**; replication, meaning to make a copy of an existing or former **structure** or **place**; or the construction of generalised representations of typical features or **structures**, are not **conservation** processes and are outside the scope of this charter.

18. Preservation

Preservation of a **place** involves as little **intervention** as possible, to ensure its long-term survival and the continuation of its **cultural heritage value**.

Preservation processes should not obscure or remove the patina of age, particularly where it contributes to the **authenticity** and **integrity** of the **place**, or where it contributes to the structural stability of materials.

i. Stabilisation

Processes of decay should be slowed by providing treatment or support.

ii. Maintenance

A **place** of **cultural heritage value** should be maintained regularly. **Maintenance** should be carried out according to a plan or work programme.

iii. Repair

Repair of a **place** of **cultural heritage value** should utilise matching or similar materials. Where it is necessary to employ new materials, they should be distinguishable by experts, and should be documented.

Traditional methods and materials should be given preference in **conservation** work.

Repair of a technically higher standard than that achieved with the existing materials or construction practices may be justified only where the stability or life expectancy of the site or material is increased, where the new material is compatible with the old, and where the **cultural heritage value** is not diminished.

19. Restoration

The process of **restoration** typically involves **reassembly** and **reinstatement**, and may involve the removal of accretions that detract from the **cultural heritage value** of a **place**.

Restoration is based on respect for existing **fabric**, and on the identification and analysis of all available evidence, so that the **cultural heritage value** of a **place** is recovered or revealed. **Restoration** should be carried out only if the **cultural heritage value** of the **place** is recovered or revealed by the process.

Restoration does not involve conjecture.

I. Reassembly and reinstatement

Reassembly uses existing material and, through the process of **reinstatement**, returns it to its former position. **Reassembly** is more likely to involve work on part of a **place** rather than the whole **place**.

II. Removal

Occasionally, existing **fabric** may need to be permanently removed from a **place**. This may be for reasons of advanced decay, or loss of structural **integrity**, or because particular **fabric** has been identified in a **conservation plan** as detracting from the **cultural heritage value** of the **place**.

The **fabric** removed should be systematically **recorded** before and during its removal. In some cases it may be appropriate to store, on a long-term basis, material of evidential value that has been removed.

20. Reconstruction

Reconstruction is distinguished from **restoration** by the introduction of new material to replace material that has been lost.

Reconstruction is appropriate if it is essential to the function, **integrity**, **intangible value**, or understanding of a **place**, if sufficient physical and documentary evidence exists to minimise conjecture, and if surviving **cultural heritage value** is preserved.

Reconstructed elements should not usually constitute the majority of a **place** or **structure**.

21. Adaptation

The **conservation** of a **place** of **cultural heritage value** is usually facilitated by the **place** serving a useful purpose. Proposals for **adaptation** of a **place** may arise from maintaining its continuing **use**, or from a proposed change of **use**.

Alterations and additions may be acceptable where they are necessary for a **compatible use** of the **place**. Any change should be the minimum necessary, should be substantially reversible, and should have little or no adverse effect on the **cultural heritage value** of the **place**.

Any alterations or additions should be compatible with the original form and **fabric** of the **place**, and should avoid inappropriate or incompatible contrasts of form, scale, mass, colour, and material. **Adaptation** should not dominate or substantially obscure the original form and **fabric**, and should not adversely affect the **setting** of a **place of cultural heritage value**. New work should complement the original form and **fabric**.

22. Non-intervention

In some circumstances, assessment of the **cultural heritage value** of a **place** may show that it is not desirable to undertake any **conservation intervention** at that time. This approach may be appropriate where undisturbed constancy of **intangible values**, such as the spiritual associations of a sacred **place**, may be more important than its physical attributes.

23. Interpretation

Interpretation actively enhances public understanding of all aspects of **places of cultural heritage value** and their **conservation**. Relevant cultural protocols are integral to that understanding, and should be identified and observed.

Where appropriate, interpretation should assist the understanding of **tangible** and **intangible values** of a **place** which may not be readily perceived, such as the sequence of construction and change, and the meanings and associations of the **place** for **connected people**.

Any interpretation should respect the **cultural heritage value** of a **place**. Interpretation methods should be appropriate to the **place**. Physical **interventions** for interpretation purposes should not detract from the experience of the **place**, and should not have an adverse effect on its **tangible** or **intangible values**.

24. Risk mitigation

Places of cultural heritage value may be vulnerable to natural disasters such as flood, storm, or earthquake; or to humanly induced threats and risks such as those arising from earthworks, subdivision and development, buildings works, or wilful damage or neglect. In order to safeguard **cultural heritage value**, planning for risk mitigation and emergency management is necessary.

Potential risks to any **place of cultural heritage value** should be assessed. Where appropriate, a risk mitigation plan, an emergency plan, and/or a protection plan should be prepared, and implemented as far as possible, with reference to a conservation plan.

Definitions

For the purposes of this charter:

Adaptation means the process(es) of modifying a **place** for a **compatible use** while retaining its **cultural heritage value**. **Adaptation** processes include alteration and addition.

Authenticity means the credibility or truthfulness of the surviving evidence and knowledge of the **cultural heritage value** of a **place**. Relevant evidence includes form and design, substance and **fabric**, technology and craftsmanship, location and surroundings, context and **setting, use** and function, traditions, spiritual essence, and sense of place, and includes **tangible** and **intangible values**. Assessment of **authenticity** is based on identification and analysis of relevant evidence and knowledge, and respect for its cultural context.

Compatible use means a **use** which is consistent with the **cultural heritage value** of a **place**, and which has little or no adverse impact on its **authenticity** and **integrity**.

Connected people means any groups, organisations, or individuals having a sense of association with or responsibility for a **place** of **cultural heritage value**.

Conservation means all the processes of understanding and caring for a **place** so as to safeguard its **cultural heritage value**. **Conservation** is based on respect for the existing **fabric**, associations, meanings, and **use** of the **place**. It requires a cautious approach of doing as much work as necessary but as little as possible, and retaining **authenticity** and **integrity**, to ensure that the **place** and its values are passed on to future generations.

Conservation plan means an objective report which documents the history, **fabric**, and **cultural heritage value** of a **place**, assesses its **cultural heritage significance**, describes the condition of the **place**, outlines **conservation** policies for managing the **place**, and makes recommendations for the **conservation** of the **place**.

Contents means moveable objects, collections, chattels, documents, works of art, and ephemera that are not fixed or fitted to a **place**, and which have been assessed as being integral to its **cultural heritage value**.

Cultural heritage significance means the **cultural heritage value** of a **place** relative to other similar or comparable **places**, recognising the particular cultural context of the **place**.

Cultural heritage value/s means possessing aesthetic, archaeological, architectural, commemorative, functional, historical, landscape, monumental, scientific, social, spiritual, symbolic, technological, traditional, or other **tangible** or **intangible values**, associated with human activity.

Cultural landscapes means an area possessing **cultural heritage value** arising from the relationships between people and the environment. **Cultural landscapes** may have been designed, such as gardens, or may have evolved from human settlement and land use over time, resulting in a diversity of distinctive landscapes in different areas. Associative **cultural landscapes**, such as sacred mountains, may lack **tangible** cultural elements but may have strong **intangible** cultural or spiritual associations.

Documentation means collecting, **recording**, keeping, and managing information about a **place** and its **cultural heritage value**, including information about its history, **fabric**, and meaning; information about decisions taken; and information about physical changes and **interventions** made to the **place**.

Fabric means all the physical material of a **place**, including subsurface material, **structures**, and interior and exterior surfaces including the patina of age; and including fixtures and fittings, and gardens and plantings.

Hapu means a section of a large tribe of the **tangata whenua**.

Intangible value means the abstract **cultural heritage value** of the meanings or associations of a **place**, including commemorative, historical, social, spiritual, symbolic, or traditional values.

Integrity means the wholeness or intactness of a **place**, including its meaning and sense of **place**, and all the **tangible** and **intangible** attributes and elements necessary to express its **cultural heritage value**.

Intervention means any activity that causes disturbance of or alteration to a **place** or its **fabric**. **Intervention** includes archaeological excavation, invasive investigation of built **structures**, and any **intervention** for **conservation** purposes.

Iwi means a tribe of the **tangata whenua**.

Kaitiakitanga means the duty of customary trusteeship, stewardship, guardianship, and protection of land, resources, or **taonga**.

Maintenance means regular and on-going protective care of a **place** to prevent deterioration and to retain its **cultural heritage value**.

Matauranga means traditional or cultural knowledge of the **tangata whenua**.

Non-intervention means to choose not to undertake any activity that causes disturbance of or alteration to a **place** or its **fabric**.

Place means any land having **cultural heritage value** in New Zealand, including areas; **cultural landscapes**; buildings, **structures**, and monuments; groups of buildings, **structures**, or monuments; gardens and plantings; archaeological sites and features; traditional sites; sacred **places**; townscapes and streetscapes; and settlements. **Place** may also include land covered by water, and any body of water. **Place** includes the **setting** of any such **place**.

Preservation means to maintain a **place** with as little change as possible.

Reassembly means to put existing but disarticulated parts of a **structure** back together.

Reconstruction means to build again as closely as possible to a documented earlier form, using new materials.

Recording means the process of capturing information and creating an archival record of the **fabric** and **setting** of a **place**, including its configuration, condition, **use**, and change over time.

Reinstatement means to put material components of a **place**, including the products of **reassembly**, back in position.

Repair means to make good decayed or damaged **fabric** using identical, closely similar, or otherwise appropriate material.

Restoration means to return a **place** to a known earlier form, by **reassembly** and **reinstatement**, and/or by removal of elements that detract from its **cultural heritage value**.

Setting means the area around and/or adjacent to a **place** of **cultural heritage value** that is integral to its function, meaning, and relationships. **Setting** includes the **structures**, outbuildings, features, gardens, curtilage, airspace, and accessways forming the spatial context of the **place** or used

in association with the **place**. **Setting** also includes **cultural landscapes**, townscapes, and streetscapes; perspectives, views, and viewshafts to and from a **place**; and relationships with other **places** which contribute to the **cultural heritage value** of the **place**. **Setting** may extend beyond the area defined by legal title, and may include a buffer zone necessary for the long-term protection of the **cultural heritage value** of the **place**.

Stabilisation means the arrest or slowing of the processes of decay.

Structure means any building, standing remains, equipment, device, or other facility made by people and which is fixed to the land.

Tangata whenua means generally the original indigenous inhabitants of the land; and means specifically the people exercising **kaitiakitanga** over particular land, resources, or **taonga**.

Tangible value means the physically observable **cultural heritage value** of a **place**, including archaeological, architectural, landscape, monumental, scientific, or technological values.

Taonga means anything highly prized for its cultural, economic, historical, spiritual, or traditional value, including land and natural and cultural resources.

Tino rangatiratanga means the exercise of full chieftainship, authority, and responsibility.

Use means the functions of a **place**, and the activities and practices that may occur at the **place**. The functions, activities, and practices may in themselves be of **cultural heritage value**.

Whanau means an extended family which is part of a **hapu** or **iwi**.

ISBN 978-0-473-17116-2 (PDF)

English language text first published 1993
Bilingual text first published 1995

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This revised text replaces the 1993 and 1995 versions and should be referenced as the *ICOMOS New Zealand Charter for the Conservation of Places of Cultural Heritage Value* (ICOMOS New Zealand Charter 2010).

This revision incorporates changes in conservation philosophy and best practice since 1993 and is the only version of the ICOMOS New Zealand Charter approved by ICOMOS New Zealand (Inc.) for use.

Copies of this charter may be obtained from

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ANNEX 5

Convention Concerning the Protection of the World Cultural and Natural Heritage

The General Conference of the United Nations Educational, Scientific and Cultural Organization meeting in Paris from 17 October to 21 November 1972, at its seventeenth session,

Noting that the cultural heritage and the natural heritage are increasingly threatened with destruction not only by the traditional causes of decay, but also by changing social and economic conditions which aggravate the situation with even more formidable phenomena of damage or destruction,

Considering that deterioration or disappearance of any item of the cultural or natural heritage constitutes a harmful impoverishment of the heritage of all the nations of the world,

Considering that protection of this heritage at the national level often remains incomplete because of the scale of the resources which it requires and of the insufficient economic, scientific, and technological resources of the country where the property to be protected is situated,

Recalling that the Constitution of the Organization provides that it will maintain, increase, and diffuse knowledge, by assuring the conservation and protection of the world's heritage, and recommending to the nations concerned the necessary international conventions,

Considering that the existing international conventions, recommendations and resolutions concerning cultural and natural property demonstrate the importance, for all the peoples of the world, of safeguarding this unique and irreplaceable property, to whatever people it may belong,

Considering that parts of the cultural or natural heritage are of outstanding interest and therefore need to be preserved as part of the world heritage of mankind as a whole,

Considering that, in view of the magnitude and gravity of the new dangers threatening them, it is incumbent on the international community as a whole to participate in the protection of the cultural and natural heritage of outstanding universal value, by the granting of collective assistance which, although not taking the place of action by the State concerned, will serve as an efficient complement thereto,

Considering that it is essential for this purpose to adopt new provisions in the form of a convention establishing an effective system of collective protection of the cultural and natural heritage of outstanding universal value, organized on a permanent basis and in accordance with modern scientific methods,

Having decided, at its sixteenth session, that this question should be made the subject of an international convention,

Adopts this sixteenth day of November 1972 this Convention.

I. Definition of the Cultural and Natural Heritage

Article 1

For the purposes of this Convention, the following shall be considered as "cultural heritage":

monuments: architectural works, works of monumental sculpture and painting, elements or structures of an archaeological nature, inscriptions, cave dwellings and combinations of features, which are of outstanding universal value from the point of view of history, art or science;

groups of buildings: groups of separate or connected buildings which, because of their architecture, their homogeneity or their place in the landscape, are of outstanding universal value from the point of view of history, art or science;

sites: works of man or the combined works of nature and man, and areas including archaeological sites which are of outstanding universal value from the historical, aesthetic, ethnological or anthropological point of view.

Article 2

For the purposes of this Convention, the following shall be considered as "natural heritage":

natural features consisting of physical and biological formations or groups of such formations, which are of outstanding universal value from the aesthetic or scientific point of view;

geological and physiographical formations and precisely delineated areas which constitute the habitat of threatened species of animals and plants of outstanding universal value from the point of view of science or conservation;

natural sites or precisely delineated natural areas of outstanding universal value from the point of view of science, conservation or natural beauty.

Article 3

It is for each State Party to this Convention to identify and delineate the different properties situated on its territory mentioned in Articles 1 and 2 above.

The World Heritage Convention

4. The cultural and natural heritage is among the priceless and irreplaceable assets, not only of each nation, but of humanity as a whole. The loss, through deterioration or disappearance, of any of these most prized assets constitutes an impoverishment of the heritage of all the peoples of the world. Parts of that heritage, because of their exceptional qualities, can be considered to be of "Outstanding Universal Value" and

as such worthy of special protection against the dangers which increasingly threaten them.

5. To ensure, as far as possible, the proper identification, protection, conservation and presentation of the world's heritage, the Member States of UNESCO adopted the World

Heritage Convention in 1972. The Convention foresees the establishment of a "World Heritage Committee" and a "World Heritage Fund". Both the Committee and the Fund have been in operation since 1976.

6. Since the adoption of the Convention in 1972, the international community has embraced the concept of "sustainable development". The protection and conservation

of the natural and cultural heritage are a significant contribution to sustainable development.

7. The Convention aims at the identification, protection, conservation, presentation and transmission to future generations of cultural and natural heritage of Outstanding

Universal Value.

8. The criteria and conditions for the inscription of properties on the World Heritage List have been developed to evaluate the Outstanding Universal Value of properties and to guide States Parties in the protection and management of World Heritage

properties.

9. When a property inscribed on the World Heritage List is threatened by serious and specific dangers, the Committee considers placing it on the List of World Heritage in Danger. When the Outstanding Universal Value of the property which justified its inscription on the World Heritage List is destroyed, the Committee

II. THE WORLD HERITAGE LIST

II.A Definition of World Heritage

Cultural and Natural Heritage

Cultural and natural heritage are defined in Articles 1 and 2 of the World Heritage Convention.

Article 1

For the purposes of this Convention, the following shall be considered as "cultural heritage";

- monuments: architectural works, works of monumental sculpture and painting, elements or structures of an archaeological nature, inscriptions, cave dwellings and combinations of features, which are of Outstanding Universal Value from the point of view of history, art or science;
- groups of buildings: groups of separate or connected buildings which, because of their architecture, their homogeneity or their place in the landscape, are of Outstanding Universal Value from the point of view of history, art or science;
- sites: works of man or the combined works of nature and of man, and areas including archaeological sites which are of Outstanding Universal Value from the historical, aesthetic, ethnological or anthropological points of view.

Article 2

For the purposes of this Convention, the following shall be considered as "natural heritage":

- natural features consisting of physical and biological formations or groups of such formations, which are of Outstanding Universal Value from the aesthetic or scientific point of view; geological and physiographical formations and precisely delineated areas which constitute the habitat of threatened species of animals and plants of Outstanding Universal Value from the point of view of science or conservation;
- natural sites or precisely delineated natural areas of Outstanding Universal Value from the point of view of science, conservation or natural beauty.

Mixed Cultural and Natural Heritage

Properties shall be considered as "mixed cultural and natural heritage" if they satisfy a part or the whole of the 14 Operational Guidelines for the Implementation of the World Heritage Convention definitions of both cultural and natural heritage laid out in Articles 1 and 2 of the Convention. considers deleting the property from the World Heritage List.

ANNEX 6

توزيع السكان طبقاً لفاك المدن والبلدج
محافظة الكاوية

جدول رقم (2)

البلديات	فئات العمر												البلدج	شعبة / مدينة / قرية	كلم الدرب الأحمر			
	+75	-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20				-15	-10	-5
3481	42	39	76	76	135	137	135	168	139	123	232	331	288	222	174	162	كفور	البلدج
2294	32	51	61	88	97	163	126	178	148	147	147	248	269	220	185	134	بلات	البلدج
1775	74	90	137	164	232	300	261	346	287	272	379	579	557	442	359	296	جبله	البلدج
2589	59	87	83	127	106	163	150	184	154	161	218	254	261	213	202	167	كفور	البلدج
2743	59	87	96	132	139	179	169	204	162	196	198	238	249	234	208	173	بلات	البلدج
5332	118	174	179	259	245	342	319	388	316	357	416	512	510	447	410	340	جبله	البلدج
1320	20	30	32	61	54	65	67	78	84	80	115	138	113	83	100	100	كفور	البلدج
1436	20	27	34	47	79	72	67	74	77	76	80	104	112	107	97	63	بلات	البلدج
2386	40	57	66	103	133	137	134	152	161	156	195	242	275	190	197	163	جبله	البلدج
2114	68	89	90	168	170	212	188	196	161	191	297	354	351	276	232	171	كفور	البلدج
2387	70	91	92	169	185	274	219	238	209	230	333	350	252	245	194	194	بلات	البلدج
6573	138	180	182	337	355	486	407	434	369	400	527	687	701	528	477	365	جبله	البلدج
2741	84	84	77	141	172	188	171	196	149	148	234	296	279	239	184	149	كفور	البلدج
3779	83	93	90	145	149	188	208	220	177	170	201	263	267	219	180	126	بلات	البلدج
3330	167	177	167	286	271	376	379	416	326	318	435	559	536	458	364	275	جبله	البلدج
1859	42	43	54	85	71	115	100	114	106	114	200	249	198	137	120	116	كفور	البلدج
1750	41	41	51	83	85	134	129	102	92	118	132	202	183	138	114	105	بلات	البلدج
3659	83	84	105	169	176	249	229	216	198	236	332	451	381	275	234	221	جبله	البلدج
1716	51	55	53	72	67	115	111	122	100	105	153	178	173	163	128	100	كفور	البلدج
3783	52	55	59	91	83	127	114	143	113	96	136	148	172	140	131	93	بلات	البلدج
3499	103	110	112	163	156	242	225	265	213	201	289	326	345	303	259	193	جبله	البلدج
2828	46	58	65	128	118	163	158	171	144	205	259	352	293	250	211	207	كفور	البلدج
2874	62	67	83	164	129	198	175	204	177	164	218	264	302	245	214	208	بلات	البلدج
5702	108	125	148	292	247	361	333	375	321	369	477	616	595	495	425	415	جبله	البلدج
1444	34	27	34	57	54	84	102	100	83	96	134	161	153	121	116	89	كفور	البلدج
1714	41	45	40	81	51	96	76	92	97	98	114	121	148	131	108	102	بلات	البلدج
2888	75	72	74	136	116	130	178	192	179	184	248	282	301	252	224	191	جبله	البلدج
1637	31	40	59	60	65	123	114	135	143	133	203	266	147	129	106	83	كفور	البلدج
1400	30	36	41	69	76	82	99	106	109	77	107	137	154	103	99	73	بلات	البلدج
2327	78	100	129	141	205	213	241	252	210	310	403	301	232	205	156	جبله	البلدج	
1836	31	51	45	63	67	117	109	132	105	124	168	204	189	164	135	127	كفور	البلدج
1876	28	43	50	85	73	123	106	129	128	140	141	216	189	145	171	109	بلات	البلدج
3712	59	94	95	153	140	240	215	261	233	264	309	420	378	309	306	236	جبله	البلدج
2670	61	44	59	81	98	130	119	142	91	145	188	263	209	160	150	130	كفور	البلدج
2874	65	48	70	87	95	150	128	150	119	109	153	199	244	171	156	130	بلات	البلدج
4114	126	92	129	160	193	280	247	292	210	254	341	462	453	331	306	260	جبله	البلدج

توزيع السكان طبقاً لثلاث الفئات العمرية والجنس
محافظة القاهرة

جدول رقم (2)

الإجمالي	فئات العمر														الفرع		
	+75	-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10		-5	0
6142	20	20	52	102	119	219	271	353	401	427	542	746	758	721	712	679	ذكور
5466	32	35	29	91	105	166	220	328	314	377	513	613	675	668	642	628	إناث
11608	52	55	81	193	224	385	491	681	745	804	1055	1359	1433	1389	1354	1307	جمله
22139	129	139	244	358	499	777	935	1203	1358	1522	2142	2712	2758	2519	2384	2440	الذكور
19754	133	137	182	321	355	667	857	1067	1230	1349	1823	2334	2427	2285	2301	2286	إناث
41893	287	296	426	679	854	1444	1792	2270	2588	2871	3965	5046	5185	4804	4685	4726	جمله
38030	248	254	466	718	966	1457	1959	2037	2491	2749	3766	4664	4412	3761	4028	4099	الذكور
33986	175	222	298	498	762	1130	1675	2140	2197	2263	3342	4004	4152	3623	3766	3677	إناث
72016	378	476	764	1216	1728	2647	3634	4177	4688	5014	7108	8668	8354	7384	7794	7776	جمله
3174	57	52	64	99	110	134	152	190	197	210	293	413	344	322	269	278	الذكور
3177	51	58	49	92	135	162	152	196	193	204	283	353	403	300	274	261	إناث
6351	108	110	113	191	245	297	304	386	390	414	576	766	717	622	543	539	جمله
375	8	12	20	8	23	15	19	19	17	16	28	55	32	36	32	15	الذكور
330	7	8	7	16	10	21	21	22	21	17	19	47	43	34	15	22	إناث
705	15	20	27	24	33	36	40	41	38	33	47	102	95	70	47	37	جمله
3147	49	63	74	108	146	131	174	193	187	208	284	403	302	295	254	253	الذكور
3055	53	79	60	100	117	170	174	201	199	218	211	350	329	287	252	256	إناث
6202	101	142	134	208	263	321	348	394	386	426	495	753	631	582	506	509	جمله
36532	153	194	323	517	772	1199	1551	1999	2468	2703	3576	3996	4216	4132	4338	4393	الذكور
32698	122	174	216	392	539	916	1222	1751	1995	2285	3230	3999	3785	3782	4081	4186	إناث
69227	277	368	539	909	1311	2135	2773	3750	4465	4988	6806	7995	8001	7914	8419	8579	جمله
28015	157	201	321	539	715	829	1434	1499	2071	2197	2693	2620	3197	3148	3061	3333	الذكور
26033	113	191	219	423	566	811	1240	1622	1701	1835	2967	3207	2590	3035	2415	3098	إناث
54048	270	392	540	962	1281	1640	2674	3121	3772	4032	5660	5827	5787	6183	5476	6431	جمله
262050	1463	1859	2624	4382	5939	8908	12056	14820	17070	18582	25712	30516	30443	28948	28824	29904	الذكور
137554	778	955	1564	2449	3350	4761	6495	7493	9190	10032	13314	15609	16039	14934	15078	15490	إناث
124496	685	904	1060	1933	2589	4124	5561	7327	7880	8550	12398	14907	14404	14014	13746	14414	جمله
262050	1763	1859	2624	4382	5939	8908	12056	14820	17070	18582	25712	30516	30443	28948	28824	29904	جمله

توزيع المصريين طبقاً لثبات السن والزوج

محافظة القاهرة

جدول رقم (3)

الإجمالي	فئات السن														قسم / النوع مركز	
	+75	-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10		-5
قسم الدرب الأحمر																
30453	696	778	860	1322	1320	523	1844	2043	1690	1887	2786	3570	3106	2841	2241	1886
29986	704	793	880	1446	1453	2033	1930	2172	1901	1855	2181	2924	3131	2472	2274	1777
60439	1400	1531	1740	2768	2773	4016	3774	4215	3391	3742	4967	6494	6237	5013	4515	3663
30453	696	778	860	1322	1320	1923	1844	2043	1690	1887	2786	3570	3106	2841	2241	1886
29986	704	793	880	1446	1453	2093	1930	2172	1901	1855	2181	2924	3131	2472	2274	1777
60439	1400	1531	1740	2768	2773	4016	3774	4215	3391	3742	4967	6494	6237	5013	4515	3663
قسم الجمالية																
25162	509	594	767	1157	1141	1366	1499	1607	1472	1672	2368	2952	2541	2051	1855	1611
24510	539	614	693	1181	1201	1718	1523	1593	1616	1629	1969	2515	2530	1927	1693	1569
49672	1048	1383	1460	2338	2342	3084	3022	3200	3088	3301	4337	5467	5071	3978	3548	3180
25162	509	594	767	1157	1141	1566	1499	1607	1472	1672	2368	2952	2541	2051	1855	1611
24510	539	614	693	1181	1201	1718	1523	1593	1616	1629	1969	2515	2530	1927	1693	1569
49672	1048	1383	1460	2338	2342	3084	3022	3200	3088	3301	4337	5467	5071	3978	3548	3180
قسم باب الشعرية																
26628	567	597	816	1283	1185	1634	1695	1812	1523	1643	2263	2869	2704	2312	2031	1694
27388	578	718	813	1339	1316	1928	1808	1955	1814	1845	2114	2667	2578	2306	1943	1666
54016	1145	1315	1629	2622	2501	3552	3503	3767	3337	3488	4377	5536	5282	4618	3974	3360
26628	567	597	816	1283	1185	1634	1695	1812	1523	1643	2263	2869	2704	2312	2031	1694
27388	578	718	813	1339	1316	1928	1808	1955	1814	1845	2114	2667	2578	2306	1943	1666
54016	1145	1315	1629	2622	2501	3562	3503	3767	3337	3488	4377	5536	5282	4618	3974	3360
قسم النصارى																
29583	924	1066	1189	1429	1410	1873	2018	1984	1783	1786	2157	2738	2867	2353	2207	1799
30932	847	1016	1236	1887	1729	2102	2012	2240	2017	2090	2364	2683	2694	2236	2082	1697
60515	1771	2082	2425	3316	3139	3975	4030	4224	3800	3876	4521	5421	5561	4589	3496	3496
29583	924	1066	1189	1429	1410	1873	2018	1984	1783	1786	2157	2738	2867	2353	2207	1799
30932	847	1016	1236	1887	1729	2102	2012	2240	2017	2090	2364	2683	2694	2236	2082	1697
60515	1771	2082	2425	3316	3139	3975	4030	4224	3800	3876	4521	5421	5561	4589	3496	3496

توزيع المصريين طبقاً لفئات السن والزوج
محافظة القاهرة

جدول رقم (3)

الإجمالي	فئات السن														كسم مركز / النوع	
	+75	-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10		-5
كسم محافظة لاسن																
137528	778	931	1563	2449	3350	4782	6494	7490	9189	10032	13313	15604	16036	14931	15076	15488
124478	685	904	1060	1932	2589	4123	5560	7327	7879	8548	12397	14904	14403	14012	13744	14411
262006	1463	1857	2623	4381	5939	8165	12054	14817	17068	18580	25710	30508	30439	28943	28820	29899
137528	778	931	1563	2449	3350	4782	6494	7490	9189	10032	13313	15604	16036	14931	15076	15488
124478	685	904	1060	1932	2589	4123	5560	7327	7879	8548	12397	14904	14403	14012	13744	14411
262006	1463	1857	2623	4381	5939	8165	12054	14817	17068	18580	25710	30508	30439	28943	28820	29899
كسم البساتين																
417658	3100	3737	5920	11233	15230	22071	24408	26573	27585	29177	35917	44289	44873	40480	41866	41199
400825	2464	3136	4067	7798	11476	19298	22966	27205	27645	28550	39323	45516	43578	38419	39742	39642
818483	5564	6873	9987	19031	26706	41369	47374	53778	55230	57727	75240	89805	88451	78899	81608	80841
417658	3100	3737	5920	11233	15230	22071	24408	26573	27585	29177	35917	44289	44873	40480	41866	41199
400825	2464	3136	4067	7798	11476	19298	22966	27205	27645	28550	39323	45516	43578	38419	39742	39642
818483	5564	6873	9987	19031	26706	41369	47374	53778	55230	57727	75240	89805	88451	78899	81608	80841
كسم المروج																
260957	1378	1799	2985	5422	7351	10935	13683	16600	19859	21302	23820	25089	26323	25293	28520	30598
245418	1039	1313	2003	3722	5585	9069	11724	14159	17386	19228	27628	28164	24552	23799	26899	29148
506375	2417	3112	4988	9144	12936	20604	25407	30759	37245	40530	51448	53253	50875	49092	55419	59746
260957	1378	1799	2985	5422	7351	10935	13683	16600	19859	21302	23820	25089	26323	25293	28520	30598
245418	1039	1313	2003	3722	5585	9069	11724	14159	17386	19228	27628	28164	24552	23799	26899	29148
506375	2417	3112	4988	9144	12936	20604	25407	30759	37245	40530	51448	53253	50875	49092	55419	59746
إجمالي المحافظة																
3398532	45741	53481	80062	123785	140471	181709	197512	210999	218572	232492	302466	377680	355162	300672	299864	277864
3301573	41042	48619	63170	109956	131498	187543	197486	217073	220573	229876	305983	369121	344450	284809	285176	265228
6700105	86783	102100	143232	233741	271969	369282	394968	428072	439145	462368	608449	746801	699612	585481	585040	543092
3398532	45741	53481	80062	123785	140471	181709	197512	210999	218572	232492	302466	377680	355162	300672	299864	277864
3301573	41042	48619	63170	109956	131498	187543	197486	217073	220573	229876	305983	369121	344450	284809	285176	265228
6700105	86783	102100	143232	233741	271969	369282	394968	428072	439145	462368	608449	746801	699612	585481	585040	543092

توزيع العمر بين طبقات السكان والذراع

ملاحظة: النسبة

جداول رقم (3)

الإجمالي	طبقات العمر													الذراع	توزيع / مدينة / قرية	قسم الدرب الأحمر		
	+75	-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15				-10	-5
3473	42	39	76	76	135	137	135	168	139	125	229	328	286	222	174	162	مفرد	البلدية
2284	32	51	61	88	97	163	126	178	148	147	147	248	269	220	185	134	مفرد	البلدية
4767	74	90	137	164	232	300	261	346	237	272	376	576	555	442	359	296	مفرد	البلدية
3589	59	87	83	127	106	163	150	184	154	161	218	234	261	213	202	167	مفرد	البلدية
3743	59	87	96	132	139	179	169	204	162	196	198	238	249	234	208	173	مفرد	البلدية
5332	118	174	179	259	245	342	319	388	316	357	416	512	510	447	410	340	مفرد	البلدية
1220	20	30	32	61	54	65	67	78	84	80	115	138	113	83	100	100	مفرد	البلدية
1136	20	27	34	47	79	72	67	74	77	76	80	104	112	107	97	83	مفرد	البلدية
2386	40	57	66	108	133	137	134	152	161	156	195	242	225	190	197	163	مفرد	البلدية
3208	68	89	90	168	170	212	188	196	161	188	297	354	351	276	330	170	مفرد	البلدية
3353	70	89	92	169	185	274	219	237	206	209	229	333	350	252	245	194	مفرد	البلدية
5561	138	178	182	337	355	486	407	433	367	397	526	687	701	528	475	364	مفرد	البلدية
2736	84	84	77	141	122	188	170	196	147	147	233	296	279	239	184	149	مفرد	البلدية
2774	83	92	90	145	149	187	207	220	177	170	200	262	267	219	180	126	مفرد	البلدية
3510	167	176	167	286	271	375	377	416	324	317	433	558	546	458	384	275	مفرد	البلدية
1863	41	43	54	86	71	114	100	114	106	117	200	246	198	137	120	116	مفرد	البلدية
1747	41	41	51	82	85	134	129	102	91	117	132	202	183	138	114	105	مفرد	البلدية
3610	82	84	105	168	156	248	229	216	197	234	332	448	381	275	234	221	مفرد	البلدية
1745	51	55	53	71	67	115	111	122	100	105	153	178	173	163	128	100	مفرد	البلدية
1753	52	55	59	91	83	127	114	143	113	96	136	148	172	140	131	93	مفرد	البلدية
3498	103	110	112	162	150	242	225	265	213	201	289	326	345	303	259	193	مفرد	البلدية
2826	46	57	65	128	118	163	158	171	144	205	259	351	293	250	211	207	مفرد	البلدية
2874	62	67	83	164	129	198	175	204	177	164	218	264	302	245	214	208	مفرد	البلدية
3700	108	124	148	292	247	361	333	375	321	369	477	615	595	495	425	415	مفرد	البلدية
1444	34	27	34	57	54	84	102	100	82	96	134	161	153	121	116	89	مفرد	البلدية
1442	40	45	40	81	54	96	75	92	97	98	114	121	148	131	108	102	مفرد	البلدية
2886	74	72	74	138	108	180	177	192	179	194	248	282	301	252	224	191	مفرد	البلدية
1834	31	40	58	60	65	123	114	135	142	132	203	266	147	129	106	83	مفرد	البلدية
1000	30	36	41	69	76	82	99	106	109	77	107	137	184	108	99	73	مفرد	البلدية
3234	61	78	99	129	141	205	213	241	251	205	310	403	301	232	205	156	مفرد	البلدية

توزيع المصروفين طبقاً لعلاقات السنن والتوزيع

مدينة القاهرة

جدول رقم (3)

الرموز	فئات السنن														النوع	فئة	
	+75	-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10			-5
6141	20	20	52	102	119	219	271	333	401	427	542	746	758	721	712	678	فقران
5464	32	35	29	91	105	166	220	328	344	377	513	612	675	668	642	627	فقران
11605	82	55	81	193	223	385	491	651	745	804	1055	1358	1433	1354	1305	1305	فقران
22132	129	159	244	358	499	775	935	1202	1358	1522	2142	2711	2756	2518	2384	2440	فقران
19750	133	137	182	321	355	667	857	1067	1230	1349	1823	2332	2426	2285	2300	2286	فقران
41882	262	296	426	679	854	1442	1792	2269	2588	2871	3965	5043	5182	4803	4684	4726	فقران
38023	203	254	466	718	966	1457	1958	2036	2490	2749	3765	4664	4412	3761	4026	4098	فقران
33952	175	222	298	498	762	1189	1675	2140	2197	2265	3342	4004	4152	3621	3765	3677	فقران
72005	378	476	764	1216	1728	2646	3633	4176	4687	5014	7107	8668	8564	7382	7791	7775	فقران
3174	57	52	64	99	116	134	152	190	197	210	283	413	344	322	269	278	فقران
3177	51	58	49	92	135	163	152	196	193	204	293	353	403	300	274	261	فقران
6351	108	110	113	191	245	297	304	386	390	414	576	766	747	622	543	539	فقران
375	8	12	20	8	25	15	19	19	17	16	28	55	52	36	32	15	فقران
336	7	8	7	16	16	21	21	22	21	17	19	47	43	34	15	22	فقران
703	15	20	27	24	33	36	40	41	38	33	47	102	95	70	47	37	فقران
3147	49	63	74	108	146	154	174	193	187	208	284	403	302	295	254	253	فقران
3035	52	79	60	100	117	170	174	201	199	218	211	350	329	287	232	256	فقران
6201	101	142	134	208	263	324	348	394	386	426	495	753	631	582	506	509	فقران
36528	135	194	323	517	723	1199	1551	1998	2468	2703	3576	3995	4216	4130	4338	4393	فقران
52807	122	174	216	392	539	936	1222	1751	1994	2284	3230	3959	3785	3782	4081	4184	فقران
69219	277	368	539	909	1311	2135	2773	3749	4462	4987	6806	7994	8001	7912	8419	8577	فقران
28003	157	199	320	539	715	829	1434	1499	2071	2197	2693	2617	3196	3148	3061	3333	فقران
26020	113	191	219	422	566	811	1239	1622	1701	1834	2966	3207	2590	3035	2413	3098	فقران
34037	270	390	539	961	1281	1640	2673	3121	3772	4031	5659	5824	5786	6183	5476	6431	فقران
262006	1463	1857	2623	4381	5939	8905	12054	14817	17068	18580	25710	30508	30439	28943	28820	29899	فقران
137529	778	953	1563	2449	3380	4782	6494	7490	9189	10032	13313	15604	16036	14931	15076	15488	فقران
124475	685	904	1050	1932	2589	4123	5560	7327	7879	8548	12397	14904	14403	14012	13744	14411	فقران
262036	1463	1857	2623	4381	5939	8905	12054	14817	17068	18580	25710	30508	30439	28943	28820	29899	فقران

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إستراتيجية حفاظ مستدامة (الجبانة الشرقية فى القاهرة و نطاق الحماية)

منطقة الجبانة الشرقية هى منطقة شديدة التميز و لها خصوصية متفردة، فهى شديدة الثراء بالمقابر التاريخية و المبانى ذات القيمة المعمارية المتميزة هذا بالإضافة الى إرتباط سكانها بها. و منذ نشأتها كانت الجبانة دائما منطقة يتجاوز فيها الموت مع الحياة فهى ليست مكان للدفن فقط و لكنها منازل مأهولة بالسكان أيضا.

تخضع الجبانة الشرقية لسياسات متضاربة غير واضحة المعالم لجهات عديدة مختلفة لا يوجد بينها تنسيق مما يؤثر سلبا على التطور العمرانى للمنطقة بوجه خاص و على القاهرة التاريخية بوجه عام مما يدمر خط السماء المفتوح المطل على القاهرة التاريخية. لذا فالهدف الرئيسى للدراسة هو الحفاظ على خط السماء العمرانى للقاهرة التاريخية بتطبيق مقترح لإستراتيجية حفاظ مستدام لمنطقة الجبانة و نطاق الحماية لها.

و من هنا تكمن أهمية هذه الدراسة فى انها تقدم إستراتيجية حفاظ تتبع من منظور تخطيطى و هو منظور أوسع من الدراسات السابقة التى تتبع من منظور حفاظ عمرانى فقط.

تتكون الرسالة من ثلاثة أبواب مقسمة إلى خمسة فصول كالتالى: **الفصل الأول:** عبارة عن مسح ميدانى أولى لمنطقة الدراسة و يهدف الى رصد مظاهر التدهور العمرانى للمنطقة الذى لحق بها خلال فترة زمنية محدده و قدرها سنة واحدة و هى مدة الدراسة. **الفصل الثانى:**

دراسة نظرية تبدأ بالتعرف على التطور التاريخى للقاهرة بشكل عام و الجبانة الشرقية بوجه خاص ثم يليها دراسة نظريات الحفاظ المختلفة و المواثيق العالمية الخاصة بالحفاظ للمناطق الأثرية للوصول منها الى منهج للحفاظ يلائم منطقة الدراسة . **الفصل الثالث:** هو عبارة عن

دراسة ميدانية أكثر تفصيلا مما سبق لتقييم المنطقة طبقا لمعايير سبق تحديدها و الوصول الى خريطة مفصلة للمنطقة تصلح فيما بعد كأساس لأى عمل تنفيذى يهدف الى تطوير المنطقة والإرتقاء بها. **الفصل الرابع:** يتناول التجارب العالمية و مقارنتها بنظيرها المصرى للإستفادة

منها فى المنهج المقترح للحفاظ. **الفصل الخامس:** يقدم مقترح لإستراتيجية حفاظ مستدام لمنطقة الدراسة و نطاق الحماية لها و كذلك الخريطة التفصيلية لمنطقة الجبانة الشرقية بمقياس

مهندس: غادة محمد عطية
تاريخ الميلاد: 1964 - 6 - 27
الجنسية: مصرية
تاريخ التسجيل: 1/10/2012
تاريخ المنح: 2015
القسم: الهندسة المعمارية
الدرجة: ماجستير العلوم

المشرفون:

أ.د. محمد محمد البرملجى
أ.د. سهير زكى حواس
د. شيماء سمير عاشور (مدرس بالأكاديمية العربية للعلوم و التكنولوجيا و
النقل البحرى)

المتحنون:

أ.د. هشام محمود عارف (أستاذ العمارة فى كلية الهندسة-جامعة الفيوم)
أ.د. أحمد محمد أمين
أ.د. محمد محمد البرملجى
أ.د. سهير زكى حواس

عنوان الرسالة:

استراتيجية حفاظ مستدامة (الجبانه الشرقية فى القاهرة و نطاق الحماية)

الكلمات الدالة: الجبانه الشرقية بالقاهرة - تراث العالمى - تخطيط إقليمى - حفاظ مستدام
- خريطة تفصيلية - عدالة إجتماعية

ملخص الرسالة:

منطقة الجبانه الشرقية هى منطقة شديدة التميز و لها خصوصية متفردة، كما انها ليست مكان للدفن فقط و لكنها منازل مأهولة بالسكان أيضا. تخضع الجبانه الشرقية لسياسات متضاربة مما يؤثر سلبا على التطور العمرانى للمنطقة. لذا فالهدف الرئيسى للدراسة هو تطبيق مقترح لإستراتيجية حفاظ مستدام لمنطقة الجبانه و نطاق الحماية لها. تتكون الرسالة من ثلاثة أبواب مقسمة إلى خمسة فصول كالتالى: الفصل الأول: عبارة عن مسح ميدانى أولى لمنطقة الدراسة الفصل الثانى: دراسة نظرية. الفصل الثالث: هو عبارة عن دراسة ميدانية أكثر تفصيلا الفصل الرابع: يتناول التجارب العالمية و مقارنتها بمصر الفصل الخامس: يقدم مقترح لإستراتيجية حفاظ مستدام لمنطقة الدراسة و نطاق الحماية لها و كذلك الخريطة التفصيلية لمنطقة الجبانه الشرقية بمقياس رسم 1/800.

إستراتيجية حفاظ مستدامة
(الجبانة الشرقية فى القاهرة و نطاق الحماية)

اعداد

غادة محمد عطية

رسالة مقدمة الى كلية الهندسة - جامعة القاهرة
كجزء من متطلبات الحصول على درجة ماجستير العلوم
فى
الهندسة المعمارية

يعتمد من لجنة ممتحنين:

المشرف الرئيسى	الاستاذ الدكتور: محمد محمد البرملجى
عضو	الاستاذ الدكتور: سهير زكى حواس
الممتحن الداخلى	الاستاذ الدكتور: أحمد محمد أمين
الممتحن الخارجى	الاستاذ الدكتور: هشام محمود عارف

كلية الهندسة - جامعة القاهرة
الجيزة - جمهورية مصر العربية

2015

إستراتيجية حفاظ مستدامة
(الجبانة الشرقية فى القاهرة و نطاق الحماية)

اعداد

غادة محمد عطية

رسالة مقدمة الى كلية الهندسة - جامعة القاهرة
كجزء من متطلبات الحصول على درجة ماجستير العلوم
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الجيزة - جمهورية مصر العربية

2015

إستراتيجية حفاظ مستدامة
(الجبانة الشرقية فى القاهرة و نطاق الحماية)

اعداد

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رسالة مقدمة الى كلية الهندسة - جامعة القاهرة
كجزء من متطلبات الحصول على درجة ماجستير العلوم
فى
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كلية الهندسة - جامعة القاهرة
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2015