١٥ مايو

15th of May

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–
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THE MIDDLE EAST STUDIO
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WITH SPECIAL THANKS TO:
Head of the Police department of the 15th of May City
And Samir who leaded us through all the troubles we got

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PREFACE

HELWAN REGION

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INTRODUCTION DESERT CITIES

Picture taken by Aglaia Konrad, from her book: *Desert City*

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After thirty years of development efforts in desert areas, Egypt is still trying to reclaim the desert, to provide work and living space for its expanding population and their expanding settlements. Country's efforts to green the desert could be ill-advised.

About 96 percent of Egypt is covered by the Sahara desert, with the remmaning, more fertile land concentrated along the Nile Sliver that snakes through the eastern half of the county. Although the Nile Valley accounts for just 4 percent of Egypt's surface year yet it is home to virtually all of the 79 million residents; and, the overcrowding in the valley looks set to become worse, given that Egypt's population is expected to double by)2050. 1 Official estimates put unemployment at 9.3 percent. Many other problems, like ecological ones, lead people to the idea to develop desert areas.

Over the years, the national government has developed a system by which it makes large tracts of land assailable to developers and builders in urban extensions and new towns. The government provides the roads and other infrastructure, which is included in the purchase price of the land.

From there, it is up to the private companies to develop much of the housing. High-rise condominium buildings are built, wide most of the units sold to the new residents. There are also lower rise buildings, along with semi-detached housing and detached housing.

This represents a new, market based approach, which has replaced the previous socialist model from before the 1970s. As is or has been the case in many market-oriented countries, the government continues to build low-income housing in the new towns and urban extensions.

The new towns are on or beyond the edge of the urbanization and some were intended to become „self-sufficient" on the assumption that people who lived in the new towns would also work there. The self-sufficient new Coons were to be 66 of October, 106 of Ramadan, Badr and Sadat City .

The urban extensions radiate from the existing urbanization, such as New Cairo, EI Rehab and Shorouk These developments are mainly residential, with services such as universities and hospitals and some industries, but were not planned to be „self-sufficient"

The Cairo area new towns include 6th of October, 10th of Ramadan, Badr, Sheikh Zayed, 15 May, Obour, New Cair o, Rehab and Shorouk cities. The government w% particularly successful in the new towns of 6th of October and 106 of Ramadan in attracting businesses and it is indeed possible that there are enough jobs in those new towns to employ the local work force. The new towns have been successful in attracting employment and in drawing employees from a larger area There are very large industrial estates in the new towns 66 of October and 106 of Ramadan, which contain manufacturing plants, warehouses and offices that would have been much snore costly and even impossible to develop on the brownfield sites inside older Cairo. In addition to the new towns, the government has developed an information technology city („Smart Village") along the desert expressway to the north west of the urban area toward Alexandria very close to the Toll PIaza of the Cairo to Alexandria Desert Road.

The Illusion of Self Sufficiency: But, of course, the „self-sufficiencfy objecttive was not reached, as many people from the new towns work in other pacts of the metropolitan area while many others from elsewhere in the metropolitan area work in the new towns. Suffice it to say that within a labor market (metropolitan area), the logic of planners with respect to where people should work is a highly inaccurate predictor of where Key will actually work. Given the opportunity to live and work

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Egyptian Airplane crashed during Yom Kuppur War, October 1973

Aswan High Dam

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During the rule of Said succeeded by Ismail in the Muhammad Ali Dynasty, the Suez Canal was constructed and opened in 1869. Partly because of the construction of this canal, Egypt hat big loans with Great Britain and France and became financially strong depended on those countries. With the great interest from Great Britain in this canal, which connects England with their colony India and is the central location between those countries, they wanted to take control and occupied Egypt in 1882. In 1914 the country became an official British Protectorate, this lasted until 1922 when the British declared a unilateral independence of Egypt, but in fact it remained to be a puppet from the British until the Revolution of 1952. Out of this revolution, Gamal Abdel Nasser became in 1953 the president of Egypt and set on a strong Arabic-Socialist and Nationalistic Politics. In 1956 he nationalize the Suez Canal that was followed by the Suez Crisis which became to be a political catastrophe for Britain, France and Israel but strengthen the power of Nasser.

An important construction project for Nasser was the construction of the Aswan High Dam, this to gain control about the water level of the Nile against the flooding, to store water for the agriculture and to generate power. The dam was funded by the Soviets and they gave the technical support. This control of the water level made it possible to settle on the lower areas of the Nile valley and completely changed the way of urbanisation inside the valley. Nasser halt strong political and economical relations with the Soviet Union which where holding between 1955 and 1971.

In 1967, there was the Six-Day war between Israel against Egypt, Jordan and Syria, this caused those Arab nations massive military and land losses and became to be a sort of trauma.

President Nasser died in 1970 and was succeeded by Anwar Sadat. Sadat switched the politics from the direction of the Soviet Union to the one from the United States, so his economical ideology. To secure his power, he launched a corrective revolution, he took the Nassersist ministers out of the government who where called to be to socialist and cleaned his military from possible opponents. This revolution took place on the 15th of May 1971 and was for Sadat of great personal meaning. It's where the name from the 15th of May City comes from. This revolution followed by the expelling of Soviet advisor in 1972 and the launche of the Infitah reform what was the beginning of economic liberalisation.

On the 6th of October 1973 Egypt and Syria started a surprise attack against Israel to regain the Golan Height and Sinai back in Arab hands. The war was a military victory for Israel but is oft seen as a political victory for Sadat. The war gave back some Arab-Self-confidence and formed the basis of the "October Working Paper" written in October 1974 by Sadat himself.

In 1979 Sadat made a peace treaty with Israel and regain for this the Sinai back. On the 6th of October 1981 Sadat got assassinated during a victory parade in Cairo. Hosni Mubarak succeeded him as president.

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TIMELINE

Abas Helmi II
Khedive under the British

Fuad I
(followed Hussein Kamel in 1917)
Sultan Untill 1922 under British protectorate, after King

Farouk I
King

1900 | 1904 | 1914 | 1922 | 1936 | 1945 | 1948 | 1950 | 1952

General History		Egypt becomes a British protectorate	Egyptian independence declared by the UK	Occupation is terminated	Arab league founded	May 15: 1st war with Israel	July 23 Revolution: Militairy coup with Nasr overthrew King Faruk. Nasr became President in 1954
Development of Cairo	Cairo has 600.000 inhabitants		Cairo has 875.000 inhabitants	Cairo has 1.150.000 inhabitants	Cairo has 1.525.000 inhabitants		Cairo has 2.350.000 inhabitants
Helwan & 15 May City	Creation of the modern City of Helwan						After the Revolution: Arise of big Industrial Plans in Helwan

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Nasser (succeeded Mohammed Naguib in 1954) Arab-Socialisme

Sadat Infitah, opening doors: liberalisme

Mubarak Privatization after economic reform

1956	1960	1967	1970	1973	1979	1981	1987	1992	2000	2009	2010
Nasr nationalized Suez Canal: Suez War	Construction of Aswan Dam	Six Days War	Nasir dies. Sadat new President followed by "Corrective Revolution" on May 15, 1971	Oct. 6 Yom Kippur war	Peace with Israel	Extremists killed Sadat. Mubarack new President	Opening 1st Metro line	Earthquake: 545 deaths 50.000 homeless		Barack Obama speech in Cairo university	
1956 1st Cairo Master Plan	Cairo has 4.784.000 inhabitants		1970 Greater Cairo Masterplan	1974 „Strategy of the new Cities",		1982 9.200.000 Inhabitants				2006 14.898.000 Inhabitants	
			1972 Generalplan for Helwan Industry-Zone is excepted 1975 Tender for the 15-May-City is won by a German-Egyptian Plan Community	1978 Final decision to build the 15-May-City with decree Nr. 119 1979 Start of construction 15-May-City		1981 First inhabitants move to 15-May-City		1990 65.000 inhabitants inside 15-May-City 1992 Completion of the Tram line 80.000 inhabitants inside 15-May-City 20.119,State provided' Dwellings of 36.000 are completed		2006 90.324 inhabitants in 15-May-City	

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DEVELOPMENT OF THE CITY

Development of Cairo

Nile Valley, South of Cairo

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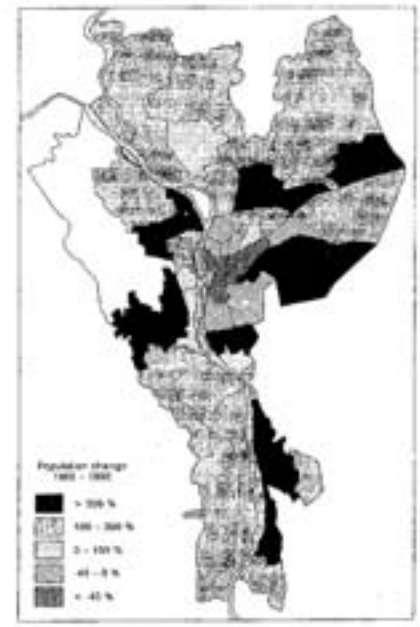

Figure 7 Greater Cairo: population change, 1966-96 – by quinn. Source: Denis (1999a)

Greater Cairo Population change, 1966-1996

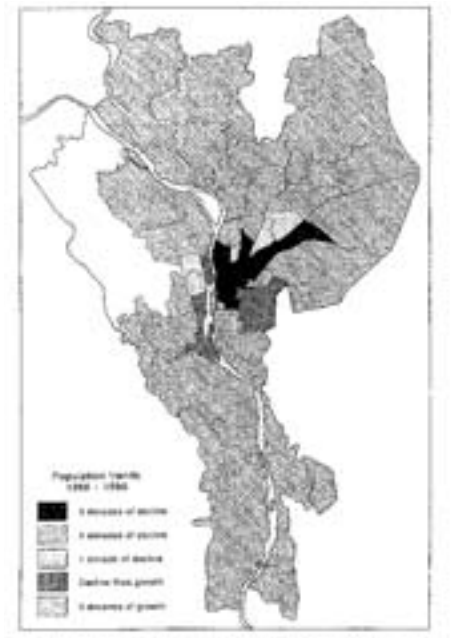

Figure 6 Greater Cairo: population trends, 1966-96 – by quinn. Source: (Denis, 1999a)

Greater Cairo Population trends, 1966-1996

Cairo is the largest City on the African continent, with an official amount of 14.898.000 inhabitants by the Egyptian Government (including Giza, Helwan and 6th of October) or 11.893.000 by UN Habitat or it even may be 17.290.000 (no one knows it really).
Fact is that the exploding of population started really since the Revolution of 1952. From that time, many people escaped from the countryside in hope of a better future in the city. This exodus is creating many problems such as uncontrolled growth and lack of infrastructure. The overloading of the city was one of the reasons to look for strategies how to control this growth.

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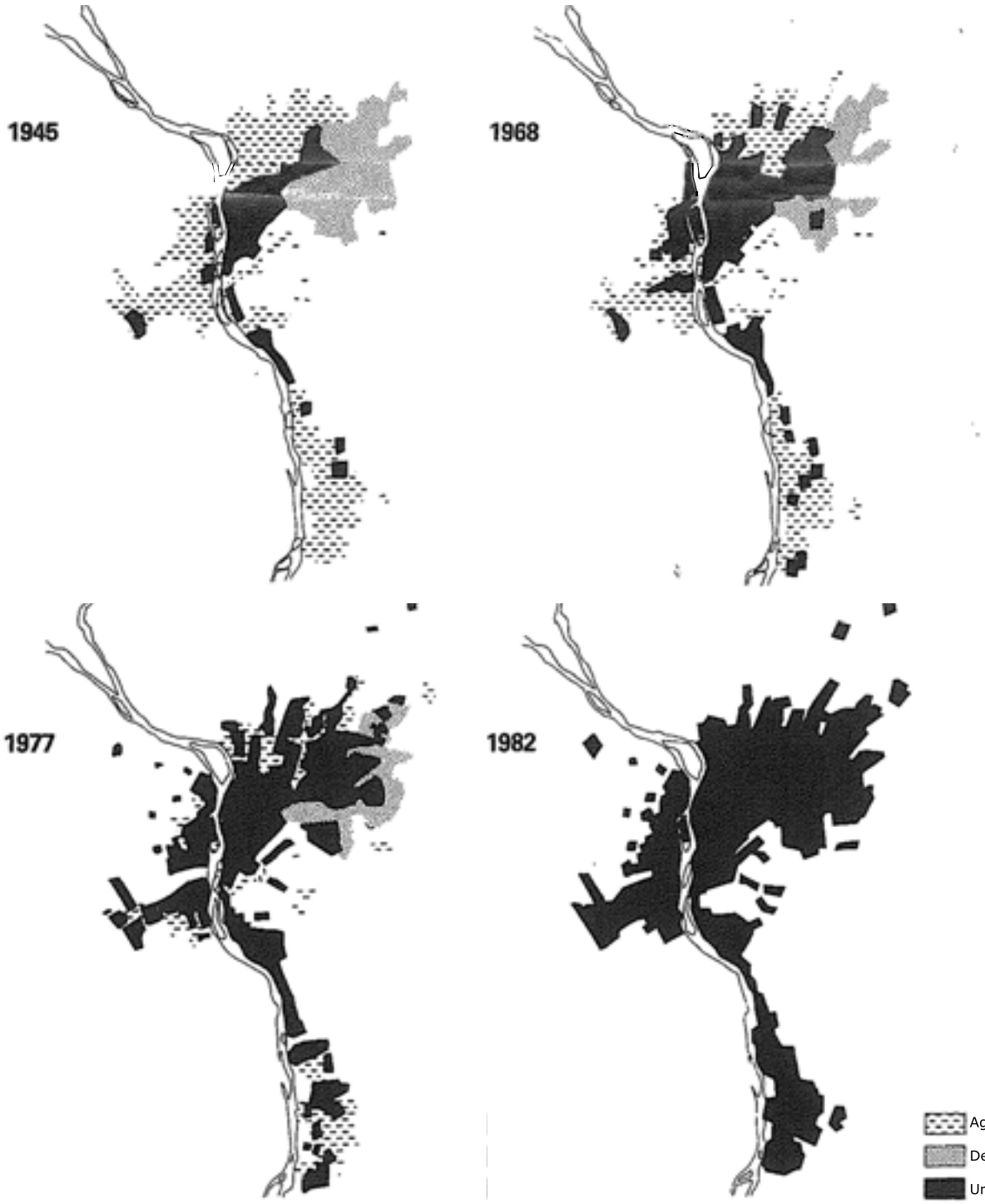

Evolution of Great Cairo, 1945-1982
Source: Greater Cairo Region, Vol I, op. cit.

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Masterplan 1970, Urban Expansion

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The Arab-Socialisme, was the political and economical principle of Nassers expansion and building policy

President Nasser

1st Master plan 1956

In the first Master plan approved in 1956 ,the Cairo Master plan was the first one to be elaborated.
Great importance was given to the planning of industrial areas around the capital. Six satellite industrial cities were planned within a 30 – Km radius around Cairo on already existing industrial centres
to absorb the increasing Cairo population which, at the time was estimated to increase to 1,500,000 inhabitants by the year 2000.
The future extension of the Cairo agglomeration were to be situated to the east of the city, on desert land.
Two suburban areas were planned; one on the Mokattam plateau, the other to the South-East of Heliopolis.
The shift from the recommendation contained in the master plan had negative consequences for the future of the metropolis. The industrial polarization within Cairo created more need for a labour force and therefore, attracted new migrants to the capital.

Greater Cairo Master plan 1970

The master plan presented an alarming diagnosis of the problem affecting the city very high densitites, notably in certain sectors of the old town. Overcharge of the sewerage system 20.1% of the building in the city were not connected to a sewerage network.
The master plan relied on an average yearly increase rate of 2.2% and foresaw 14.8 to 16 million in inhabitants for Cairo in 1990.
The urbanized area could shelter 9.5 million inhabitants by increasing densities in low-density areas it was possible to reduce densities in the saturated sectors. The 5.3 million surplus of inhabitants was to be distributed in satellite towns. The aggolomeration was going to be enclosed in its urbanized perimeter by a peripheral avenue, double by new inner circular ways. This lay-out was to completed by the existing and by newly to be-built radial ways highways crossing traffic areas (east/west) and other highways parallel to the Nile (north/south) a series of bridges crossing the river and regional roads leading to the satellite.

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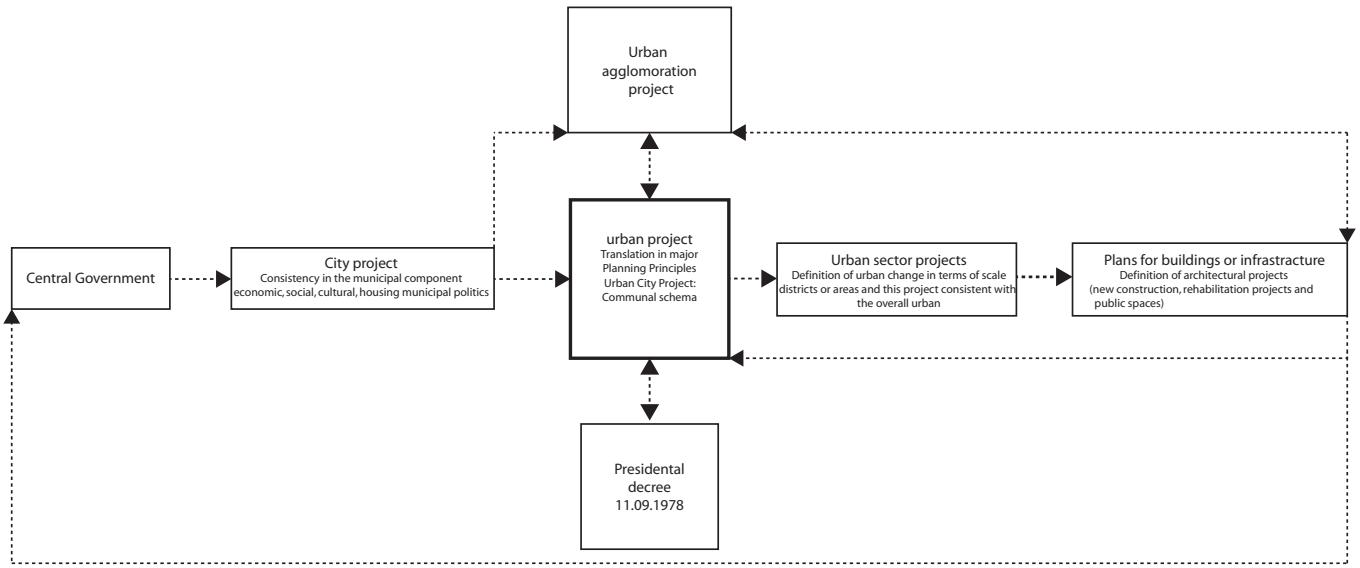
STRATEGIES OF BUILDING IN THE DESERT UNDER SADAT

General Mubarak and President Sadat (1)



Political Process

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In October 1973 there was a war with Israel. This war gave no military success for Egypt, but the countries believe in it's own strength returned. As an expression of this power, President Sadat wrote the ‚October Working Paper „, it sketched the outlines for the future development of the country. The President called for the creation of a ‚new map of Egypt' to use the other 97% of the country outside the Nile Valley. In this strategie, Egypt should be able to improve the military defence of the country and to protect the fertile land along the Nile from the rapid growth of new settlements. Under the influence of this paper, the government made in 1974 a new strategy for the expansion of Cairo. The plan was to construct various self-sustaining industrial satellite towns in the desert around Cairo and beyond. The 15th of May City is one of them. It's in comparison with the other satellite cities, the only one without a meaningful industry. Instead it's built for the Industrial Workers of Helwan.
The Egyptian ‚New Town policy' was influenced by British and French models and of the returning of a new interest in New Towns. But at the same time the Egyptian planners where also heavily influenced by Soviet large-scale models, models which many Egyptian academics have studied during the period of strong Egyptian relations with the Soviet Union (1955-1972). Kafrawi Hassan, Minister of new communities, housing and development (from 1970-1993) was the central figure in the development of the New-Cities.

The building of each new town was entrusted to a public development corporation. However, the development of each new town had to rely on private capital. These cities are expected to support diversified economic bases consisting of manufacturing, tourism, and services, and varying with the individual city In all, the Egyptian program called for the construction of at least 14 new urban centers. Given that most new-town policies in less developed nations have been based on the creation of a single city, the Egyptian policies are exceptional in their scale and goals.
In general, the government of Egypt (GOE) has adopted traditional planning terminology for the new urban centers, with a few additions. The usual distinction between satellite cities and new towns is maintained. These are described as self-sufficient communities located next to existing urban centers.
Four satellite cities were originally scheduled for construction in the desert around Cairo, but only three such cities-6 October, Al Obour, and 15 May-ever appeared in urban-planning documents. These cities situated within 40 kilometers of Cairo all afford the benefits of proximity to the larger economy and to service providers located in the GCR. Population targets in these cities range from 250,000 to 500,000 people.

DEMOGRAPHY

STRATEGY

RESOURCES

POLITICS

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SADAT'S „OCTOBER WORKING-PAPER" 1973

„After all these thousands of years and in view of the rapid increase in the population and the new life sought by them, the life of the Egyptian people cannot remain confined to the Delta and the narrow valley of the Nile. Moreover, they cannot continue to occupy with their population and constructions no more than nearly 3 per cent of the total area of their country.

This is incompatible with the people's national security. In olden times, the vast deserts were perhaps looked upon as natural protection for the people of Egypt but they are no longer so in today's world with its modem weapons. On the contrary, they have come to constitute strategic vacuums which ought not to be neglected. Meanwhile, this concept is compatible with the high rates of population increase.

The valley is already too narrow to hold its occupants who amount to 35 millions. We cannot wait until the population grows to 40 or 50 millions before we begin to act. Finally this is a situation which is incompatible with the ideal policy of exploiting the available natural wealth, the opening up of new scopes for economic and social development, and finding new patterns for a better and wider life for the citizens in new and more diversified environments.

The problem is not merely the concentration of the population and of most of the economic and social activities in the old valley. There is also the problem of the tremendous concentration in the capital, whose population has reached one fifth of the population of the entire country.

Judged by any international scale, it is a very high ratio. Moreover, it is a steadily increasing ratio unless checked as of now by suitable measures.

This position, which further deepens the concentration in Cairo, has doubled the problem of daily life in it in such a way, that sedative remedies will never do should the state of affairs continue in this direction.

We are about to renew the capital so that it may be worthy of its international status by fitting it up with necessary utilities and modem means of communication as well as facilities for work and economic and touristic movement. The capital is also to be made a centre for the activities of many regional and organisations. All these measures would add fresh numbers to the population of Cairo in addition to many others visiting in an benefiting from its utilities.

Moreover, such tremendous concentration in the capital made it an irresistible centre of attraction absorbing from all parts of the country a good deal of their potentialities, specialization and manpower. The gap gets wider between Cairo and all the other parts of the country, thus impeding equal development and progress in the different parts of the country.

The provinces, which are still the main source of our national wealth and also the source of manpower, should not be left to suffer from the effects of what they constantly lose to the capital, for the simple reason that capitals have by nature a stronger voice and are nearer to the eyes and ears of the rulers.

I have earlier stressed the necessity of reconstructing the Egyptian village. Meanwhile, we have already started a plan for the electrification of the entire Egyptian countryside. After October 6 and with all the vistas that have been opened before us and after deciding to set up and execute a comprehensive civilisational strategy, I believe, it is time to comprise all this within the framework of a comprehensive project for drawing up a new map for Egypt.

This cannot be achieved by setting up scattered projects here and there. It can be done by creating areas for population concentration and new economic activities, enjoying all the potentials of urban attraction thus appealing to large population groups which can set up an active settled, productive life enjoying all services and so that they may be able to equal the pulling power of the capital, by being not less attractive and conductive to life, labour and enjoyment.

The Suez Canal area, which has a unique world situation, should not stop as was the case along the western bank of the canal. The reconstruction of this area should be extended to the heard of Sinai. Within one comprehensive plan, this area should be changed into an industrial, agricultural, tourist area with free trade zones as well as university faculties specialising in subjects commensurate with the requirements of the area.

With its unique situation, the area is capable of attracting various kinds of investments. Its comprehensive planning systems, thus making of it a land for new life, a pioneer model for the Egypt we want before the end of the century.

With the same logic, and taking the circumstances of each area into consideration, reconstruction areas should be extended westward along the Mediterranean coast, eastward along the Red Sea coast, and southward around Lake Nasser.

The possibilities for mining, industries, fisheries and tourism are largely available in these areas.

They only need to be taken into consideration in our far reaching

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plans and, need a pioneer spirit to be applied in dealing with the new areas.
Not a single new city has been established in Egypt since the opening of the Suez Canal and the construction of its three cities, that is more than one hundred years ago. It has become important for Egypt to carry out new projects for the establishment of new cities, a number of
harbours and towns attached to them along our long maritime coast lines. This is unavoidable and is necessary in order to take advantage of our outlets along two of the most important seas of the world. Both are rich in trade, transport and tourist movements. The aim is also to realize a real and integrated Egyptian existence in all parts of the country.
This new map which is required is not only a geographical and demographical map; it is also basically an economic one. A steady life can only be extended to areas where there would be opportunities for work and livelihood. The situation in the new areas is thus linked with economic and social development plans. Furthermore, this should serve as a gateway to an administrative revolution which has become a necessity. This trend should be accompanied by a studied and decisive movement towards redistribution of authority in all sectors throughout the country, for authority should not be restricted to Cairo.
Cairo, as the capital, will naturally remain the headquarters for ministries, a large number of institutions and various activities. However, it should not be flooded with more than its requirements, so far as central planning, study and central guidance are concerned. We have to make of local government a real fact by transferring to old and new provinces all establishments that do not necessarily have to remain in Cairo. The current must be changed from a continuous absorption by Cairo of specialisations and leaderships near their original sites of work in the provinces. Without spreading out in this way, progress as well as urbanisation cannot reach all makers oflife in our country.
In this respect, it may be suitable to study the problem of present administrative divisions of the country, so that the number of gouvernorates would be defined, their borders re-mapped in a manner that would make of them larger demographical, administrative and economic units.
Consequently, they would have more possibilities for realising integration, carrying out projects and taking advantage of the capacities that are available in various fields.
Meanwhile, a higher committee should devote its time for redistribution of manpower among the different machinery of the State, so that certain departments would not complain of overemployment while other departments people complain of delay in their work due to a shortage of employees. "[12]

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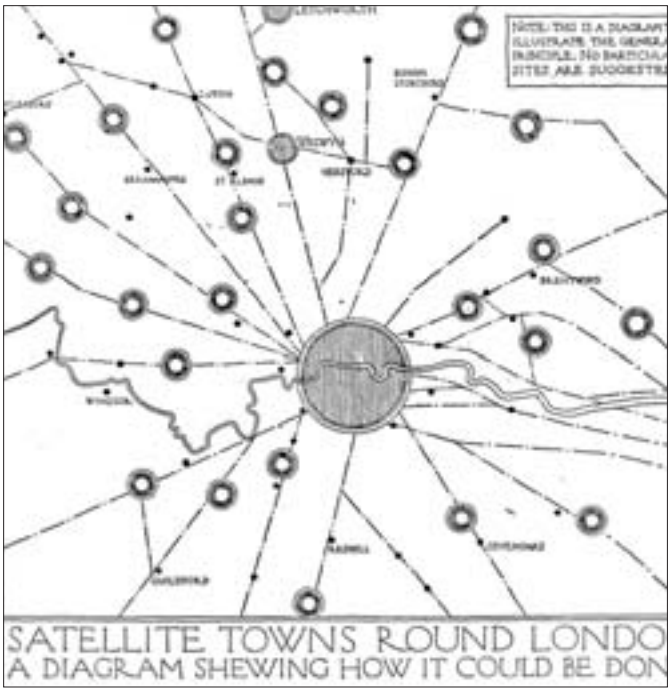
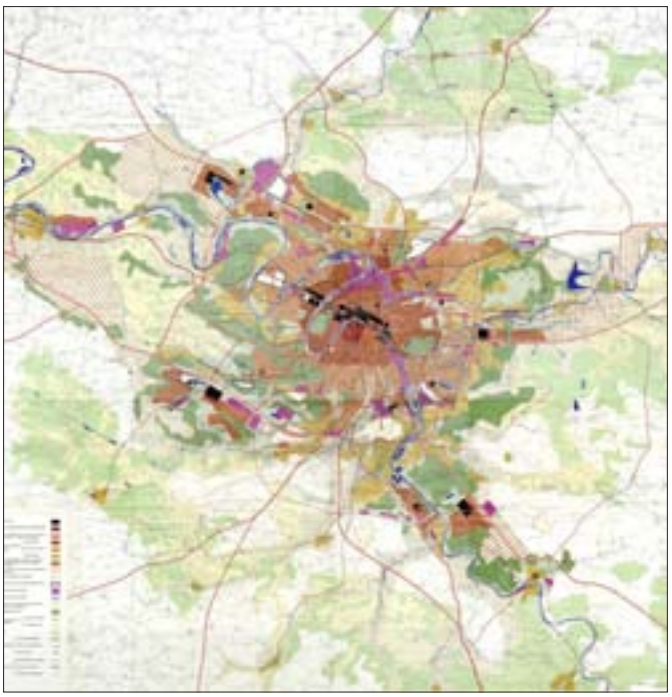
EXAMPLES OF METROPOLIS EXPANSIONS

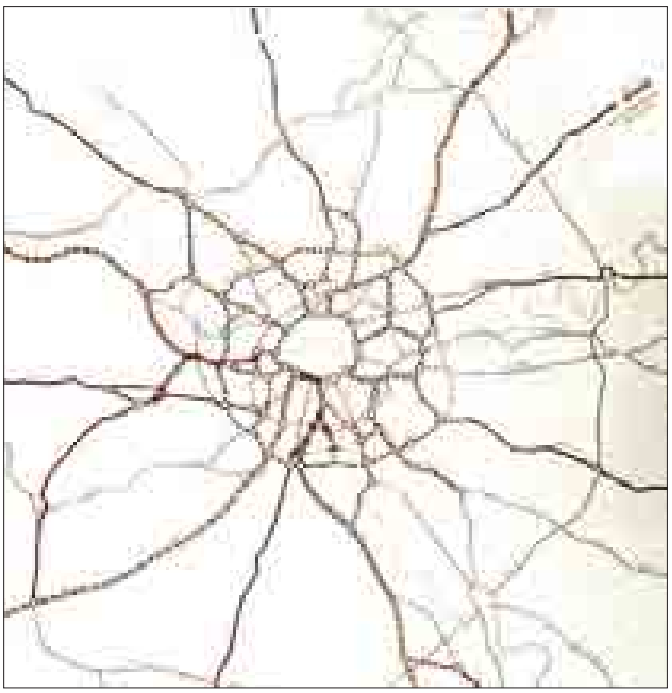
Greater London Masterplan 1945, J.Abercrombie plan



General Priniciple of Satellite towns, 1925



Paris, Le Villes Nouvelles, 1965,



Paris,infrastructure map of the region,1960

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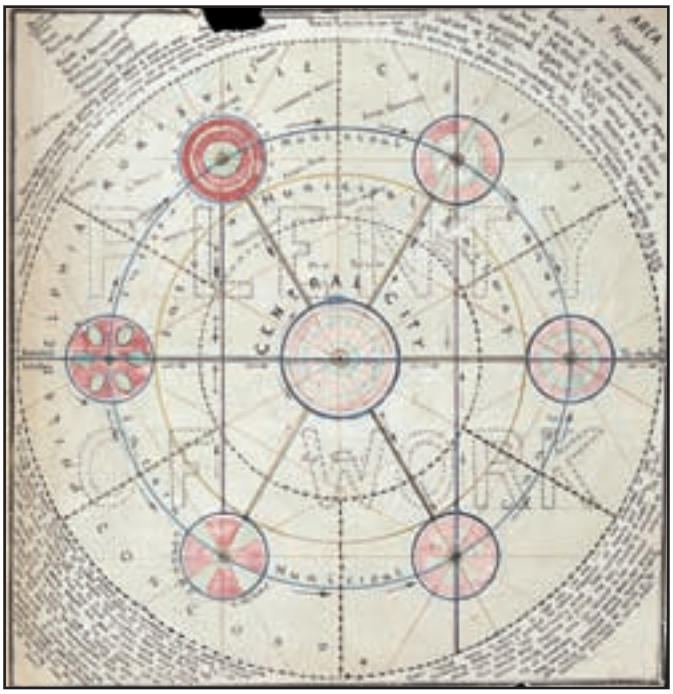

Garden City concept Howard,1902

Paris,the new gardens city, 1933

The History planning of 15 May city and Helwan growth of faced with the unrelenting the primate city of Cairo.

In 1969, Egyptian president, Gamal Nas¬ser, launched the Creater Cairo Region Master Scheme. Nasser's plans called for the creation by 1990 of four new satellite cities in the desert surrounding Cairo. These new cities were to absorb Cairo's growth, provide alternative sites for urban development, and redirect the distri¬bution of Egyptian population away from the fentile Nile region to new (Arab Republic of Egypt 1983b). Although Nasser died in 1970, shortly after the completion of this report, his successor Anwar Sadat (1974) called for the creation of a „new population map of Egypt" based on an extensive new-town program, the ideas in the Master Plan evolved into a large-scale program, beginning with the construction of the first city in 1977, to develop a variety of new urban structures including satellite cities, new towns, and new settlements (Figure 1) towns built essentially on land so as to preserve agricultural land known as the „green land".

This poly nuclear approach was lavoured with this series of rew towns very much on the London on France new Towns model.
Each new town was to have a economic base so as to be free standing and not depend on the old.

To create an integrated urban network, including Cairo and the new communities, the government incorporated a series of development corridors into the national plan. These corridors have two purposes: to promote transportation linkages and to funnel growth away from Cairo. At present, Egypt has six development corridors, five of which run along an east-west axis away from the Nile valley and delta (Figure 2). The sixth development corridor, the Cairo Ring Road, channels traffic around the city and attempts to serve as a physical barrier against further sprawl (Figure 3). Now nearing completion, this 72-kil¬ometer ring road has 23 interchanges that connect with the several development corridors and with other major roads (Cornu 1985). Planning began with the establishment of the first of the new towns, 10 Ramadan and Sadat City, in 1975. By 1989, Egypt counted a total of 14 new towns that either had

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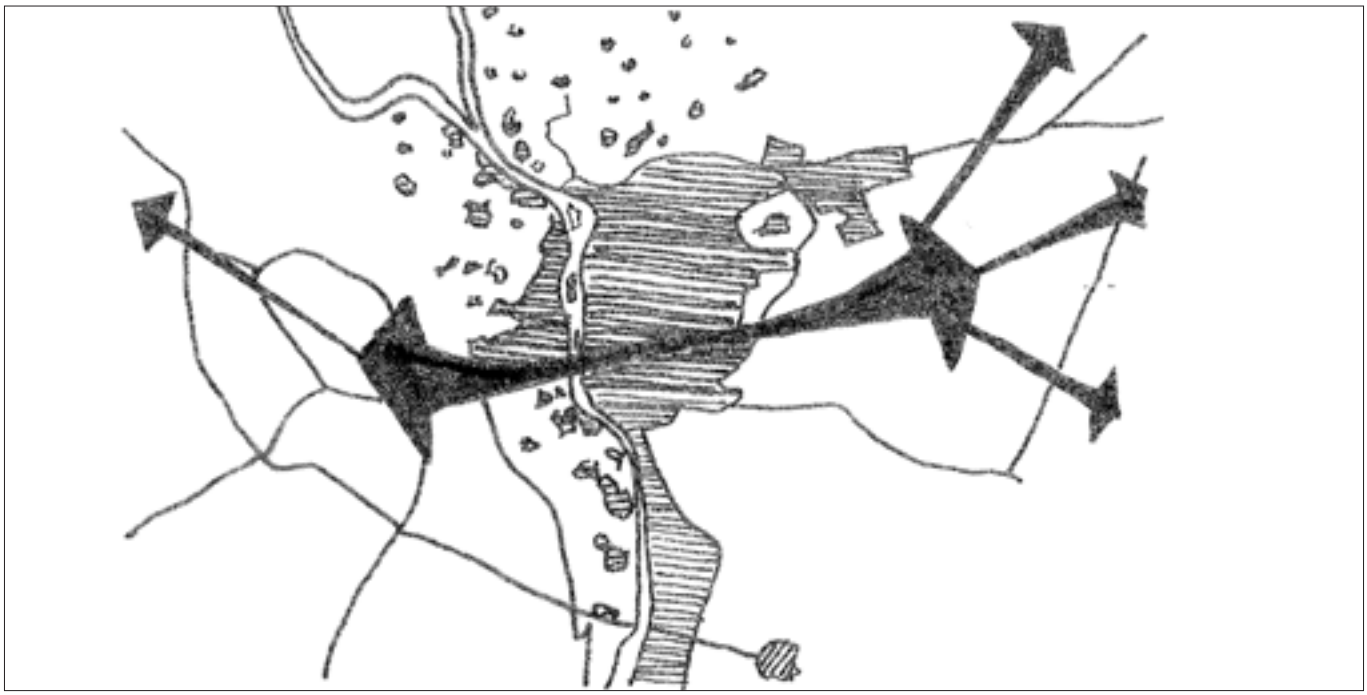
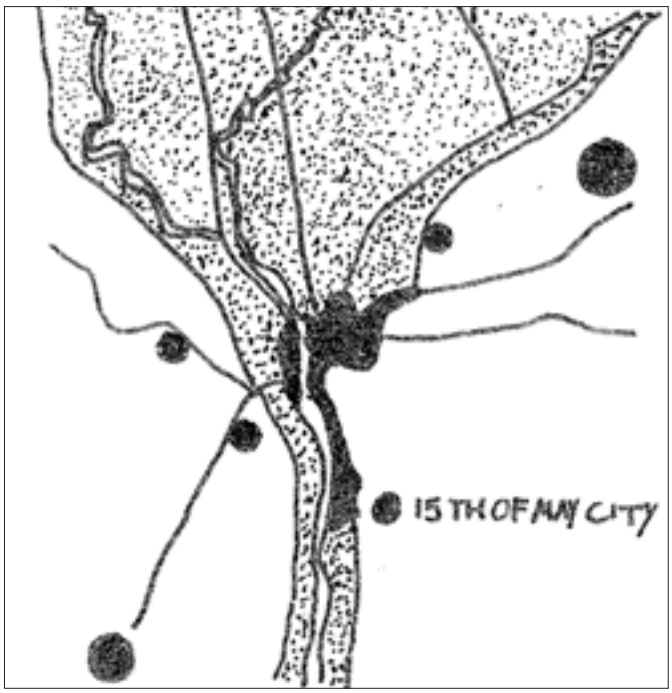
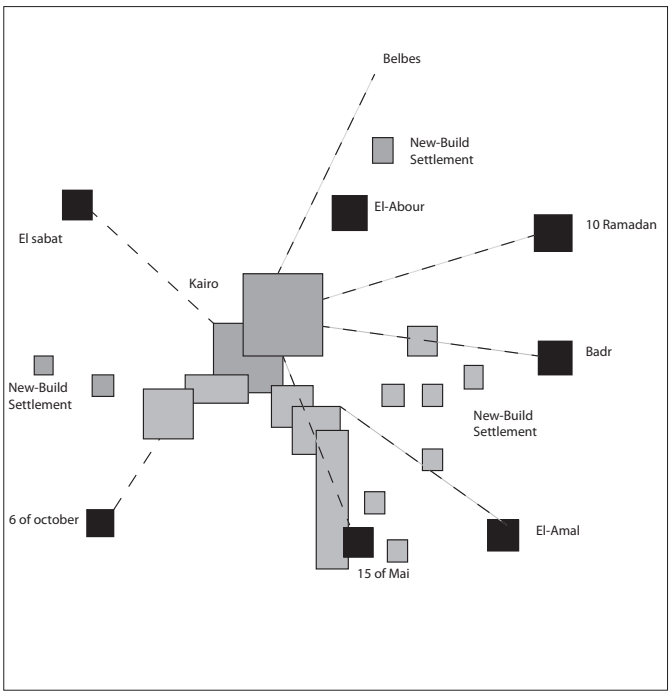
DIFFERENT STRATEGIES OF EXPANSION



Bi-Polar East West Expansion 1970



New Strategies 1974: Satelite radial Expansion.



The New Satelite Cities, development of corridors in Egypt

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The socialist new population map of Egypt

Types of new cities in Egypt
The State adopted a policy to expand into the desert creating new foundations for urbanization outside the inhabited area and breaking the conventional patterns of urban development such as extensions of informal cities. In this regard, it aimed to reproduce the populace map and geographic distribution in Egypt on one hand and create new urban environments that are more organized and attractive on the other. It was hoped for that new urban environment would absorb part of the overpopulation in existing cities, and protect agricultural land. New cities in Egypt, are divided in terms of locations and functions into three types: satellite, twin and independent cities as follows:

Satellite cities
This type of cities is located around and close to Cairo. File short and middle term objective of constructing those cities is to overcome the population density in Cairo, use available basic services and labor in attracting residents, activities, creating job opportunities and economic factors feat are linked to the mother city. Satellite cities include 15th of May, 6th of October, Bader, and Al Obour which are developed without an economic base and instead they totally depend on Cairo. In this context, they are bolls a burden and an urban plus to the mother cities.

Twin cities
It is an urban expansion into desert lands situated close to the existing urban cities. In some cases, they are just a natural extension to file existing cities. Examples of this type include: New Dynietta, New Beni Suef, New Minia, New Asuit, New Akhmim, and New Aswan. Unlike satellite cities, twin cities have their own economic and seance base but they are still closely linked to the existing cities.

Independent cities
This type of cities is characterized wilt] relative capacity and stand alone economic base. On the long term the objective is to create economic growth poles comprising independent economic entities. In such case, cities become qualified to group socioeconomic activities around a certain point to make optimal benefit from the clustering advantages. They are located far from the existing cities sufficient to support its independent position with some of them penetrating into the desert farther from the valley. Examples include: 10th of Ramadan, Sadat, New Borgel Arab and Salheya cities.

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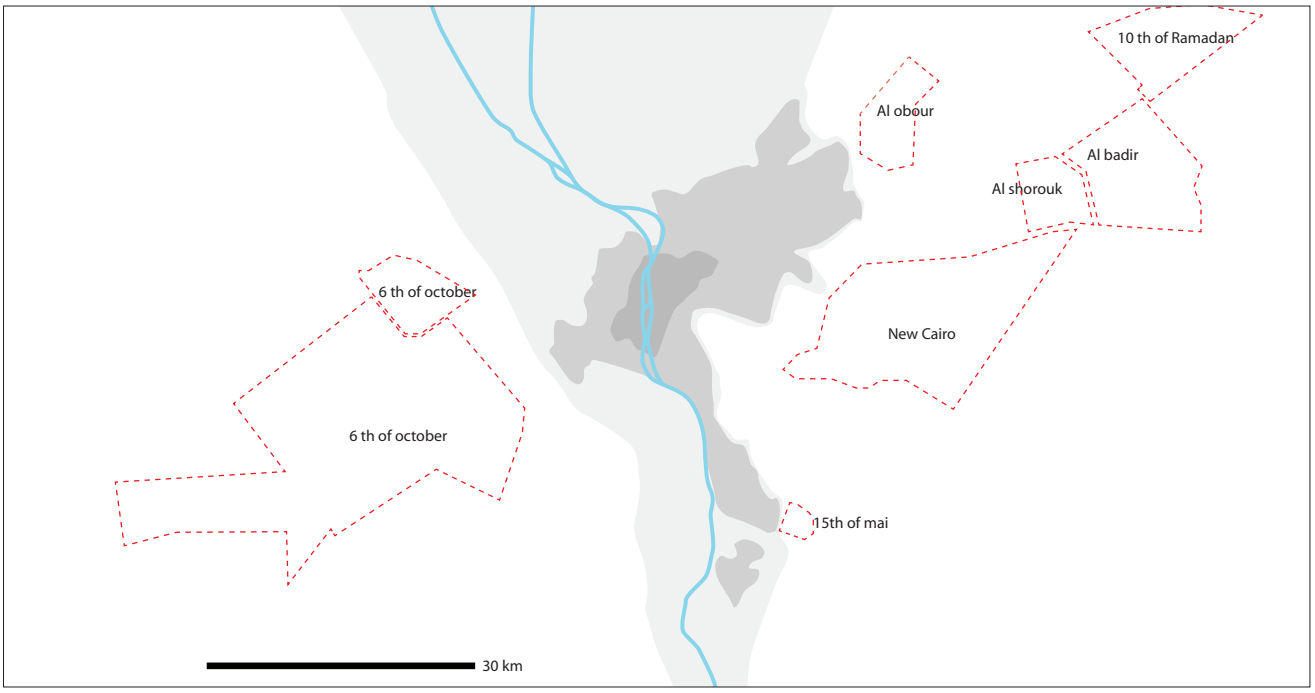
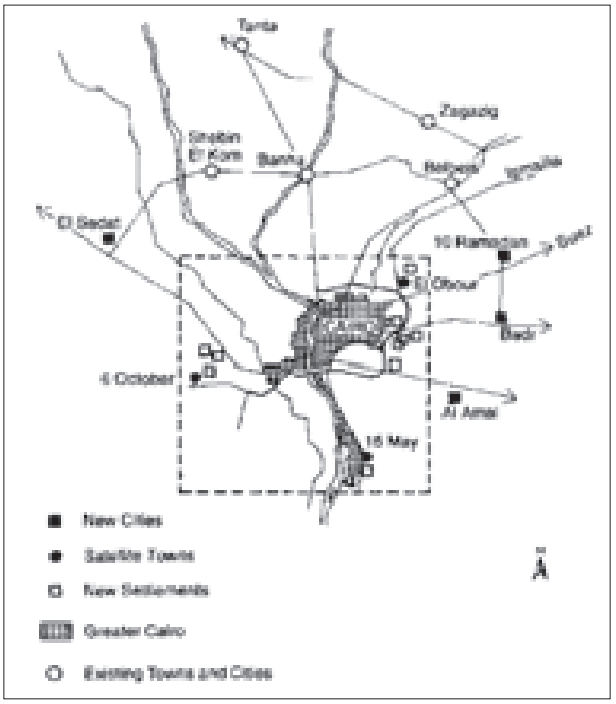
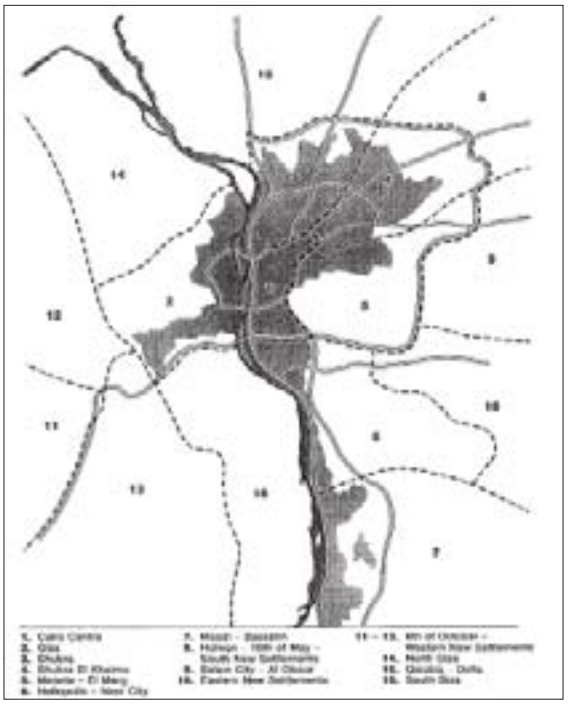
STRATEGIES OF EXPANDING CAIRO UNDER MUBARAK



Cairo Map of todays New Cities



Cairo Region



Plan's homogeneous sectors to restructure Greater Cairo
Cairo's growth and strategic plans: K. Sutton and W. Fahmi

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As a result of Cairo‘s continuous urban problems which were evident in its overcrowded conditions, its proliferation of small enterprises, its huge housing shortage, poor infrastructure and deteriorated environ¬ment, the 1983 Master plan was launched.
It aimed to meet the needs of a growing population, which was expected, incorrectly as it turned out, to reach 16 million by the year 2000. Secondly, it sought to protect farmland by establishing 10 new settlements on deselt land to the east and west of the city. Thirdly, the plan aimed to reorganise and restructure the older built-up areas seeking to reduce the concentration of people and services in the existing central parts of Cairo (homogeneous sectors policy). Fourthly, it aspired to upgrade public infrastructure and facilities in part through a new metro and a ring road. A wider objective in 1983 was to involve the private sector more in the process of urban development, with the new settlements to be one focus of such investment.
The plan‘s attempt to restructure the existing metropolitan area that was promoted through a scheme of „homogene sectors“. This sought to break up the „nononuclear“ arrangement of the city by restructuring it into 16 homogeneous sectors.
Each sector was to be an autonomous unit of 500,000-2,000,000 people and to be relatively self-sufficient in jobs and services. Several new secondary centres were to be created in these homogeneous sectors. Some progress has been made including the rehabilitation of the old core of Cairo in Camalaya-North. (Belliot, 1993; Madoeuf, 1995). Delay was nevertheless noted in the implementation of the concept of homogeneous sectors (HSs) because of financial constraints together with weak urban planning and land management processes at a local level, as well as poor linkages with planning authorities. More significantly, delay was attributed to the close relation between the HS policy based on a decentralisation strategy and the new settlement pol¬icy directly related to the deconcentration of population activities from the existing Greater Cairo Region (GCR) agglomeration.
Together the 1970 and 1983 Master Plans and subsequent modifications increasingly seek to direct Greater Cairo‘s urban growth and sprawl into an east-west axis. This aims to save the green land to the north and south of the city by encouraging urban development in two axes to the east and the west of the city (see Fig. 1). Initially the new towns and then later the post-1983 new settlements largely fit into this approach, being located in the desart areas to the east and west of the Nile valley.
The years 1991-92 some modifications were made to the 1983 master plan. Population forecasts were increased upwards to 16 million for the year 2000 (GOPP/IAURIF, 1991). The ring road route was devi¬ated 2 km to the east through the desert for military reasons. Also a western arc was introduced in this road on arable land on Giza‘s outer fringes towards 6th October and new settlements 6a and 6b. Such modifications affected the location of some new settlements as well as contributing to the cancellation of the green belt project between Cairo and the Easter belt new settlements. This gave way to the emergence of „New Cairo City“, effectively merging new settlements 1, 3, and 5.
The ring road, which is now complete in its nolthern, easten, and southern sections , has proved to be a significant factor in recent land use and population changes around Cairo. Similarly to the east of the city „New Cairo“ has emerged, including and extending the areas of new settlements 1, 3, and 5 (. However, much of this ring-road-associated housing development has been private rather than public and higher class rather than lower. So development has gone ahead but despite as much as because of the master plan.
El Kadi (1995) has demonstrated how Cairo‘s CBD has migrated within central Cairo. From an early focus on the Azbakeya Gardens district and the Abdine Pal¬ace, the business and decision-making functions have moved westwards towards the Nile, focusing on Tahlir Square and Garden City and even across the Nile to Giza and Dokki, as well as to Zamalek. (El Kadi, 1995, p 71) demonstrates graphically the varying and widespread of financial services, embassies, min¬istries anal tourist enterprises in a fragmented and fluctuating CBD. Elsewhere, the effect of the serious 1992 earthquake has been to relocate some of the inner city‘s overcrowded and ill-housed population to the edge of city housing and to the new settlements (Degg, 1992). Inner city population densities still remain high with over 250 people per hectare and even over 400 per hectare densities prevailing over much of central Cairo.

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LOCATION 15 MAY CITY

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HELWAN REGION

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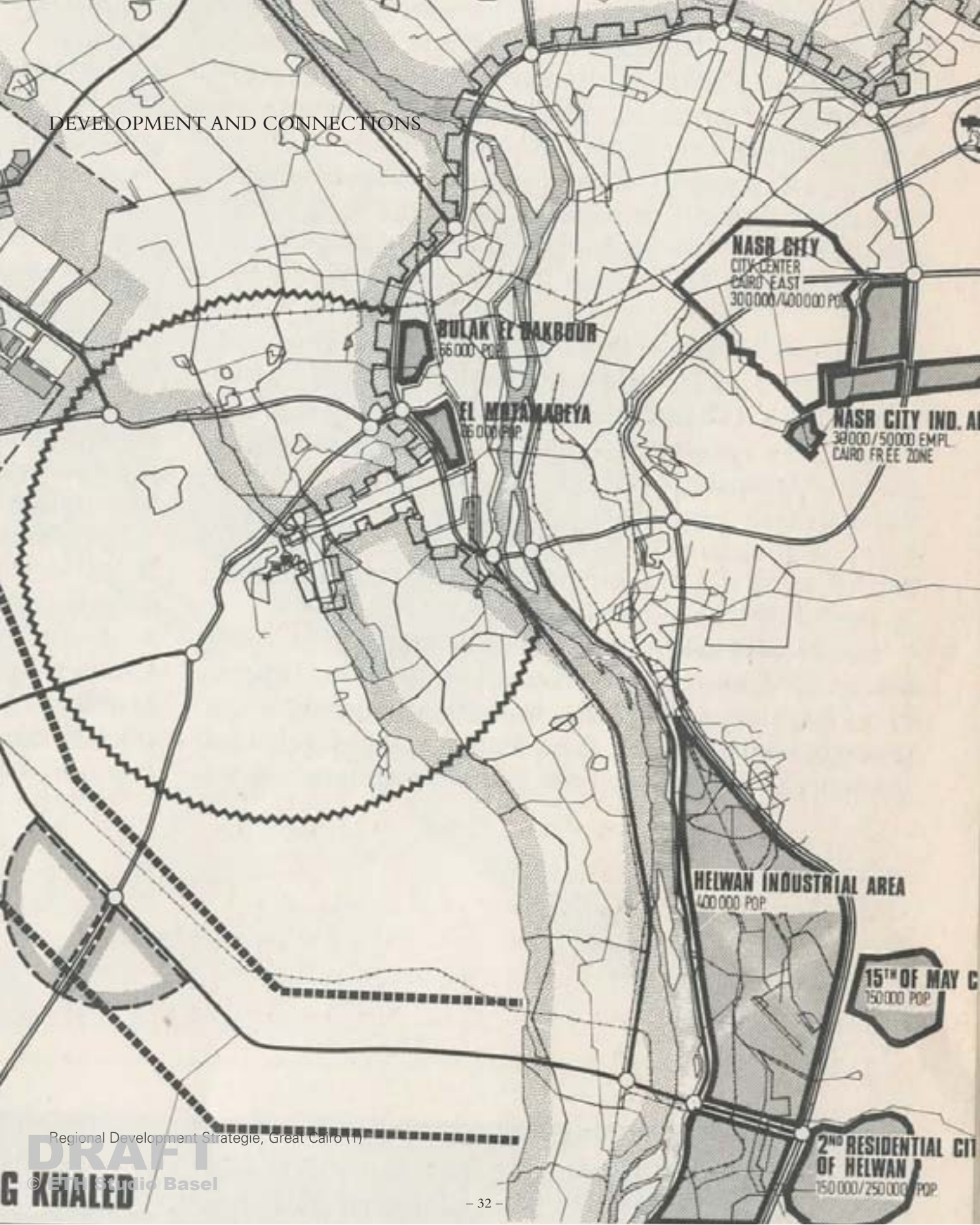

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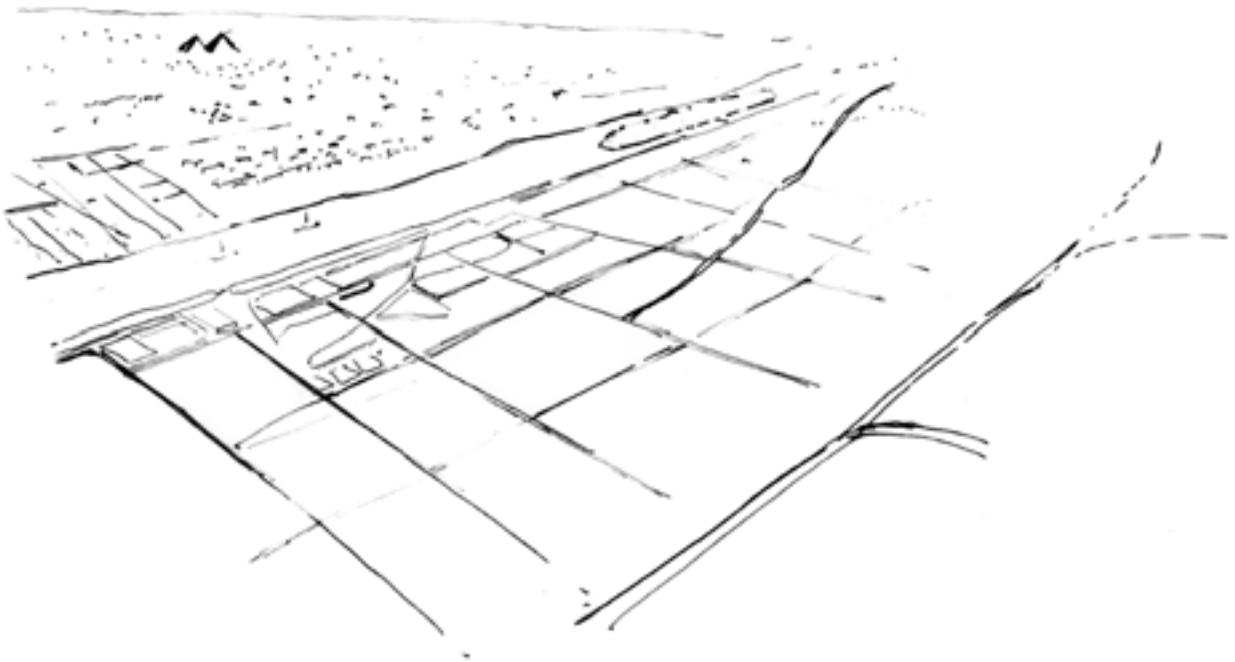

Connection Helwan-15th May
Situation 1904

Connection Helwan-15th May
Situation 1982

Connection Helwan-15th May
Situation 2010

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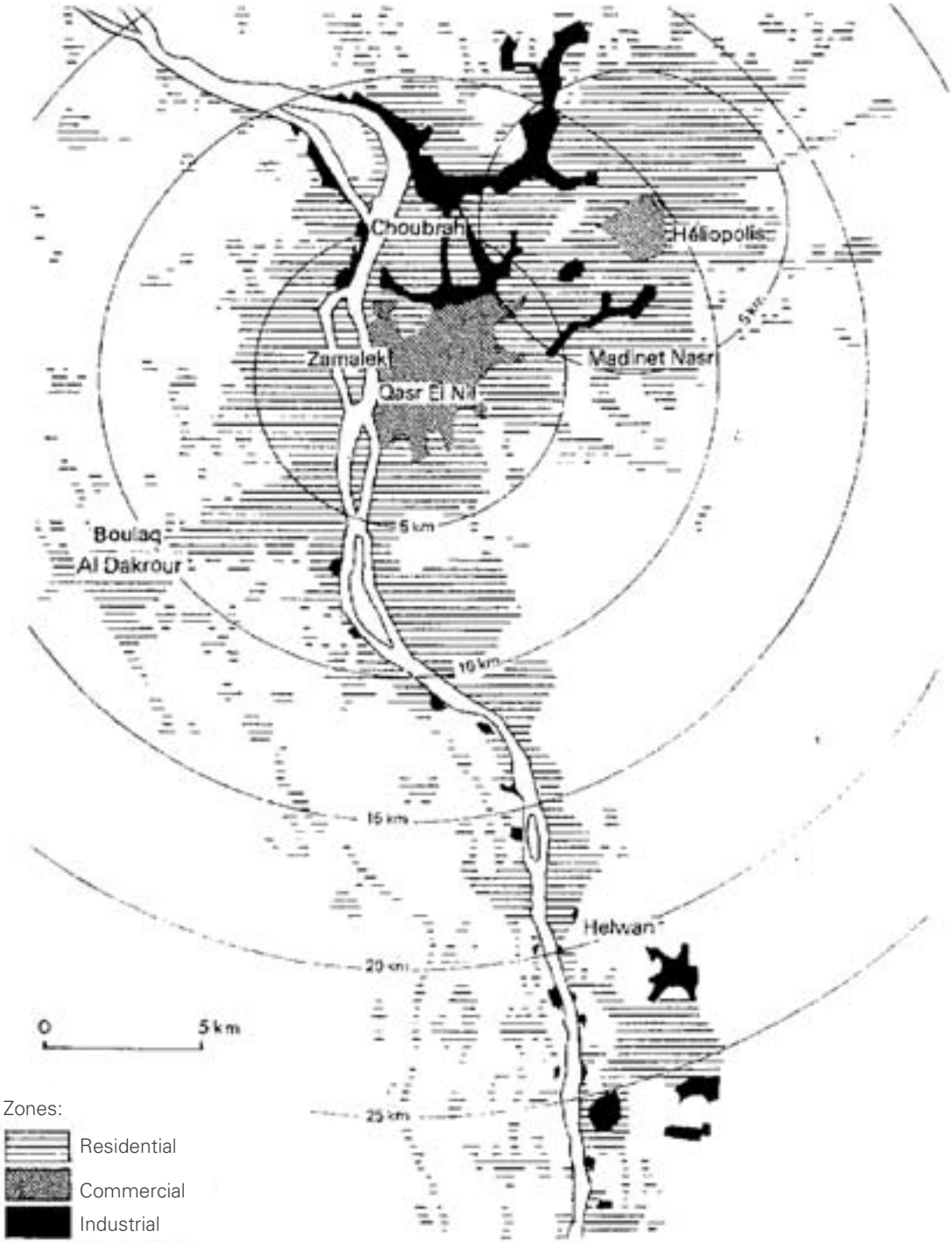

Zones map of Cairo (1)

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Map Helwan, 1908 (2)

Historic Bird View Helwan

Helwan is one of the oldest cities in Egypt, it was originally a Pharaonic city and hat the first dam in the history of the area. In centuries, the city got extinct until the epoch of Abdul Aziz who ruled from 717-720 AD during the Umayyad Caliphatehe. He had to leave the capital of Fustat because of an epidemic that broke out. He went to Helwan what became the temporary capital of Egypt. He built palaces and planted orchards. After a typhoon, Helwan disappeared.

Only during the rule (1848-1854) of Abbas I, they discovered mineral springs and Isma'il Pasha (ruled from 1863-1879) built in Helwan a spa with a hotel and connected it with a railway from Cairo. They gave the new city the French name „Helwan-Les-Bains" and for further development, they rent out the place for interested investors.

In 1879 and 1881, 61 150 houses had already emerged. During the reign of Tewfik the city was further expanded and in 1893 the city became a winter resort for the higher Income groups.

After the revolution of 1952, the city changed to the biggest industry centre of the country with a lot of air pollution. The original villas changed into multi-storey apartment buildings and the large parcels into smaller ones. The construction of the 15th of May City, a huge American development project and the North-South highway on the east side of Helwan, stimulated the developing process even more. The city owns also one of the biggest and most important university of the country which was founded in 1975.

The Grid of Helwan is influenced by the French and dated from the late 19th Century. Private investors construct the buildings and the government prepares the infrastructure.

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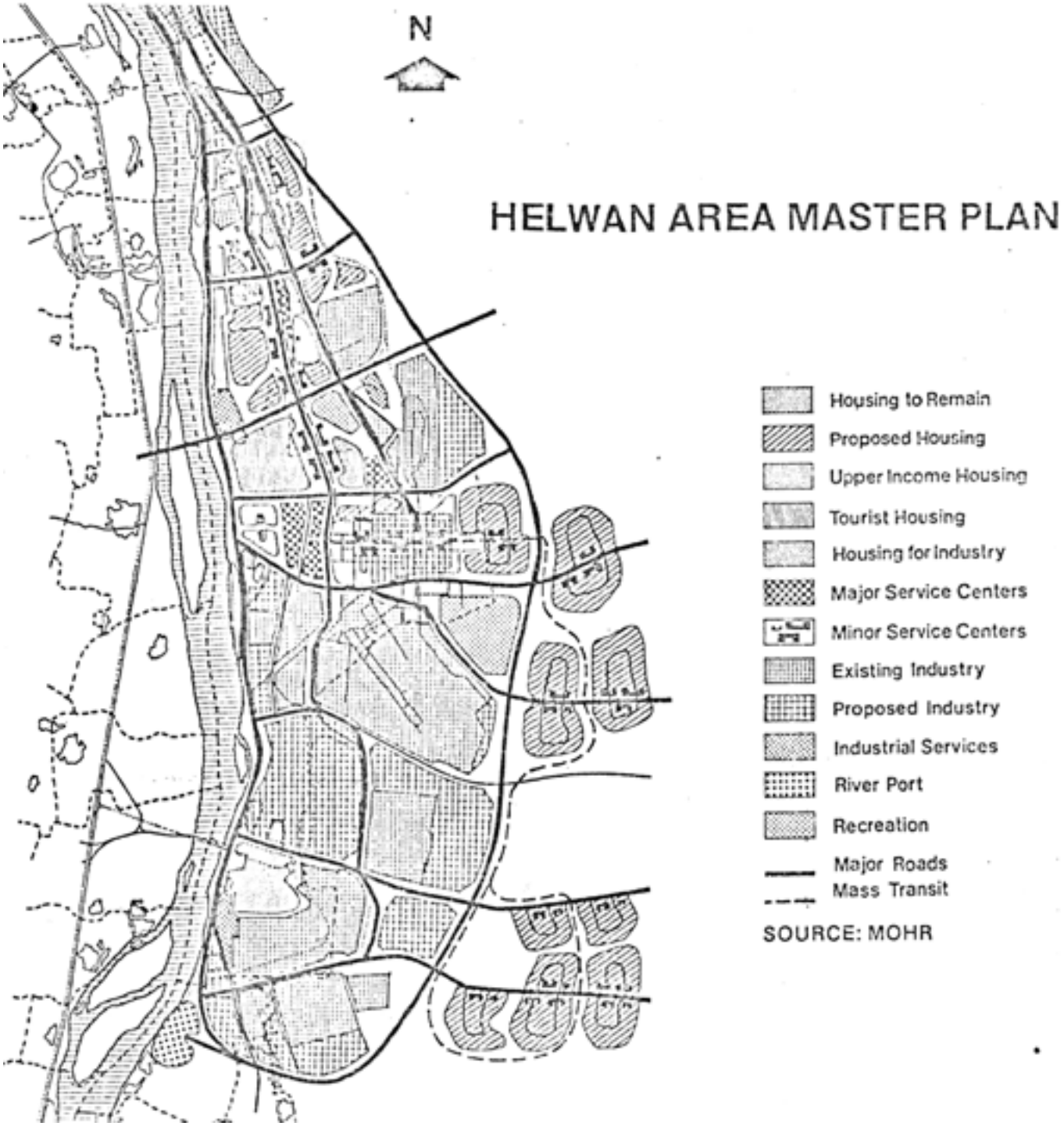
VISION OF THE REGION 1980



Helwan Area Master Plan 1980 (1)

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The Helwan Area Master Plan plan is being used as a general guide in the development of land adjacent to Helwan. The plan indicates consolidation of industrial land use to the south of Helwan City and some limited expansion of industrial area in the north. Major new housing areas are indicated to the east and southwest of the City. these areas which are planned for housing are in the desert hills above the Nile Valley „ Minor housing areas are suggested as infill to the north of the City toward Cairo with tourist and upper income llousing close to the river.

After the revolution of 1952, Helwan developed to be the biggest Industrial Centre of Egypt. Providing employment for over 150.000 workers in a variety of heavy industries like steel, cement and automotive. The problem of this development was that the government didn't provide enough housing for the workers, what caused that the majority had to commute from Cairo, this consumed about 3-5 hours a day.
By 1975 (in that time there were about 100.000 workers in Helwan's industry), almost 10,000 public housing units were built in Helwan, but informal settlements sprang up everywhere' as families sought to deal with their pressing need for shelter near their employment. Often various filtered water, using pit latrines, with construction' of mud brick along unpaved roads and harahs, frequently without any schools and almost no social or governmental services, these communities demonstrated the enormous energy and resourcefulness of low income families in providing for their most basic housing needs.
Urban migration, partly of service sector workers, and a rapidly expanding population further exacerbated the problem.
To solve this problems, the Greater Cairo Planning Committee prepared a preliminary Master Plan for Helwan in 1967, proposing, among other goals:

- Three new „towns" of 120,000 to 200,000 persons each to be added to the existing city;
- A maximum population goal of 750,000 for the region;
- A recommended industrial worker population of 107,000.

This Plan developed in the following decade to a plan of new communities for the region (see below).

Those projects are only partly realized: the 15th of May City is a unfinished New Town, the Extension is on the moment in full development thanks to private investors, the Helwan New Community became a more or less unplanned and informal area and the plans from the Second Residential City to the south of the 15th of May, didn't have any further development.

In the Regional Context, there's the plan to organize the industries in the north and south direction, not to far from the Nile to be able to have easy access to this source, and to keep an area for the agriculture along the river. Nowadays, there are a lot of informal settlements developed on this green area.

Project	**Population Size** (Ultimate)	**Dwelling Units**
15th of May (The First Residential City for Industrial Workers)	**150,000**	**30,000**
15th of May Extension	**50,000**	**10,000**
Helwan New Community	**105,000**	**21,000**
Second Residential City	**150,000 (est.)**	**30,000**

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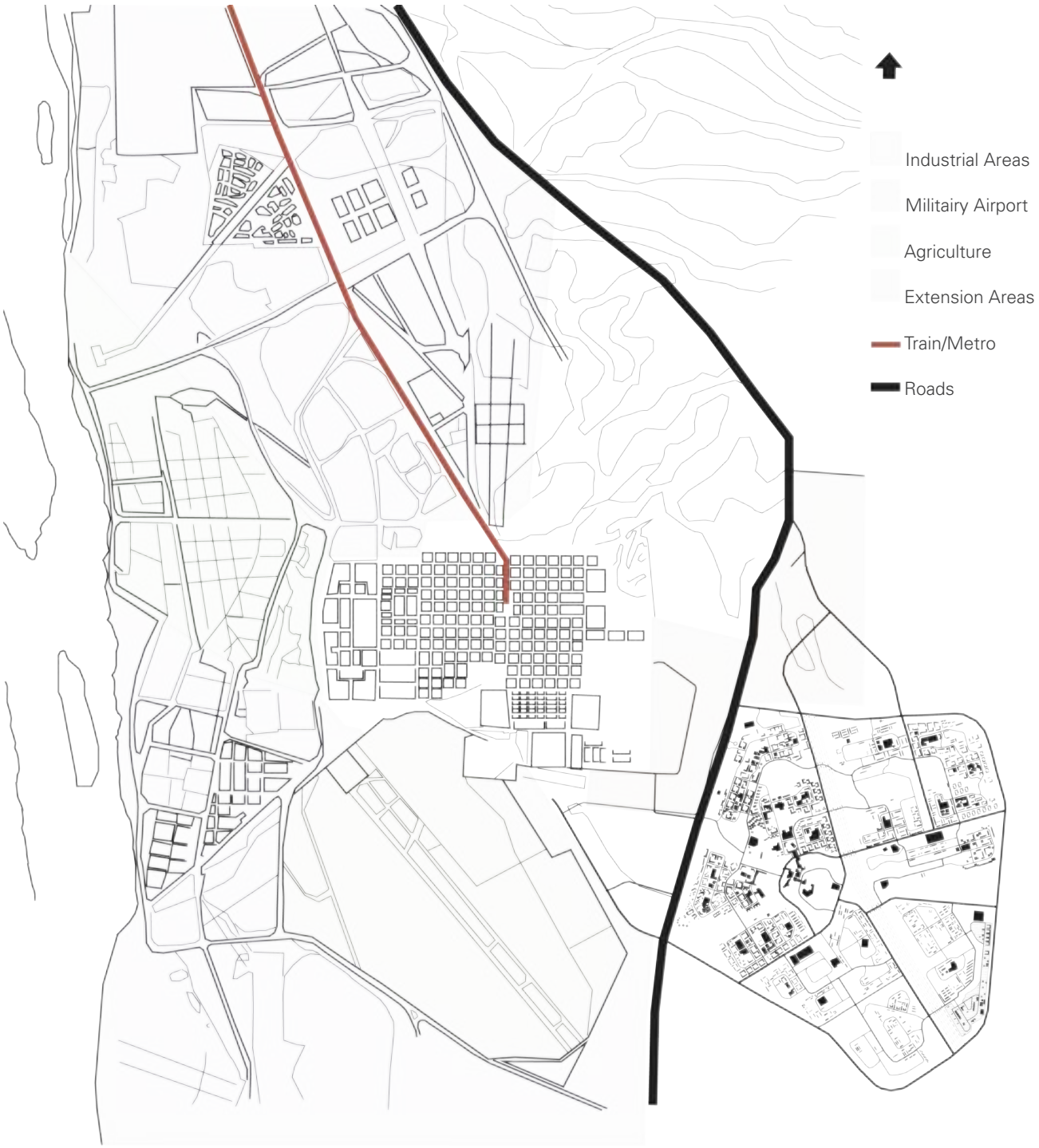
VISION OF THE REGION 1980



Regional Context of the Helwan Region in 1980 (1)

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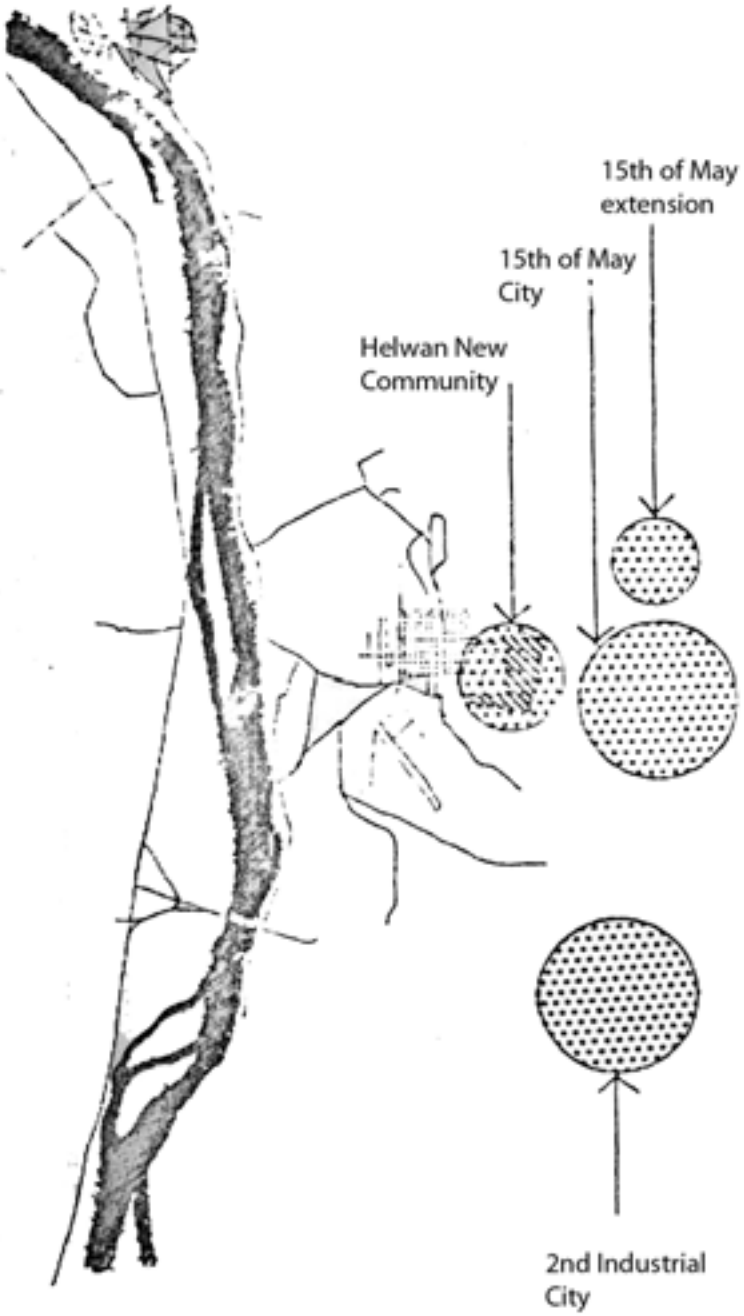

NEW COMMUNITIES

(1)

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15 MAY CITY REGION

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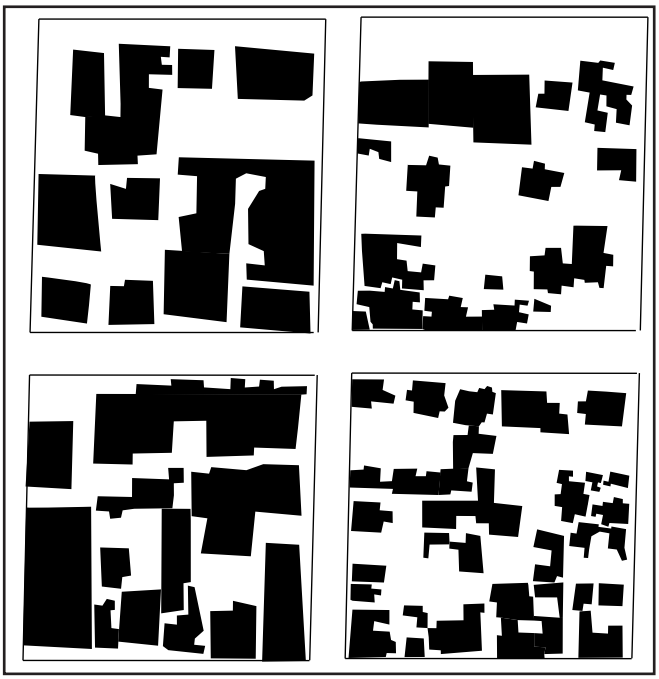

Informal & Agriculture

Helwan-Grid system

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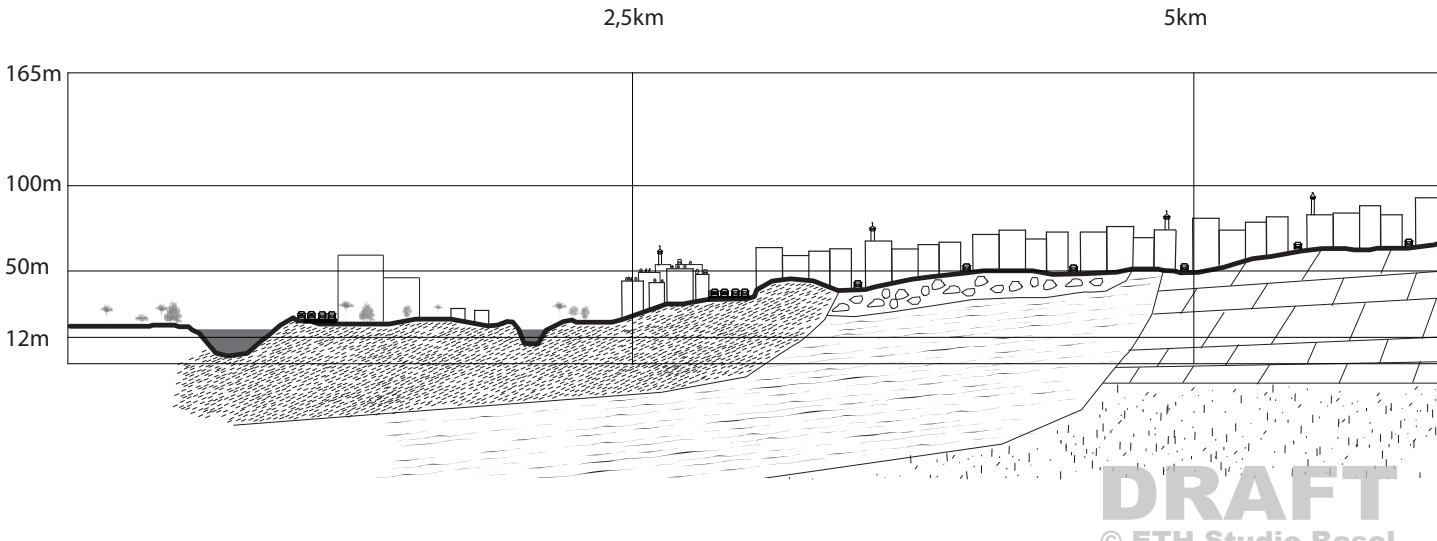
FROM THE NILE TO THE DESERT



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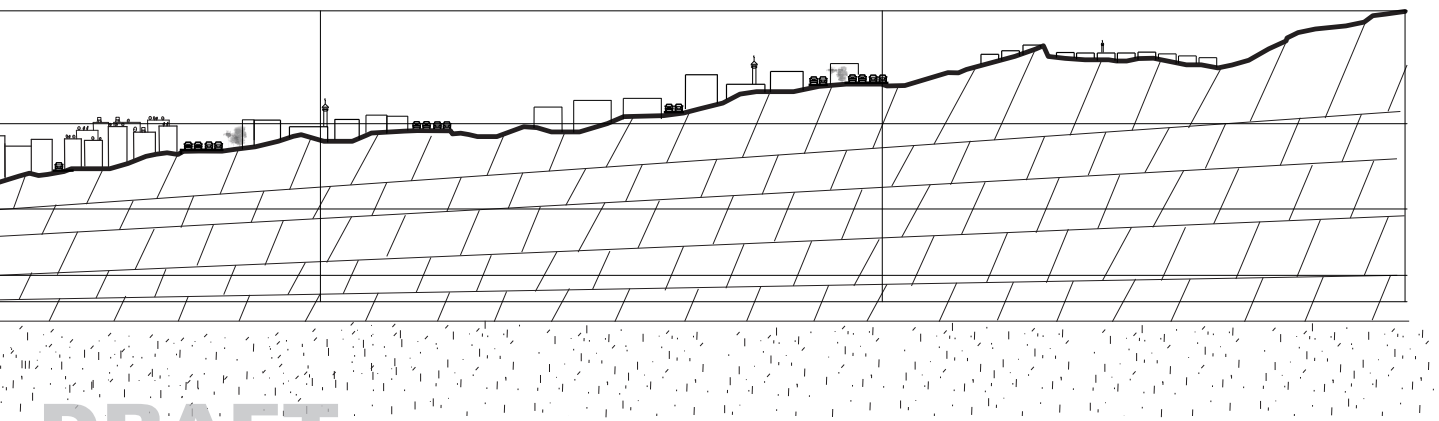
7,5km 10km 12,3km



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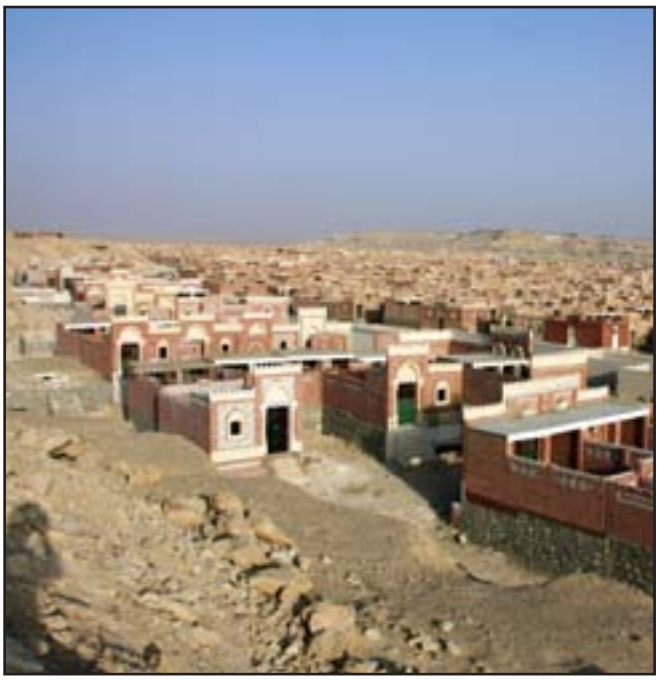

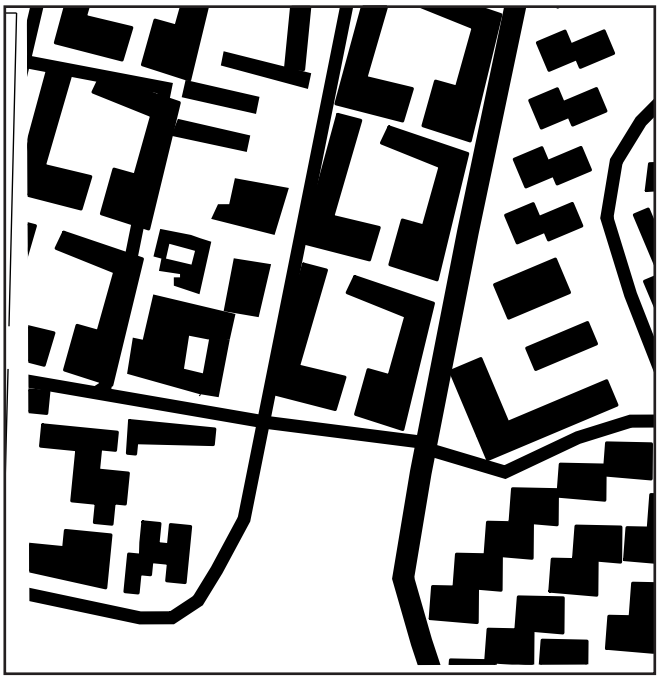

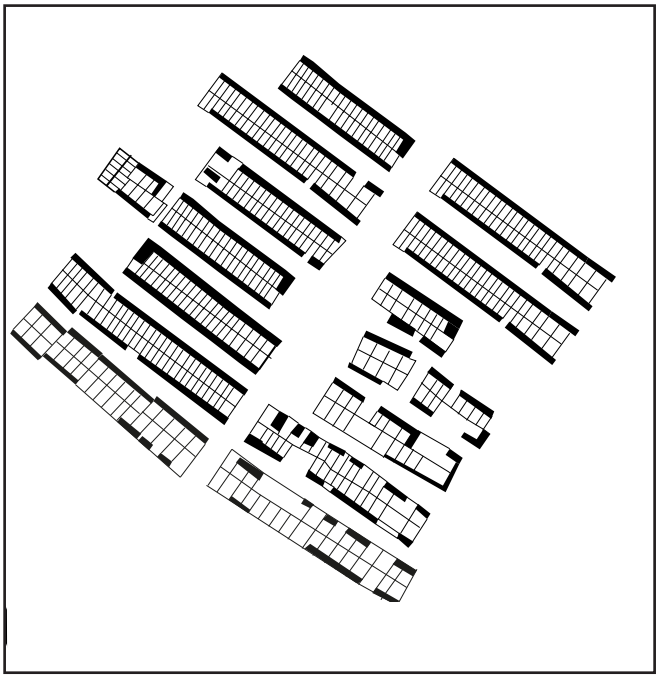

15 May - Radial System

Cemetery - Modul System

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15 MAY CITY

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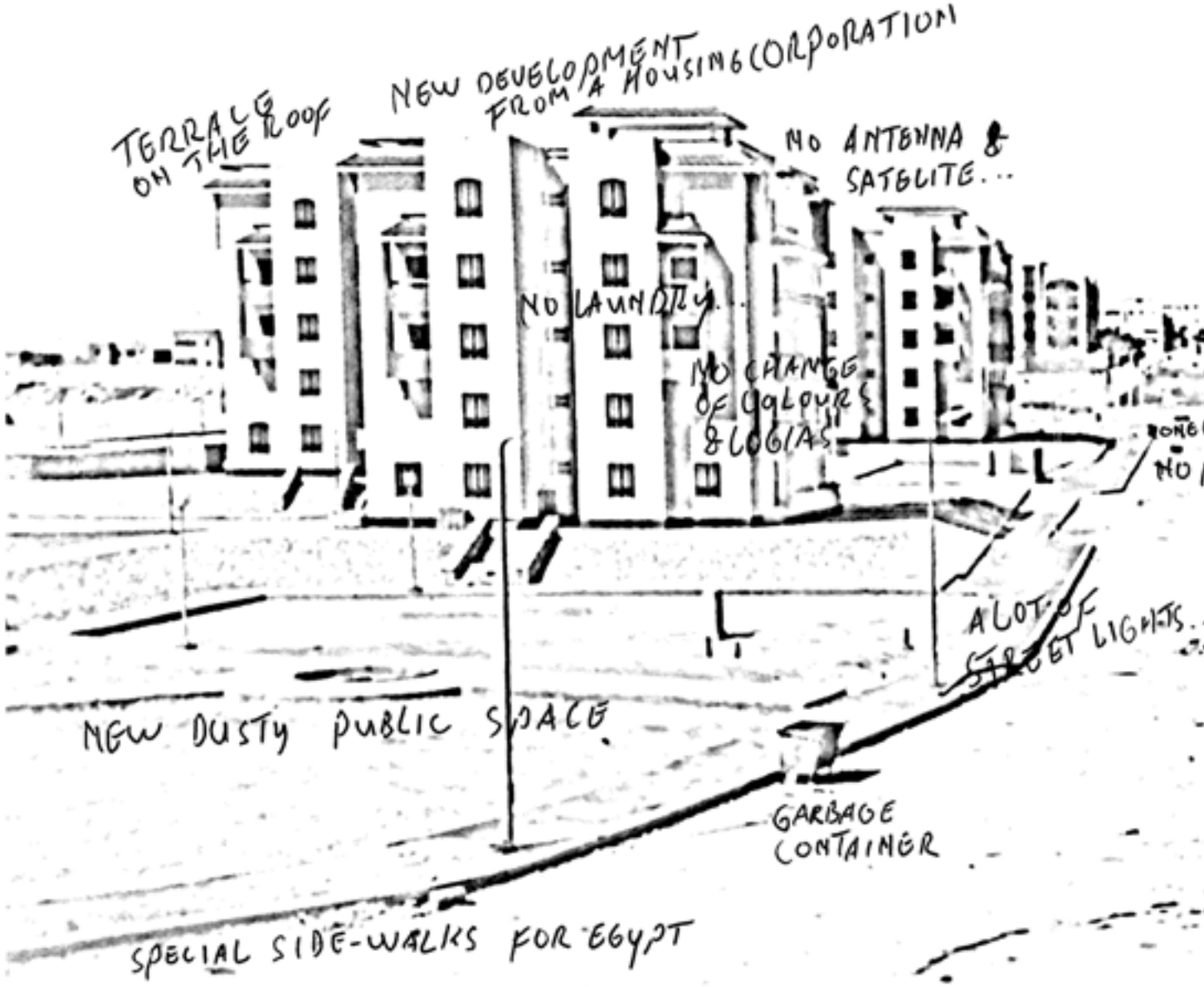

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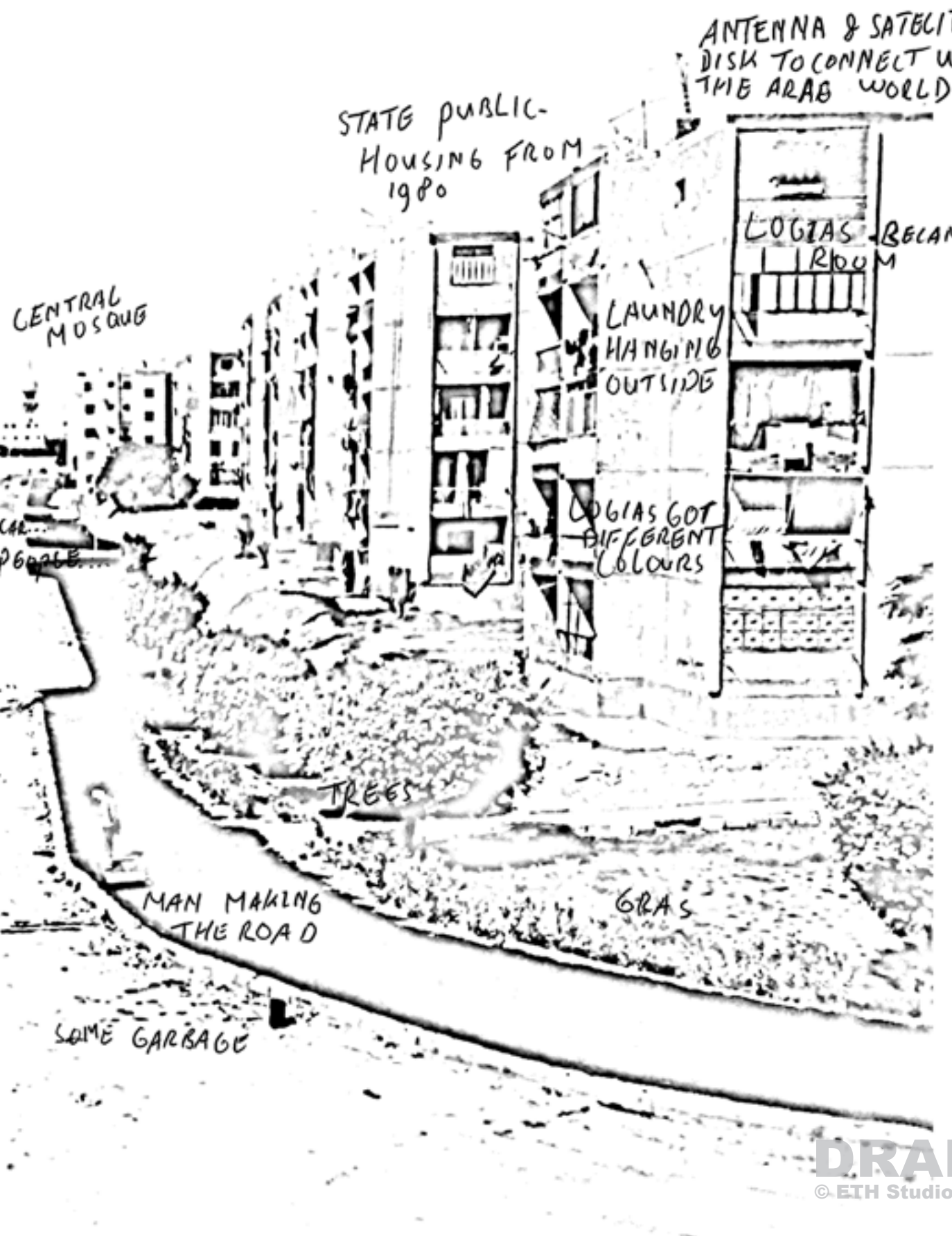

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THE MASTER PLAN

The original Masterplan, 1978.

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There was a political priority to plan 30.000 new dwellings in the direct area of the Helwan industry. In those industries, there where 100.000 well paid labour working on that time, with the majority living inside Cairo who had to suffer from commuting three till five hours a day.
To solve this problem, the government wrote a competition for a new city with the following conditions:
A new town should be build directly southeast of Helwan, on the new build motorway Masr El Galida – Helwan in a very motional topography. Cross-cut by not removable high power cables;
A target of housing for 150.000 people including all the necessary public and private services.
To plan the objects for all the buildings including the technical infrastructure for a first stage of 50.000 inhabitants;
Housing for different social groups: singles and families of social income and families of the middle and higher income;
The construction material had to be of concrete.

The final plan that's made shows a clear organisation in the service centres to make it easier to build in stages. There's a hierarchical system of 3 city areas, 6 zones and 36 neighbourhoods.
The urban design is determined by the conception to create a striking contrast between the moving topography and a relatively strict rectangular grid. In the large scale, this grid is broken twice according to steep slopes. In the connection point of the three main areas, is the main center on a topographically prominent location.
The service centres are, depending on characteristics, reduced to different linear centres, which are organised along the main walking trails. Because of that, these will be lively, climatic protected and safe.
The organisation of the different functions follows mostly in functional criteria: short ways, use of the topography and the need of regulated safety distances (building from the road) with some exceptions for aesthetic reasons. Like for example to locate the higher income family houses directly on the street to show their quality, or petrol stations and small industries offside the main road to hide them.
The buildings should, if possible (because of the moving terrain), follow the street lines. To calculate on a failure of money, the urban space should be able to be defined by only the buildings. The so created street spaces of 3 till 5 floors ribbon buildings are good to give the pedestrians shading. On the sides of the free spaces the building fronts are (depending on the function relations) more or less broken. For the middle and higher standards, are beside the block system, very dense low-rise patio buildings offered. The settlement is with big open spaces on the edges and an exaggerate ring road disconnected from the dessert.
To come back to the building material concrete, it's said to be as followed: concrete is building physical incompetent because it doesn't insulate and store heat. Heating won't be build (for cost reasons). The big elements have the disadvantage that the construction is expensive and difficult and it needs a flat terrain. On the other hand, it doesn't bring the needed jobs. These arguments didn't stop the A.R. Egypt in the 70s to obtain big prefabricated concrete elements factories in foreign countries, for what they need to find projects now to maintain those factories.

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THE MASTERPLAN

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FIG.33 PROGRAMME

LAND USE	STAGE 1		STAGE 2		STAGE 3		TOTAL	
	UNITS	AREA	UNITS	AREA	UNITS	AREA	UNITS	AREA
HOUSING								
UPPER 120/HA.	540	4,5	540	138/HA. 3,9	540	3,9	1620	12,3
MEDIUM 110/HA.	1970	17,7	2000	18,4	2050	14,8	6020	50,9
SOCIAL 118/HA.	7660	65,2	7340	55,4	7540	60,9	22540	181,5
							24,5%	
SERVICES								
SCHOOL	18,5	19,6	18	20,0	18,5	19,9	55	59,5
HOSPITAL	135	2,8	555	7,8	135	3,9	825	14,5
PUBLIC SERVICES	—	4,1	—	3,4	—	2,6	—	10,1
PRIVATE SERVICES	—	8,6	—	17,1	—	30,5	—	56,2
CULTURAL	—	5,8	—	8,2	—	10,8	—	24,8
TRAFFIC								
ROAD	—	40,4	—	39,8	—	41,7	—	121,9
FOOTPATH	—	27,7	—	35,0	—	20,5	—	83,2
BICYCLE WAY	—	5,0	—	4,9	—	3,9	—	13,8
RESERVE	—	12,0	—	13,5	—	11,8	—	37,3
PARKING	2500	5,2	2600	5,6	2650	5,4	7750	16,2
DIST. MARGINS	—	44,9	—	34,0	—	31,4	—	109,3
TRAM	—	3,4	—	—	—	—	—	3,4
OPEN AREA								
RECREATION FACILITIES		21,4		36,9		34,2		92,5
GREEN AREA								
VENTILATION		23,5		33,5		41,8		99,8
HIGH VOLTAGE		—		24,8		22,7		47,5
GRAND TOTAL								1034,1

REST AREA IN HA UNITS: NO. OF FLATS (HOUSING)
NO. OF SCHOOLS (SCHOOLS)
NO. OF BEDS (HOSPITALS)
SQM GROSS FLOOR AREA (SERVICES, CULTURE)

Programm of Master Plan.

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REALISED PLAN

The realized Plan

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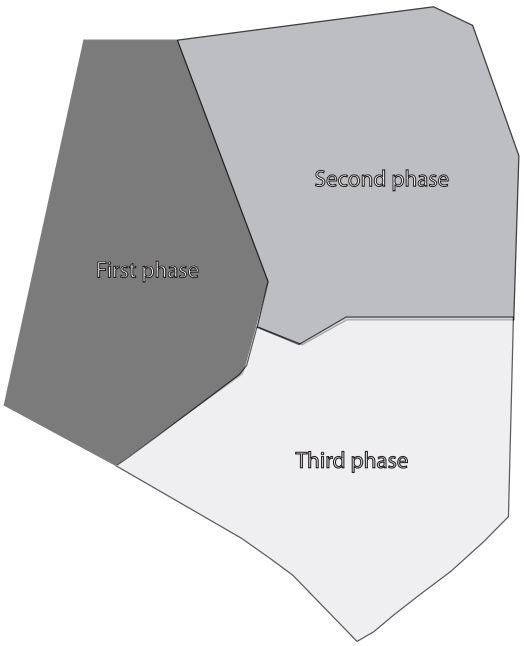
The Districts



Evolution of the city in three Phases

The 15th of May is one of the first generation urban cities established in 1978 by the Ministry of Housing and New Urban Communities, mainly to accommodate workers at the Helwan Industrial zone.
The city was developed in accordance to the national strategy for desert development and construction of new urban communities outside the Nile valley and its Delta.
This strategy aimed at geographical spreading of population by attraction of populates and services away from the Nile Valley.
The city is located south east of Helman and approximately 35 km from Cairo with a residential area of approximately 8804 feddans. It comprises of a residential area (6429 feddans) an assigned northern extension area dedicated for private construction by individuals (2095 feddans) and a southern industrial area (280 feddans).
The city is planned to include all service (educational, commercial, social, health, sports, entertainment etc).
The geographical distribution of these services is hierarchical in which each group of buildings (Megawra) has its services center, each 6 Megawra have their serices center and each 17 Megawara have their services by center.
In addition the city has a main service center containing the central and major buildings for all available services which are not available at Helwan such as cultural center, public library, theater and a museum.
Futhermore, the city include a main service area (50 feddans) for light nad small industries.
This area is divided into 190 pieces each of an area ranging from 300 m2 to 2000m2 and includes several industrial activities and services such as car services furniture manufacturing workshop and stores.

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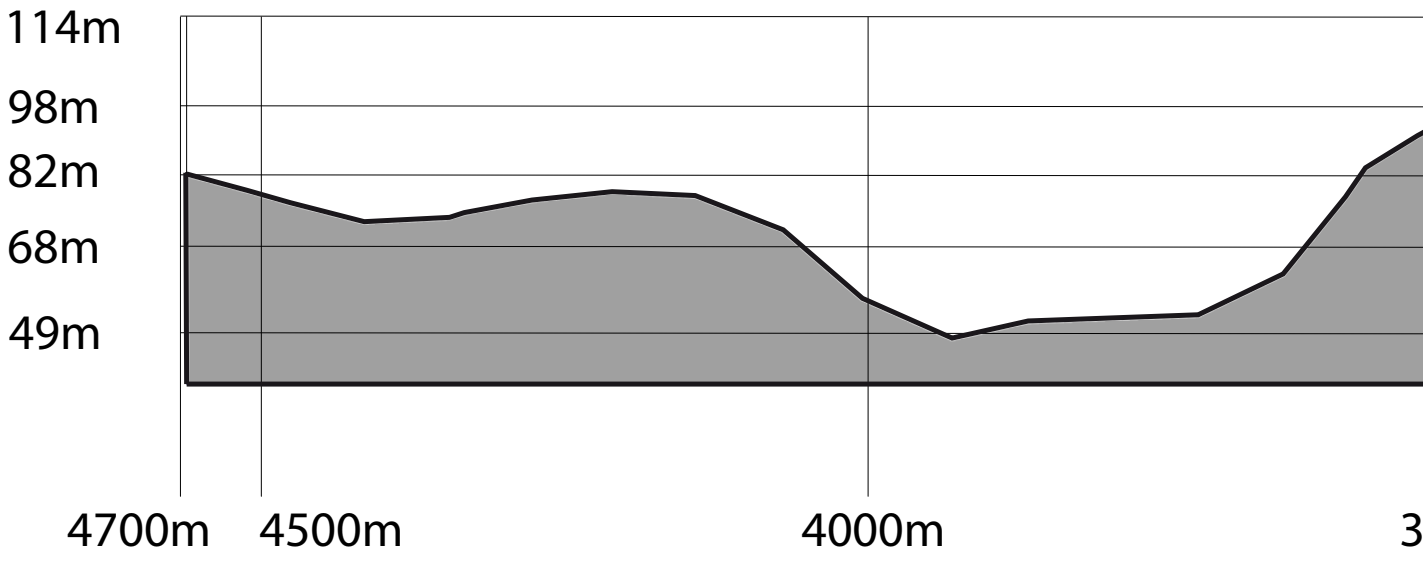

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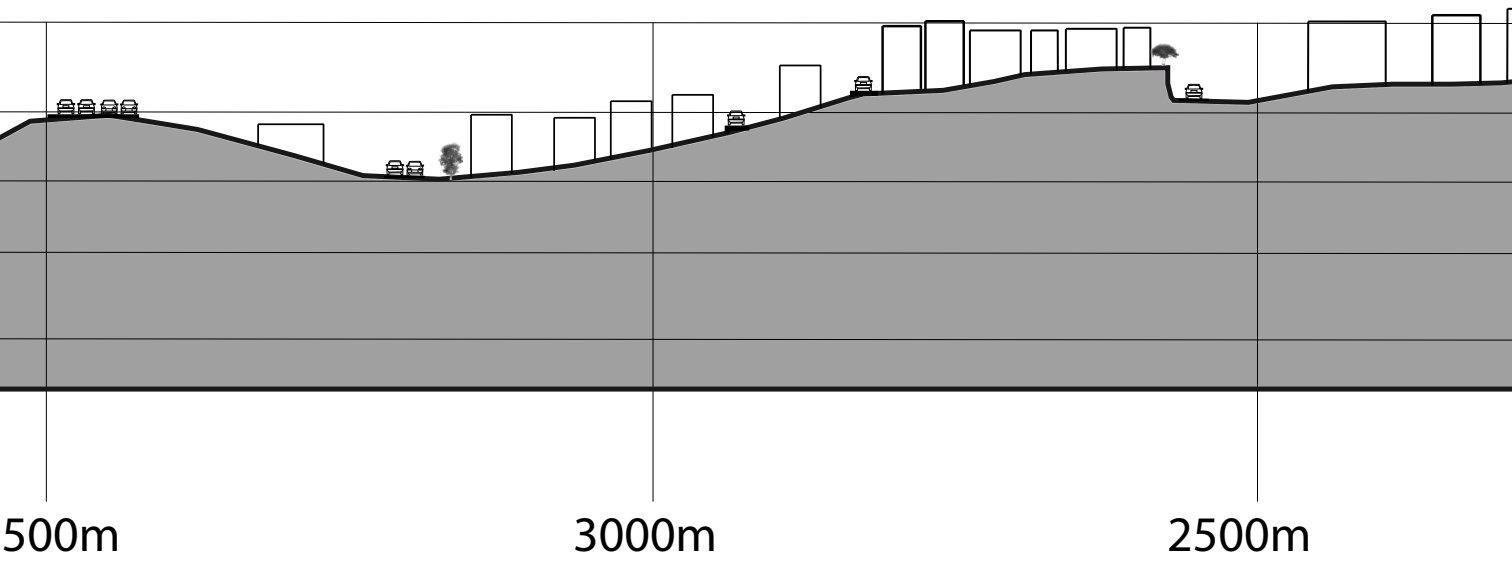

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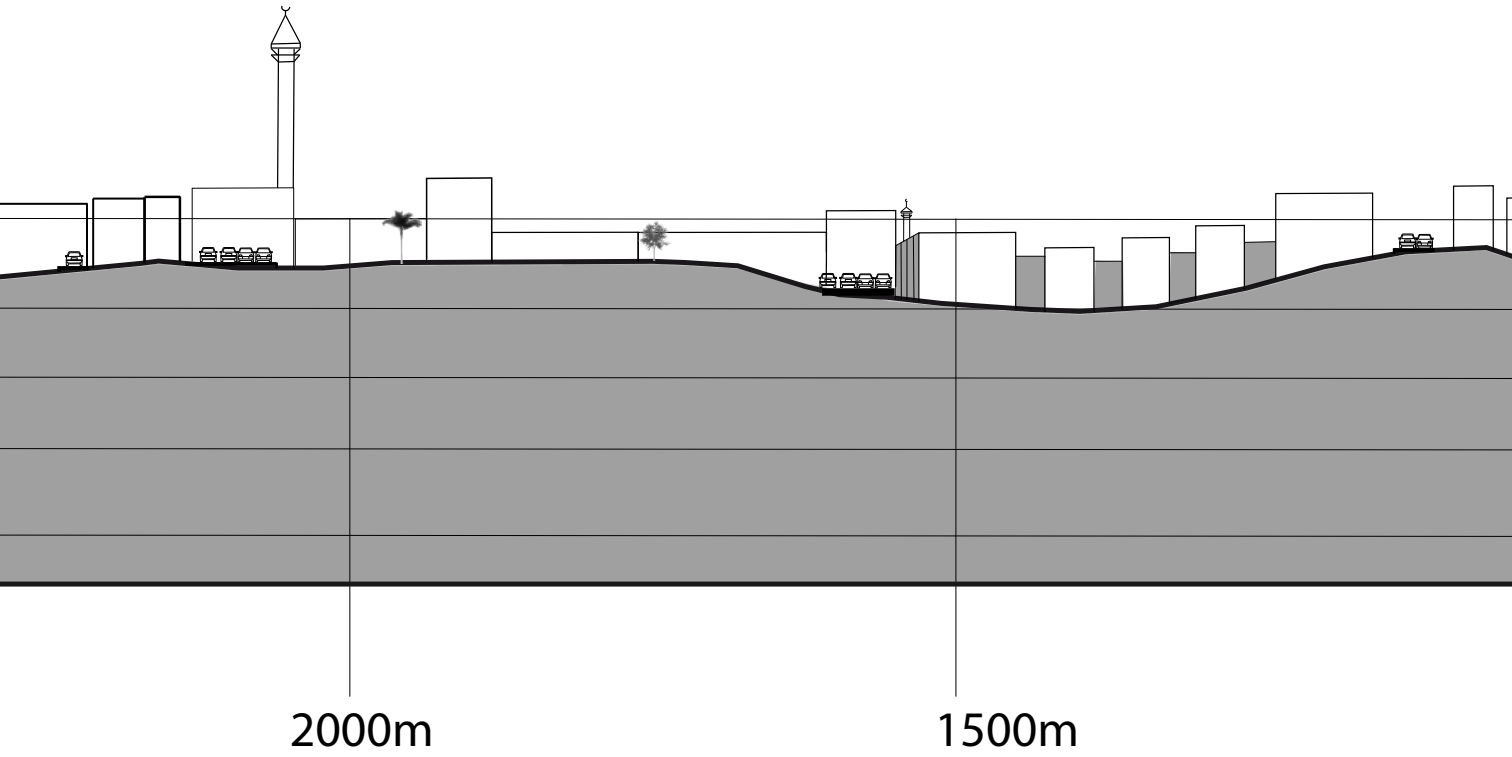

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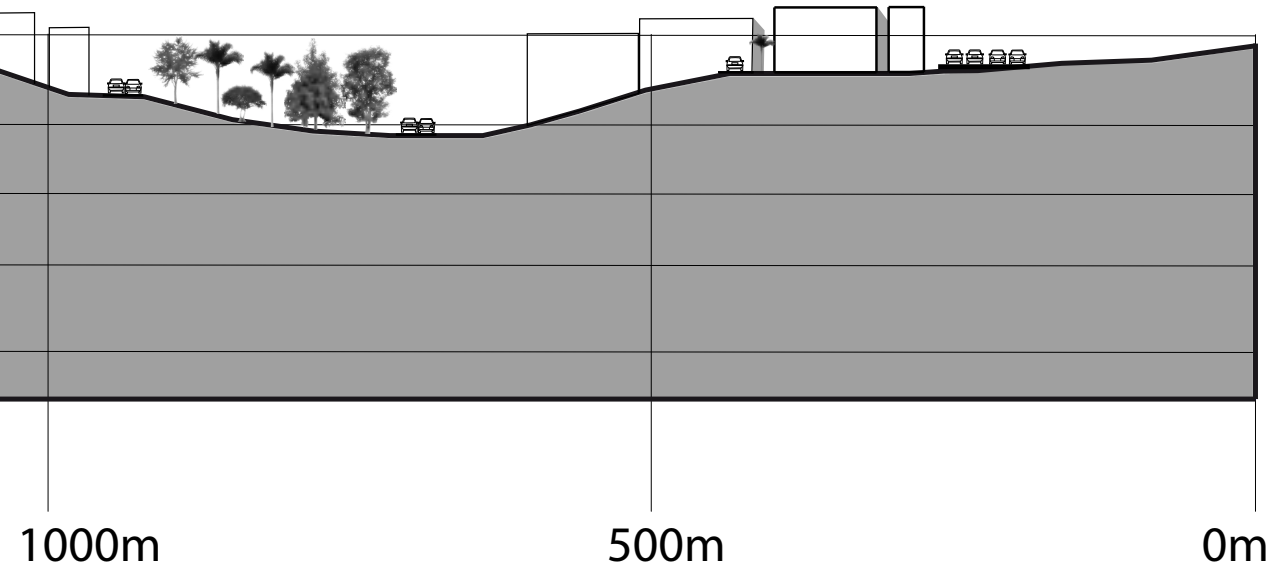

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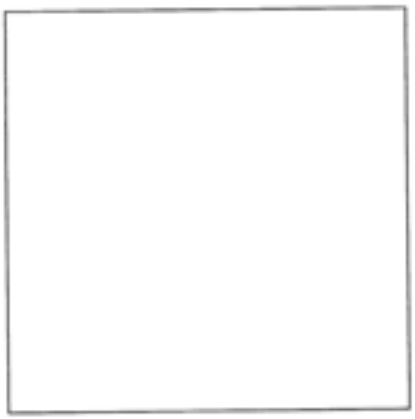

Figure 1. *Carte de l'océan (extrait de Lewis Carroll,* La Chasse au snark*).*

ESPACE
ESPACE LIBRE
ESPACE CLOS
ESPACE FORCLOS
MANQUE D'ESPACE
ESPACE COMPTÉ
ESPACE VERT
ESPACE VITAL
ESPACE CRITIQUE
POSITION DANS L'ESPACE
ESPACE DÉCOUVERT
DÉCOUVERTE DE L'ESPACE
ESPACE OBLIQUE
ESPACE VIERGE
ESPACE EUCLIDIEN
ESPACE AÉRIEN
ESPACE GRIS
ESPACE TORDU
ESPACE DU RÊVE
BARRE D'ESPACE
PROMENADES DANS L'ESPACE
GÉOMÉTRIE DANS L'ESPACE
REGARD BALAYANT L'ESPACE
ESPACE TEMPS
ESPACE MESURÉ
LA CONQUÊTE DE L'ESPACE
ESPACE MORT
ESPACE D'UN INSTANT
ESPACE CÉLESTE
ESPACE IMAGINAIRE
ESPACE NUISIBLE
ESPACE BLANC
ESPACE DU DEDANS
LE PIÉTON DE L'ESPACE
ESPACE BRISÉ
ESPACE ORDONNÉ
ESPACE VÉCU
ESPACE MOU
ESPACE DISPONIBLE
ESPACE PARCOURU
ESPACE PLAN
ESPACE TYPE
ESPACE ALENTOUR
TOUR DE L'ESPACE
AUX BORDS DE L'ESPACE
ESPACE D'UN MATIN
REGARD PERDU DANS L'ESPACE
LES GRANDS ESPACES
L'ÉVOLUTION DES ESPACES
ESPACE SONORE
ESPACE LITTÉRAIRE
L'ODYSSÉE DE L'ESPACE

Espèces d'espaces, George Perrec

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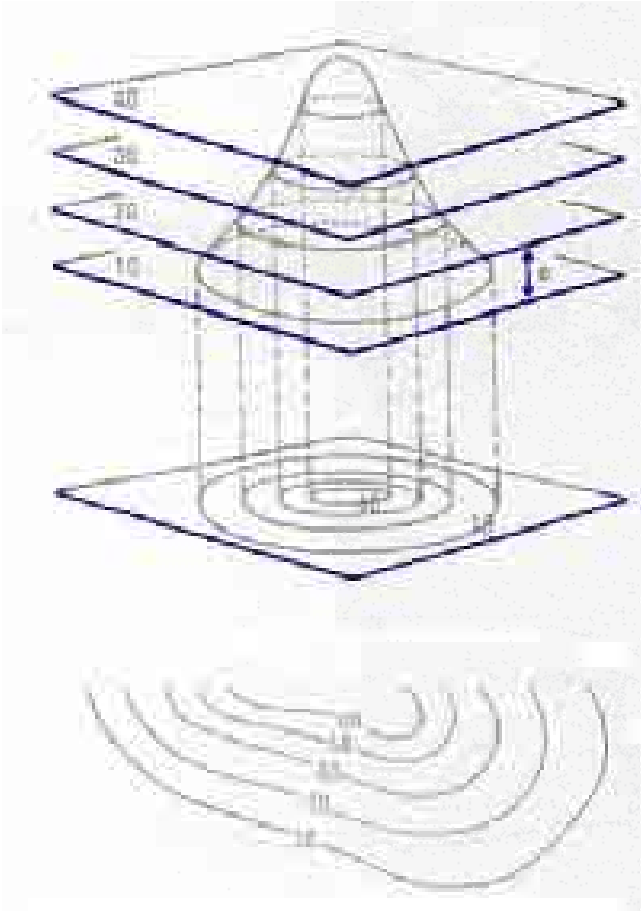
Esri Standard

The 15th of May community lies southeast from Helwan city and is connected in the same time with the southeastern extension from Helwan. It is built on rocky lowland, on a platform of the Middle and upper Eocene Rocks (Said 1962, and Conoco, 1987). These rocks belong to Gebel El Mokattam that represents a hill that borders the eastern part of Cairo city.

The planners of the city took in consideration the location of the dessert while making the Master plan. The city is a clear example of urban space adapted to natural condition. The dialogue between landscape and Architecture manifest itself all over the city. There are several levels of height were dwellings public spaces and public building are placed.



Axonometrie of a limestone hill

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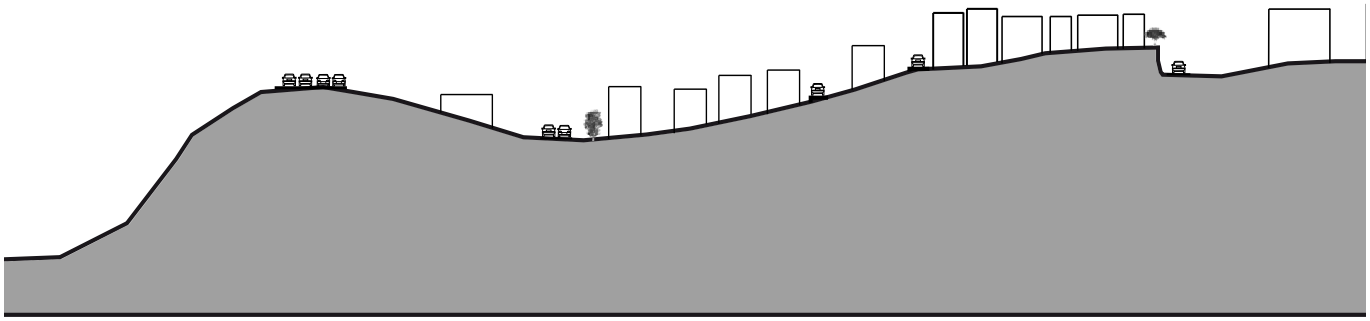
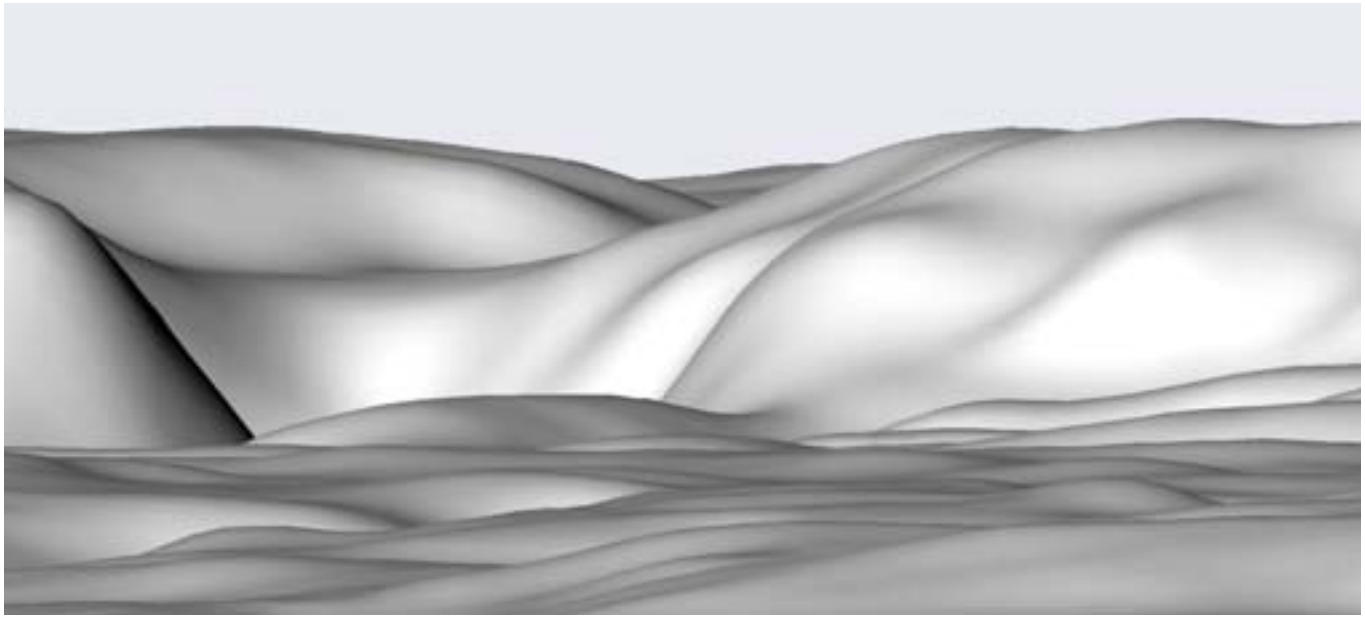


Section from the edge of the 15 May City



Impression of the 15th of may region Topography

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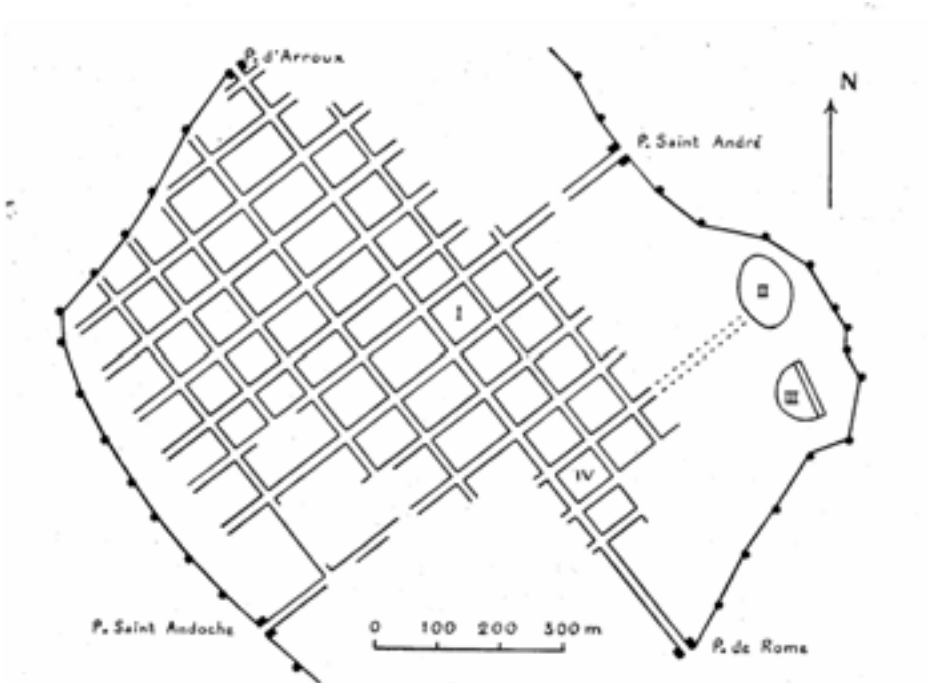
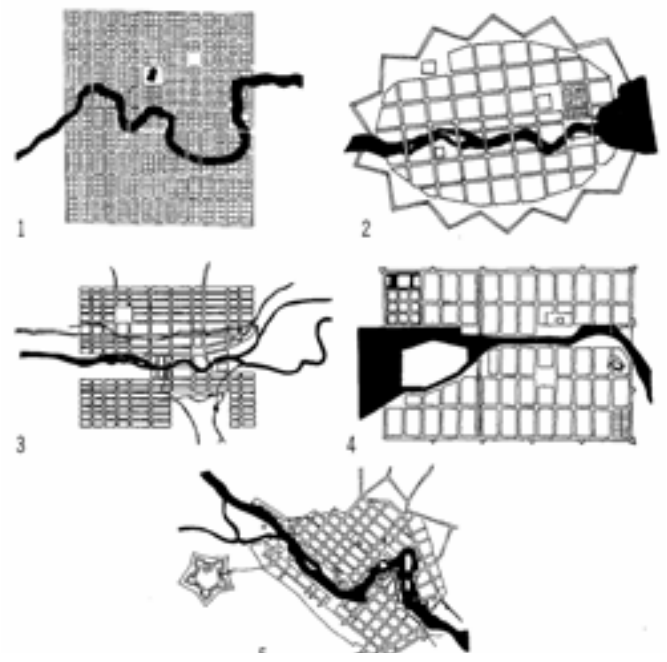
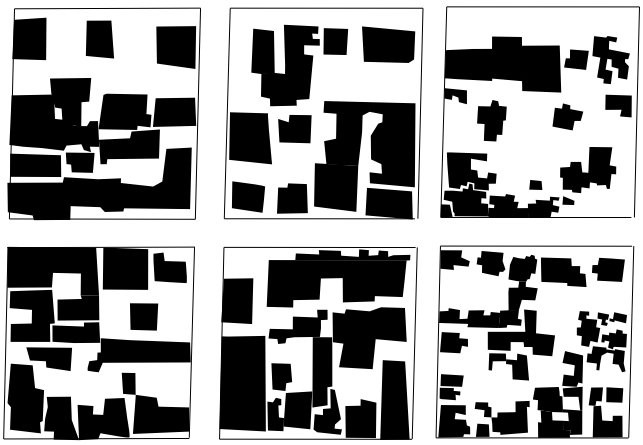


The City of Autun general Plan



Plans of New Sweden's Cities in the 17th Century



Grid Helwan

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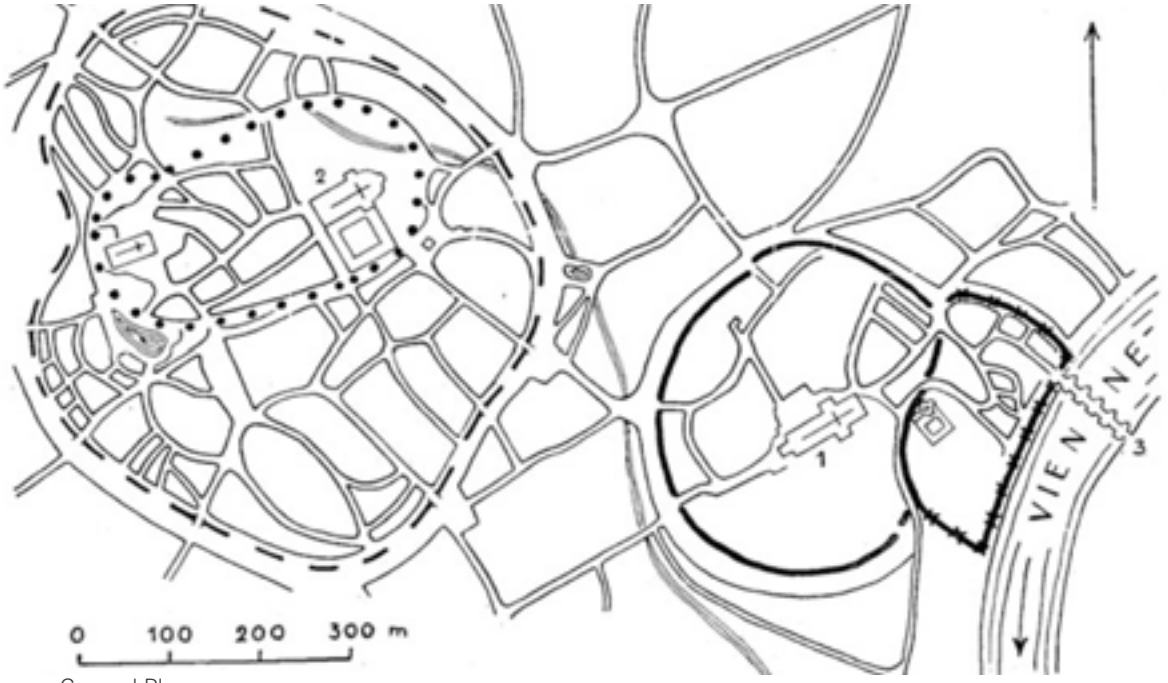
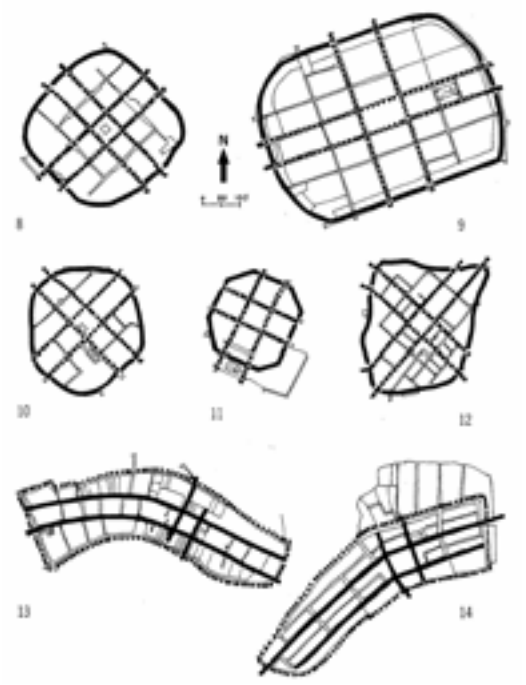
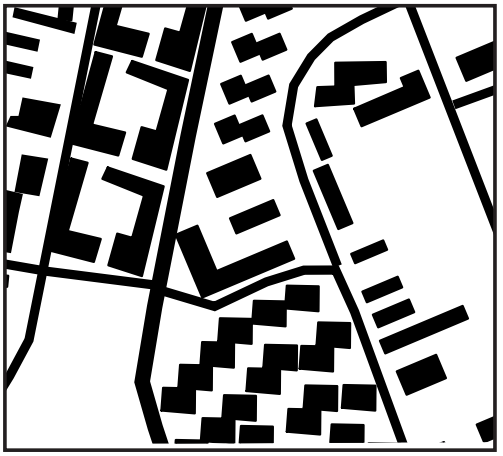


Limoge General Plan



Plans of different Mediavale Cities in France



15 May City, fragment of Pattern

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Master plan of the 15 of may

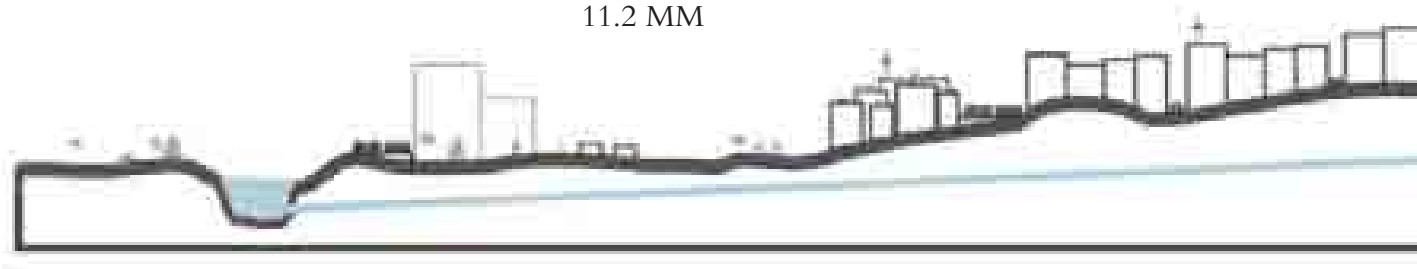
The city of 15th of May gets its drinking water from a station in south Helwan at a rate of 60,000 m3 a day by means of 1,000 mm diameter pipes. This is by agreement with the Greater Cairo Water Company (Marpak al-Maya).
The main pumping station was from a 10,000 m wide dam operated from three units of pipes operated electrically. Each one has a capacity of 300 liters per second and costs some 2.995 billion EGP. This serves all Helwan residents.

The network of water pipes of the three stages of the city and the division of the length and segments used are from 100-800 mm. The total length of the pipes is 154 km, and they are made of asbestos, steel and flexible iron.

Furthermore, there is a station to handle runoff water using some 30,000 m3, and includes the work and chemical and electrical structures.

ANNUALL RAINFALLS

11.2 MM



Water circulation system from the Nile

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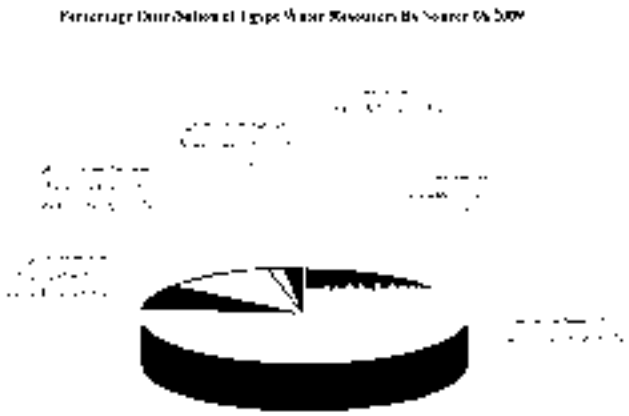
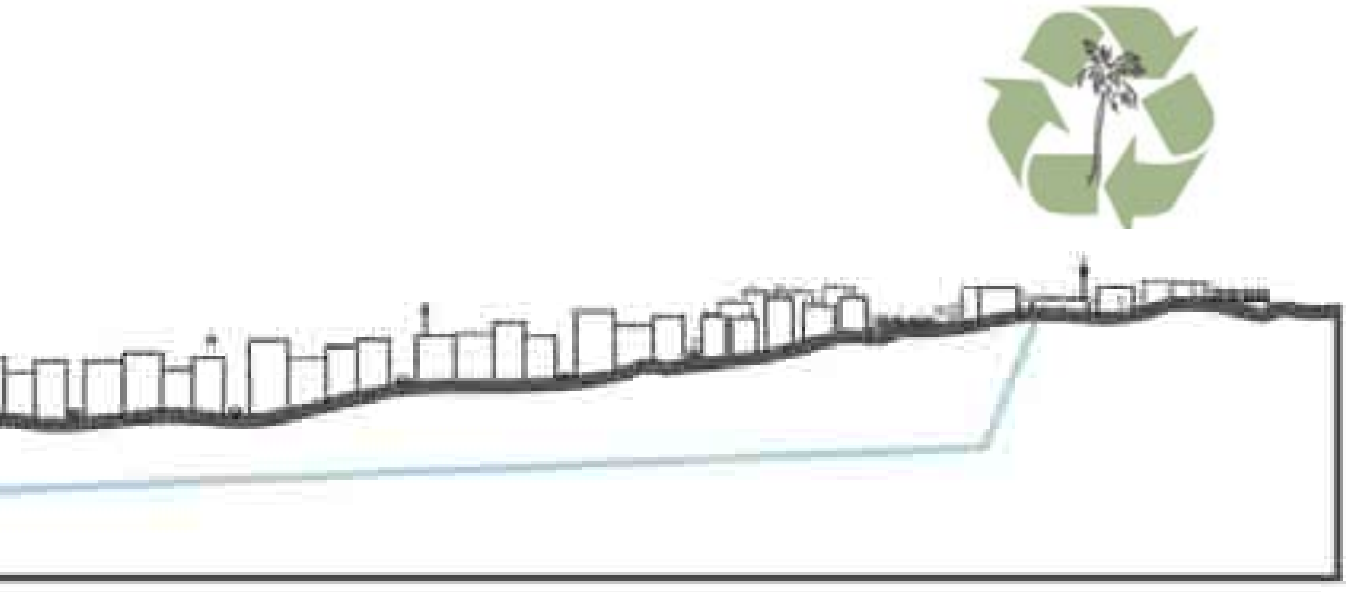


Statistics data from OMPGE,1990

In the absence of local water treatment plants, the city of May 15th relies on fresh treated water fed from north Helman station. This station delivers water to the city through a main pipline of diameter 1000mm. According to the information obtained from the city council the current water amount fed to the city is 53,000-60,000 m3/day. Furthermore, the actual water feed to the city does not satisfy the actual water needs and therefore water shortage is consider a major problem in the city.
Another pipeline of diameter 1000 mm is being developed to deliver water from Al Tebin water treatment plant to fulfill current and future water demands.



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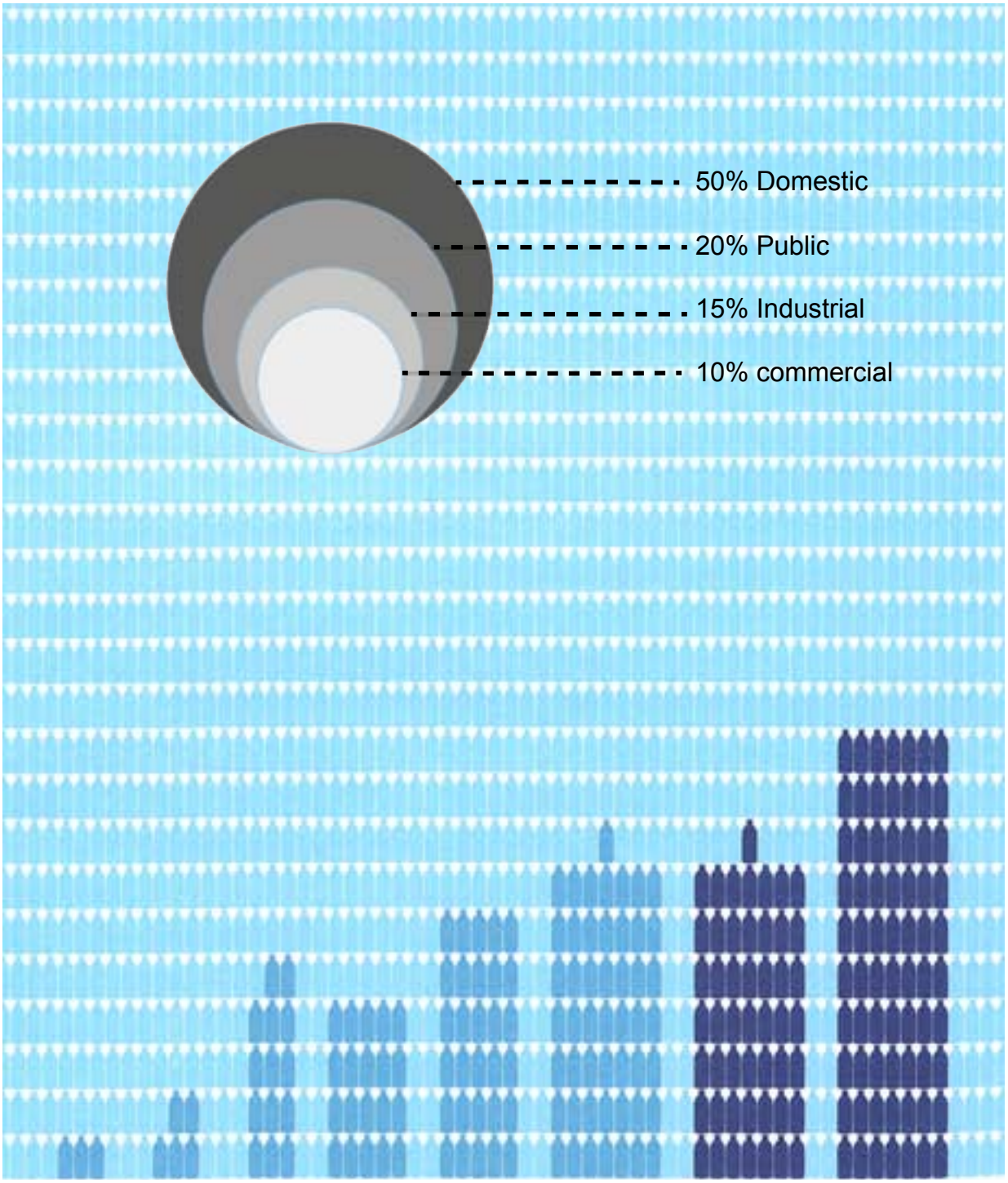

Water consumption a person per day

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Actual plan of 15 th of may

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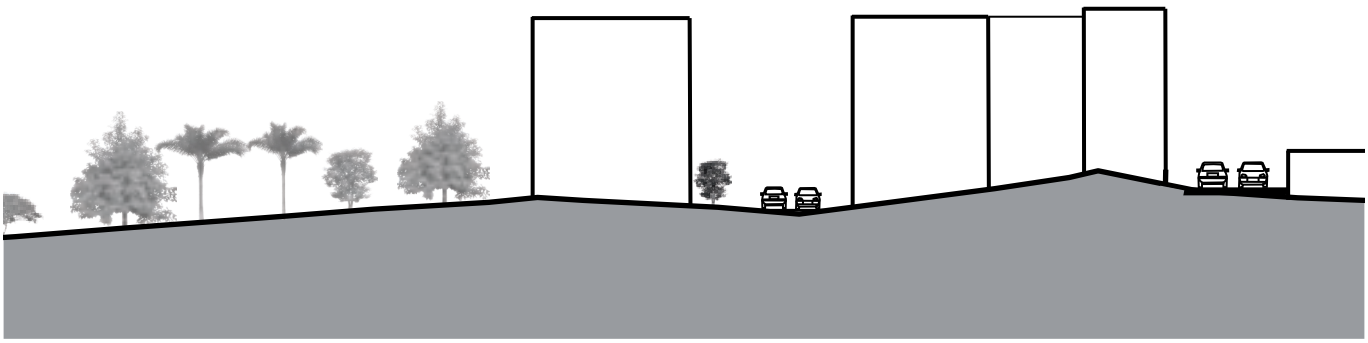

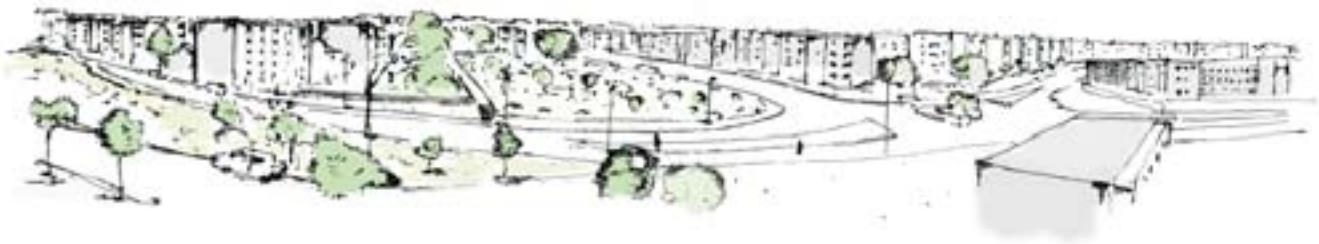

Master plan, the green areas

Green between the blocks

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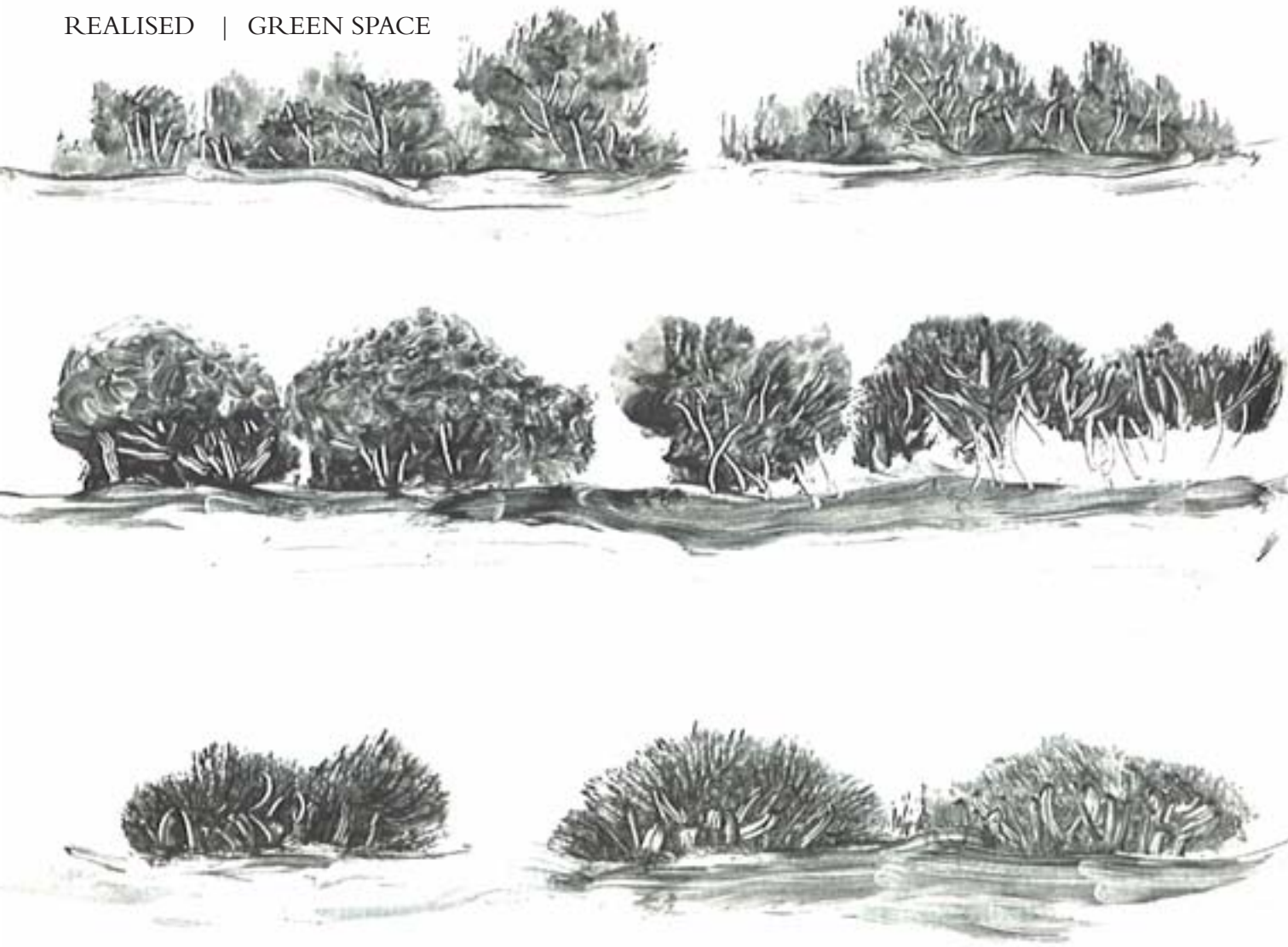

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Palm tree

Taxus bacata

Pinus pinea

The green spaces in the city are an example for the artificial act done by the planers to change the nature of the dessert area.
33% of the city land is planted. Private ownership of green spaces is 936,000 m2. The city has 29,480 trees and some 119,000 plantings.
In the city there 29 different short and type of trees .the majority of them where imported from abroad to create an image of a clean city in the dessert .Most of the water used for the vegetation are passing a process of purification out side the city and being used again for the green areas.
Those tree are also a proof of the involvement of the stats to maintain the image of the labour class living in the dessert.

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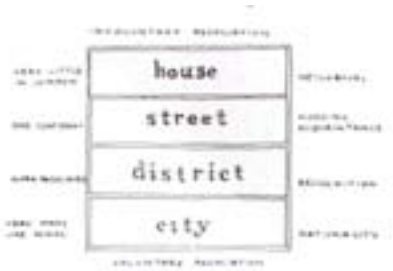
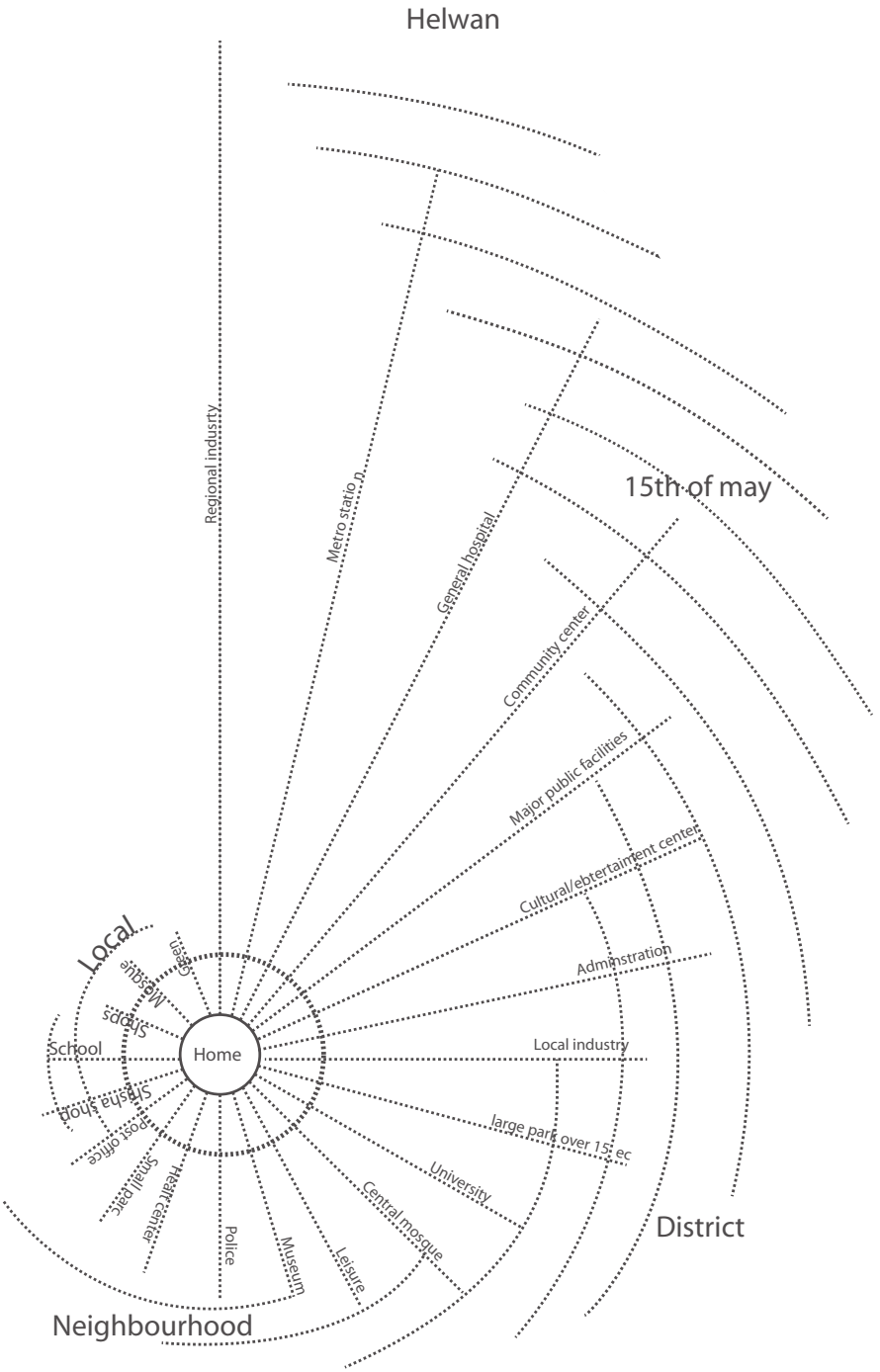


Valley Section,Doorn Manifesto, 1954

A & P Smithson, diagram,Dubrovnik, 1956



Scale of associations ,15 of may

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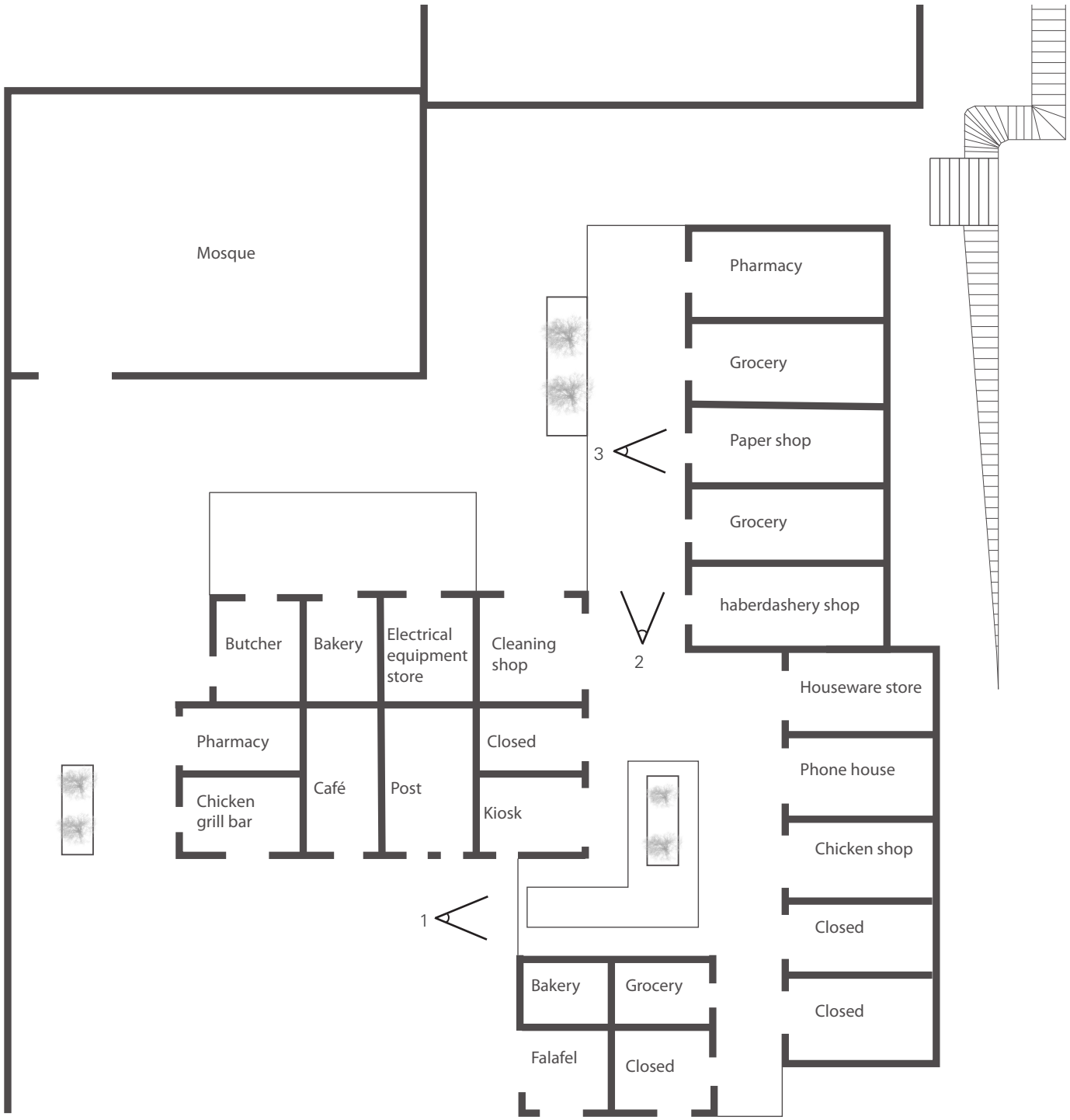

Plan of a functioning market in the 18th Neighbourhood

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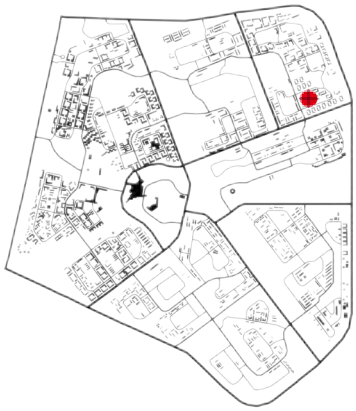
1: View towards the Courtyard

2: View through the arcade

3: View inside the Paper shop

Every neighbourhood got a market in its centre. They all have a similar concept: an open system on the ground floor, the different building for the stores are connected with roofs and arcades which provide the shading in the outside areas. Those roofs are cut on different places where there're courtyards with some plants and trees inside. The markets serve as a social place of interaction for the neighbourhood, these are the places where the people meet and drink thee or smoke a shisha in the local café. The people also go to pray inside the mosques that are beside every market. The shops are sufficient for the simple daily needs. For eating there're only a simple Falafel and Kebab places. For the bigger shopping and restaurant, the people need to go to Helwan or Cairo.

The markets in the fulfilled neighbourhoods function really well, they are really lively and the shops, cafés, eateries and the mosque have sufficient clients and visitors. Partly due to the high rent rates, there're some closed stores. In the unfulfilled neighbourhoods, mostly on the southeast side of the 15th of May City, there're markets that are empty and have only a few stores open, they don't work well and give really a sad impression. Like you can see on the picture on the next page.



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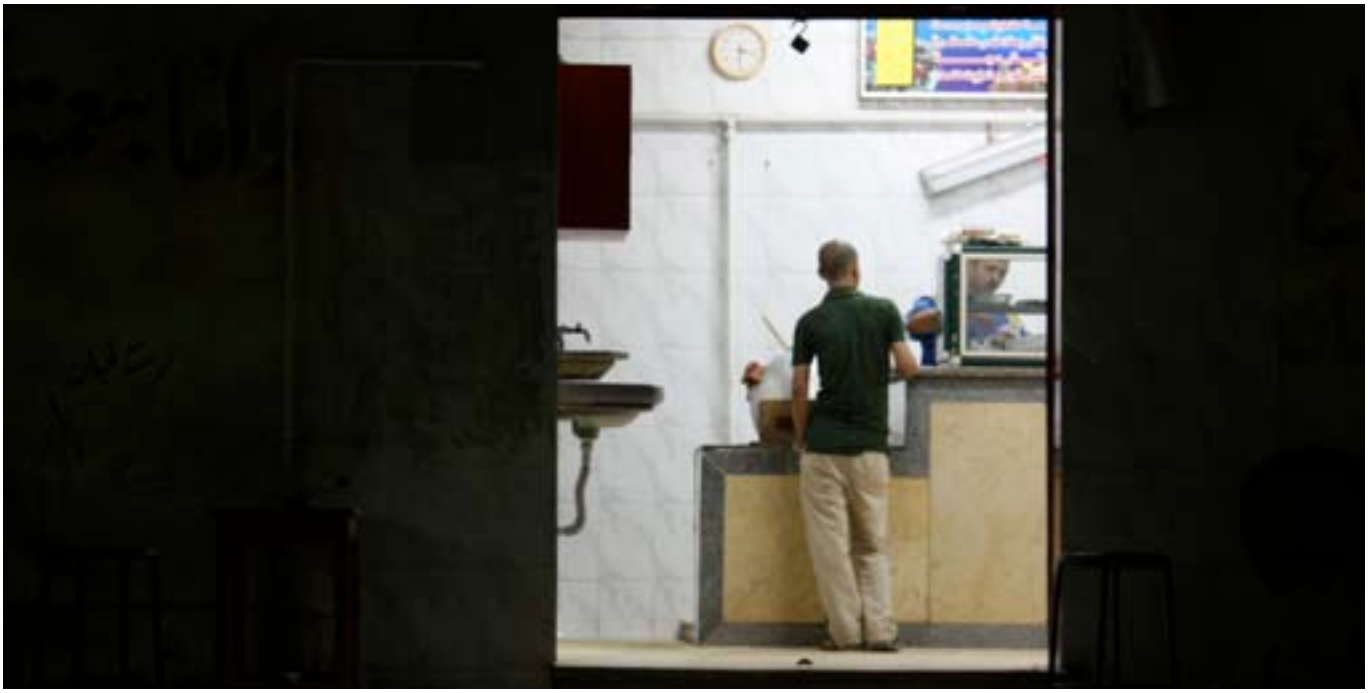

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Principle of the Public Buildings inside a Neighbourhood. This principle always repeats itself but the neighbourhood isn't always completed.

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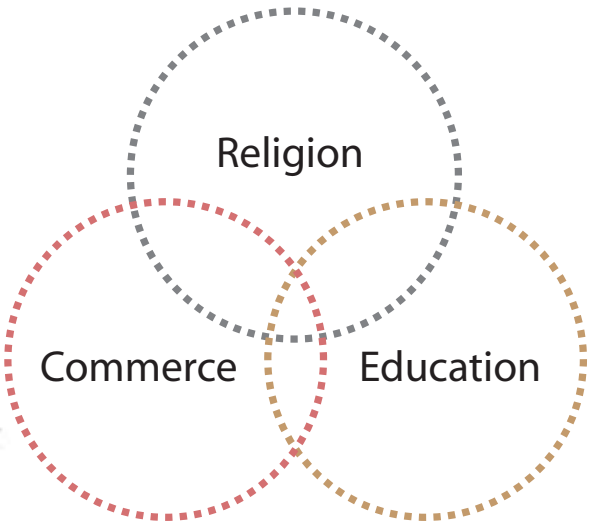
Neighbourhood Centre



Arcades in a Neighbourhood Centre

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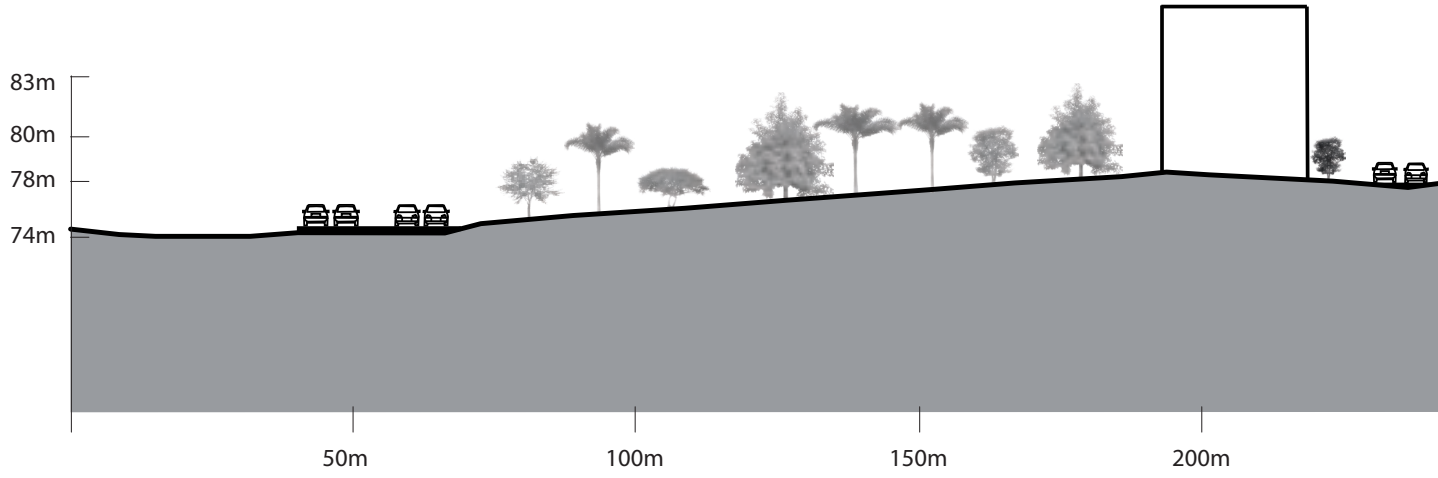
Typical Neighbourhood



Section of a Neighbourhood

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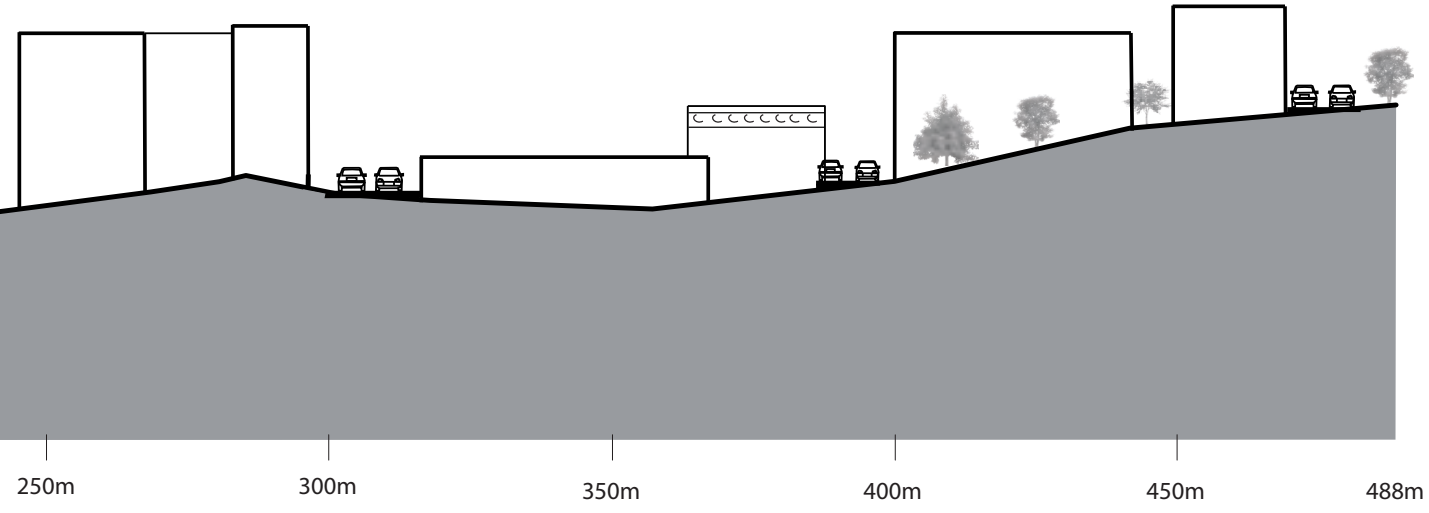
Neighbourhood Centre



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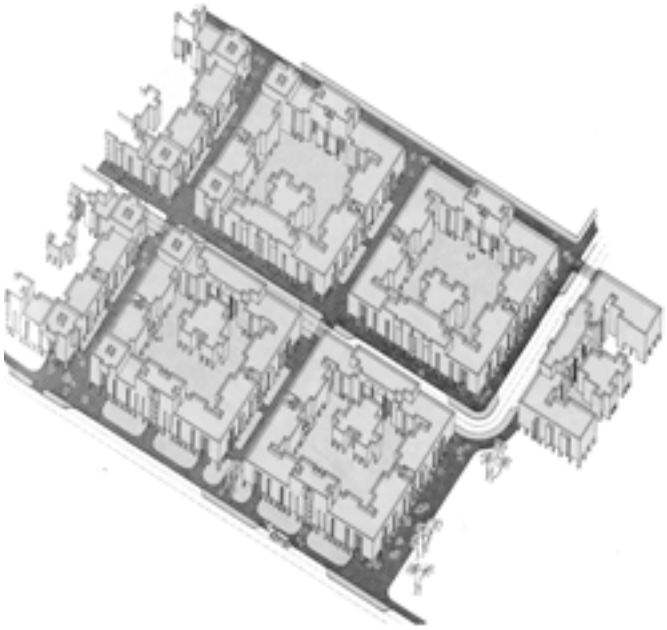
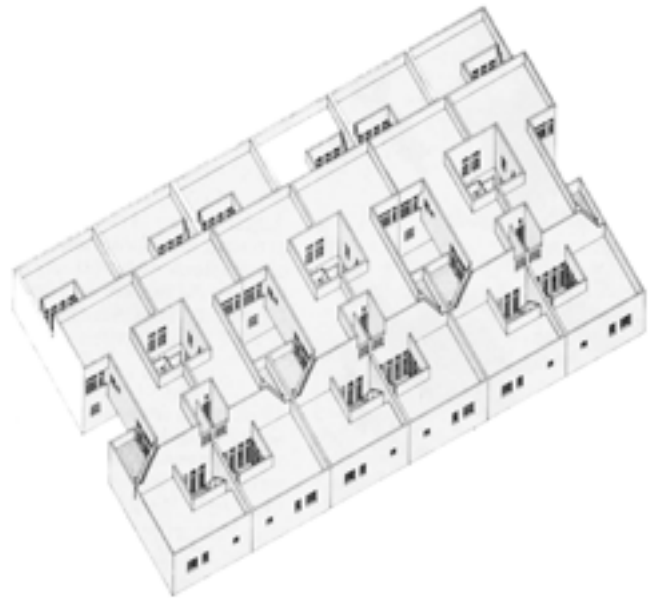


Middle-Class Dwelling,
3-5 Floors, Closed Blocks



Densification of low buildings, Upper-Class Dwelling,
Acces from inside, 1-3 Floors.

In the Masterplan there're only two housing typologies designed: a closed block typology and a courtyard typology, explained as followed:
The buildings should, if possible (because of the moving terrain), follow the street lines. To calculate on a failure of money, the urban space should be able to be defined by only the buildings. The so created street spaces of 3 till 5 floors ribbon buildings are good to give the pedestrians shading. On the sides of the free spaces the building fronts are (depending on the function relations) more or less broken. For the middle and higher standards, are beside the block system, very dense low-rise patio buildings offered.
To building material consist mainly of concrete, what caused some problems in these climate conditions: concrete is building-physical incompetent because it doesn't insulate and store heat. Heating won't be build (for cost reasons).
The big elements have the disadvantage that the construction is expensive and difficult and it needs a flat terrain. On the other hand, it doesn't bring the needed jobs. These arguments didn't stop the A.R. Egypt in the 70s to obtain big prefabricated concrete elements factories in foreign countries, for what they need to find projects now to maintain those factories.
All of the new Desert Settlements of that time where built on the same way: out of concrete.
The typology and density of this plan was, except of the material, really designed for the climate, with all the shading and enclosed courtyards. Something happened in the design process that followed this plan. The realized is in a very different typology, no blocks but rows, L-shapes, U-shapes, etc.
In the income groups, it's quite clear to see in the statistics, that most of the housing is built for the lower income and lower middle income. There're in comparison very few dwellings built for the middle and higher incomes. This all has to do with the target group for this city: the workers from the Helwan-Industry.

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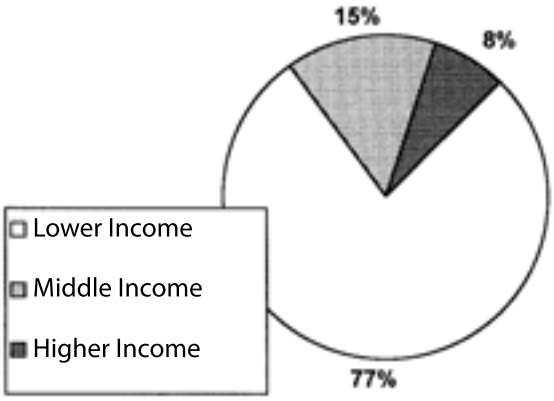
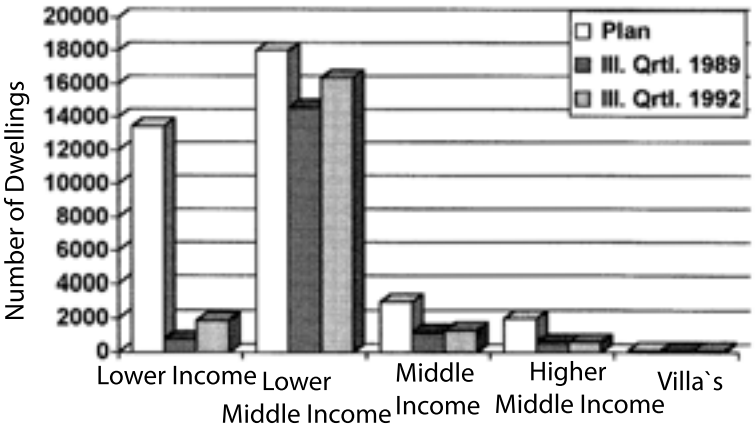
dwellings for the poorest people in this city.



Planned quota from the different income groups of the inhabitants.



Rationing from the realised dwellings in the different levels.

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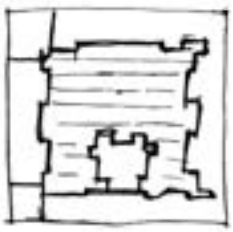
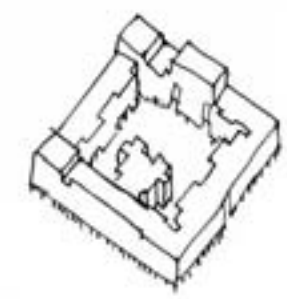
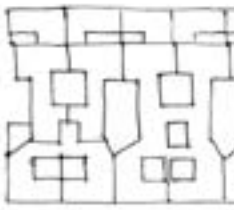
Planned

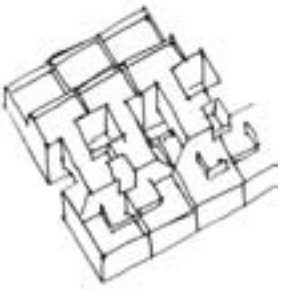
Closed Block Typology with Innen-Court. On the street side there‘re arcades who provide shading and makes ventiliation possible in the court.





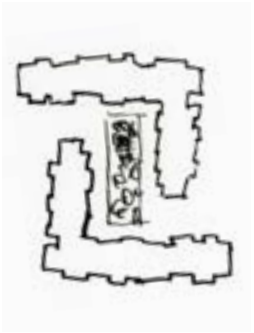
Patio Typology.
There‘s a system of Patios and Terasses to provide direct acces with the outer spaces and shaded day-light inside the dwellings.

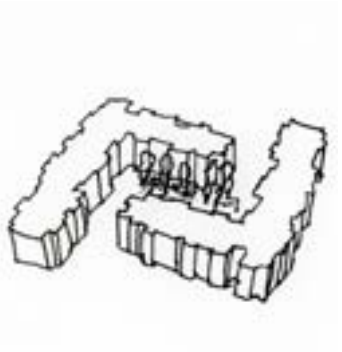




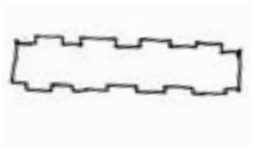
Realised

L-Shaped Blocks with green in the court-yard, 4 Floors high.





Rectangular Block
6 floors high.



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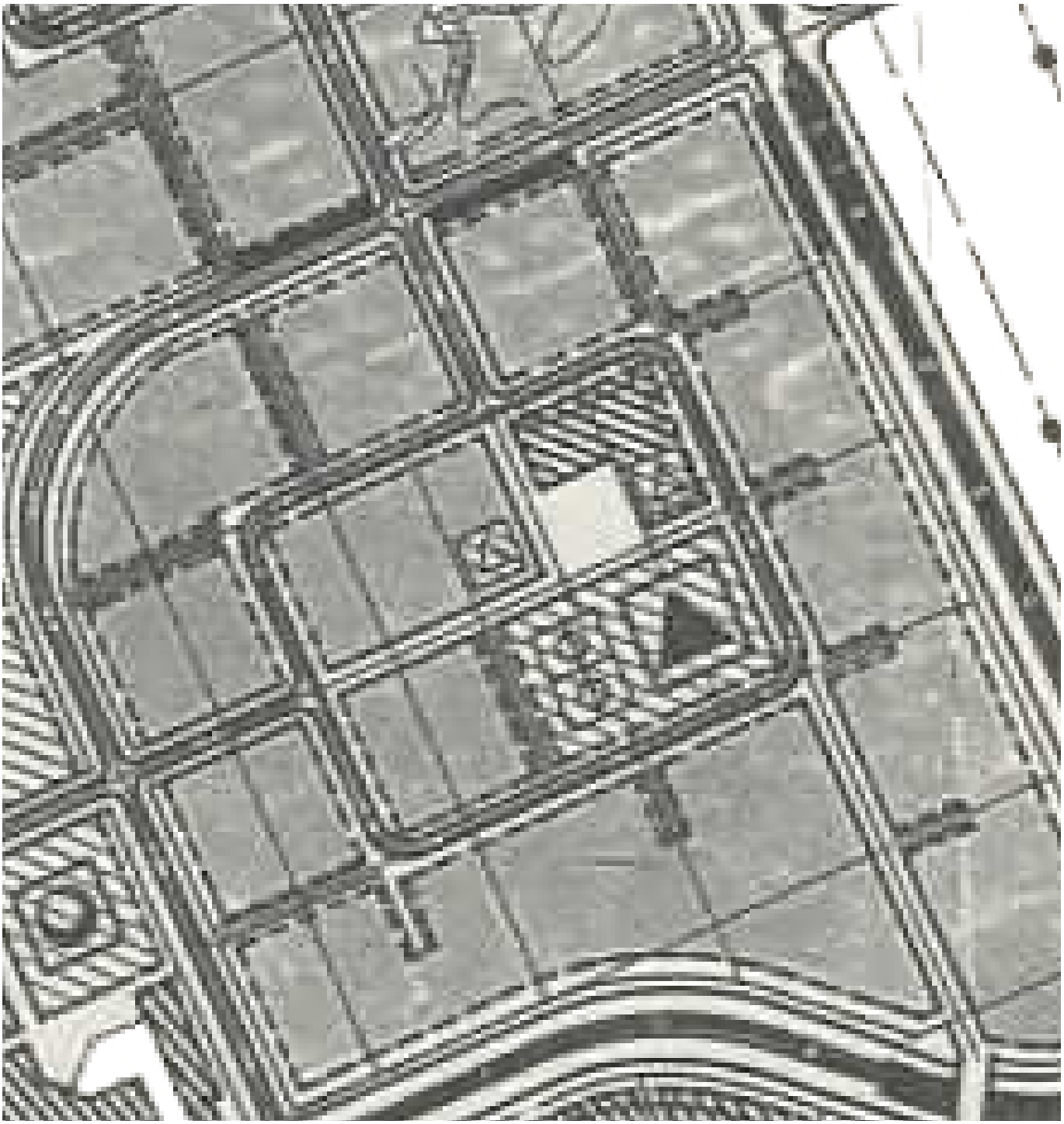

Master plan from the 3rd Neighbourhood

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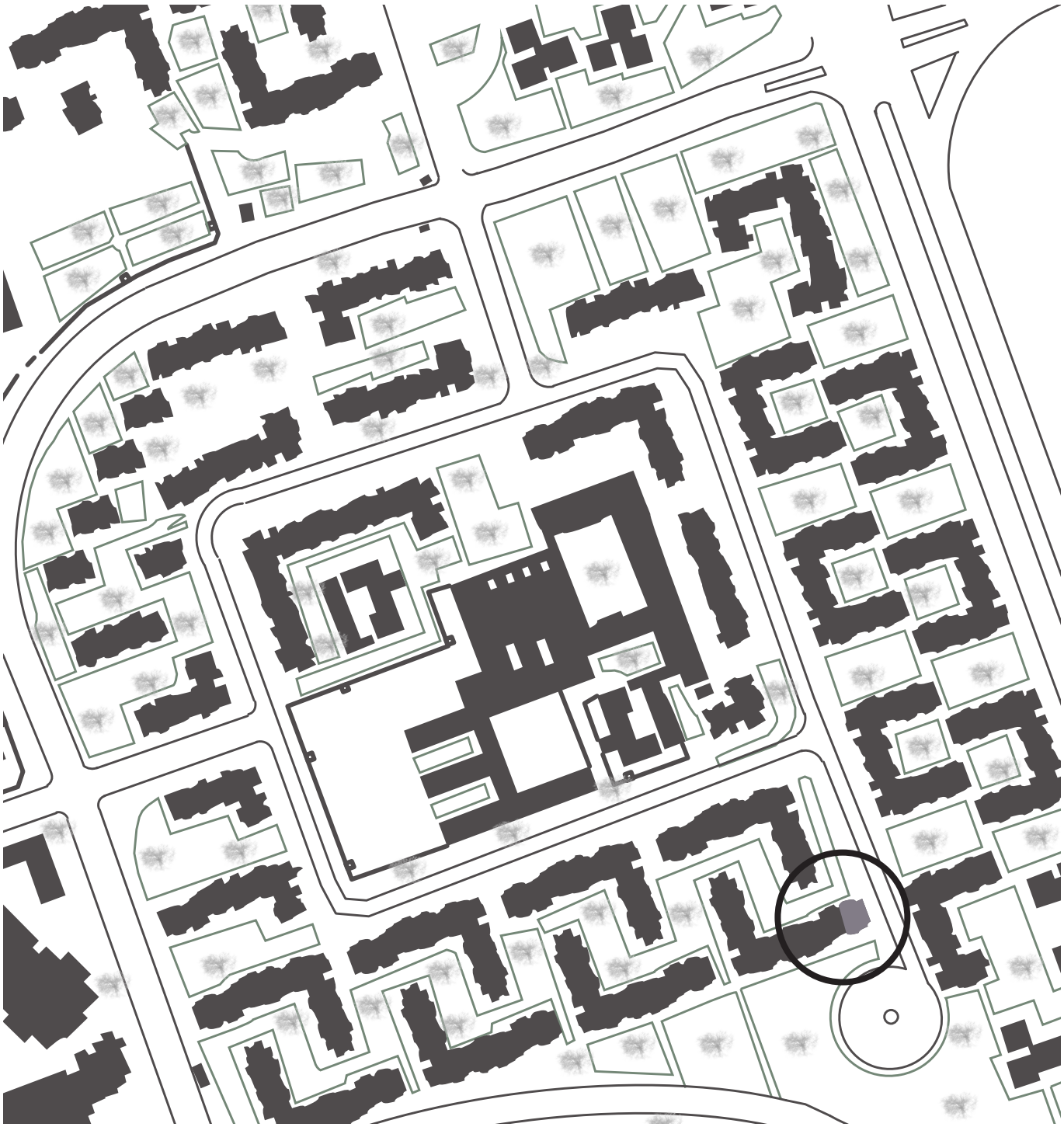

Situation Plan from the 3rd Neighbourhood and Location of the visited Dwelling

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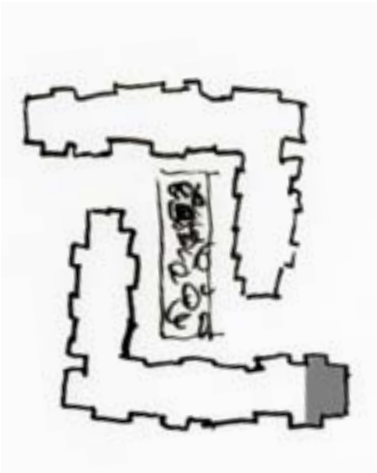

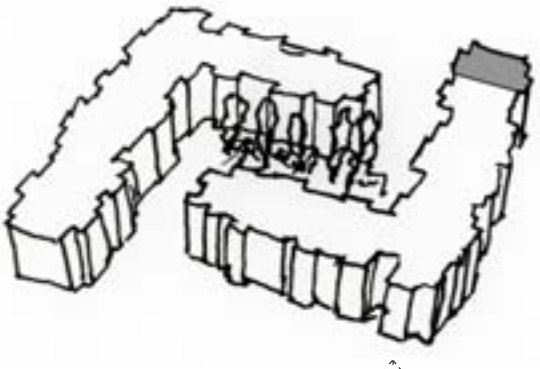

Top Plan and Isometrie of the block, the dwelling in gray.

Floorplan of the visited dwelling. The arrows show the air-circulation that the residents use to cool the apartment

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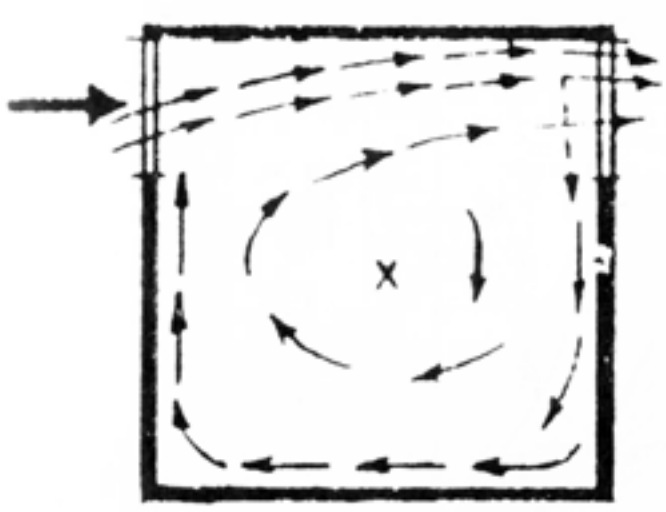
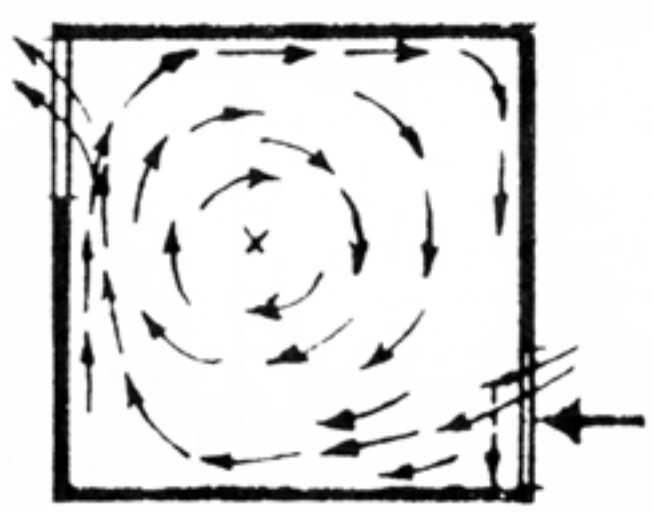
Outside View from his 2nd Bedroom. Medium income Housing



Draught in a space with direct culvert.



Draught in a space with indirect culvert.

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The Dwelling we visited is from the 63 years old Saber al Sharawy. He moved in about 26 years ago, lives there with his wife and before also with his three children, they all got married and moved out. He's a typical middle-class man, owning his flat and a car. It's a very standard flat with just two bedrooms, closed one of the two loggias to get an extra storage room, basic bathroom and a small kitchen. From his balcony that's on the southeast direction, he's a beautiful view over the centre of the 15th of May City.
He has no air-conditioning and heating but uses natural ventilation. He found it very hot inside the dwelling during summers and very cold in the winter. There's no insulation, just the concrete walls.

Name: saber al sharawy.
Age:63.
He is married, has 2 sons and 1 daughter, they all married and moved out of the flat.
He is the owner of the house and bought it 26 years ago for 15.000 LE
Why did he choose this city?
"It's quiet city, with wide roads, comfortable and safe.
He weekly visits his relatives in Cairo.
What are the places you visit every year?
Alexandria and he loves the sea.
The apartment consists of living room, 2 bedrooms, bathroom and Balcony.
The grandchildren play outdoors.
His daily shopping is in the centre of the neighbourhood.
Every month he goes shopping in Helwan.
He has a weak Relationship with his neighbours.
He's retired from work but used to work in the aircraft industry in Helwan.

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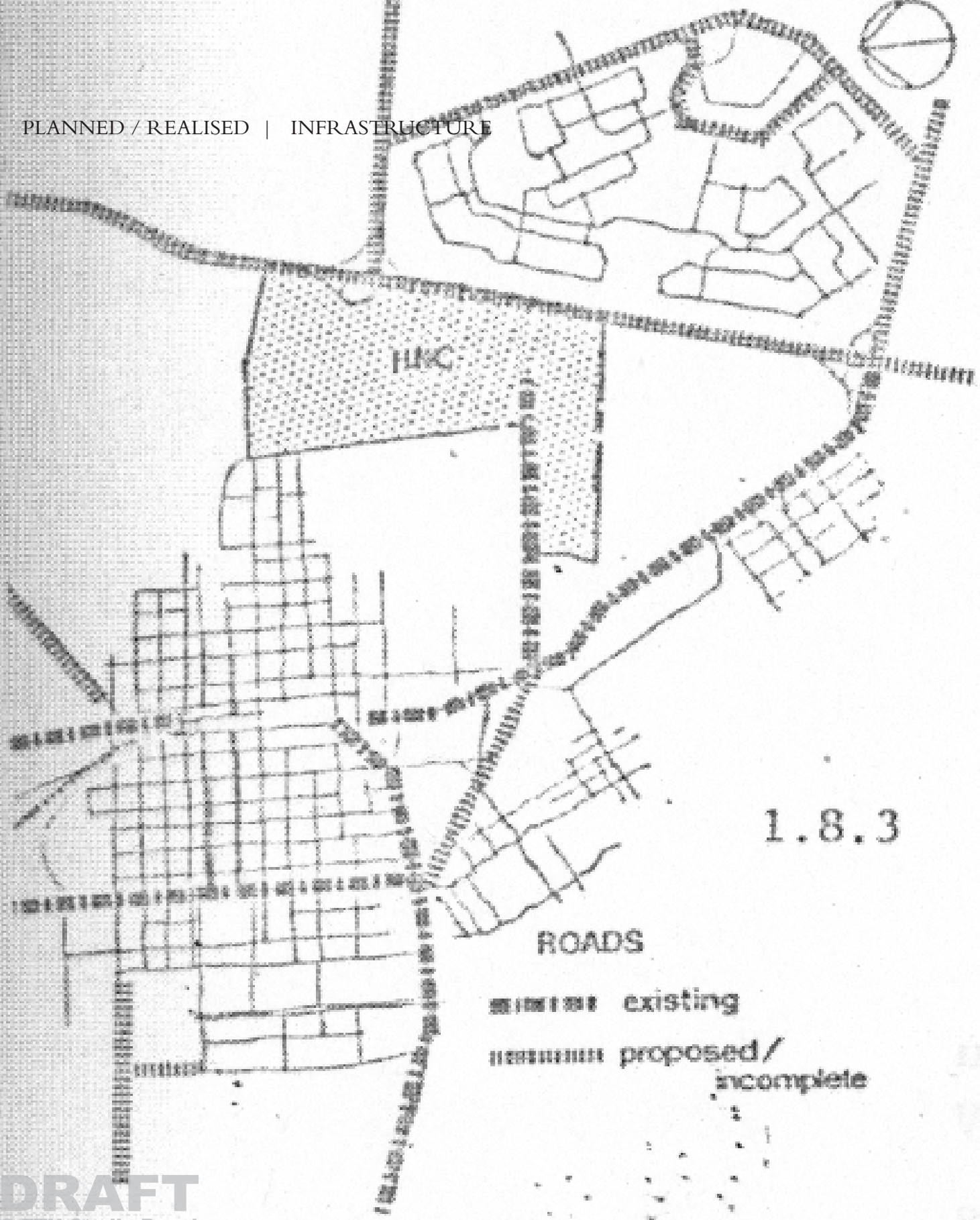

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A local 144 km long road network has already been developed to cover most areas within the 15th May city. It is connected with the Greater Cairo Cities mainly by the auto strad highway which connects Masr El-Gedidah to Helman. Another major city connector that arrives in neighbouring Helwan is the underground subway (metro) a communication network grid has been developed to encompass all sections of the city.

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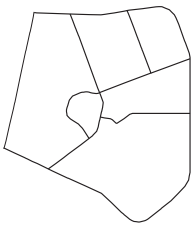
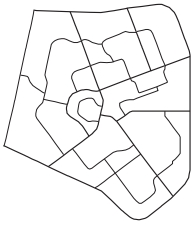
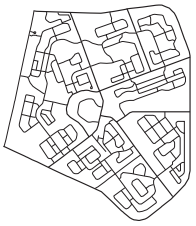


Main roads



Main roads with secondary roads



Total road system

Actual plan of 15th of may

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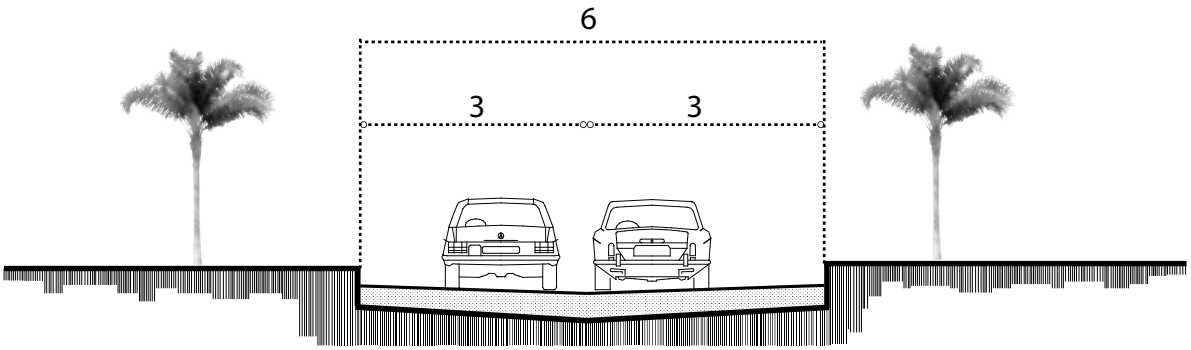
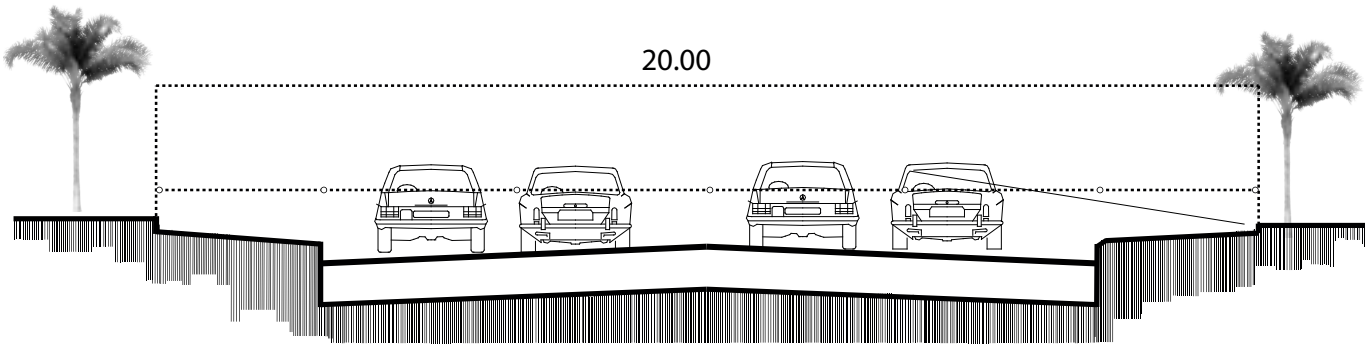


Section Secondary Road



Section Main Road

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One of the 12 buses on the central busstation

Donkey transport within the 15 May City

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The Tram standing in Helwan

Micro buses leaving frequently from and around the neighbourhood

The government, who ordered the planning of the 15th of May City, had the intention to provide a good public transport system for its inhabitants. Good connections with the Helwan-Industry, Helwan and Cairo, but also within the 15th of May city were important. For this reason, they planned and built in the centre a big bus station and a tramline. The tramline connects the 15th of May City with the industries of Helwan. The bus station was realised in the first phase of construction and the tram opened about ten in years later in 1992. Nowadays, the bus station is hardly in use, there are only 12 buses a day around the area that people hardly take. The problem is also the location of this bus station. It's to far from the neighbourhoods, the people transport to get there and they prefer faster alternatives. The tram is suspended on the moment, also the tram didn't go to the neighbourhoods, it was to slow and unreliable, no one took it while it was the cheapest mode of transport. On the moment you can only see it driving (or standing) in Helwan itself. The transports with the most successes are the private microbuses. They leave from the neighbourhoods and drive around them or to Helwan or Cairo. They are the fastest mode of transport and drive very frequently. It's interesting to see that the state planning totally failed in the transport system.

As private transports there are the cars, owned by the middle and higher incomes, and the donkeys used by the poor people to transport goods.

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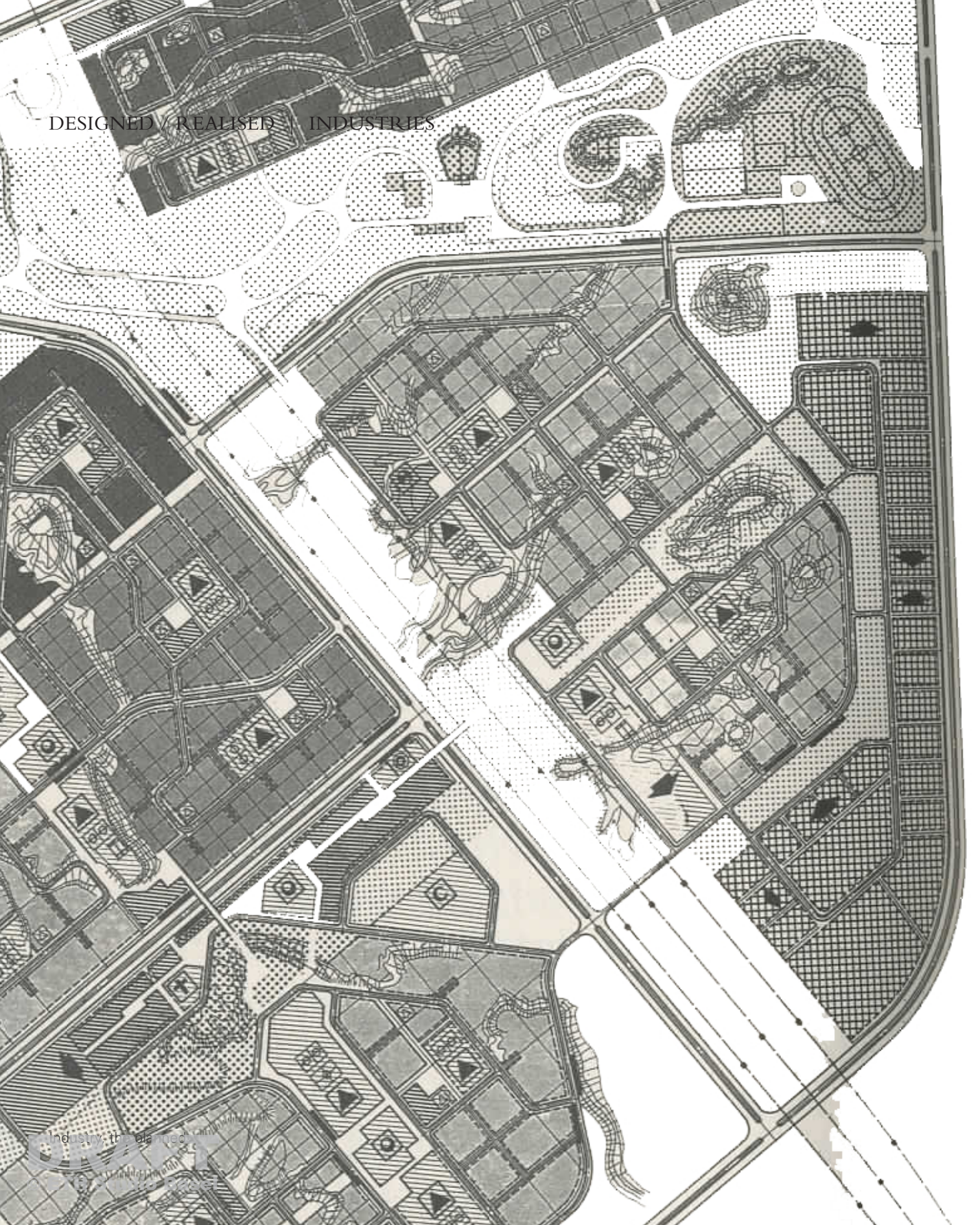

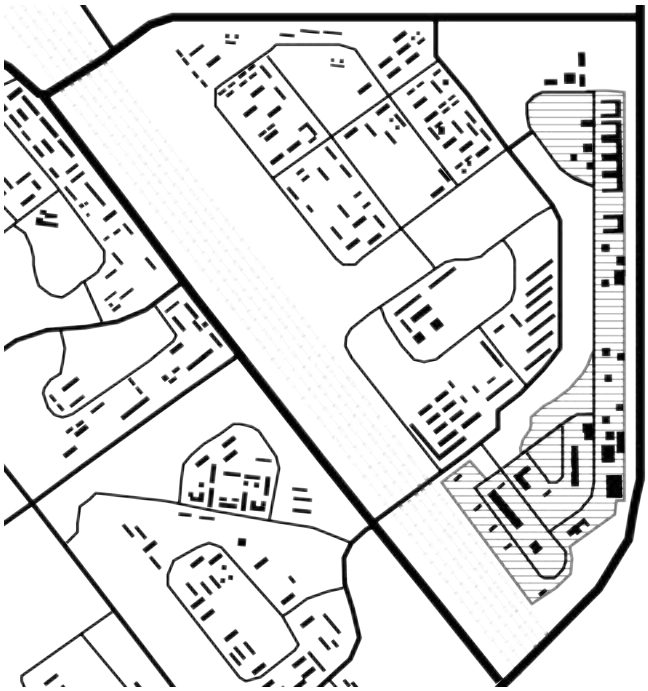

Industry, the realised

The 15th of May City is built for the industrial workers of Helwan, it' a residential city where they didn't plan any important industries. Only one area in the southeast of the city was reserved for companies to settle. In this small industrial zone, there're some manufactures, the products diverse between food and textile. The government sells here the parcels to private investors.
In an extension of 15th of May, there's a new industrial zone to provide new jobs for youth and to promote industrial investment. This zone is located south of the city on an area of 280 feddans.

One of the older buildings with garages inside

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Table 4.13: Industrial establishments under construction (30/6/2001)

Implementation Phase		Number of Reserved Pieces	Operating Establishments	Establishments Under Construction
Industrial Activities	Food processing	38	3	19
	Wooden industries	22	1	13
	Plastics industries	13	-	10
	Paper industries	4	-	2
	Spinning industries	6	1	2
	Electrical industries	4	-	2
	Metallurgical industries	17	4	9
	Construction materials	4	-	3
	Chemical industries	4	2	1
	Miscellaneous industries	39	5	22
	Total	151	16	83
Total area (1000 m^2)			52	44
Annual production (EGP 1000)			15600	31000
Employment (person)			2140	1135

Source: The Consultancy Studies for Water and Sanitation Plans Modernization for the Republic Cities, Second Phase Studies Report for 15th of May, October 2003

Table 4.14: Industrial activities in the industrial zone at the city's extension

Industrial Activity	Expected Labour
Food processing	1800
Spinning and weaving	3000
Construction materials	650
Wooden industries	1000
Chemical industries	1700
Electrical industries	6400
New industries	1000
Stores	80
Services for spinning and weaving area	800
Food services	360
Chemical services	150
Electronically services	250
Central services	120
Total	**17310**

Source: The Consultancy Studies for Water and Sanitation Plans Modernization for the Republic Cities, Second Phase Studies Report for 15th of May, October 2003

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Food Processing in the factories

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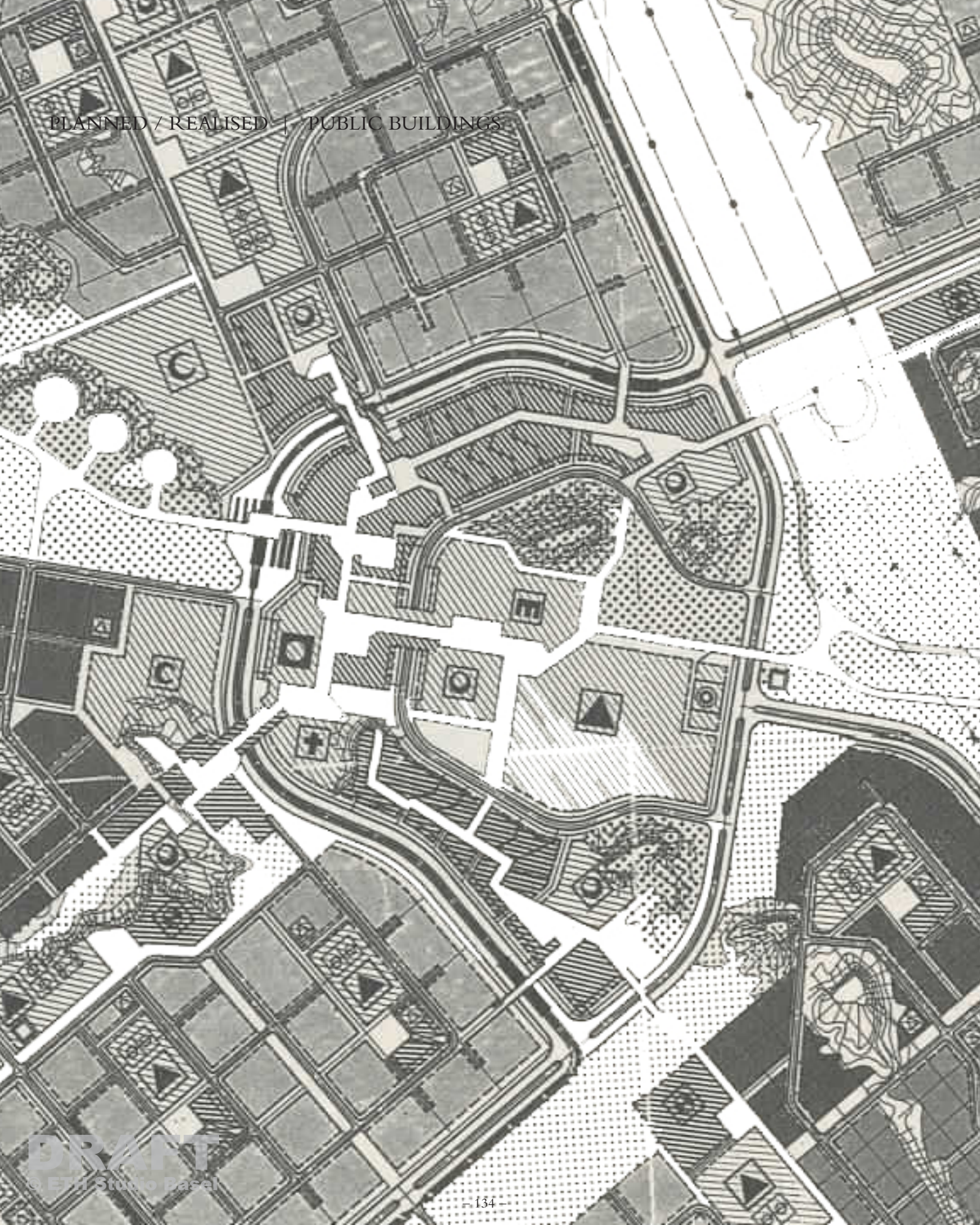

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The realised public buildings

There's a relative high density of public buildings. It was quite exceptional that by constructing this city, the public buildings were realised and finished before the dwellings. In this way, the new residents hat from the beginning all the needed services in their neighbourhood. By providing the services before the needs, there's always a risk that the demand will be insufficient on the end. This is been showed in the for example many empty schools and hospitals.
By comparing the planned with the realised, it's also clear to see the unfinished in the public.

The planned public buildings

Main city administration

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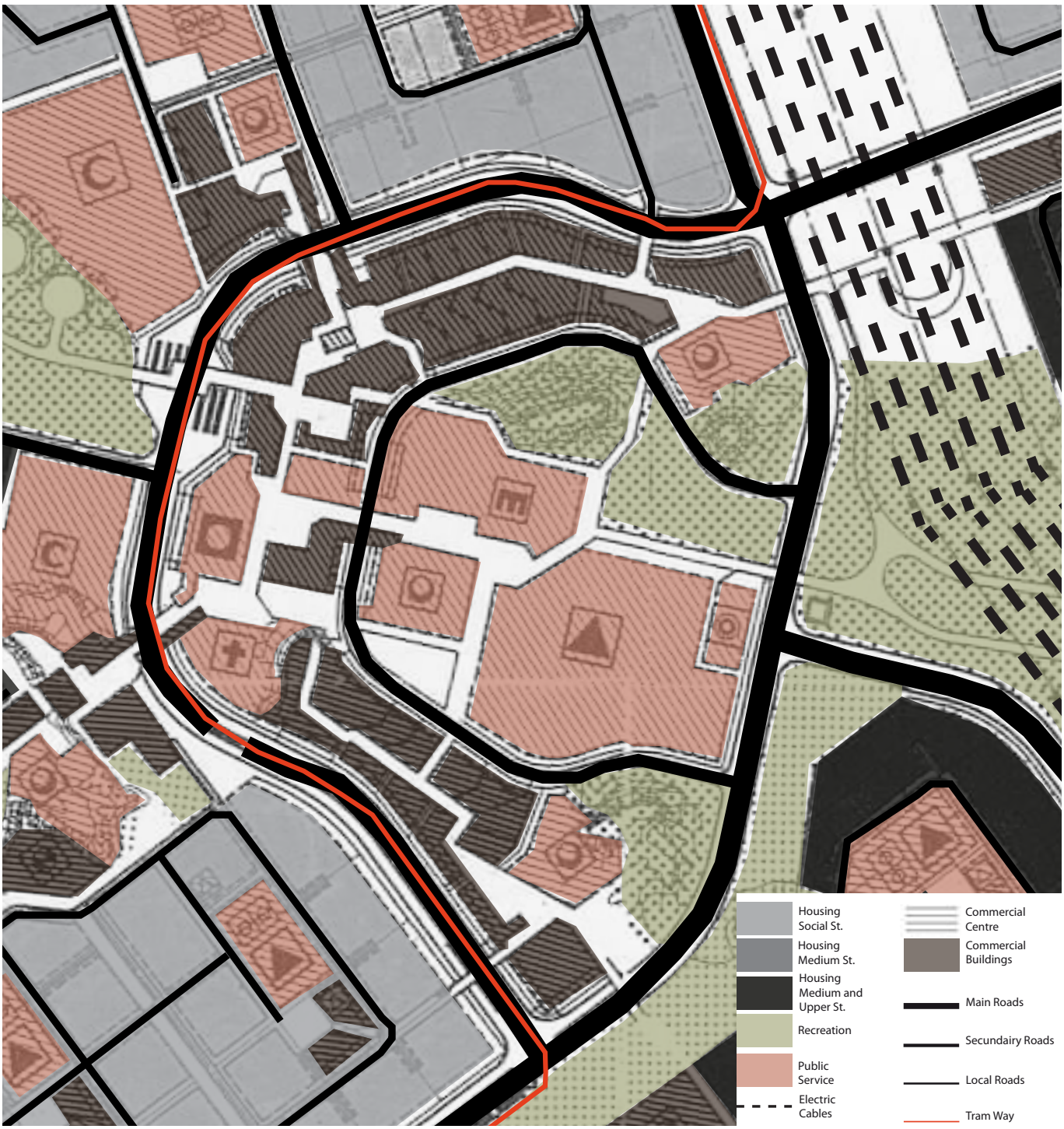

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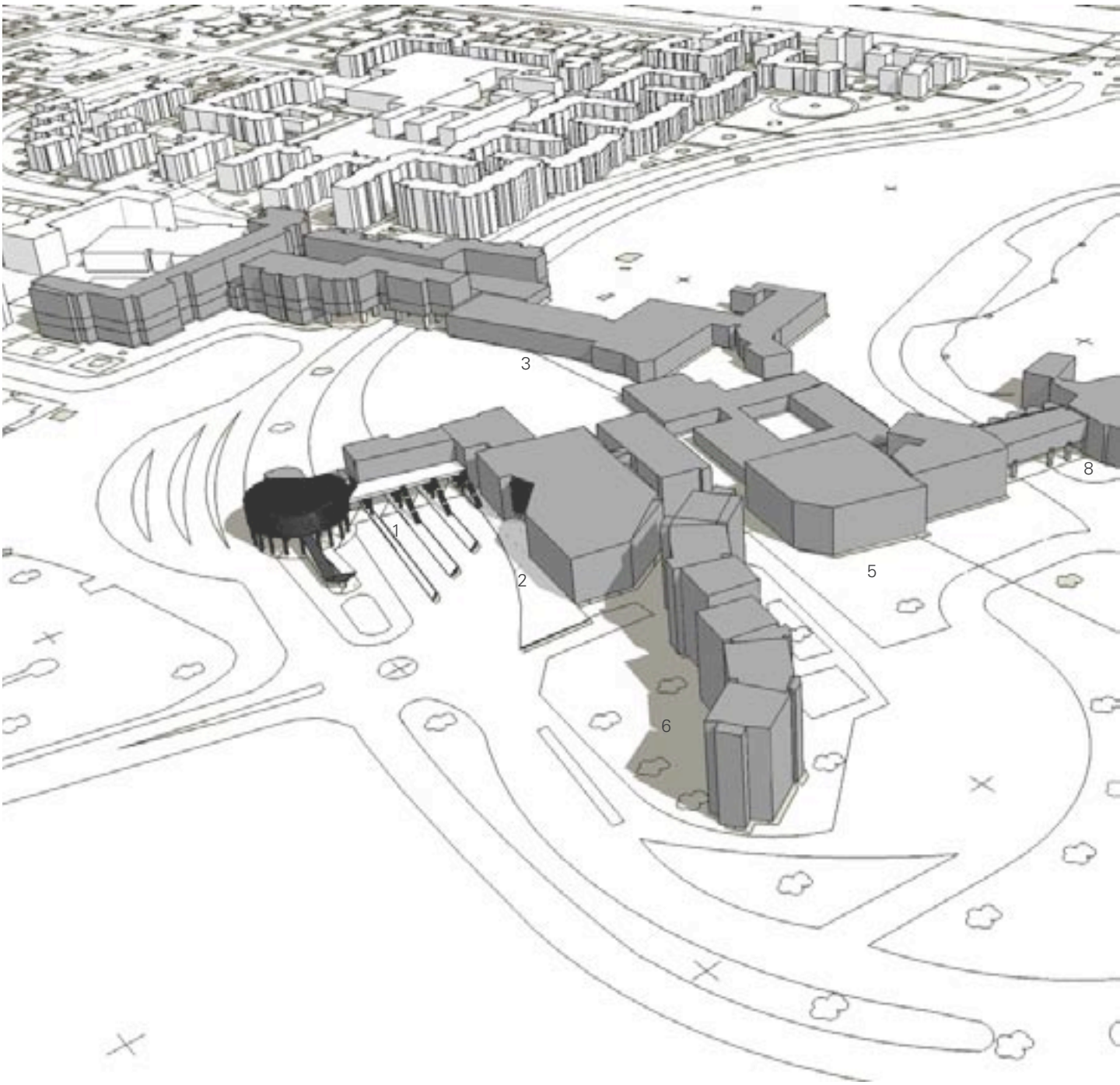

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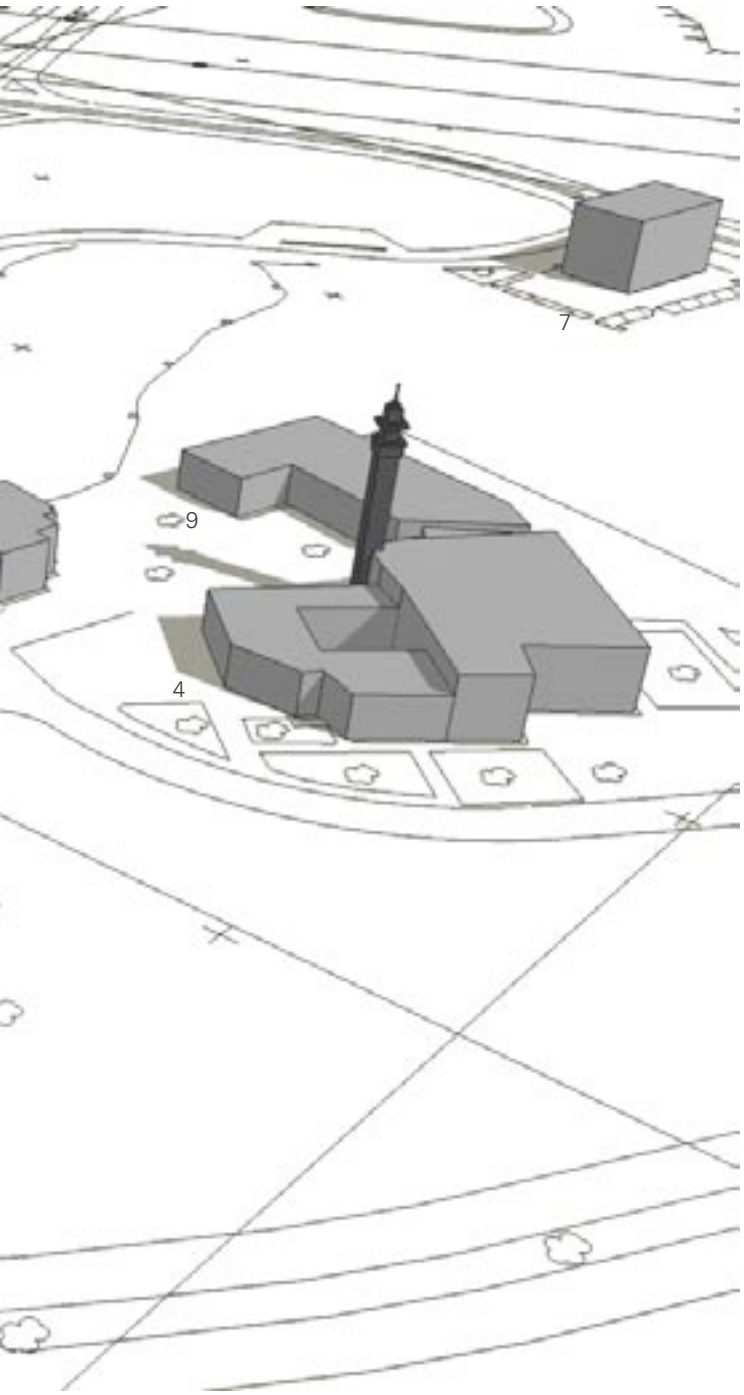
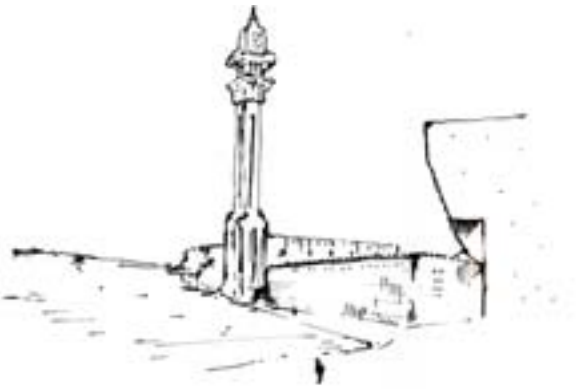
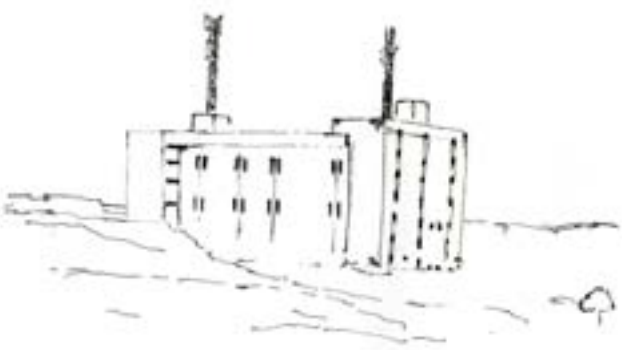


1: Café. Beside: Administration of Statistics of the Helwan Governate and Bus Station below



4: Main Mosque



7: Telecommunication

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2: Garage: Empty

3: Market (empty and never used)

5: Libary (only one room in use)

6: City Administrations, Planning Administration and Bank

8: Museum of Fine Arts

9: 15th of May University

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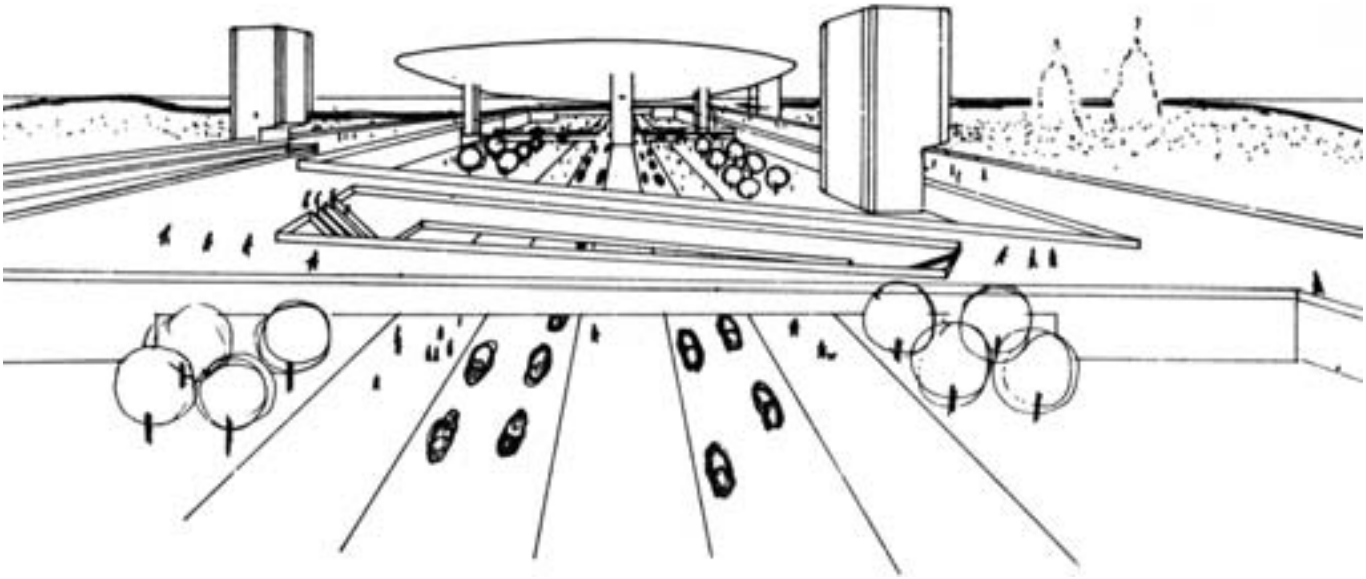
From left to right: Café, Bus station, Parking Garage (not in use) and above the bus station Administration of Statistics of the Helwan Governate



CIAM: Seperation of traffic flows

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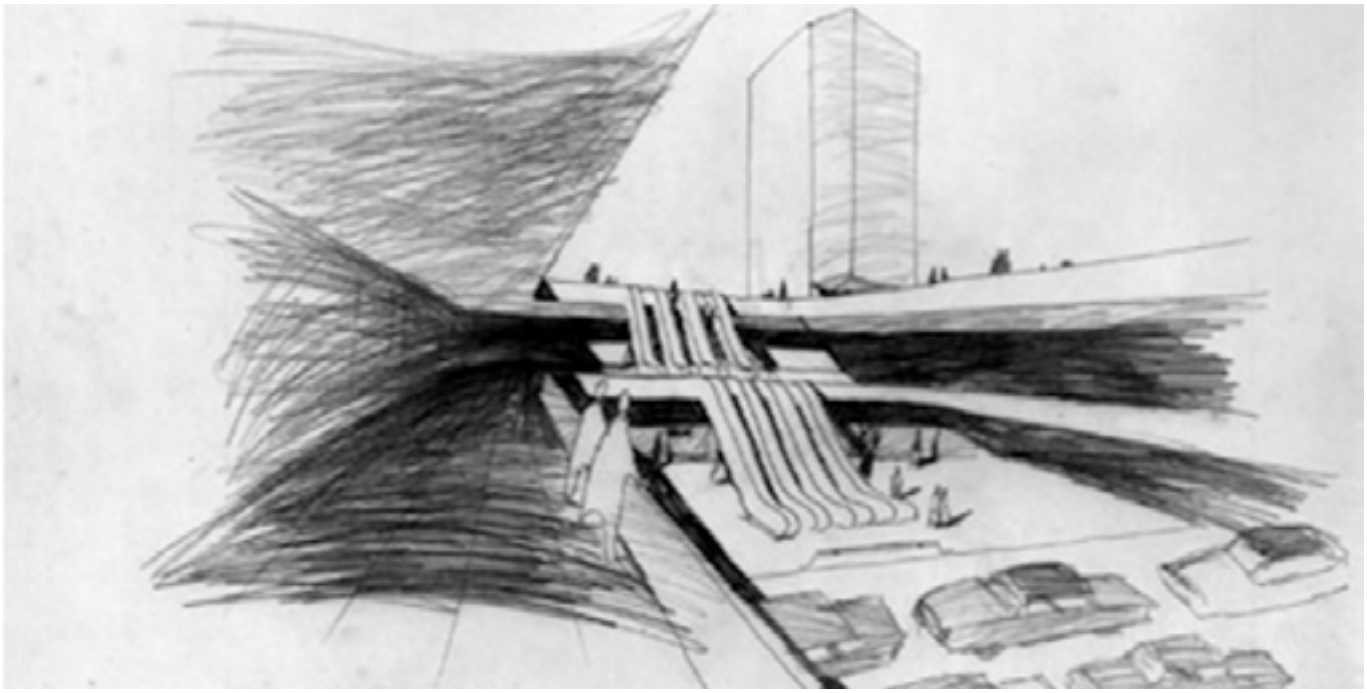

CIAM _ A. Smitson sketch of the city

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The 15th of May City is a special place in Egypt and different in many cases from the other satellite cities that where created in the same period of time.
It's a city where informality doesn't really exist, where the government has a strong presence and control. It is also a place where an ideology of a president is represented. In this city the government provided most of the infrastructure: big roads, public transportation, efficient water system, many green areas and trees along the roads.
The government is strongly manifested in the city by the impressive buildings that were provided to the citizens a modern architecture in the centre that represent the state. In the other hand it also represents the failures of this city. The centre is really deserted from people: the big bus station is hardly in use, the parking garage is never used, market and library are built but never used, a main mosque that is to big and what people don't like to visit. Instead of centralizing people it decentralize them. It's because of the clustered system that the people are staying in their neighbourhoods and because of the unfinished plan that made it to be a not central location.
The presence of the State in the 15th of May City made for us a difficulty in our research. People were afraid that we would might shown those failures in our work. The city seems to be very symbolic for Sadat's dynasty and that is something to protect. The representative spaces reveal the expression of complex symbolism in the architecture design.

Somehow the liberalism is in this city less present than in the other New Towns like New Cairo or the 6th of October. In those cities, the private investors took over the control of the development where the state got in the background .The state keep their influence on the new developments, even without building new dwellings.
The city of 15th of May has diverse qualities. The centrals markets are taking important role in the city's activities, those markets are important public spaces that reassemble daily labour people inside the neighbourhoods, where the people meet and interact with each other. In most cases those people are mostly in their own neighbourhood but don't go very often to the other districts, (the big distances between them and the similarity of the shops don't invite the people to move around a lot.)

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UNFULFILLED

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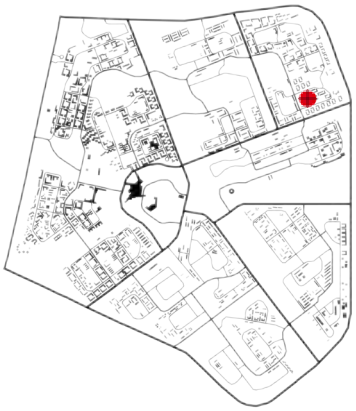
The unfinished of this city has a certain quality.
The low density with only 2.500 inhabitants per km2, (if we compare this numbers with those of Cairo that has about 37.000 per km2).
We could understand the relief of the local people to live there. The wide roads, constructed for a city of 150.000, have a very low density of traffic, there're no irritations from the traffic by going around.
The parks that are situated in the west side of the city are well kept and quite. Those Green spaces with the native topography create divers sequences of landscape architecture that combine dessert and green, in a lot of places this rocky hills are pointing out between the buildings what serve a scenic background in the city. The desert cliffs are drawn in the Master Plan. The intention was to disconnect the city from the desert by a wide ring road and setback it from the neighbourhoods. The desert is manifesting in the city by dunes on the streets, which get partly covered or even blocked.
In the other hand we can see clearly the planned failures: the empty schools, hospitals, centre, bus station, tram that doesn't drive anymore, the closed Luna park, the unfinished neighbourhoods, the empty markets etc. There's an over amount of public buildings who where built before the dwellings, calculated on a higher population rate.
there's no interaction between the people of the different neighbourhoods what makes that people only stay together within the same social group. This is causing alienation between the different groups inside the city and doesn't help to develop an urban City.



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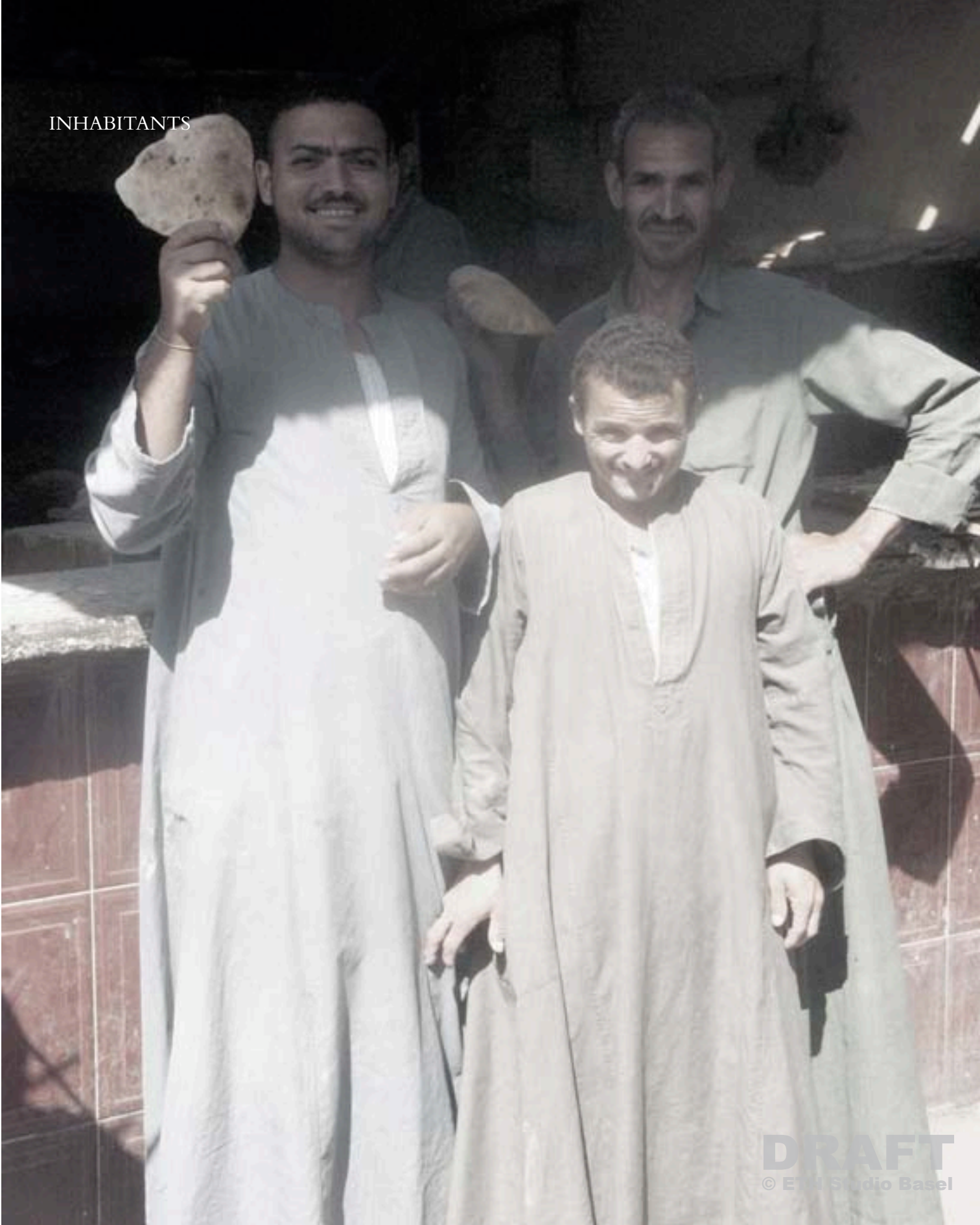

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The 15 May city, where the construction started in 1979 and the first dwellings were initiated in 1981, was intented to be occupied by 150,000 inhabitants. Most of these settlers were supposed to be labours from the neighbouring industrial town of Helwan.
Their contribution relative to the size and growth of Greater Cairo has been minimal, while the city was able to offer low site and tax incentives to draw business.

The basic failure of this satellite city is the attraction to new resident population. There was lack of central planning, problems with the infrastructure. The housing, industry, water, electricity, facilities and transportation can be mentioned to be in poor condition, what affected the development of the city. Also the poor basic services and the lack of social and educational infrastructure have also discouraged families from settling in.

The cost of living in the city became, due to strong rise of prices in the years after the initiation, almost as high as in Cairo. The price of the housing units, although lower than in the metropolitan areas, is too high for the lower classes. The emphasis on a low-income target population, makes the city less attractive for the middle and higher income. Most of the housing units were meant for low/low-middle income households.
In the culture of the Egyptians, especially from the lower classes, is to live in closed communities. Many residents prefer to live in an unplanned conventional suburb rather as in a planned new town.

The problem of transportation is divided in two categories: public regional transport. The inhabitants are obliged to use private means of transport such as taxis and microbuses.

The State consecutive 5-year plans involved multi construction capacities; nevertheless, an evident failure to achieve the target is largely due to poor building capacities. This can be explained as: lack of financial resources, skilled labor, and equipment.

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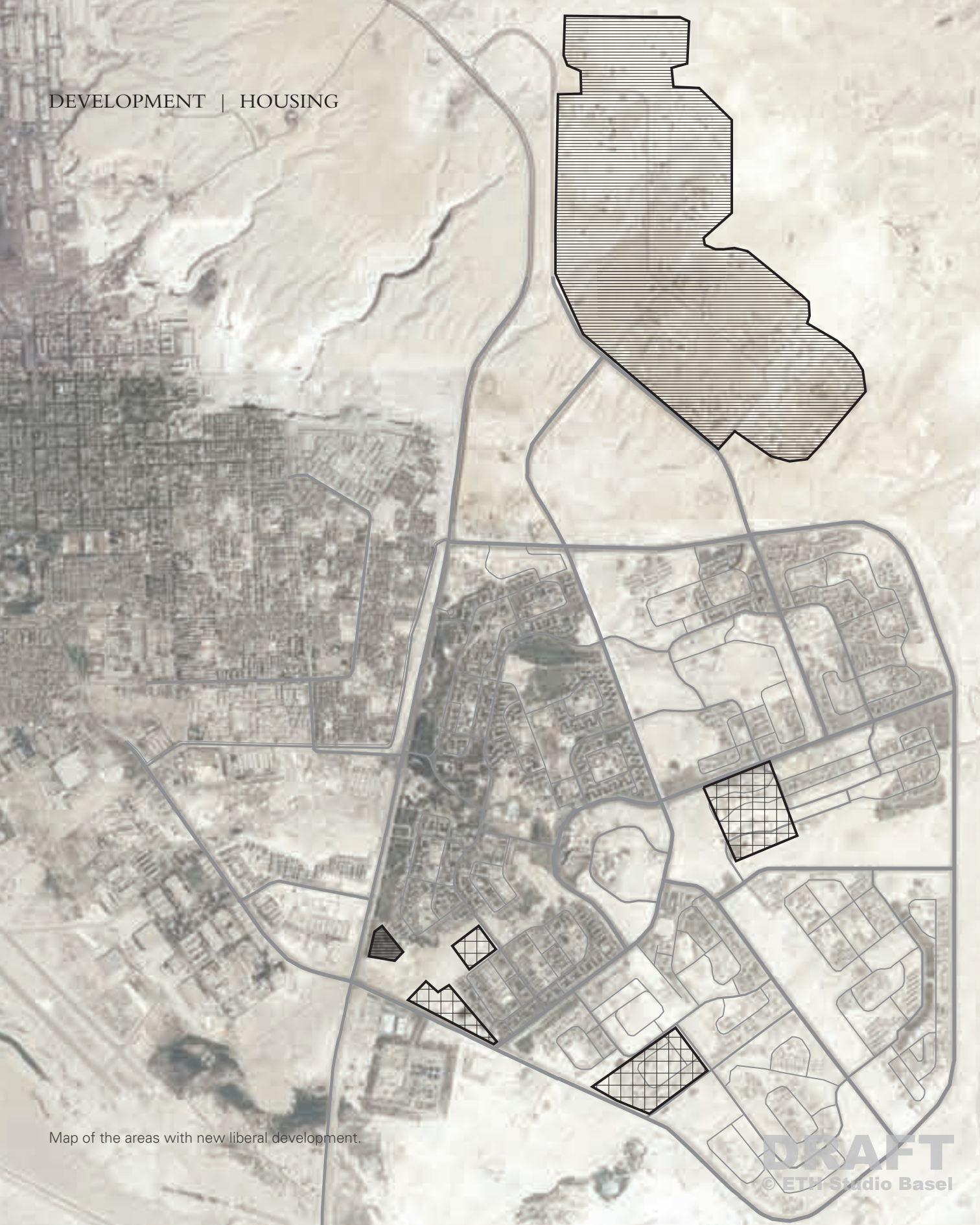

Map of the areas with new liberal development.

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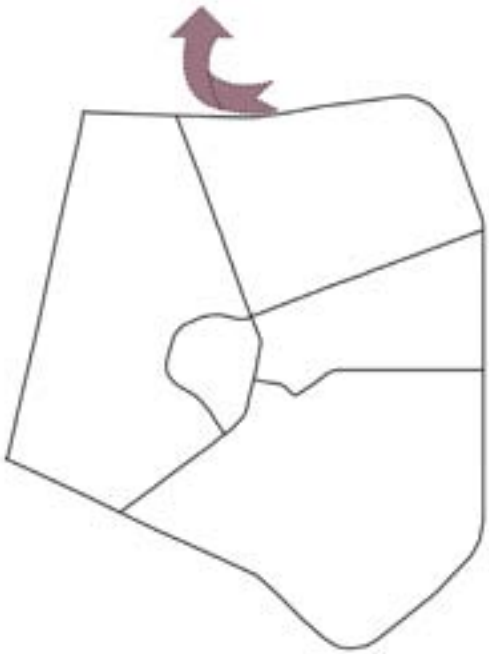
Private Development
Lower-Middle Class

Outside Extension of
the 15 May City
Private Development
Lower-Middle Class

Private Development
Villas's

The 15th of May City is built and developed by the government. The government provided the infrastructure, the public buildings and built the dwellings for the people. Some of these dwellings are still owned by the government who hire them out. The rent costs are fixed in contracts, what means that the residents, who came in 1982, still pay the same rent what's about 35-50 LE a month (circa 6,00-8,50 CHF), (with a new contract it costs about 500 LE a month).
Since the liberalization that started under Sadat, the government provide in the new to construct areas, only the infrastructure and the public buildings. The plots are sold to private investors and housing communities who develop the dwellings and sell or let them. There're a few areas inside the 15th of May City where there's construction going on. In the extension of the city on the North side (what the government started to develop after private development pressure), are the dwellings developed privately. The central market of the neighbourhood (provided by the government) has the same concept as the ones you find in the 15th of May City itself.
The extension area is still under construction.
In the centre there's also one construction side: a new shopping mall, the self-called Mega Mall, should provide products which are until today only available outside the 15th of May City.
For the higher income they recently constructed new villas on the southwest side inside the 15th of May. This is the only area with richer people inside the 15th of May City. Near this villa area, a private investor is building a huge café/restaurant on a small hill in a park.
With the Urban Pressure rising also to the south of Cairo, even the 15th of May City won't escape from private investors. The question is in how far the government likes to control these developments and how the 15th of May City will be shaped in the future, if it will lose it's quality of quietness, safety and space, or will manage to keep those.



North development

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Qisms	No of buildings	% residential	% mixed residential and work	% vacant	% privately owned	% government and publicly owned	% in blocks of flats/apartments	% villas
Central Cairo								
Gamalia	6227	48.3	12.5	6.4	89.5	6.5	63.3	0.0
Manshiet Nasser	13.246	80.1	6.5	2.1	88.8	10.6	73.5	0.0
Qasr el Nil	917	24.9	29.4	4.0	69.4	26.4	52.5	2.2
Zamalek	1129	36.9	26.0	0.7	86.3	12.8	58.5	11.7
Outer districts								
Maadi	5388	79.5	1.5	3.8	94.6	3.7	70.8	13.5
Shubra	4615	77.7	12.2	0.7	95.3	3.9	90.4	1.2
Heliopolis	6368	61.1	11.4	13.2	80.7	17.1	73.2	13.2
Helwan	51,695	81.9	3.0	8.4	90.5	7.4	90.4	1.2
New towns								
15th May	2694	75.4	0.3	11.7	93.5	6.4	79.1	3.9
Badr City	53	100.0	–	–	100.0	–	100.0	0.0
Governorate of Cairo	473,788	76.0	5.6	7.4	91.6	7.1	83.7	1.4

Satelite cities residential status

pavillon house typologie situated in the nord area of the city

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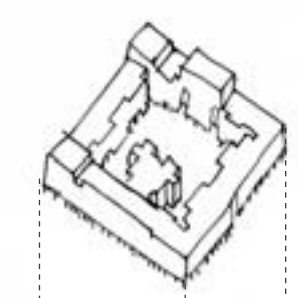
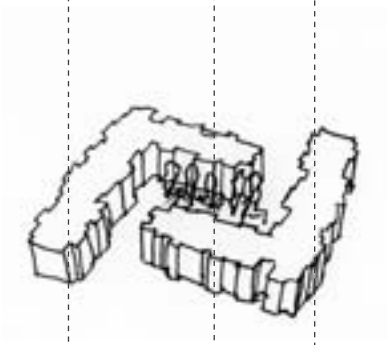
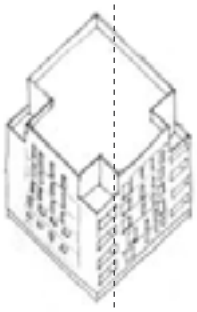


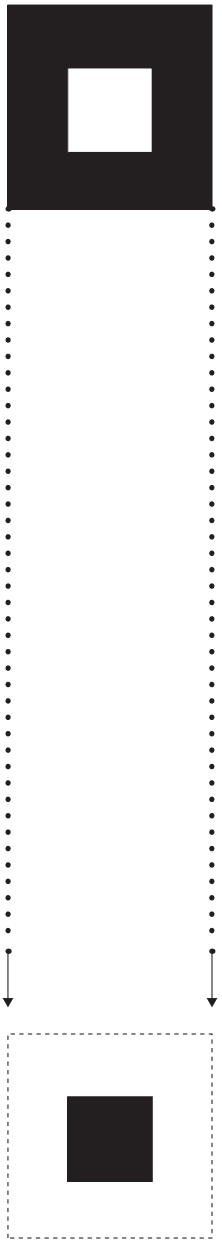
Courtyard typologie



Open block typologie



pavillon house typologie



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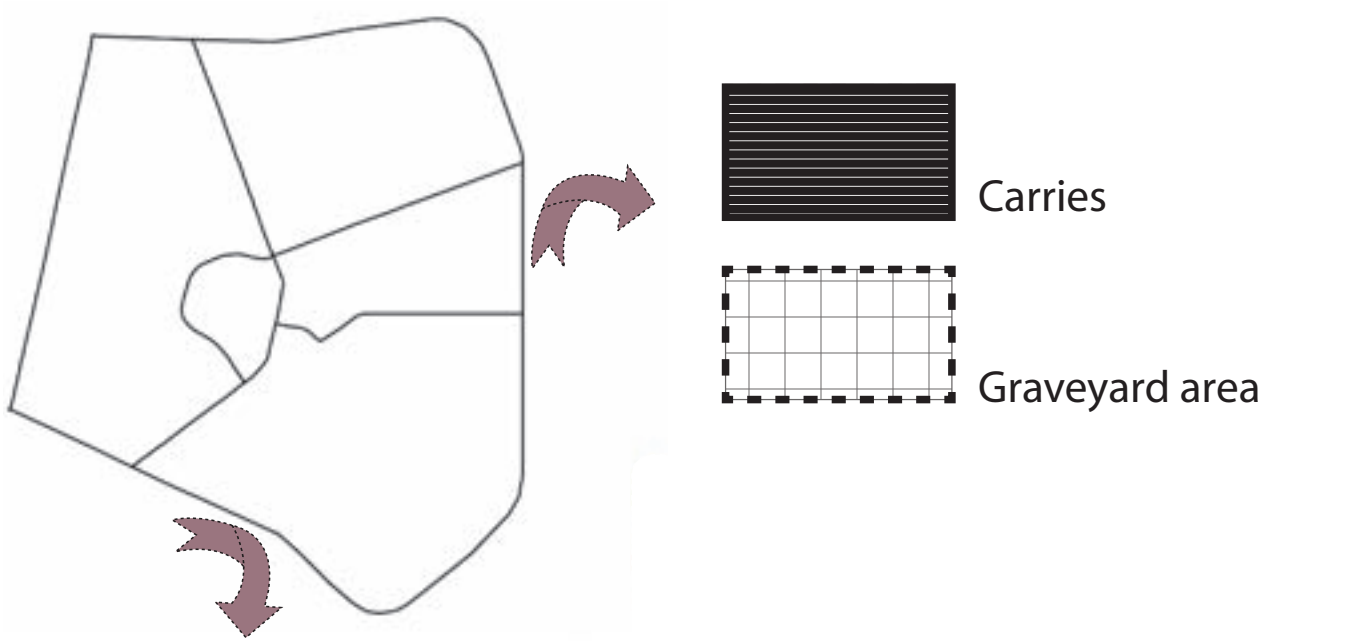
The limestone carries situated in the south of the city



East and South development

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Plan of the graveyard

View of the regional grave next to the 15 of may

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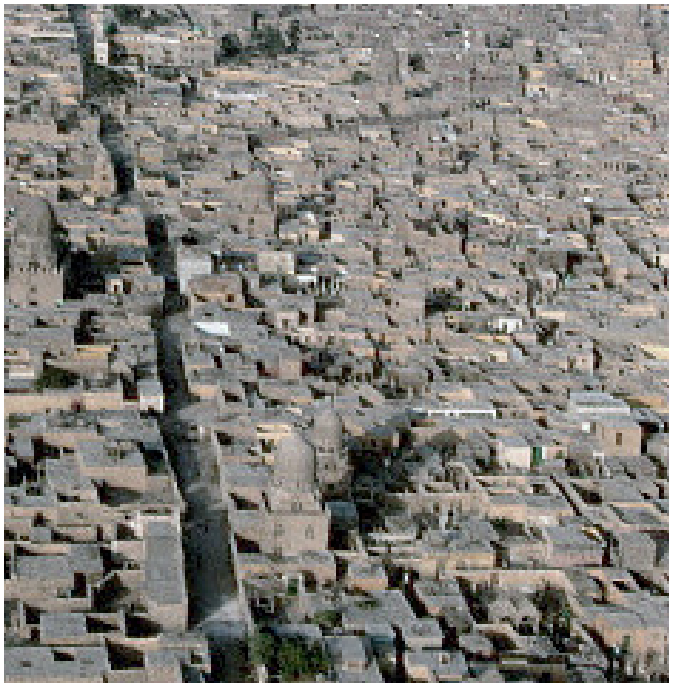
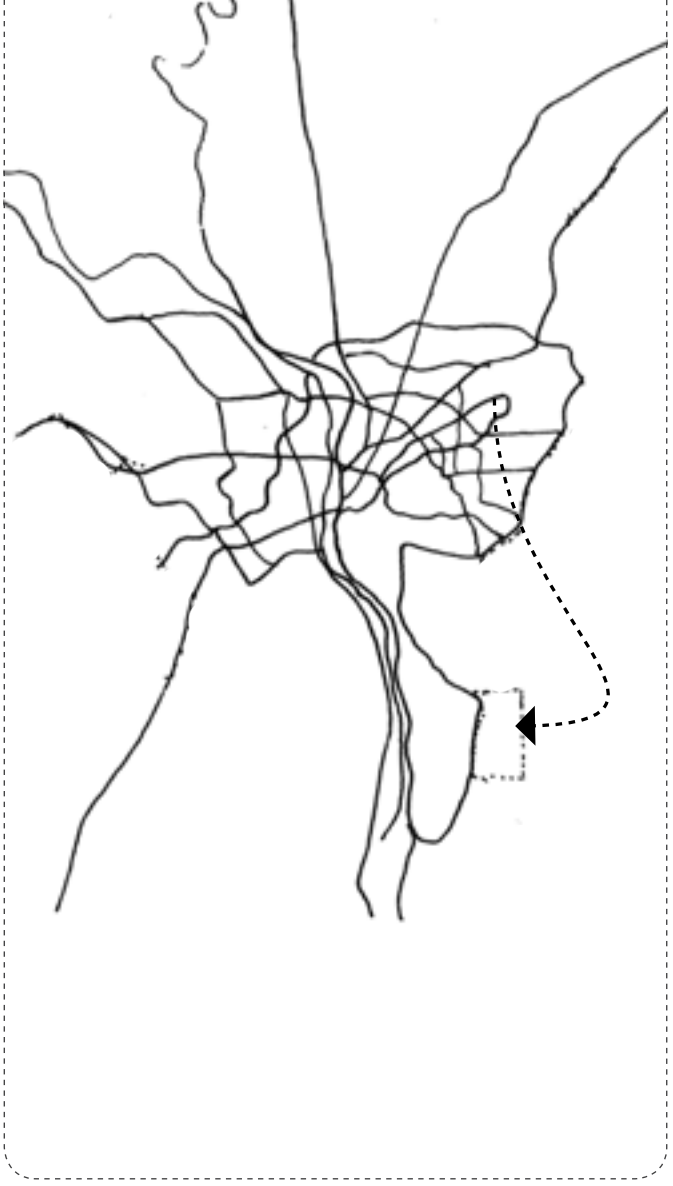
Dead incorporated with living,city of dead,Cairo



View on the city of dead,Cairo



Deplacement of graves from the city of dead to the dessert

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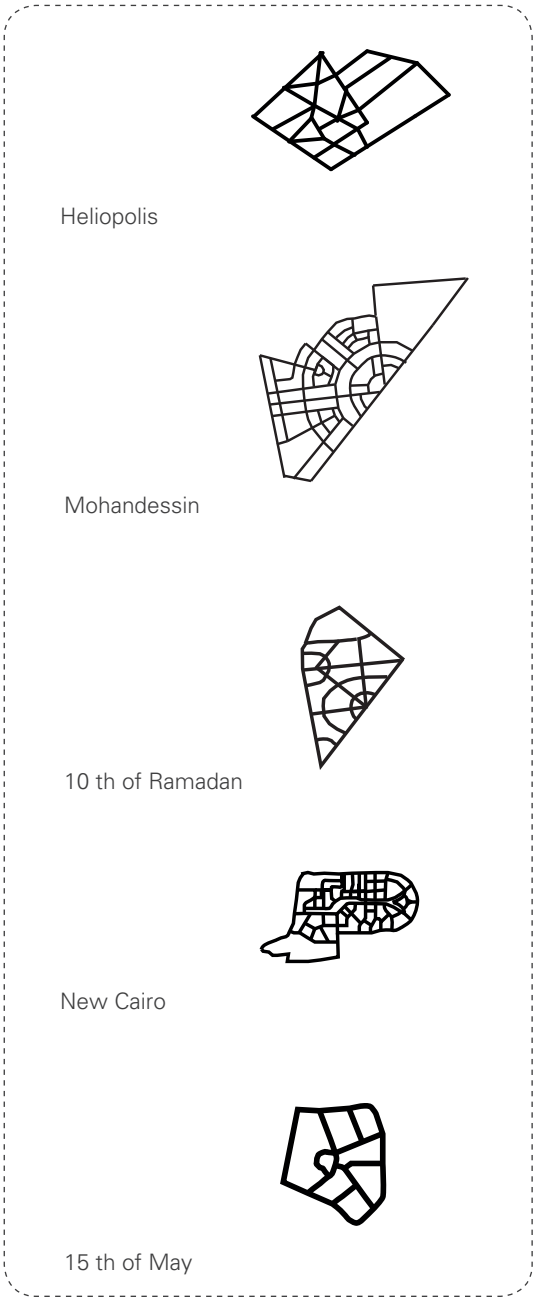

Satelite cities

The role of unplanned „spontaneous urbanisation“ A major reason why the Master Plans satelite cities failed to have a significant effect on Cairo‘s urban development over the last three decades, has been the dominance of unplanned „spontaneous urbanisation“, to use Galila El Kadi‘s (1994, 1997) terminology. She considers that up to 84% of constructions over the last two dec¬ades (probably referring to the 1970s and 1980s) have been illegal, such that at the end of the 20th century Cairo appears to be „une megapole en grands partie spontanee. The 23 ZUS (Zones d‘urbanisation spontanees) built on the edge of the city on agricultural land or on desert fringes covered 24% of the urbanised area in 1993 and sheltered 6 million inhabi¬tants, or 46.5% of Cairo‘s population. (EI Kadi, 1997). It can be a case of multi-storey blocks of fiats as well as individual houses built with out any formal planning permission. Similarly, illegal extra floors are added to many buildings and this turns conventional areas into partial spontaneous urbanisation areas. These cover large areas to the north, west and south of the metropolis.

15 May city can be regarded as partial economic successes they have not attracted large numbers of residents. The planners have failed to allow for the possibility that people may prefer to remain in familiar, if crowded, „lived-in environments“ in Greater Cairo, rather than relocate to the desert city with unattractive modernistic architecture and which are physically and psychologically distant“. Denis (1997) has observed that the majority of the „desert cities“ remain empty, including 15 May of even the most meagre infrastructure: water, electricity and transportation. Housing in the new towns has proved to be too expensive for such workers and has attracted speculators rather than residents (Stewart, 1996, p 471). Poor basic services and the lack of social and educational infrastructure have also discouraged families from settling in.

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Factors behind the relative failure of Cairo's master plans

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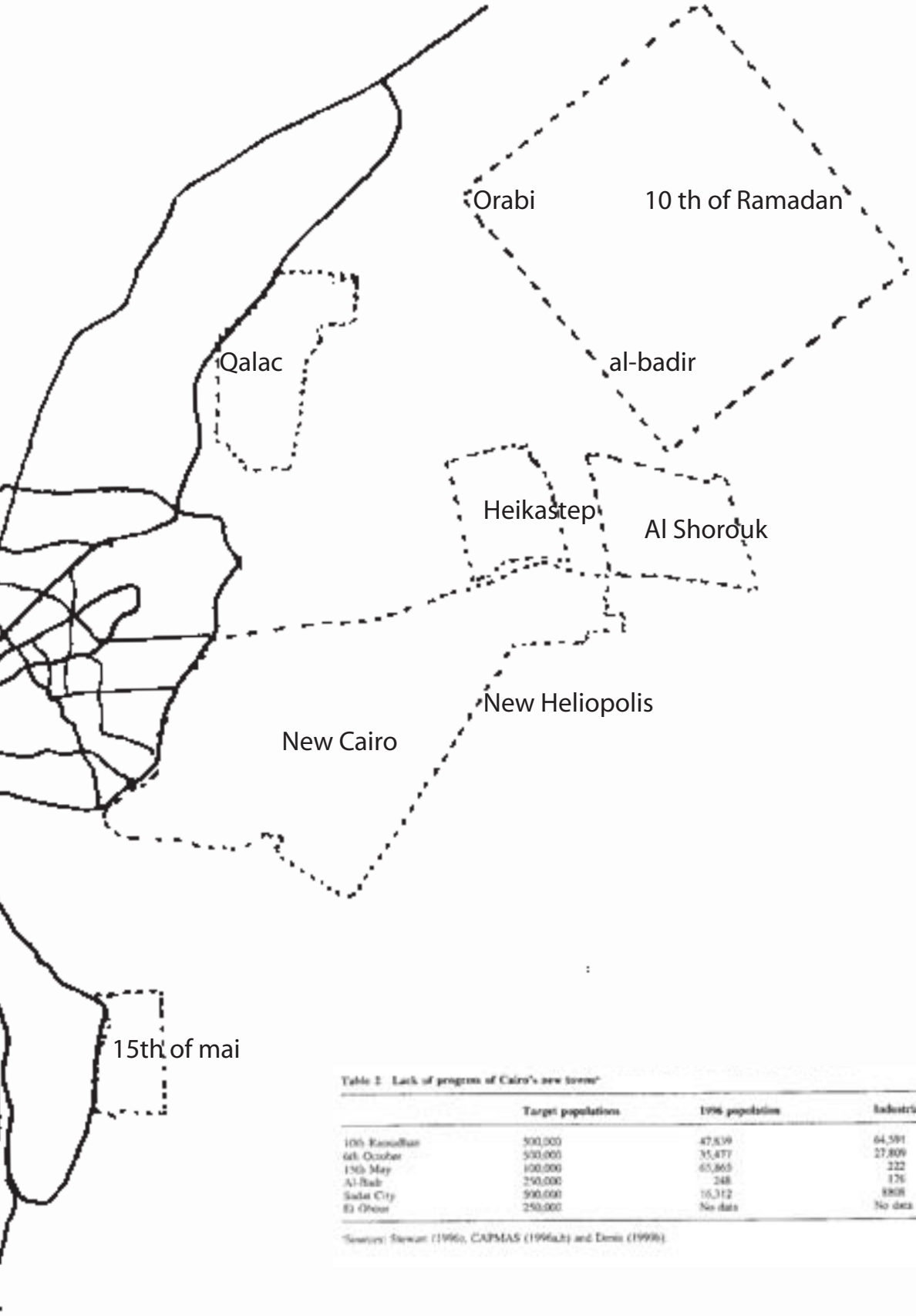

Table 2 Lack of progress of Cairo's new towns[a]

	Target populations	1996 population	Industrial jobs in 1996
10th Ramadan	500,000	47,839	64,591
6th October	500,000	35,477	27,809
15th May	100,000	65,865	222
Al-Badr	250,000	248	176
Sadat City	500,000	16,312	1808
El Obour	250,000	No data	No data

[a]Source(s): Stewart (1996), CAPMAS (1996a,b) and Denis (1998).

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