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IMBABA

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IMBABABA



DRAFT

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0. PREAMBLE





0.1 AIMS OF RESEARCH & METHODOLOGY



Working on Imbaba

The city of Cairo is one of the cities with the highest growth. But where do all the people live? How is this enormous growth absorbed?

The most visible solution are the many spontaneous neighborhoods around Cairo. It started around 1952 after the Revolution when the government built the first public housing project in Egypt. Next to this enormous construction site the so called “informal growth” started on agricultural soil. Today these housings are the majority of new buildings. Typical for these areas is the enormous growth and that the government can not handle this problem anymore.

The immense problems in health and the absence of any form of infrastructure confront the city and the politicians with an apparently unsolvable problem.

In the minds of the government these settlements are totally illegal. They don't follow any form of planning laws or any kind of land orders. Anyway for the image of Egypt the circumstances in which the most of the Egyptians live are not bearable anymore. But all efforts to stop the informal settlement or bring them under control failed. On closer examination, it turns out that few of the objections are clearly against the informal settlements.

On the whole they are an effective alternative for low-income majority because they develop over time to residential communities, whose homes are well built and even exceed the standards of the middle income houses. We also can say that the informal settlements are referring more to a traditional way of living than the imported western concepts in urban planning strategies. This whole topic around this spontaneous, owner driven housing market was from the beginning on an interesting inexhaustible source.

For us the investigation of these phenomena in living as well as an objective view towards the informal settlements are important. During our stay in Cairo and our visits in Imbaba we were confronted with a total different way of living. But instead of just thinking about the weaks of the informal areas we found a lot of interesting basic approaches.

Working in Imbaba for us was very difficult according to receiving information and also in easy things like talking to people.

But later through interviews with involved parties and through visits of particular parts of Imbaba we succeed to confirm our impressions. We can assume, that there are several parties dealing with Imbaba and that the governmental aims differ from that of the inhabitants.

1. IMBABABA



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1.1 GROWTH OF IMBABA

Accessibility | Imbaba Bridge

Already in 1833, Pasha Mohammad Ali considered building a railway between Suez and Cairo. After his death Abbas contracted with Robert Stephenson to link Alexandria and Cairo by rail. The first part of this railway between Alexandria and Kafer Eassa was opened in 1854, and the line was completed two years later. It was built mainly to link Cairo with the railway line going down to Upper Egypt, which begins on the west bank of the Nile.

For Imbaba the connection to downtown lead in the middle of the 20th to a better accessibility and we can presume that this was one of the reasons for the government to install their first public housing project on a fallow land on the to date unurbanised west border of the Nile.





1.1 GROWTH OF IMBABA

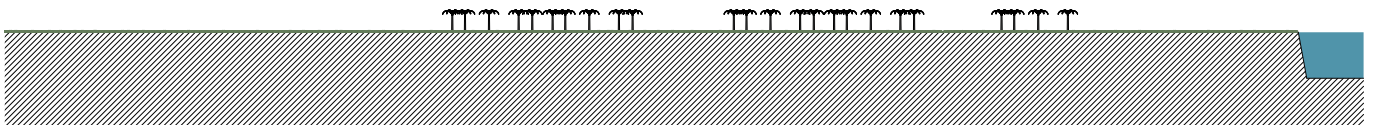
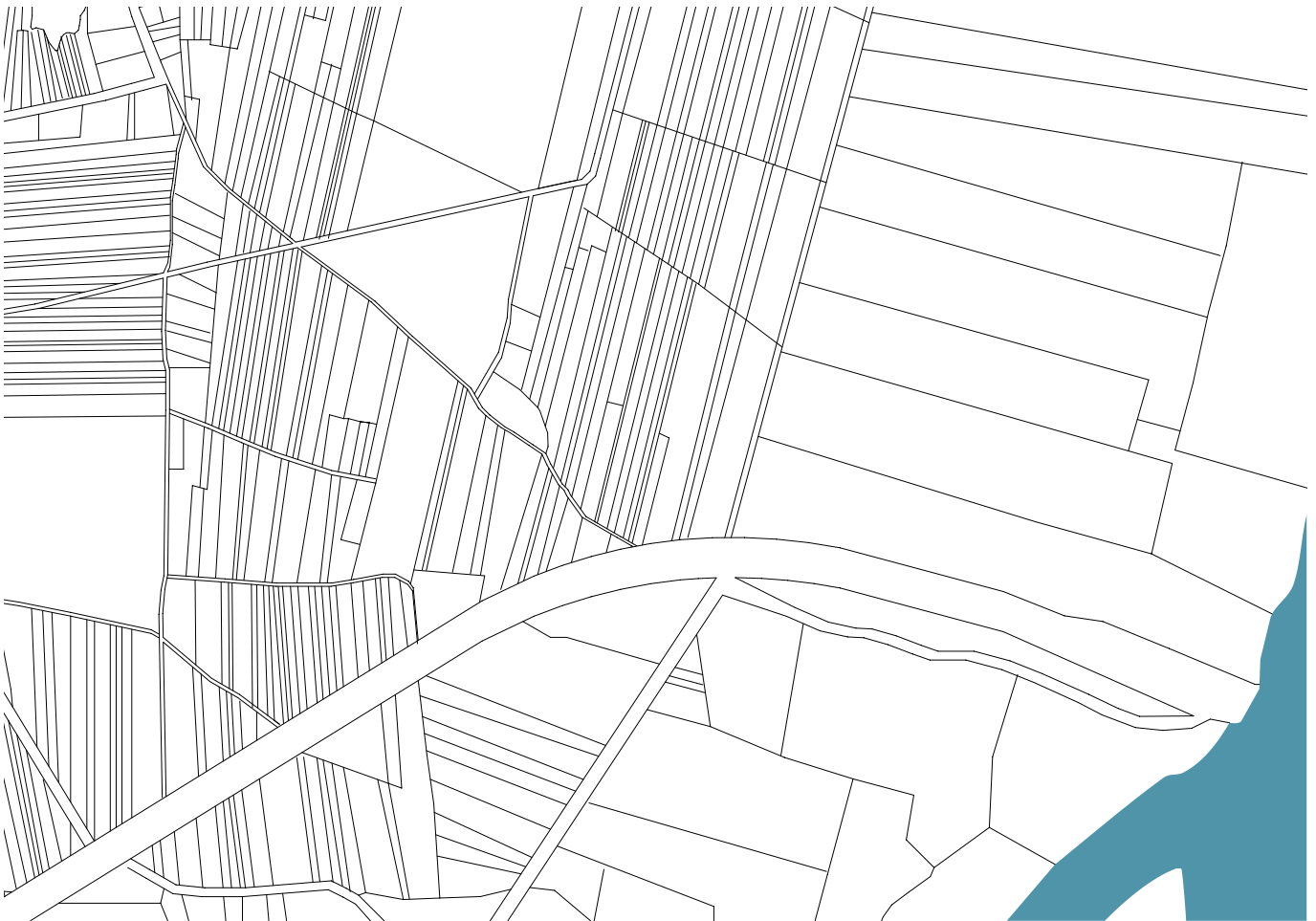
The Rural Background

The whole urbanisation of Imbaba takes place on former agriculture land. The district Imbaba as a part of Cairo was very important for the camel trade in the past and until the Revolution of 1952 before the era of Gamal Abdel Nasser, the area was totally untouched by any form of colonizati-

on. The different sizes of the parcels indicates the different intensities of the Nile-flooding.

The lots next to the riverbank for instance where later the first public housing project of Egypt was built, is placed on former flood plain and created huge parcels.





- left: cultivated fields at the border area of Imbaba
- right.top: ground plan showing the irrigation and parcelling pattern of 1940
- right.bottom: schematic section, no form of colonisation on agricultural land is visible at this time

1.1 GROWTH OF IMBABA

The Rural Background

Rural Egypt

Source: Hopkins Nicholas S., Westergaard Kirsten, Directions of change in rural Egypt, Cairo, 1998, p. 2-4

The 1996 census showed that the percentage of the population of Egypt that is classified as rural actually rose from 56 percent in 1986 to 57 percent in 1996. Therefore, of a total Egyptian population of about 61.5 million, the total rural population was 35 million in 1996 compared to 28 million in 1986. Almost certainly this reflects an elusive definition of 'rural' and does not take into account the growth of the larger semi-urban or even urban communities in the rural sector. Part of the rise may be due to the faster rate of natural increase combined with a manageable rate of rural-to-urban migration.

Basically what is defined as rural in the census consists of everything outside the seats of governorates and district towns, that is, the urban is defined in terms of its administrative role, and the rural is residual. Rural Egypt specifically includes the agricultural areas of the Nile valley and the Delta, the 'new lands' (reclaimed lands), and the semiarid and arid zones of the northwest coast where pastoralism and rain-fed agriculture is carried out. The characteristic setting is of course the village, though this term covers a variety of situations from hamlets of a few hundred people to agro-towns of twenty thousand or more. On the valley fringes and in the desert people live in smaller clusters. Even in the valley there are people who live outside the village cluster, on their fields. Still, most people live in clustered communities ranging from several thousand up. The average 'village' size in Egypt is about seven thousand (in India, for example, it is about two thousand; in Turkey or Iran it is a few hundred).

One should certainly not confuse a rural person with a farmer, let alone a peasant, in spite of the fact that the term

fallah, usually translated as 'peasant,' continues to have major currency. Although evocative, the term fallah has a wide range of meaning. Literally it means a tiller of the soil, a plowman (Wehr 1961 :726), but is often used in the sense of a 'rustic' or a 'villager.' Large farmers sometimes describe themselves as fallah, which could be taken as disingenuous. Nowadays the term is sometimes used in contrast to the educated. 'Fellah' refers to a man who wears a gallabiya rather than trousers, a woman who dresses country rather than city. Some of the authors in this collection refer to peasants and others to farmers. Following Wolf (1969:xiv-xv), the editors understand a peasant to be a member of a community most of whose members earn their living from subsistence agriculture, while a farmer conducts agriculture within a market economy. In this sense, we feel that we are dealing in Egypt with farmers and not peasants.

Rural Egypt is historically food producing, and agriculture still predominates. An understanding of the social organization of agriculture is essential to a grasp of rural Egypt. Yet rural Egypt and agricultural Egypt are not coterminous. There are substantial numbers of people who earn their living outside agriculture, in government service, trade, transportation, and in the many factories that draw on rural people for their labor force. This may take the form of off-farm employment for the head of household, or the head may continue to work in agriculture while other household members (often his children) work elsewhere. Relative to the past, for example, in 1952 at the time of the revolution and the first agrarian reform, rural society in Egypt is no longer so enclosed in an agrarian hierarchy. The rural and the urban interpenetrate each other far more than in the past. Writers in the 1960s referred to the ruralization of the city (J. Abu-Lughod 1961). Now the issue is the urbanization of the countryside—in terms of education, employment, architecture, and exposure to mass media such as television. People (men and some women) move easily back and forth

between the cities and the countryside in search of profit, employment, entertainment, education, health care, and so on (Fanchette 1997). Although less dominant than in the past, agriculture is still very significant. According to CAPMAS and Ministry of Agriculture figures quoted by Fouad Ibrahim (1996:75), the proportion of the employed who work in agriculture declined from 53 percent in 1970-71 to 33 percent in 1991-92. According to the same sources, agriculture's share in the national income dropped from 29 percent to 16.5 percent, and its share in exports by value dropped from 63 percent to 20 percent in the same period. It is also true that for nearly thirty years, Egypt has not been self-sufficient in food. „From being self-sufficient in food and a net exporter of agricultural commodities in the early 1970s, the country endured an annual net deficit in its agricultural trade balance in the 1980s“ (Khedr et al 1996:55). It should be noted, however, that yields of most crops have risen, showing that agriculture is not stagnant.

Although rural Egypt is often treated as a whole, there is considerable variation, not only between the old and new (or reclaimed) lands, but also within the old lands themselves.

This difference is often expressed as a distinction between the Delta, north of Cairo, and the Valley, to the south, but further distinctions are sometimes made. This contrast is illustrated by figures on poverty and on fertility. Rural Upper Egypt has both a higher poverty rate and a higher fertility rate than rural Lower Egypt. In Egypt for 1990-91, 34.1 percent of the rural population was estimated to fall below a poverty line based on consumption needs. The urban figure was slightly higher at 35.88 percent. The figure for the Valley is higher and for the Delta lower than this overall poverty figure of just over one-third of the population (Abdel-Latif and EI-Laithy 1996:300; see also EI-Laithy and Kheir alDin 1992/93). The fertility rate also varies from

urban to rural, and from Delta to Valley. The highest rate is in the rural Valley (5.19), compared to the urban Valley (3.80) and the rural Delta (3.45), with the lowest (2.66) in the urban Delta (Fargues 1997:129). All these major regional distinctions are helpful, if oversimplified. Interregional variations particularly concern such ecological factors as the concentration of certain crops and animal raising practices (which in turn reflects differences in temperature, soil quality, and reliability of the water supply), as well as physical isolation. But there are other axes of difference:

- (1) Whether or not a region has a history of large estates, land reform cooperatives, or other special aspects in the history of land tenure;
- (2) Both off-farm employment and the marketing of agriculture produce reflect the proximity to major urban centers, new industrial sites (for example, Tenth of Ramadan City in the desert east of the Delta), tourist centers or simply axes of communication;
- (3) The existence of social structural features such as 'tribalism,' itself not a uniform phenomenon;
- (4) Variations in the division of labor by gender (women, for instance, are more likely to work in agriculture in the Delta than in Upper Egypt);
- (5) The presence of local crafts or other traditional industries. The studies in this collection provide ample material for an analysis of regional variation in Egypt.

1.1 GROWTH OF IMBABA

The Rural Background



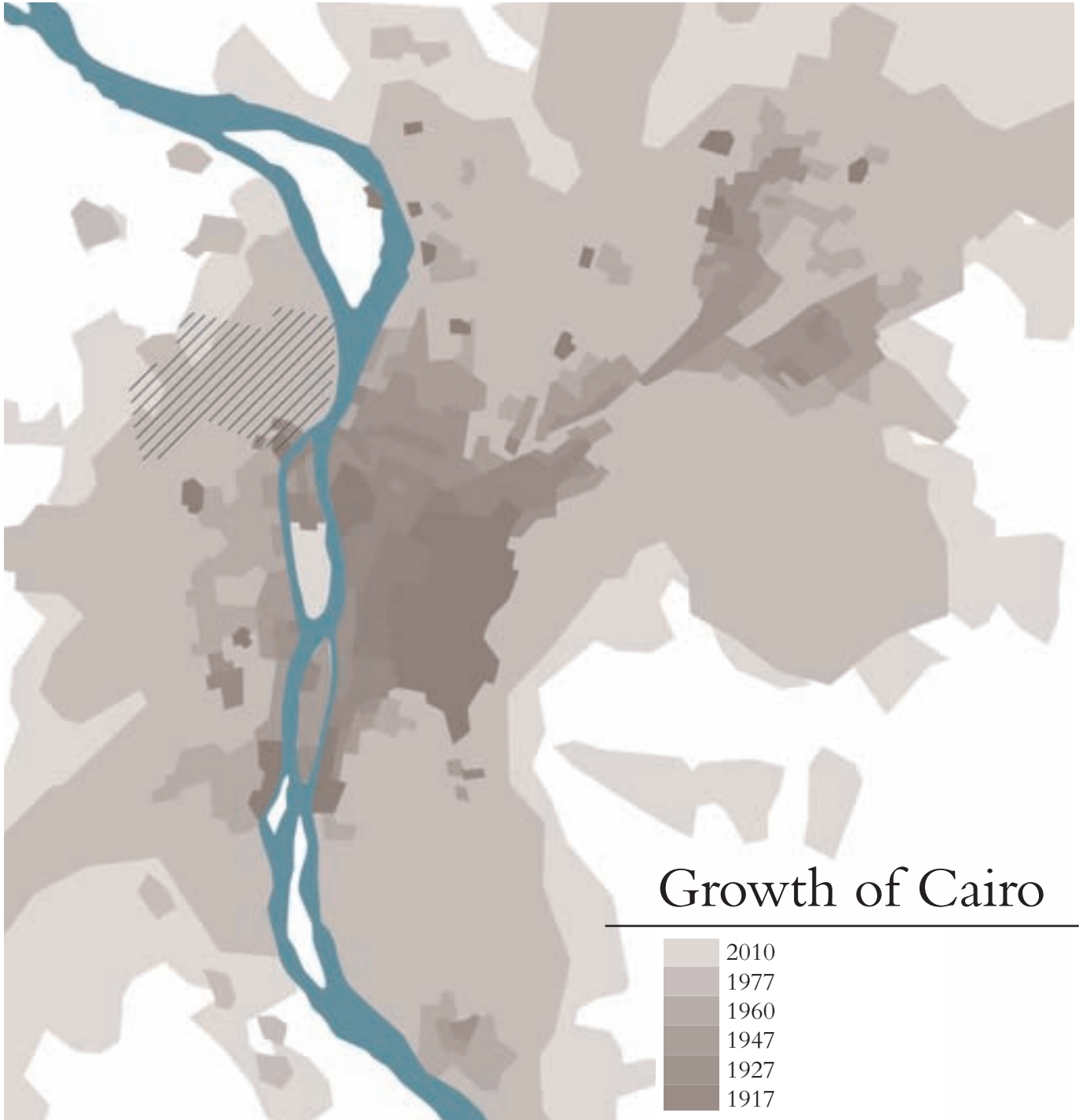
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left: farmer working on his field in the Nile-delta
right.top.left: flooded field
right.top.right: water supply for the faraway fields
right.bottom: already cultivated field



1.1 GROWTH OF IMBABA

The Transformation



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left: map showing the different stages of the urbanisation of Cairo an the transformation from rural to urban



The Nasser Era

The probably most important era in the history of Imbaba is strongly connected to Gamal Abdel Nasser Hussein.

He was the second President of Egypt from 1956 until 1970. In 1952 he led the Egyptian Revolution which overthrew the monarchy of Egypt and Sudan and created a modern and socialistic reform in Egypt.

Under his leadership Egypt gained an enormous industrial growth and his social targets led to a rethinking in the population. He laid the foundation for the most public housing projects like the one in Imbaba.

Although his status as „leader of the Arabs“ was severely tarnished by the Israeli victory over the Arab armies in the Six Day War, many in the general Arab populace still view Nasser as a symbol of Arab dignity and freedom.

1.1 GROWTH OF IMBABA

Beyond Rules and Regulations

The Land Tenure and the Fragmentation of the Agriculture Land

Until 1855 1/7 of the cultivated land in rural areas was in private ownership, all the rest belonged to the government. By that time it was usual that the land in the villages was redistributed at regular intervals, once to switch to the cultivation by rotation. This was done according to the instructions of the government. After 1855 private property and inheritance rights of Muslim were introduced. A farmer, who could prove that he had worked on his land for 5 years, and paid his taxes for the inheritable property rights, received the rights on the land. With the *Land Act Saidiyh* this was formalized in 1858.

The Muslim tradition of inheritance requires that the male heirs receive all the same parts and the female heirs receive half the parts, which eventually led to a fragmentation of the country.

Soon the stage was reached where the piece of land was too small for the owner for self-catering, so he sold it to larger landowners. He even remained only the choice either to work as paid farm workers, or to emigrate to the city. To 1896, most of the land was in private hands.

This situation was exacerbated by the changes that arose with the construction of the Aswan Dam. The lands of rich landowners got bigger and much land was owned by foreign investors. In 1920 11% of agricultural land was in the hands of foreigners, 23% of this land consisted of large estates. With an Ottoman law it was confirmed that foreigners had the right to own land and so the colonial administration had continued this practice until 1950. Today Foreigners may have only 1000 square meters for their own apartment.

In 1952 there were only 2136 people who owned 20% of the entire country, where the individual possessed an average size of 560 feddans (235 ha), while 2.6 million people, or 94% of all landowners, owned only 35% of the country, where the average size of individual possession of 0.8 feddans (0336 ha) was.

The different land reform laws of 1952, 1961 and 1969 gradually led to the disposition that one family can not own more than 100 feddans (42 hectares) and a single person not more than 50 feddans (21 ha). Since then there are no more large landowners and 57% of all land owners have 5.0 feddans or less.

It is estimated that 50% of the land is leased. Probably the landowners, who have 10–50 feddans, lease their land because it is too big for working on it and the farmers who have land between 1–5 feddans lease it because it is too small. Waste Land and other unprocessed and unclaimed land belongs to the state.

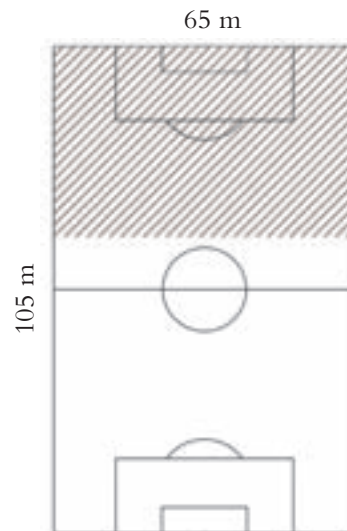
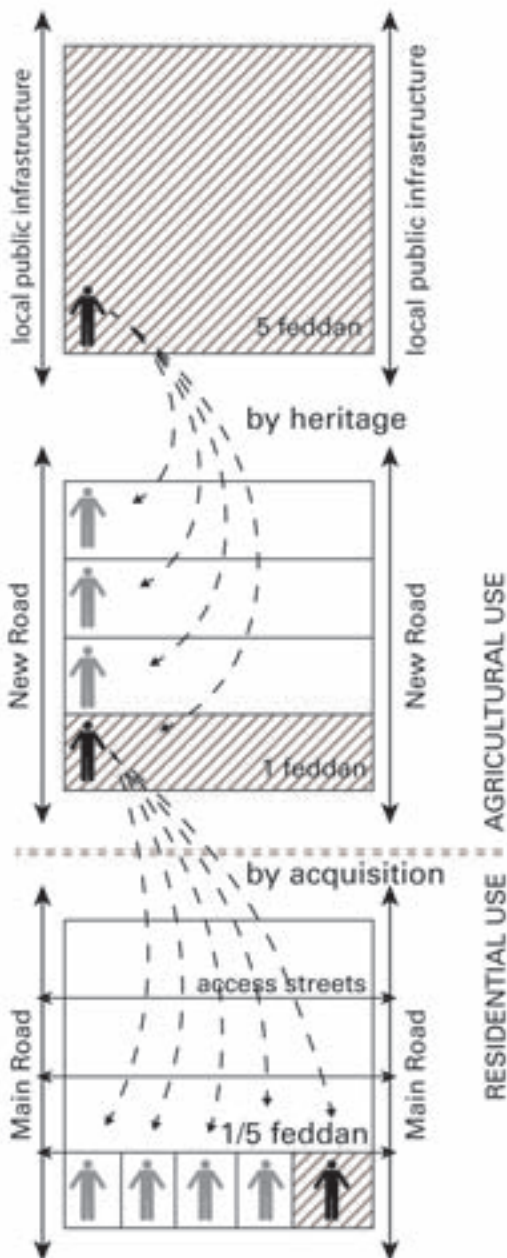
The islamic laws follow the in the Sharia described commandments of the Koran and the traditions of the Prophet Mohammed. The law distinguishes between land ownership, possession of special rights to land, owned a building and possession of a single unit in a building.

There are therefore four types of properties usual: Private ownership, lease, the Right of use and Waqf.

However, there are variations of it traditionally.

In informal areas there are various forms of tenure. The land plot for instance can be legally owned but even though it is de facto possession of the resident it can not be considered as a legally recognized ownership.

The opposite case can be found as well: the farming of agricultural land may be illegal, but the building itself can be built legally.



1 feddan =
40 % of size of one foot-
ballfield or 4.200 m²

100 feddan = 42 ha
average lotsize what one family could own in 1969

1.1 GROWTH OF IMBABA

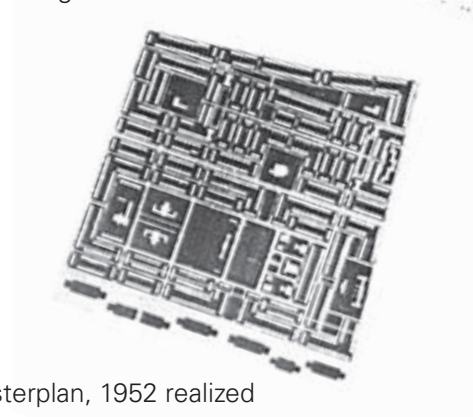
The Simultaneous Development

The State “workers’ city“ was one of the first large-scale housing projects developed in the Middle East. It was erected for the accommodation of Government workers. The planning of the neighbourhood started in 1947, and by 1952 100 units had been completed.

The „workers city“ was planned to occupy a site of 330 feddans on the west bank of the Nile and accommodate 6000 families. The layout is rectilinear, with wide streets and open spaces for schools, social center, administrative buildings, playground, library and a mosque. The houses are all two-storey, some in continuous rows and some as separate two-family units. Three different types are used, with 2, 3 or 4 rooms plus bathroom and kitchen.

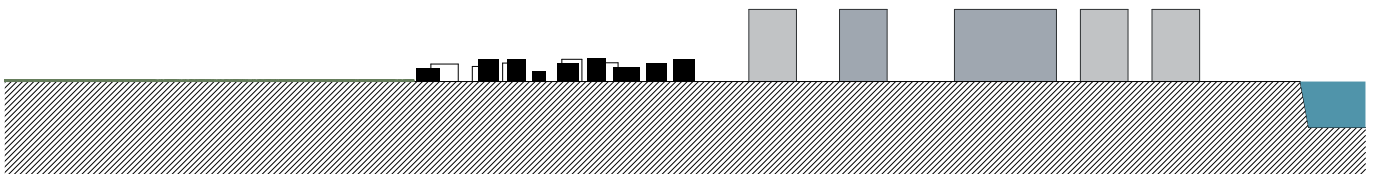


Masterplan, 1947 with the conceived expanding on the left



Masterplan, 1952 realized





- left.bottom: perspective drawing of worker houses
- right.top: ground plan of 1957 with the housing project together with the first informal settlements beside
- right.bottom: schematic section, the informal growth starts next to the state driven project

*„My grandfather worked
mental printers. And
still living in a former
She likes it!“*

*rked for the govern-
my grandmother is
r worker house.*

Amr Abotawila
Architect in Cairo
born and raised in Imbaba

1.1 GROWTH OF IMBABA

The Simultaneous Development

The first informal growth started approximately after 1947 together with the huge housing project, the “workers city“. This project was located on land which consisted of different sized tenures, probably by one owner because of the equal divisions and huge lots.

It was planned to extend this project but the lots which were meant for this extension were located on an area which was divided in many small parcels which made the expropriation much more difficult. In the period of Nasser

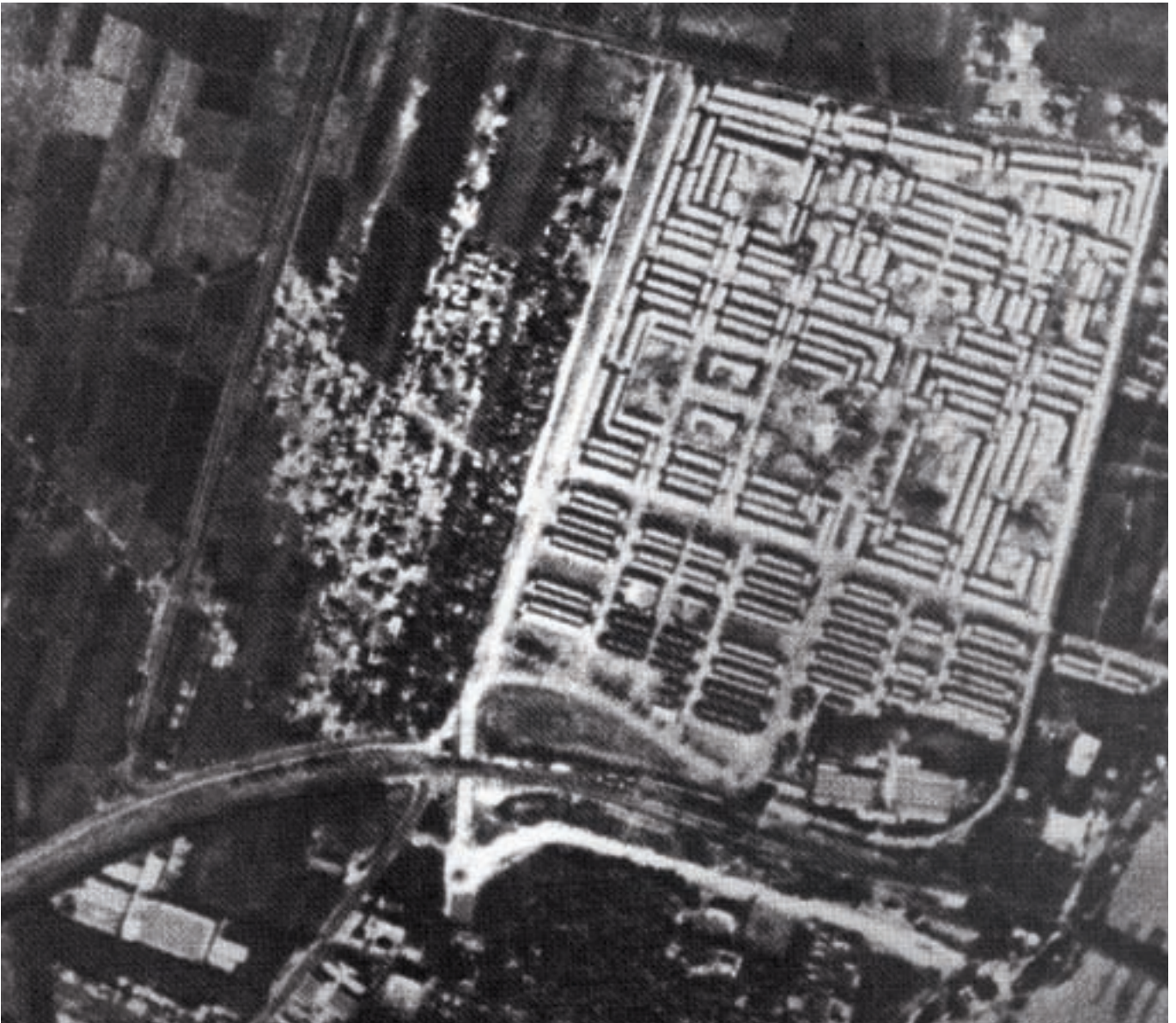
it wasn't possible anymore to distribute the owners from their small tenures.

We can presume that the first informal dwellings in this time were built by the construction workers of the formal projects on the site which was meant for the extension. In Egypt its usual that the construction workers live in “temporary“ apartments next to the construction site. The land for it was affordable at this time and made a fast growth possible.



left: satellite image of el mounirah, 1977

right: the first informal growth next to the workers' city, areal view from 1957





⋮ on this page: unofficial settlements spreading on rural land

1.1 GROWTH OF IMBABA

Fragmentation of the Agriculture Land

Reducing the average farm size affected all governorates, but not to the same extent. This process was linked to the differential dynamics of growth in the numbers of farms and to the variations in the size of the agricultural area. The

Fragmentation is one of the reasons of the rural exodus and enforced the growth of Imbaba. Today the whole Nile-delta appears as a huge bricolage of different lot sizes and tenure patterns.



- left: the border area of Imbaba next to the ringroad, satellite image
- right: satellite images next to the agglomeration of Cairo showing different lotsizes





1.1 GROWTH OF IMBABA

The Rural Boarder







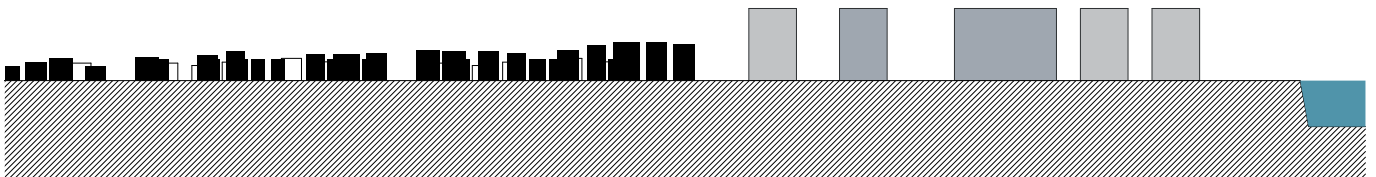
1.1 GROWTH OF IMBABA

After the Crossing | The Filling Up

In the period of the economic boom after the "Crossing", the reconquering of the Suez-canal, mostly all parcels in Imbaba were occupied. The growth could then only go on vertically.

Parallel with the filling process the parcels seemed to become smaller in the future periods, probably due to the increase in land value which lead to speculation and also because of the increased price inflation.





- left: leftovers are started to filled with dwellings, photo today
- right.top: ground plan from 1977
- right. bottom: schematic section, the growth is saturated the inhabitants extend their habitats vertically

1.1 GROWTH OF IMBABA

The Ring Road



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The ring road surrounding Imbaba is probably the most important freeway connecting Cairo with the greater region.

It was built in the late 1980s to solve the big traffic problems but kept a semi-circular road until August 2009. The total length of the ring road is about 110 km and crosses 15% urbanized land.

In the past, the hope of bordering Imbaba by this frontier

actually and try protect agricultural areas from urban encroachment didn't work out. The spreading of settlements went on in the inner side as well as on the outside in the contrary. According to that many people use the ring road to pick up a microbus. They even built there own stairways to get access. Today, the ring road seems to be a kind of vein for the whole area.

left: groundplan showing the course of the course of the ring road
right: ring road dividing the inner core from the border area



1.1 GROWTH OF IMBABA

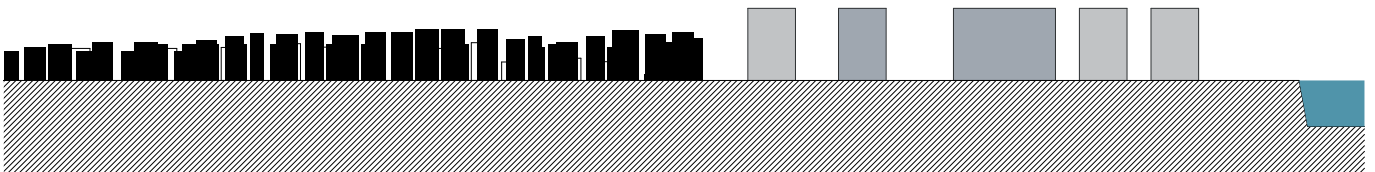
Today

Today we can see that in the old part of Imbaba a growth is not possible anymore, the development is saturated and the vertical growth have reached its limit. The inhabitants can only try to extend their living circumstances with small annexes.

The border area next to the ring road is now used for a more and more ad-hoc building type. A contractor buys a

piece of land and builds it immediately. This intensified formalisation is typical for the contemporary growth of Imbaba. The building technique they use refers to the traditions and are solved by local construction companies of Imbaba. There are some public projects in Imbaba but still the small parcelling of the whole area makes it very complicated for developing land and attracting investors.





- left: one of the narrow streets in imbaba
- right.top: ground plan of today
- right.bottom: schematic section, horizontal spread has stopped and the citizens already exploited their lots totally

1.1 GROWTH OF IMBABA

Today



DRAFT

- left: the former railway, today a place for trading
- right.top: a woman carrying vegetables to the daily market
- right.bottom: view on the border where the spread doesn't seem to stop



1.1 GROWTH OF IMBABABA

Development of Streets

1) Used as Irrigation Canal

For irrigating the agriculture lands the whole Nile-delta is covered by a huge network of water supply canals. Everywhere there is still agriculture. We can find these even in the border areas of Imbaba.



2) Canal used as Garbage Depot

In the first stage of the urbanisation of the agriculture land the canal is still carrying water but loses its function for irrigating the fields. The inhabitants throw their garbage into the canal. The missing waste management leads to an increase of the health problem.



3) Transformation into street

By solving the health problem created by the polluted canal, the government fills it up with sand. Depending on the former size of the canal the new empty space is used as a street.

This transformation is very typical for the informal land use as well as it leaves the footprint of the original irrigation pattern into the new urban structure.

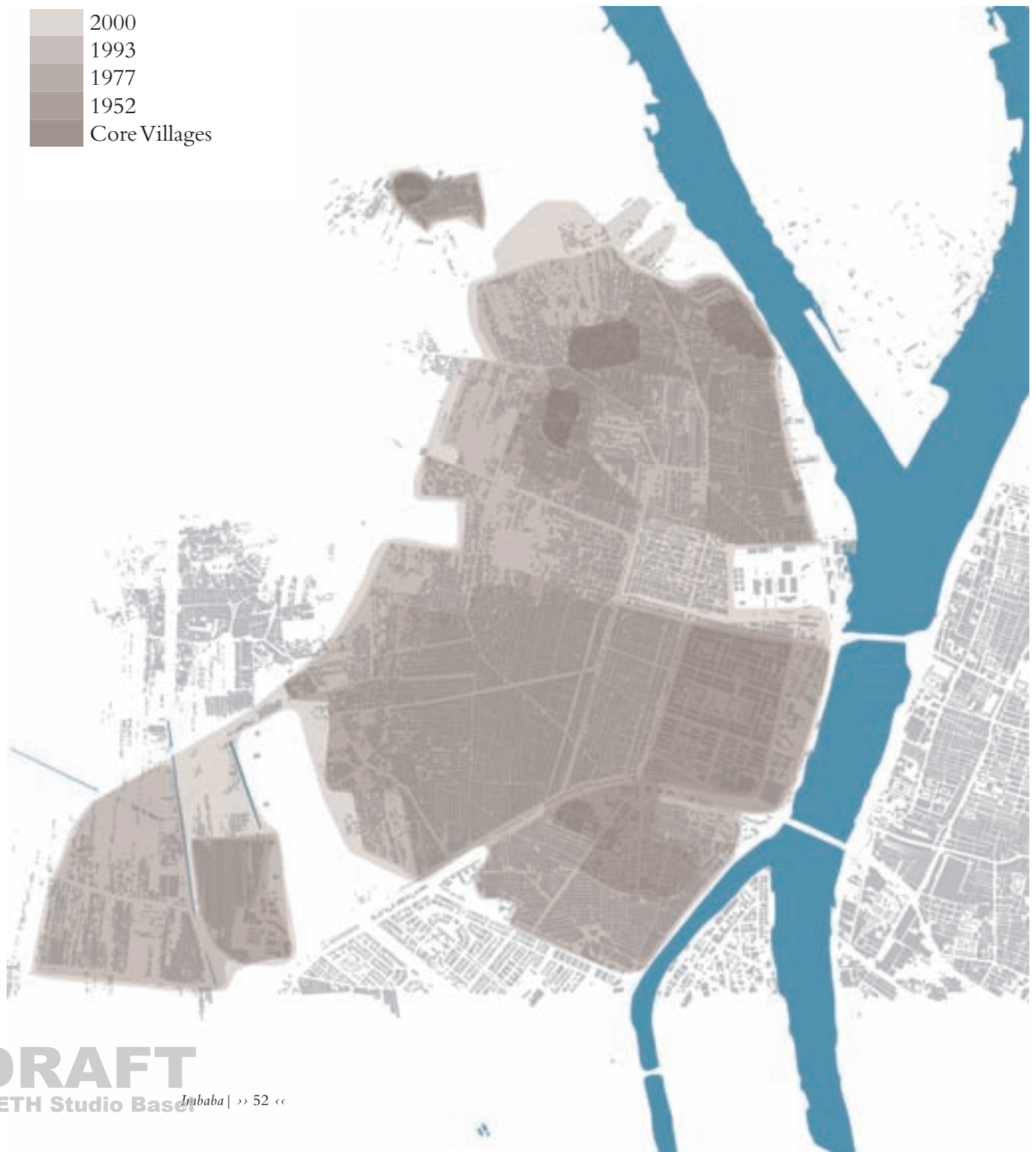


- left.top: main irrigation canal in the Nile delta
- left.middle: an irrigation canal in the border area of Imbaba
- left.bottom: main street in el-Mounirah
- right: satellite images showing the continuity of the irrigation pattern



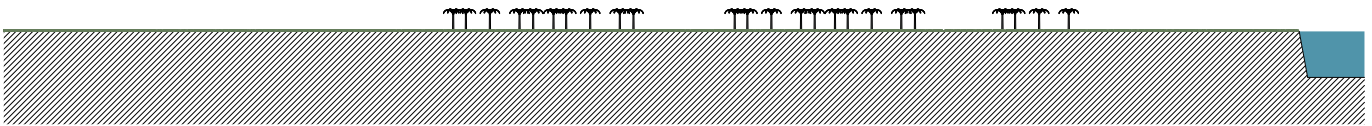
1.1 GROWTH OF IMBABA

Compendium

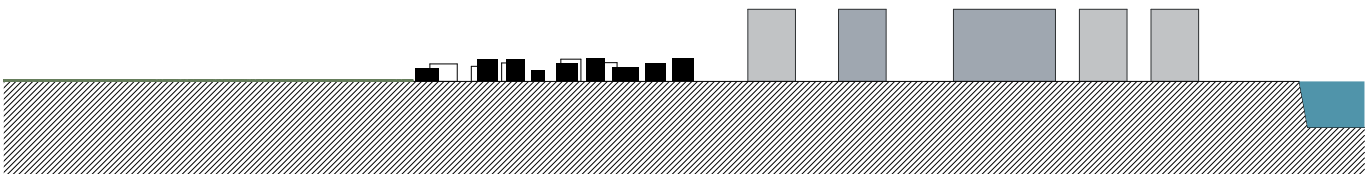


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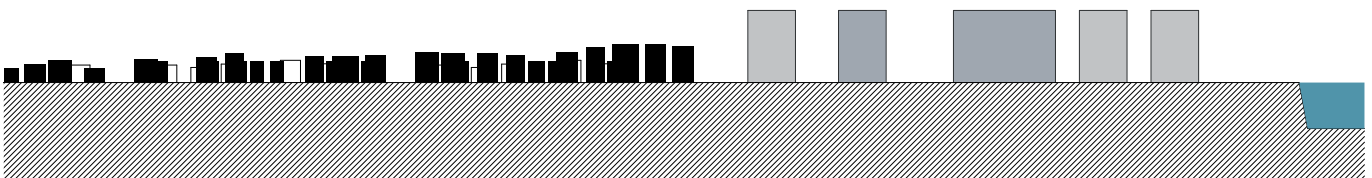
- left: overlay of different stages in population growth of imbaba
- right: schematic sections of the Nile-border through time



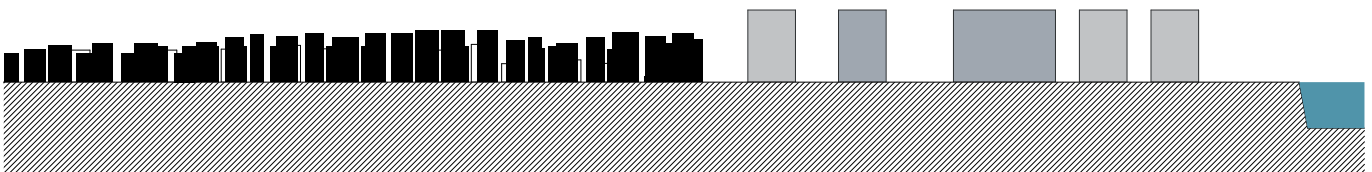
The Rural Background, Before 1952



The Simultaneous Development, after 1952



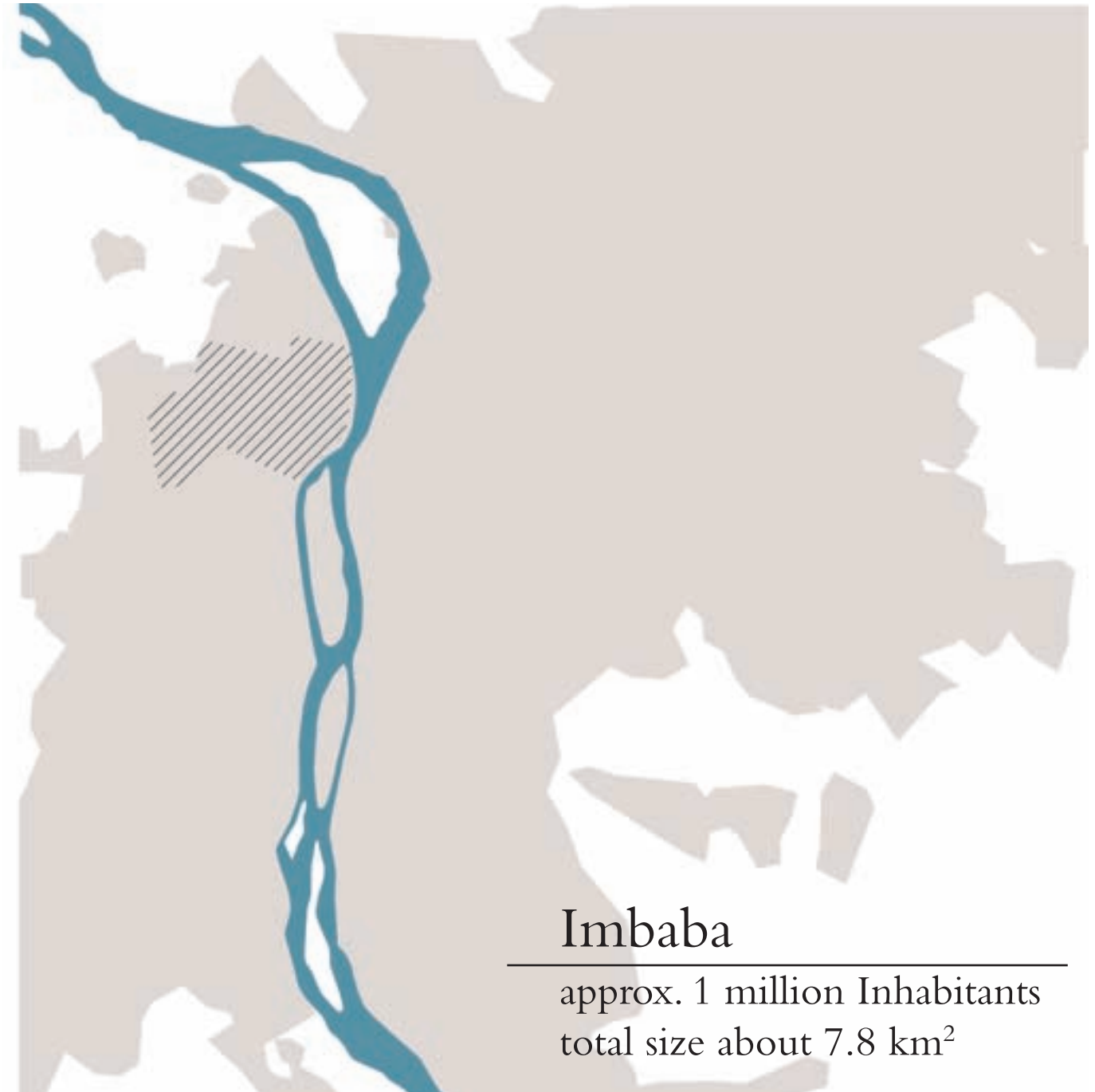
After the Crossing – The Filling Up, 1977



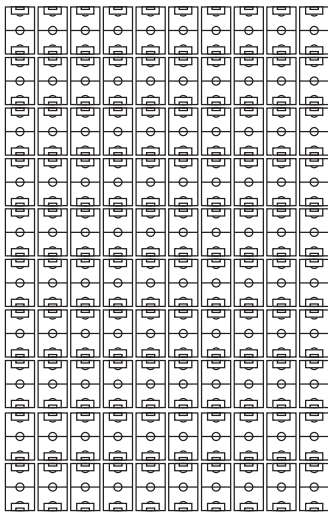
Today, 2010

1.2 URBAN CHALLENGES & HIDDEN POTENTIALS

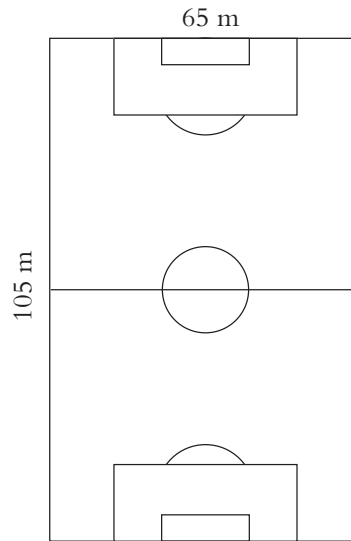
The Status Quo



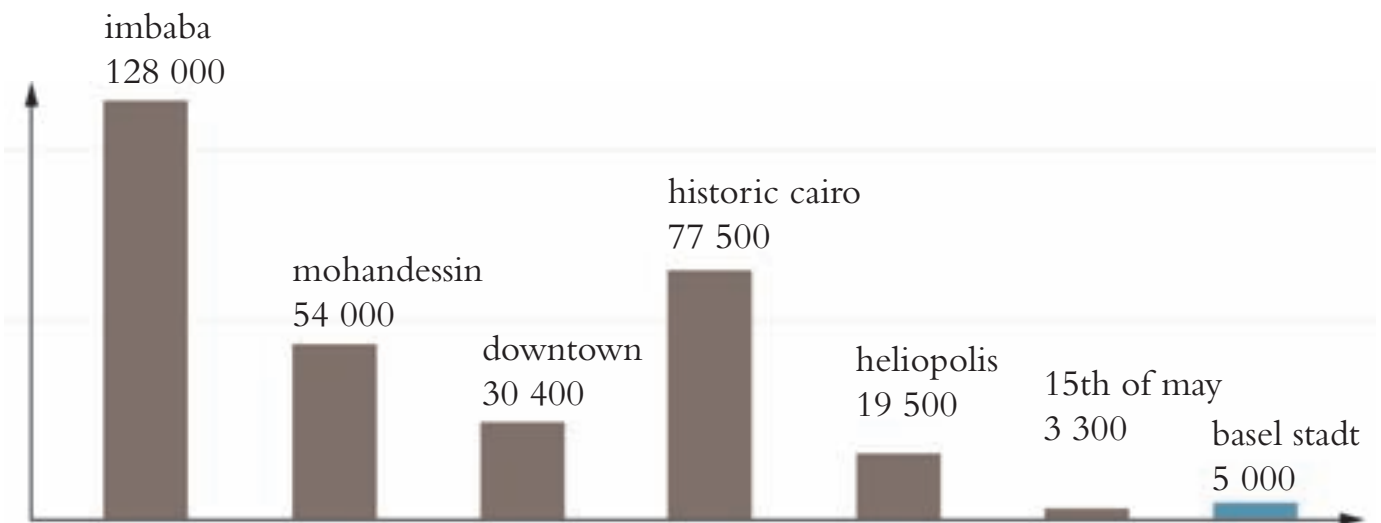
- left: plan of cairo in the year 2010 with imbaba labeled
- right.middle: comparison showing density of population in imbaba
- right.bottom: diagram showing number of people living on one square meter



Total Size of ~100 Football ground

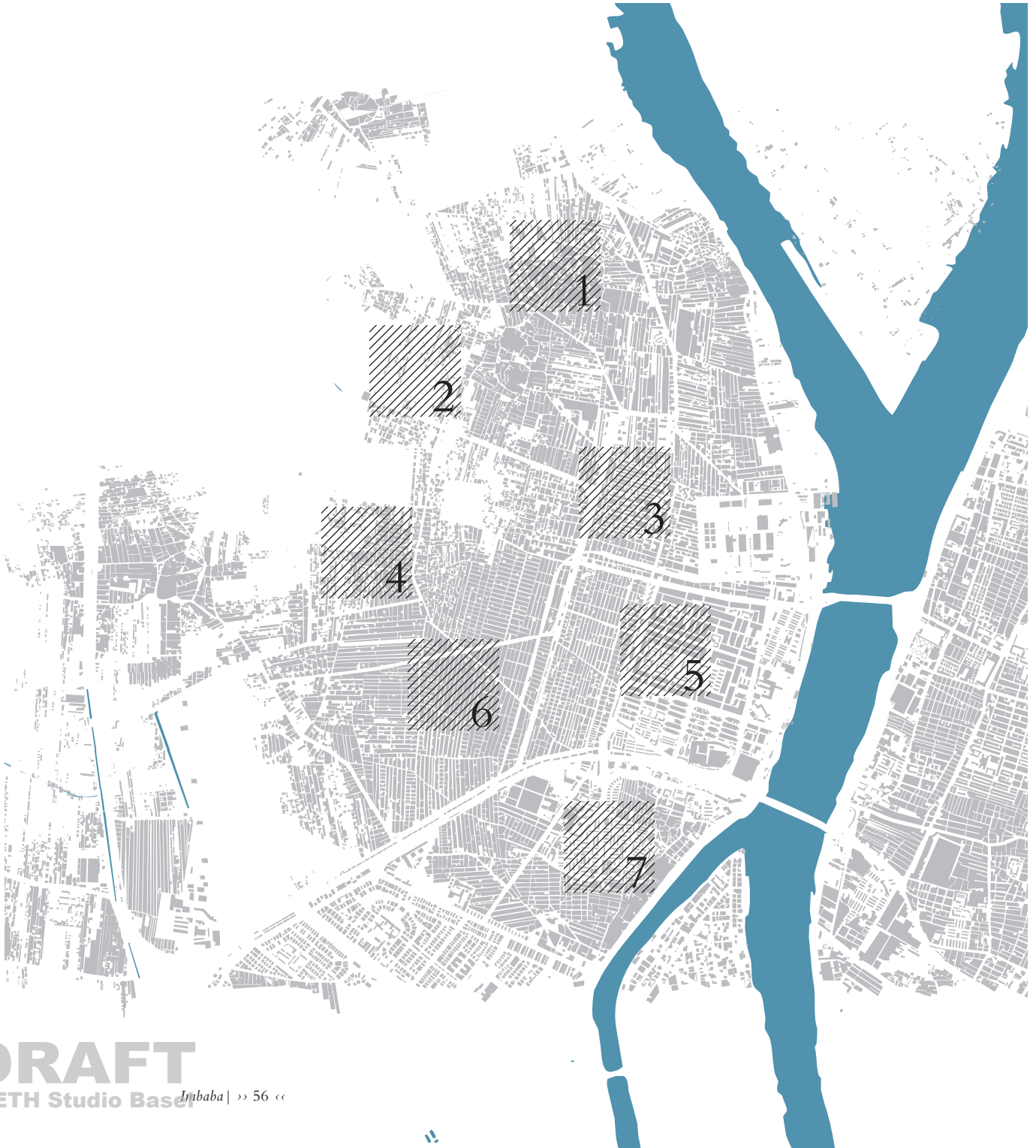


~ 1400 People | one Football ground



1.2 URBAN CHALLENGES & HIDDEN POTENTIALS

Density





1 67% Footprint

30° 6'8.94"N | 31°12'43.41"E
founded before 1950 A.D.
informal origin

1 m Road width



2 44% Footprint

30° 5'54.28"N | 31°12'10.51"E
founded approx. 2000 A.D.
informal origin

5 m Road width



3 59% Footprint

30° 5'24.82"N | 31°12'59.85"E
founded approx. 2000 A.D.
informal origin

8 m Road width



4 74% Footprint

30° 5'17.95"N | 31°12'3.58"E
founded approx. 1993 A.D.
informal origin

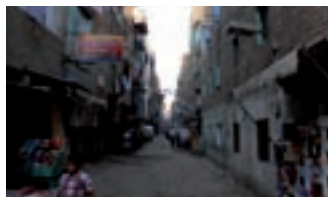
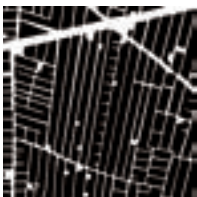
3 m Road width



5 47% Footprint

30° 4'57.10"N | 31°13'3.14"E
founded 1950 - 1960 A.D.
formal origin

10 m Road width



6 72% Footprint

30° 4'54.03"N | 31°12'20.99"E
founded 1970 A.D.
informal origin

2 m Road width



7 38% Footprint

30° 4'24.39"N | 31°12'49.86"E
founded 1950 - 1960 A.D.
formal origin

8 m Road width



0 200

0 100

1.2 URBAN CHALLENGES & HIDDEN POTENTIALS

El-Oubor Market | The Source

El Oubor market as the biggest market hall in the agglomeration of Cairo offers all varieties of fresh products. The products are one part imported but also brought directly from the agriculture farms in the Nile delta. The market hall is located 26.5 km linear distance away from Imbaba and the traders have to travel that distance every night. Since it is very important for the inhabitants of Imbaba to

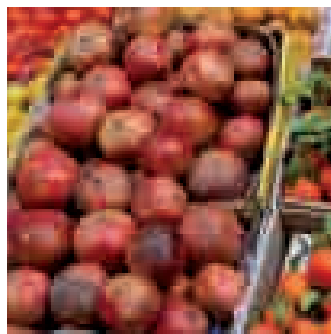
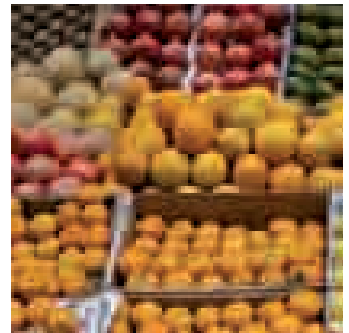
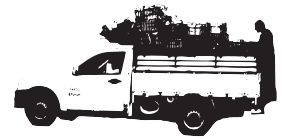
solve their local supply it can be considered as a driving force in the whole development of this area.

Due to the lack of cooling all goods are sold fresh at the local markets in Imbaba. That also leads to the fact that many people from greater Cairo come there to buy there cheaper and fresher.





left: satellite image showing distance imbaba to el-oubor market
 right.top.left: main hall of the market for fruits and vegetables
 right.top.right: everyday life in el-oubor with all the different sellers
 right.bottom: variety of goods you can find in el-oubor



1.2 URBAN CHALLENGES & HIDDEN POTENTIALS

El Souk | El Mounirah

The daily market in El Mounirah seems to be well organised. In most units the ground floor is used for shops. It is interesting that the nearby districts like Mohandessin and Downtown use this market for buying their products because the quality is much better and the prizes are very low. For the community life this market together with all

the different social hotpots like the cafes and mosques in El Mounirah are very important and was during our visit crowded by people. it also seems to be the most important place for communicating, sharing news and discussing. In this street everybody knows everybody and the people care about themselves.





- left.left: salesman offering cucumbers for 50 LE | 1kg
- left.right: map showing the market strip
- right.top: butcher at el-mounirah souk
- right.bottom: the range of offerings from vegetables to cloth



1.2 URBAN CHALLENGES & HIDDEN POTENTIALS

El Souk | El Mounirah



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left: the offer of products covers local supply
 right.top.left: dense market strip in el-mounirah
 right.top.right: fresh meat directly from producer
 right.bottom: even fish is sold there, fresh and cooled
 right.bottom: also goods like carpets are offered



1.2 URBAN CHALLENGES & HIDDEN POTENTIALS

El Souk | El Bouhi Street

The El Bouhi street on the west part of old El Mounirah is full of these small improvised market spots. The traders often sitting on the street while selling their products. During the rush hour in the evening this

area is totally crowded by the commuters. The most of the traders are coming from outside of Imbaba from the rural area and stay only for the day to sell their products.





left.left: typical trade spot on el bouhi street
 left.right: groundplan showing the market spots
 right.top: temporary market stalls
 right.bottom: rush hour in el bouhi street



*„Many people from
here to buy food. Do
It is cheap and of co*

*all over cairo come
o you know why?
ourse, it is fresh. “*

Amr Lasheen
GTZ Consultant

1.2 URBAN CHALLENGES & HIDDEN POTENTIALS

Public Institutions



- left: illustration showing number of official public buildings
- right.top: temporary mosque
- right.bottom: school in imbaba on border area

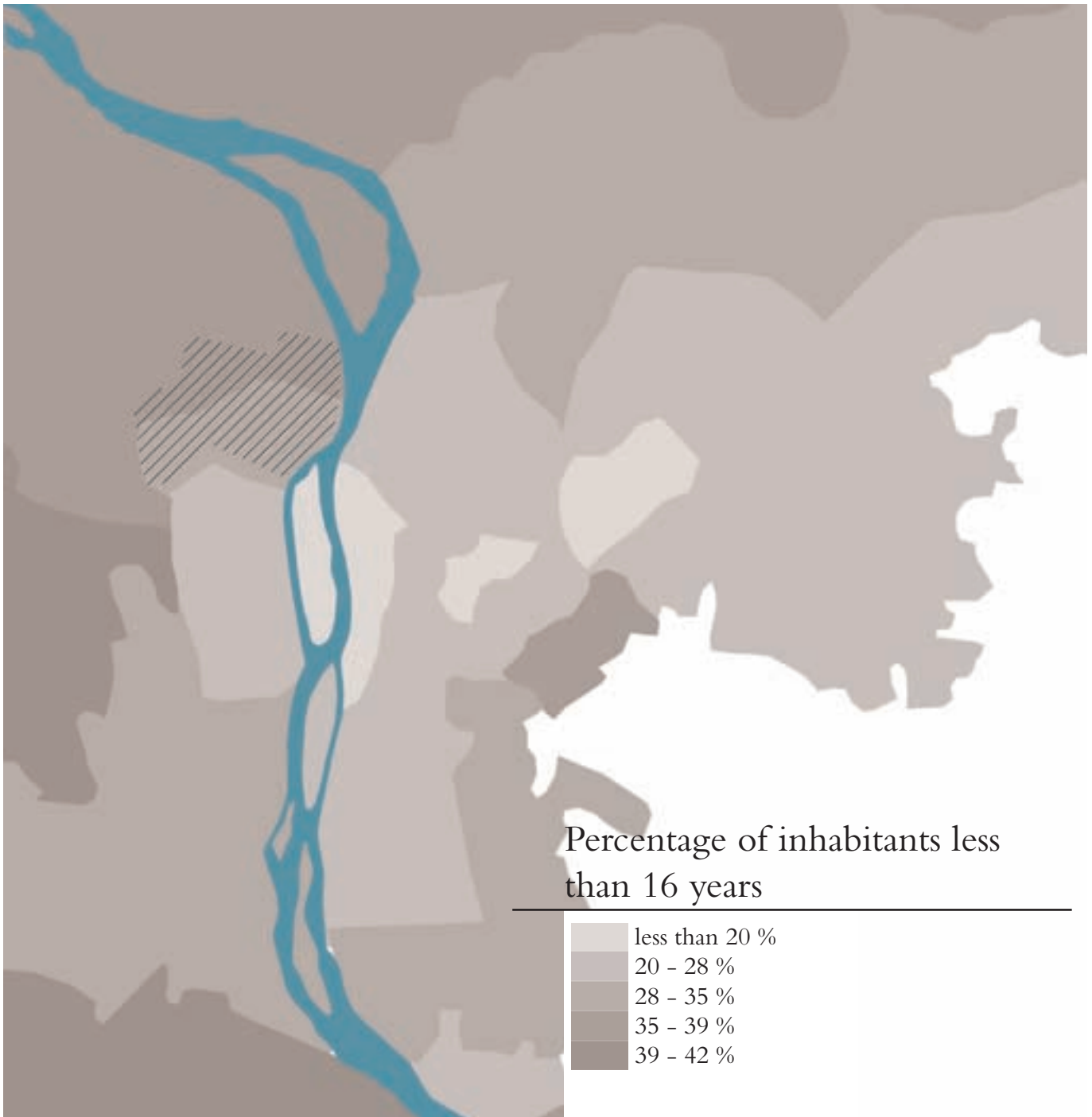
The number of schools in Imbaba according to the population is not sufficient. Also other public infrastructure like police, hospitals and community centers are rarely present. The dense urban structure makes it nearly impossible to install such institutions.

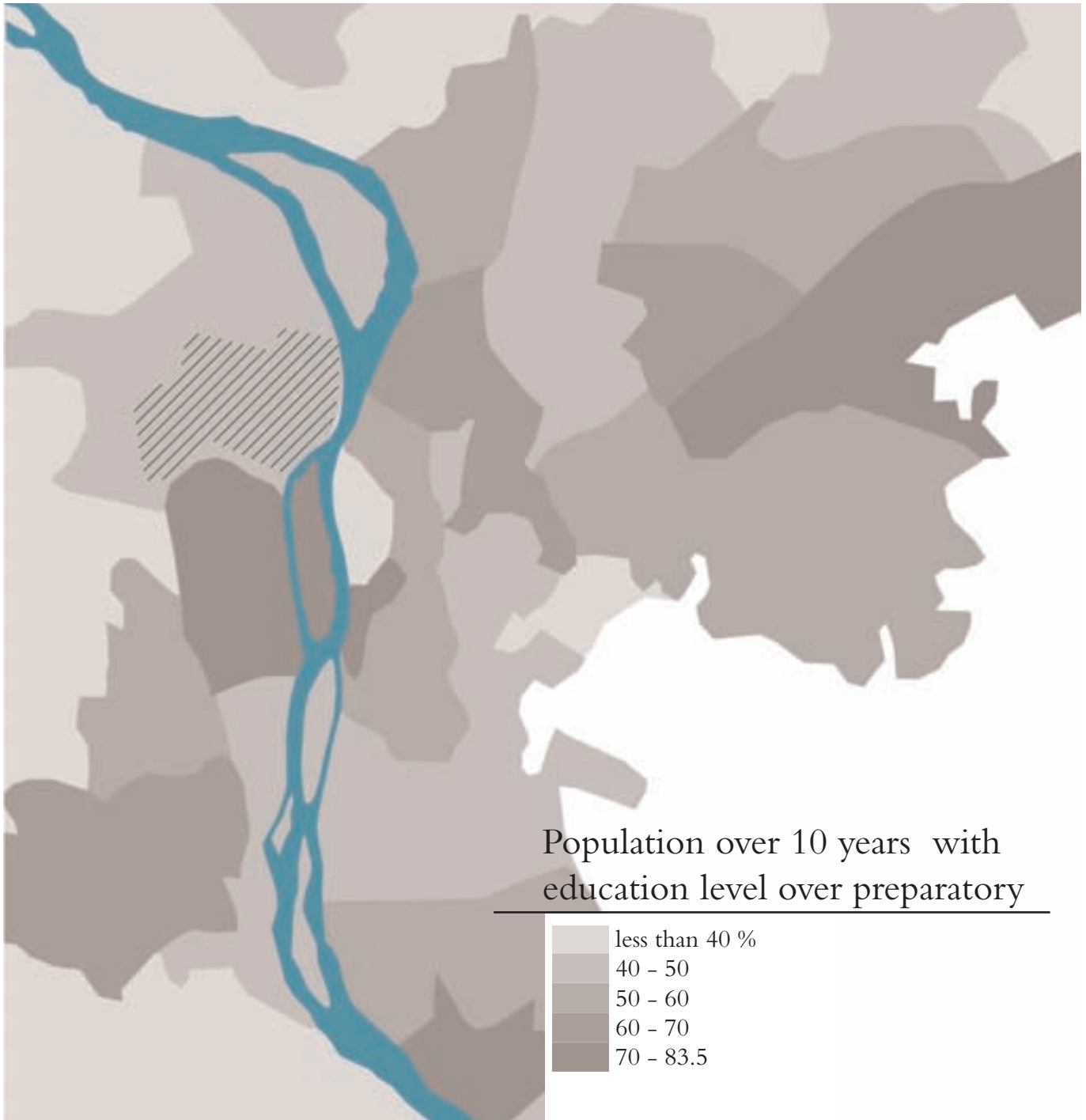
If the government would succeed to implement a network of public services, parallel the provision with basic supplies like water, sewage and electricity would be ensured. The Inhabitants know how to deal with this shortage and improvise with unofficial self organized services like temporary mosques.



1.2 URBAN CHALLENGES & HIDDEN POTENTIALS

Education due to child-population





1.2 URBAN CHALLENGES & HIDDEN POTENTIALS

Infrastructure | Problems of Disposal & Sewage

The immense lack of the supply infrastructures like water and sewage is the main problem of Imbaba. The rapid growth and expansion of the population lead to an overload of the existing structures which are outdated and not repaired for a long time.

Water shortage is one of the biggest problems. The network does not consist of a closed cycle, since, depending on demand and over again here and there individual leads are attached. In general, the water pressure is quite low and the supply is uneven. It is estimated that 40% of the water is lost in the network.

Because of the poor supply has been recently reported that all buildings that are over 4 floors, a water storage must be attached on the roof.

When building a new building the responsibility of the water supply is found by the owner himself. Only lawfully constructed buildings may be connected to the main water supplement.

In the informal areas the water supply is an urgent problem

as Waste water and electricity because these two can be obtained easily by other means. The newer and more remote districts are understandably fed unofficial worse.

The connections are simply attached to the existing ones. The individual residents themselves create the connections in their homes.

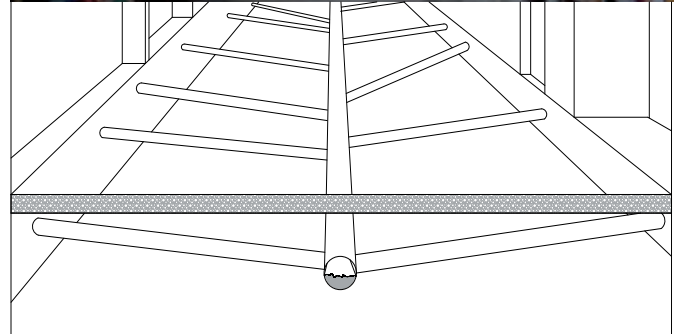
Mosques and schools are important in the districts for the unofficial start because the government offers water supply to these buildings. When this opening via public line is present, the ports can later be grown.

On mosques this is true especially because of the religiously prescribed washings,

Electricity

The supply line to the house is the responsibility of each owner, which means that many lines are attached only provisional. Power failures are common.

- right.top: drainage system under construction
- right.middle: illegal plug-ins to official sewage drainage
- right.bottom: since there is no real garbage collection, the people throw their waste on the streets



1.2 URBAN CHALLENGES & HIDDEN POTENTIALS

Infrastructure | Problems of Health

The lack of the infrastructure system like waste management lead to an increase of several sicknesses. Organic waste and dead animals are just next to the apartments of the people. Children playing on the streets. It is coherent that the contaminated water also reaches the ground water which is used by the residents.



left: dead animals next to garbage filled irrigation canal
 right.bottom: people got used to it somehow
 right.top: several unused areas are already occupied by
 garbage which is thrown by the public garbage collection



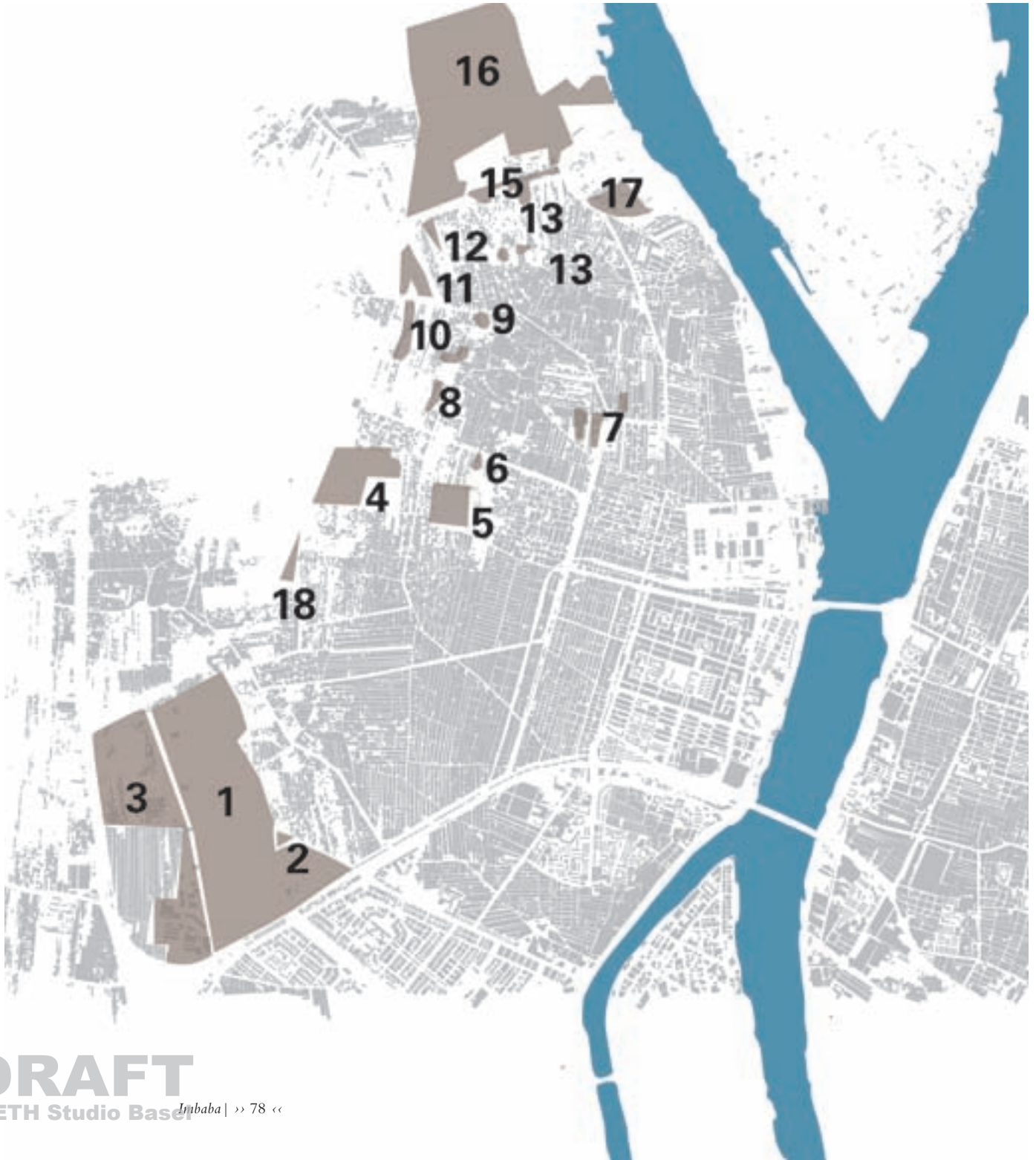


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1.2 URBAN CHALLENGES & HIDDEN POTENTIALS

Interventions | Proposed Projects

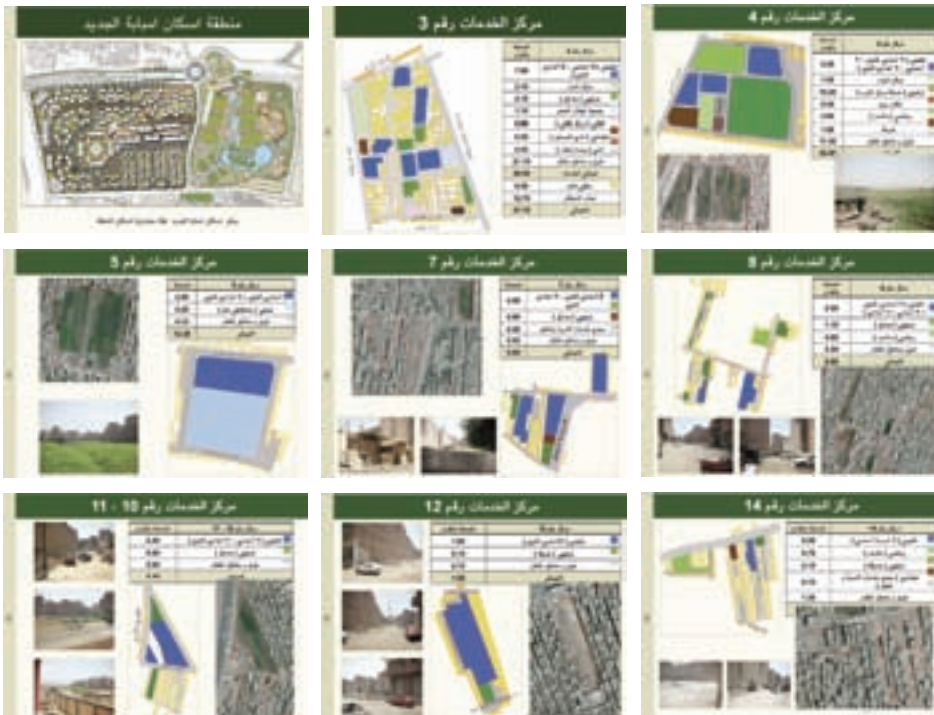


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- left: the proposed locations of service centers in imbaba (GOPP)
- right: extract of GOPP plans for transformation of the area

The General Organization for Physical Planning (GOPP) is the national Egyptian authority responsible for the planning process. GOPP was established in 1973 to be responsible for all planning activities in the country. Currently the GOPP is involved in organizing the planning process on all levels (regional, urban, and detailed) and preparing planning guidelines, urban development programs and coordination of the planning processes allover Egypt. This involves monitoring the implementation of plans through cooperation with the local authorities, conducting and supervising urban studies (e.g. concerning transportation system, infrastructure, waste handling and treatment plants and environmental studies) proposing and developing planning related legislation, monitoring urban extensions to stop urban sprawl over agricultural and environmental sensitive areas and preparing village planning strategies and policies allover Egypt. More, the GOPP is responsible for building capacity for planning professionals in all planning levels and areas. Since GOPP is the major planning institution in Egypt the project is very important as it will help disseminating the use of new technologies in planning.

Source: www.gopp.gov.eg



1.2 URBAN CHALLENGES & HIDDEN POTENTIALS

Area 1 | Airport land



Airport land

0.7 km²

former use: military airport

projected: living, park area



The airport land with a size of 0.7 km² and its close location next to Mohandessin is the most important developing area in Imbaba. On the one hand there are plans to connect Mohandessin to the ring road in the north by a subterranean highway on the other hand the wish of green and clean

living areas for the middle class. Although the official voice says that the new living units are reserved for the inhabitants that has to be resettled. The question is if these new units are suitable and affordable for the people.



- left: satellite image of existing airport area in status quo
- right.left: proposed plan for the northern region with park and residential units
- right.right: perspective of the planned units





1.2 URBAN CHALLENGES & HIDDEN POTENTIALS

Area 1 | Airport land



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© ETH Studio Basel *Jubaba* | >> 84 <<





1.2 URBAN CHALLENGES & HIDDEN POTENTIALS

Area 4 & 5 | Rural islands

- left: satellite image showing the isolated rural islands in between informal settlements
- right.middle: GOPP plans with proposed zones for public services
- right.bottom: photo taken from the ring road looking at the huge leftover



Rural islands

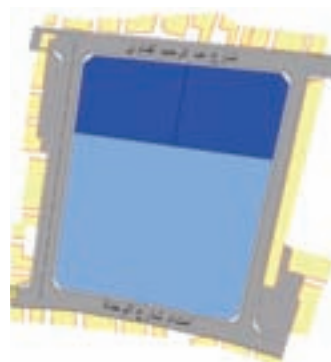
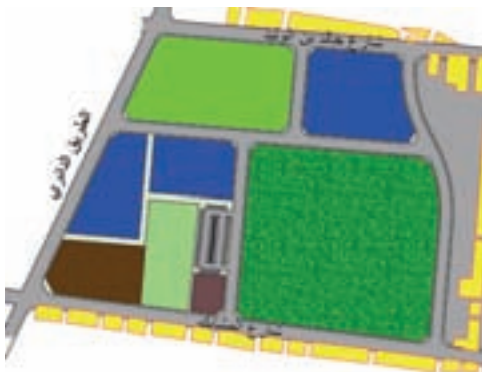
0.12 km² | 0.04 km²

former use: rural

projected: living, service



Only huge and unbuilt lots are possible to develop. But even on this area a lot of inhabitants have to leave because of the proposed concepts of the GOPP.



- school
- park
- police station
- youth center
- sports (golf)
- hospital



1.2 URBAN CHALLENGES & HIDDEN POTENTIALS

Area 7 | Traffic Hub



Traffic Hub

0.13 km²

former use: parking, unused
projected: schools

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- school
- park
- family service
- former units

GOPP tries to ameliorate the huge lack of public institutions like schools. The Education map on page 79 indicates that need. The concept provides to install these spots in between the narrow urban structure all over Imbaba.



*„These new units
the people we have*

*are designated for
e to move. “*

Dr. Sahar Attia

Managing Director, Professor at Cairo University

Author of new plans for Imbaba

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1.2 URBAN CHALLENGES & HIDDEN POTENTIALS

Upgrading or Control ?

The GTZ, the German Technical Cooperation, who cares about the shortage of infrastructure in Imbaba, tries to install improvements. These improvements had been abused in the past by the government according to the impacts of 1992 where the city was confronted with a inaccessibility to Imbaba.

For that reason we should always think about the question whether it is an action of upgrading or control.

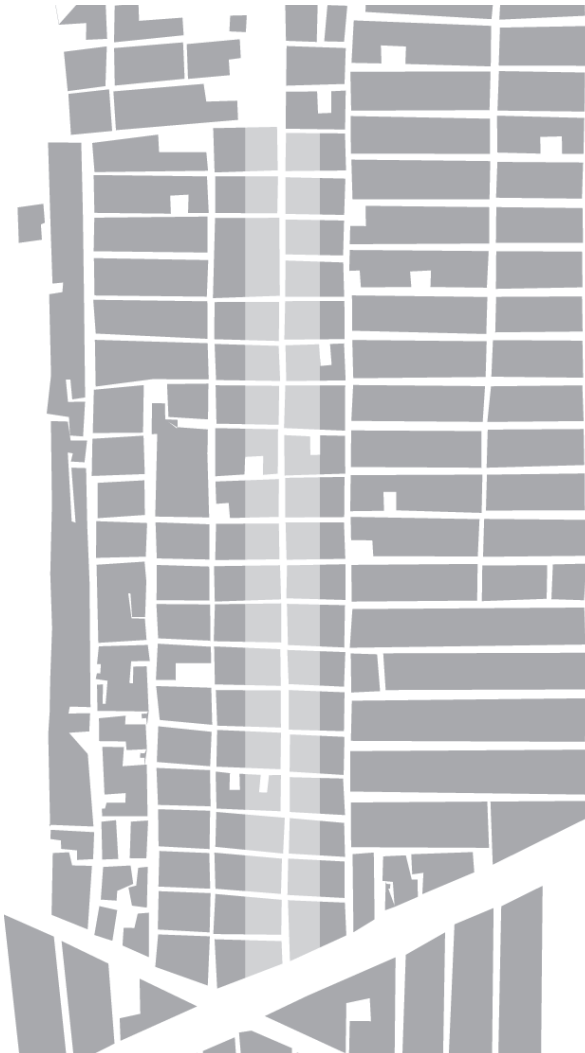


Imbaba 1992

Impacts against policeman in
december 1992 -

The state tried to enter Imbaba

- right.left: widening the streets to improve the accessibility
- left. left: most streets even don't allow cars to pass through



1.2 URBAN CHALLENGES & HIDDEN POTENTIALS

Modernisation

Lighting / Shading



GOPP
»



The North-Giza Project | Airport Area

Cleaning



GTZ
»



The North-Giza Project | Airport Area

“Civilizing”



Investors
»



Urban Planning and Growth in Cairo

Eric Denis (1997)

Source: Middle East Report, 1997

.... Above all, Cairo is a mirror of Egyptian society, the product of the local management of powerful social contradictions and inequalities through the speculative real estate market, highly centralized authority, modern urban planning and a population that routinely resists official designs for the organization of the city.

Yet while these factors provide order to an apparent chaos, they are also transforming the urban landscape by altering the compact social compositions that have, until recently, characterized urban order in Cairo.

In the past two decades, economic liberalization and structural adjustment have favored speculation, enriched property owners and accelerated impoverishment, reinforcing existing social fractures and inequalities. At the same time, the reduction of public spending has drastically reduced the availability of subsidized products. ...

...This reinforcement of economic inequalities accompanies an official ordering of urban space which is supposed to foster peaceful coexistence and overall social and economic fluidity. Yet Cairo is the nerve center of a centralized state which evidences no desire for democratic decentralization. The administrative framework of Egyptian society, dominated by the military hierarchy since 1952, imposes strict control over its capital. ...

...The application of centralized power, however, is mediated by the dense and compact nature of Cairo's social order. Cairo is a congested city with rare uncrowded spaces. Even the newest suburbs have a density comparable to that of the city center.

This lack of population diffusion distinguishes Cairo from

numerous other cities in developing countries which are surrounded by slums and seek to maximize the occupation of the city's periphery. One simple comparison: the average population density of Mexico City is on the order of 30 inhabitants per hectare, whereas in Cairo there are more than 170 people per hectare. This density and compactness have long characterized social proximity in Cairo, where inequalities are managed without distance or any real segregation. In the historic heart of the city, social connections are negotiated on a street level through a mixture of mediation and community interests often centered on familial solidarity and regional allegiances of the older generation. In this sense, the city does not act as a destroyer of communities, but rather is composed of compact islands of social interaction. These social proximities also foster an effective, localized social control where each individual plays a role in group morale and can relay public authority. In other words, the Cairene people, many of whom are minor civil servants, have fashioned informal institutions to obtain political space otherwise denied them and to humanize links with the government.

Urban Planning

While this localization remains an informal instrument of elite control over Egyptian society, the authorities have nevertheless called upon the science of urban planning to formalize urban order in order to more easily distinguish and separate its social components and affirm a modern centrality. This implies, in effect, a break with the compact city. Three overarching principles have guided the development of contemporary urban planning: first, delineating the external borders of the city; second, asserting a centrality to the city and making the center more accessible; and third, establishing a new society in new cities on the terrain of the surrounding desert.

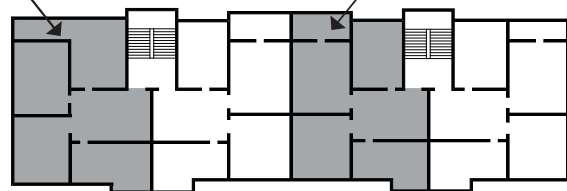
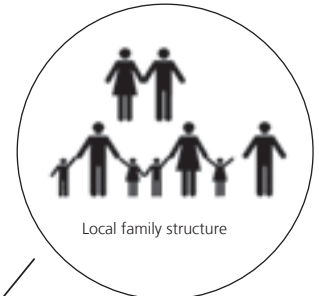
1.2 URBAN CHALLENGES & HIDDEN POTENTIALS

The Misfit



By adapting western housing concepts the planners disrespect the local family structures which don't fit into the promoted habitats. The results can often be seen in the degradation and customization of these dwellings by extending the living circumstances in an "informal" way. According to that the need of a balcony seems less important than expanding the living area.





- left.left: customized public housing with extensions
- left.right: outdated public housing unit
- right.top: figure plan 2010 with public housing labeled
- right.bottom: typical low cost housing groundfloor

2. DUALITY

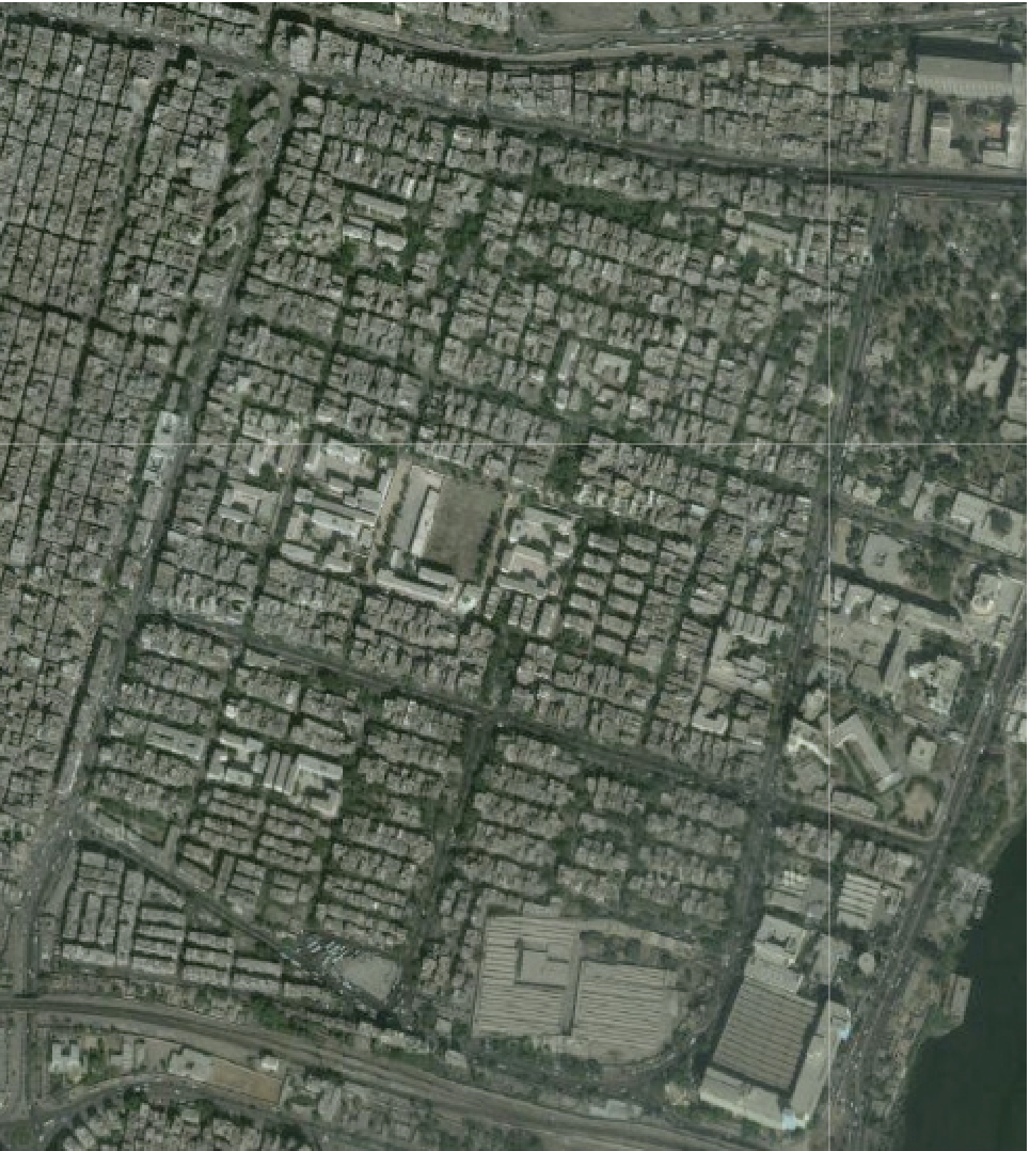


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2.1. INTRODUCTION

Parallel housing development

Using the term “informal” for describing the spontaneous developed settlements in Imbaba is not very accurate. A more accurate term would be “parallel housing development”. It would underline more the fact that this type of housing refers to the contemporary real estate market in Egypt. The way how people improvised in building their homes and then how the professionals had adapted these is a sign of an over traditions survived process. We can say it

has been “formalised” in a special way.

So it is obvious that this strategy cannot be described as “informal” anymore. Actually these settlements are still a symptom of the cultural duality of Cairo: the Arab-oriented culture on the one hand and the western-oriented on the other. As we showed on the previous pages western concepts didn’t match to the local family structure who deserve more flexible homes. Flexible in the typology but also in





terms of access to capital. All in all we can presume that the spontaneous, unofficial settlements are good alternative to the state driven projects.

On the following pages we want to show that the so considered “informal“ housing production in Imbaba is not informal anymore but it is a more and more hybrid with informal and formal origins.





2.1. INTRODUCTION

„INFORMAL“

illegally occupied land

unplanned settlements or unauthorized housing
(WHO - WORLD HEALTH ORGANIZATION, 1999)

autonomously development of housing without permissions or parceling laws and mostly without infrastructure
Rheinhard Goethert, 1986

ashwaiyyat: Ashwaiyyat, the plural for ashwaiyya. means an informal area something without order, a chaos.



„FORMAL“

having the appearance of being suitable

being in accord with established forms and conventions and requirements

regular or symmetrical in form

formal is defined as an action which fulfills an official regulation
(Wictionary)

synonymes: precise, punctilious, stiff, starched, ritual



2.1. INTRODUCTION

How to define in-/formal

El-Mounira Informal Settlement, Cairo

Mohamed M. el-Sioufi

The term „informal settlement“ has come to be used to refer to those communities in Egypt built around Cairo in violation of the rules and regulations that have been promulgated by the government in a vain effort to control urban expansion. The regulations they violate include prohibitions against using agricultural land for commercial or residential use and buying or selling that land when it is so used. Anything constructed on agricultural land is also by definition illegal since it has to be constructed without a building permit.

The loss of agricultural land which these settlements entail is also in itself a serious problem. Although Egypt has a total area of about 1.2 million square kilo meters, only 4 percent of that is arable land, and all of that arable land is confined to the narrow strip on either side of the Nile where the majority of Egyptians live and into which Cairo is expanding.

Consequently any increase in the rural population means an automatic increase in migration to the city and in the city's population, which eats again into the surrounding agricultural land and continues the vicious circle. Considering the lack of services in these settlements and the tenuous hold on property ownership their illegality implies, the question arises why they continue to grow and thrive. The answer is to be found in the socioeconomic conditions that now prevail in Egypt. First of all come the pressures of population growth.

When the growth began, housing was already a problem, but one that was fairly well controlled until the early 1950s. Acute shortages began to develop in the late fifties and early sixties, however, when attempts at regulation

left the private sector unwilling to keep up with demand any longer. Those regulations included stringent rent controls and the prohibition of eviction, both of which made private investment in housing stock unprofitable.

Informal settlements obviously have their advantages.

They require no subsidy from the government-the financing system works more or less automatically - and can therefore keep up with demand, in contrast to the public housing the government provides which lags far behind.

The quality of both construction and maintenance is high, because the people who live in the building are in 98 percent of the cases its owners. Building costs and rents are geared to what the market can pay. Both construction and building maintenance are at a very high level compared with public housing, even though these buildings are officially substandard.

Informal housing also has its obvious disadvantages. Aside from the loss of the agricultural land itself, using agricultural-land subdivision has its own built-in problems. Some of the lots are so shallow that it is uneconomical to build on them. and many blocks are so long as to cause traffic circulation problems. The high value of the land means that streets are made too narrow, space for public facilities is absent. and sanitation services nonexistent; because there is no municipal structure, there is no garbage or refuse collection, no police or fire protection, public-area maintenance is minimal, and sewage is a constant threat to public health. But whatever the drawbacks, these settlements are sheltering people in a way that seems to satisfy them and at a cost they can afford at a time when government and business are failing at both, and that is no small achievement.



-ashwaiyyat -

Who is afraid of ashwaiyyat? Urban change and politics in Egypt

Asef Bayat and Eric Denis (2000)

NINETEEN NINETY-TWO was a watershed in Egypt's recent urban history and in the discourse within Egypt on cities. Imbaba, one of Cairo's major informal communities, with around one million inhabitants, had been "taken over" by the militant Islamic group Al-Gama'a al-Islamiyya. Their penetration of this very large informal settlement resulted in the creation, according to foreign correspondents, of "a state within the state" in Egypt.

The Imbaba incident and similar events followed a decade of sustained debate and discourse on cities and politics, often reviving century-old assumptions concerning the social consequences of urban transition. Cairo is currently perceived as a giant city choked by overpopulation, seemingly the result of an influx of fallahin (peasants) which is said to be threatening its urban configuration and turning it into a "city of peasants". By the same token, the argument goes, the ecology of the city is being transformed by the spread of ashwaiyyat (informal communities) which are ruralizing Egyptian urban centres.

The last ten years have witnessed a growing concern that rural migration is laying the groundwork for a major social explosion because of the prevalence of poverty and joblessness and the undermining of family relations.

Some see ashwaiyyat as "unnatural" communities which trigger "social disease" and "abnormal behaviour" such as lack of privacy, overcrowding and violence. Others have commented on the erosion of respect for parents and social control and on the prevalence of immo-

rality. The informal cities are perceived by many in Egypt as representing a Hobbesian locus of lawlessness and extremism, producing a "culture of violence" and an "abnormal" way of life. The 1996 Egypt Human Development Report summed up the prevalent expert position thus:

"During the last 15 years, we have witnessed a process of ruralization of Cairo, with the growth of many rural formations and semi-rural settlements on the fringe of the city. Consequently, many new sub-populations in the city have their distinct lifestyles and tend to travel in insular circuits." Egyptian cities generally are assumed by the national media, academia, government officials and, more significantly, by the planning community, to be spaces of migrants who have ruralized the urban centres, turning them, like Cairo, into "cities of peasants". Ashwaiyyat are seen to represent the epitome of ruralized life in cities, exhibiting anomie, poverty, crime and thus political violence. These assumptions view Egyptian cities and the countryside from the vantage point of Janet Abu-Lughod's classic study *Cairo: 1001 Years of the City Victorious* but seem to pay little attention to the significant changes which she later acknowledged had occurred since the 1970s. The purpose of this paper is to illustrate some of these changes, the implications for the current discourse on informal cities and their assumed association with social and political problems. We argue that the demographic changes of the last 20 years or so have produced a more complex spatial pattern. First, cities have ceased to be centres for rural migration (which has levelled off) while villages have begun to assume urban characteristics. These observations thus challenge the assumption of a clear-cut rural-urban dichotomy. Finally, we question the basis of the premise which infers social deviance and political violence from the character of the informal city.



2.1. INTRODUCTION

Impressions

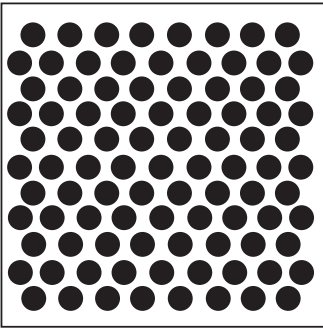






2.2. COMPARISON

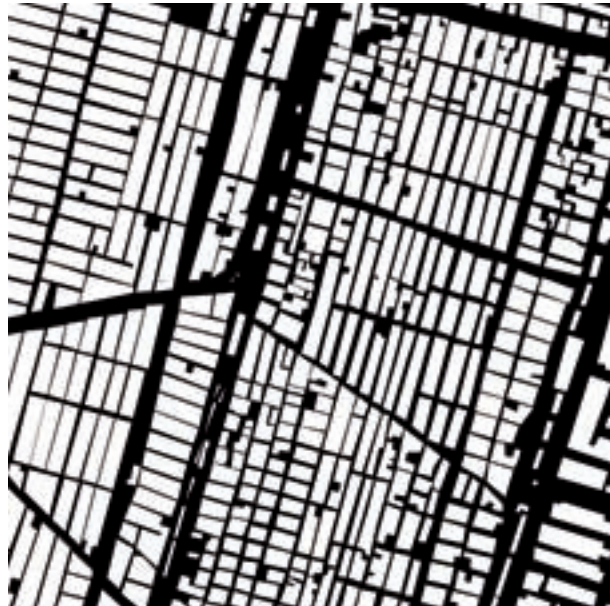
Different Patterns



El Mounirah 90p/ha

irregular^{streetpattern}

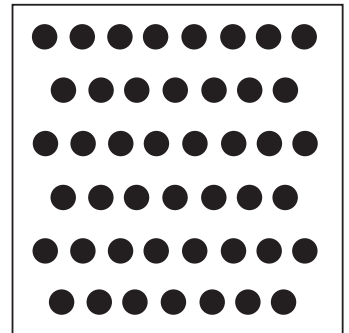
- former irrigation network still visible
- typical street width of 3 - 4 m
- 5 - 6 storey units
- small blocks
- built on fragmented agricultural land
- no open space
- low to middle - income residents





regular streetpattern

- based on urban planning concept
- typical street width of 8 - 9 m
- 4 - 5 storey units
- huge apartment blocks
- built on former flooding plain
- inner courtyard left for community activities
- low - income residents



Public Housing Project 45p|ha





2.2. COMPARISON

Streets | Access Streets



3-4m

narrow access street in el-mounirah
no street lighting
for cars not accessible
no trees



4-6m

access street in el-mounirah
irregular lighting
for tuk-tuks accessible
no trees





6-8m

private access street in the public housing district
regular lighting
for cars accessible
trees in the private courtyards



10-12m

public access street in the public housing district
regular lighting
cars parking and driving
trees on the trottoirs





2.2. COMPARISON

Streets | Main Streets



10-12m

main street in el-mounirah
irregular lighting
for cars and tuk-tuks accessible
trees

12-15m

market street in el-mounirah
irregular lighting
for cars tuk-tuks accessible
no trees





15-18m

main street next to the workers houses district
regular lighting on the trottoirs and in the middle
cars parking and driving
trees in the middle and on the trottoirs

18-22m

street connecting imbaba with downtown
regular lighting
cars parking and driving
trees on the trottoirs





2.2. COMPARISON

Livelihood







2. 2. COMPARISON

Everyday life



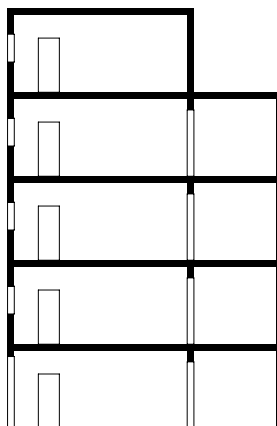
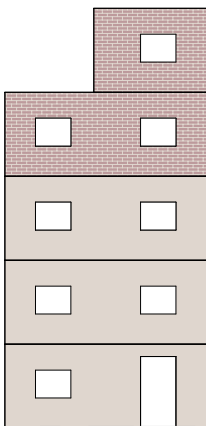
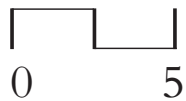
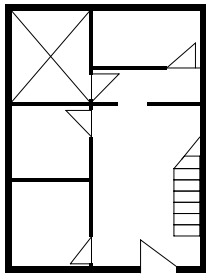
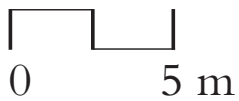




2. COMPARISON

Dwelling

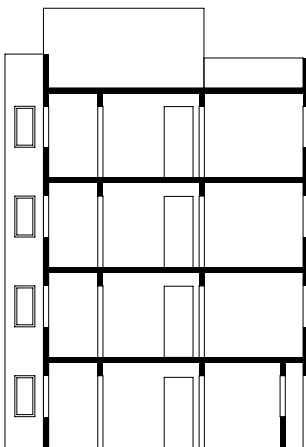
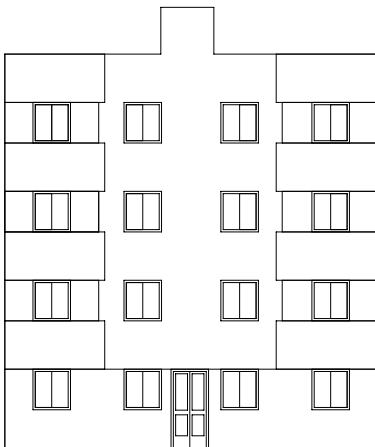
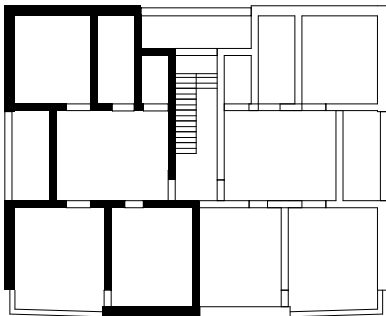
Housing Unit in El Mounirah





Public Housing

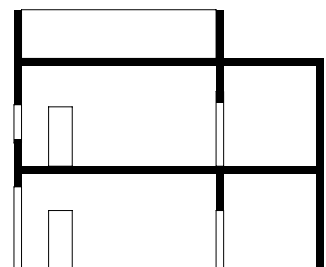
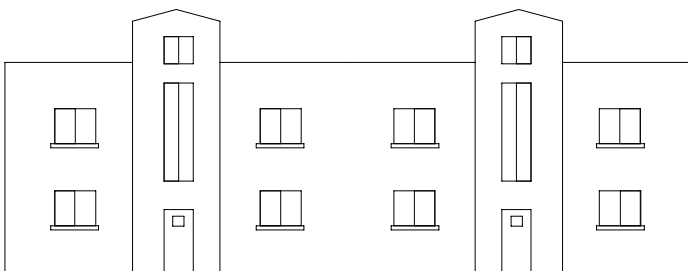
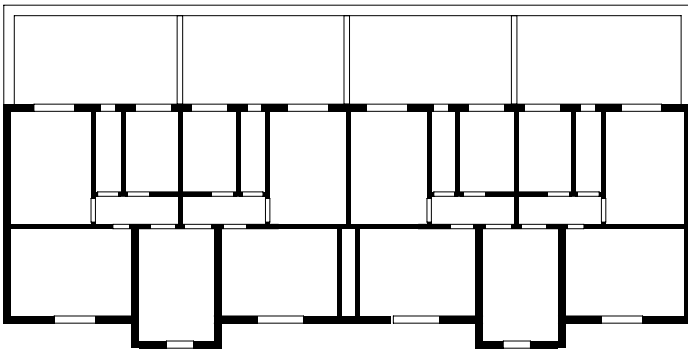
0 5 m





“Workers City“

0 5 m





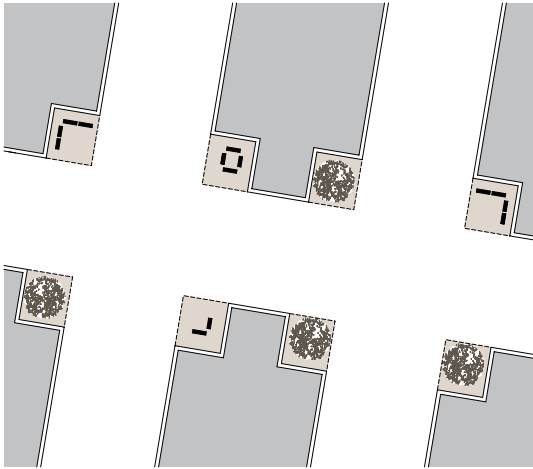
2.3. THE CONVERGENCE

Green Space





- left.top.left: the wooden pavillon in el-mounirah is not used by the people
- left.top.right: the rare green space is not used by the residents
- left.bottom: the original planned free space in the middle of this street is transformed into storage places
- right.top: workers city concept with leftovers
- right.middle: leftover used as parking lot
- right.bottom: leftover used as extension



In both districts the urban concepts of spaces meant for greenery and for relaxing didn't match to the people needs. They transform the free area their way. The leftovers in the workers city are used as parking lots or even as extensions to their homes.



*„We offer them g
they don't use it.
It's a question of*

green space - but

culture. “

Fathi Hani

Head of social center in Imbaba



2.3. THE CONVERGENCE

Public Space





left.bottom: roof used as public space for the whole unit
bottom: in the formal areas the planned green space is transformed by the inhabitants



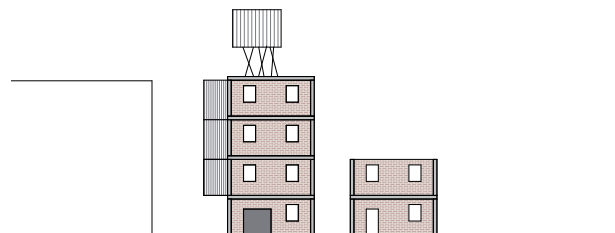
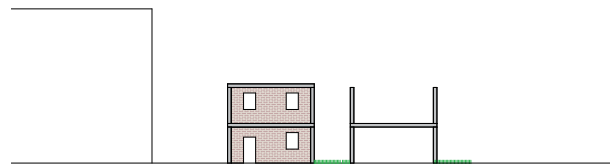
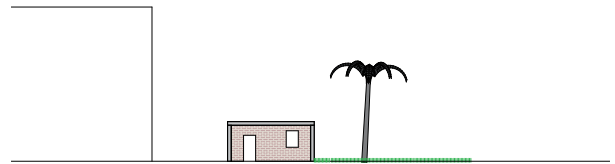
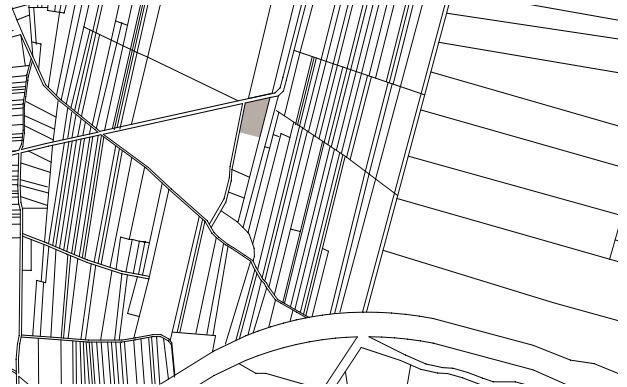


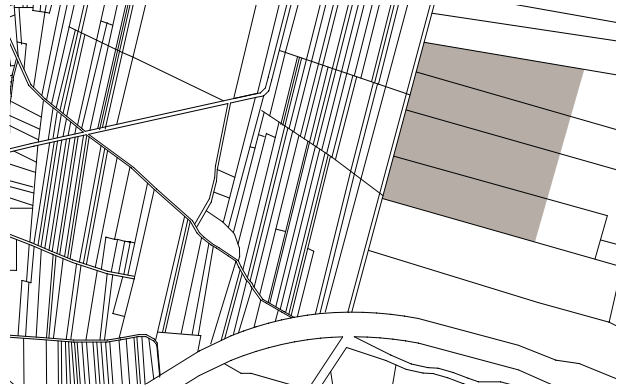
2.3. THE CONVERGENCE

Building Strategies

Stages of Development

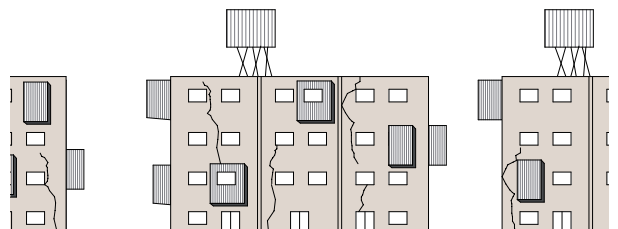
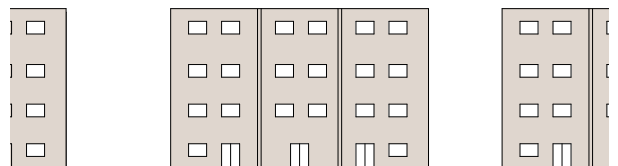
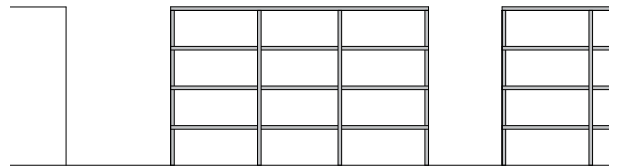
- 1) acquire a piece of rural land legal
- 2) building it illegally
- 3) depending on the financial situation the owner builds his lot step by step
- 4) when the lot is totally built, the owner tries to extend his living area with horizontal annexes or even to relocate functions on the roof





Stages of Development

- 1) the mostly governmental driven projects require huge lots
- 2) constructing the units with official or semiofficial companies
- 3) the finished apartments are meant for the low income class
- 4) because of the fixed rents, the apartments are not kept in a good condition. The inhabitants also extend their apartments with annexes.



*„This area (the work
most dangerous area i*

*ers city) is today the
in Imbaba. “*

Amr Abotawila

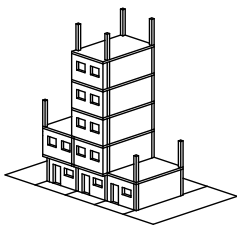
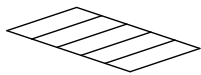
Architect in Cairo

born and raised in Imbaba



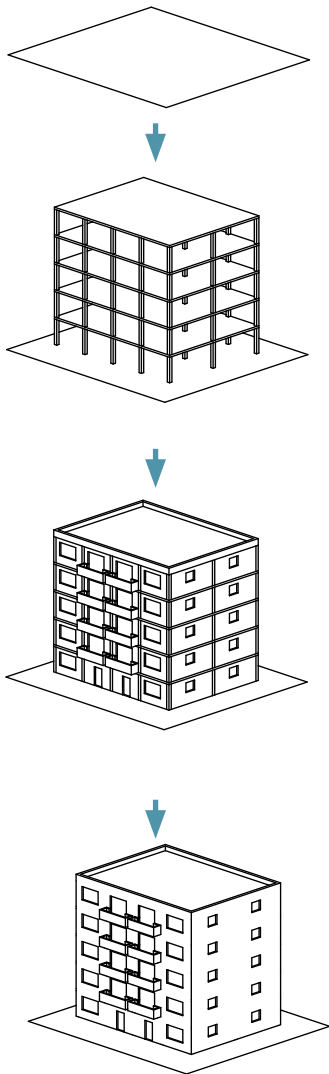
2.3.THE CONVERGENCE

Typologies



Incremental





Ad hoc

DRAFT
© ETH Studio Basel



*„The inofficial way
mits ongoing devel
An extension becom
the family grows on
situation increases.*

*y of building per-
development. [...]*
mes necessary if
r the financial
“

Rheinhard Goethert, 1986



2.3.THE CONVERGENCE

Elements of Extensions



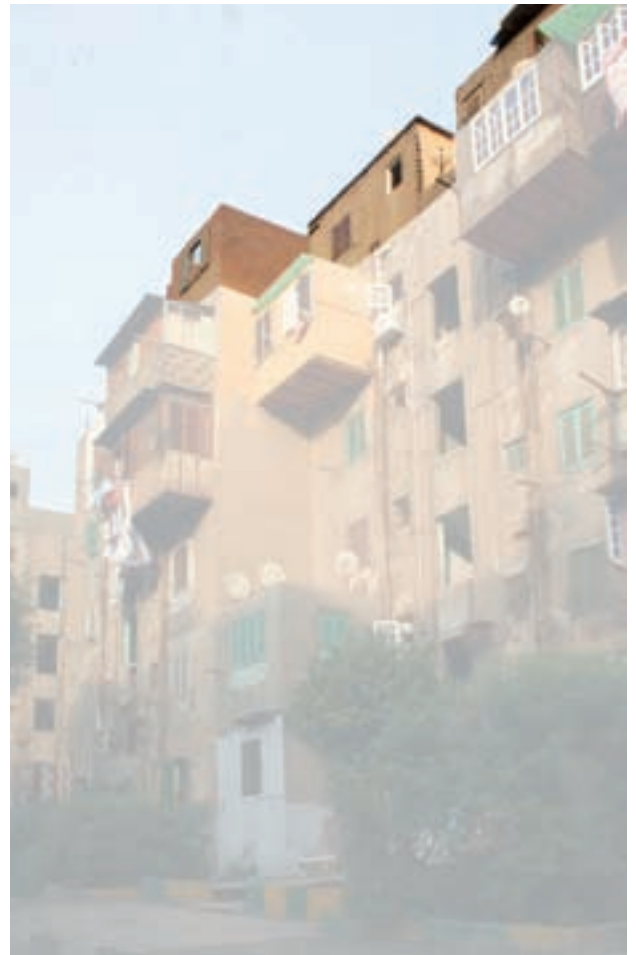
Horizontal extension in El Mounirah



Pigeon cage on the roof



"Annexes" in the Workers City



Roof extensions



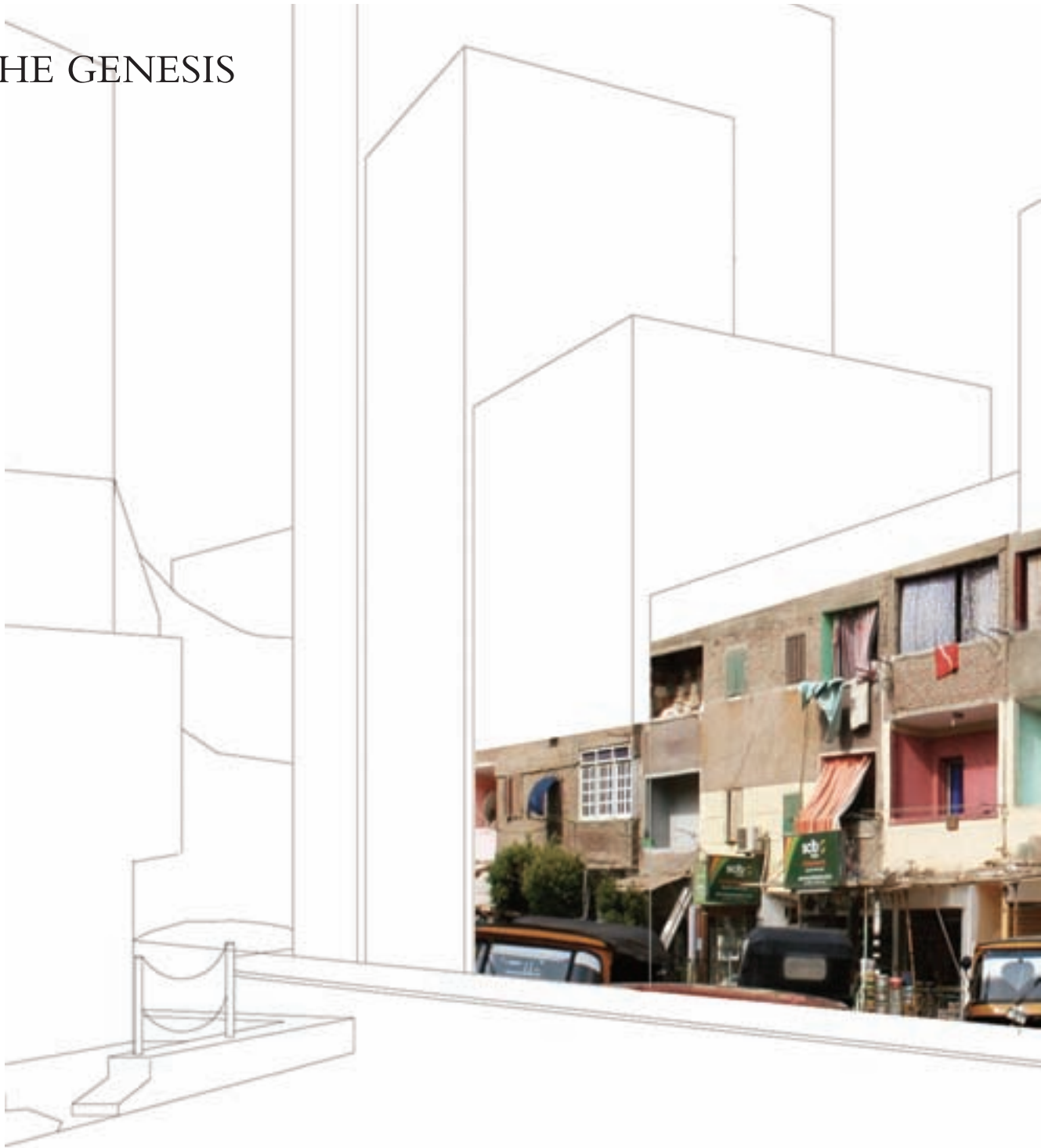
3. BLURRING



G BOUNDARIES



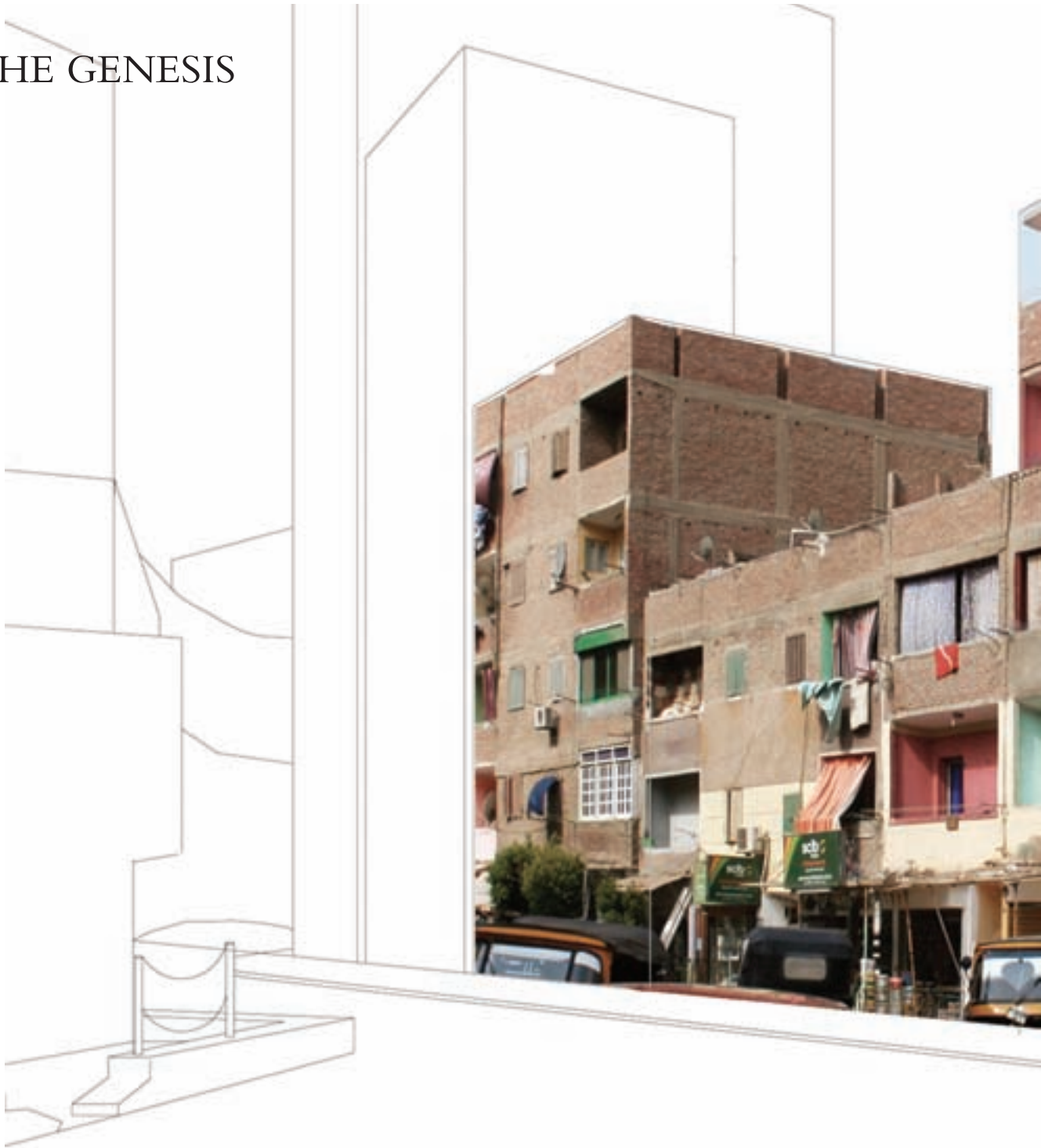
3.1.THE GENESIS







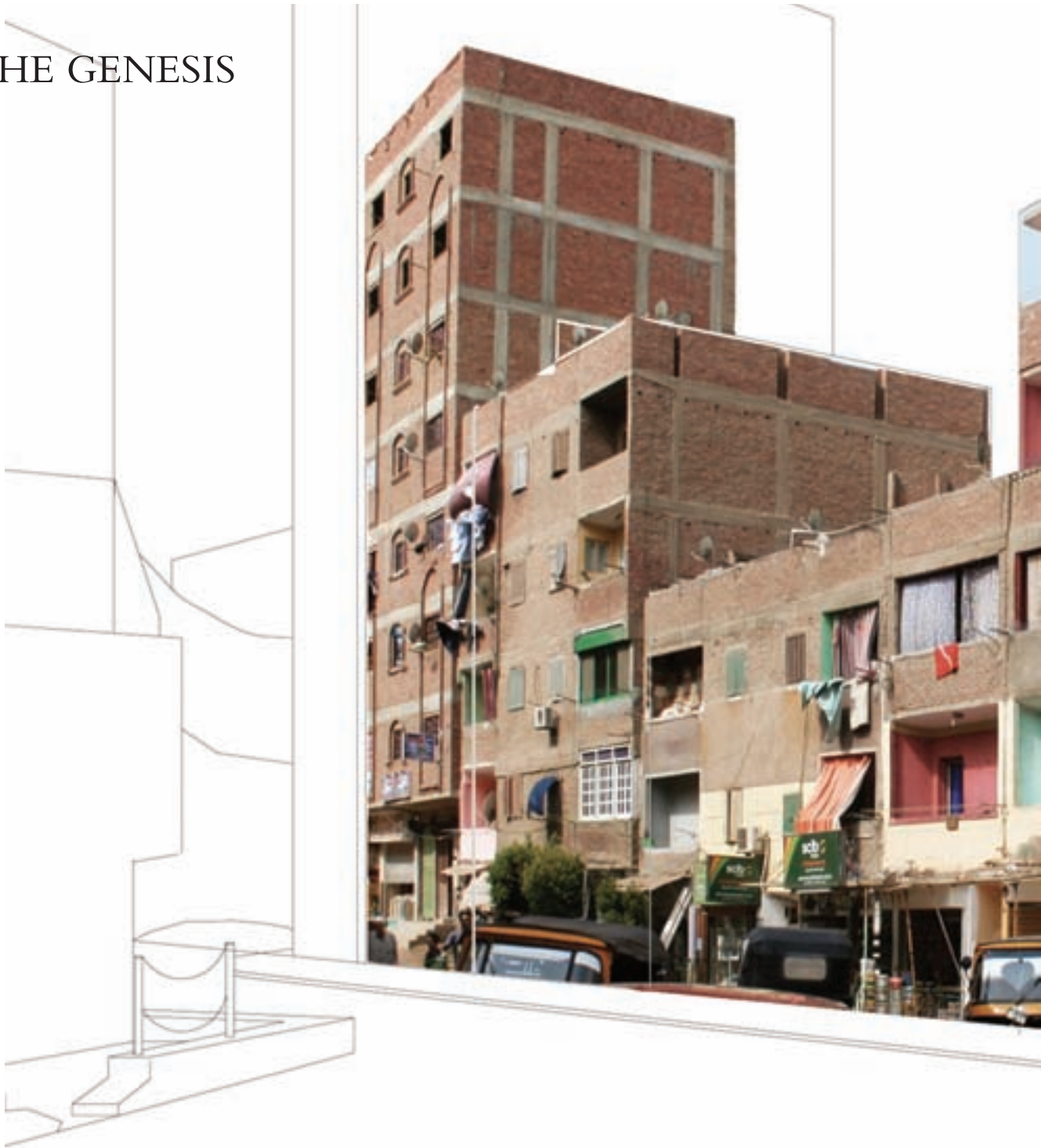
3.1.THE GENESIS







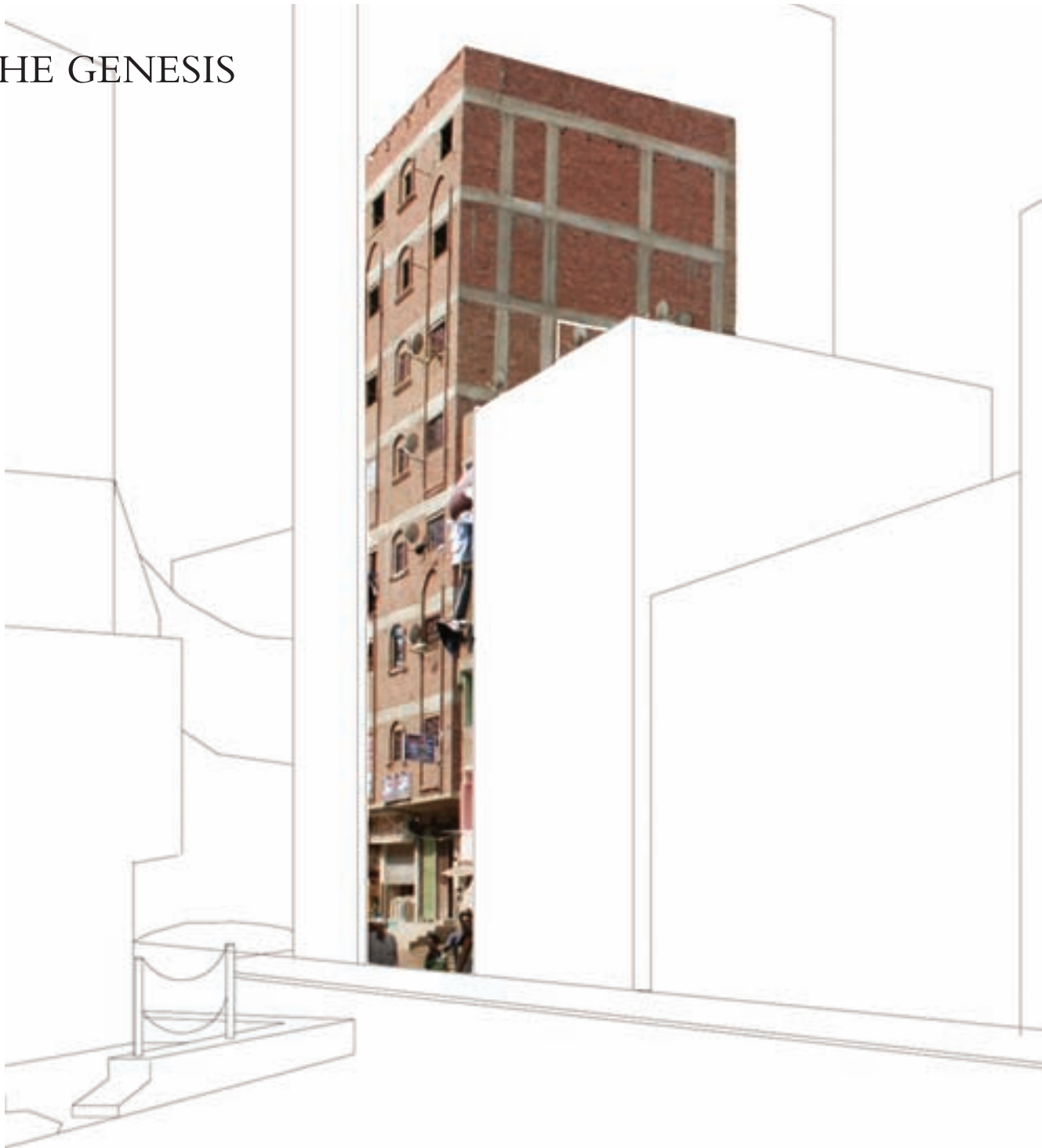
3.1. THE GENESIS

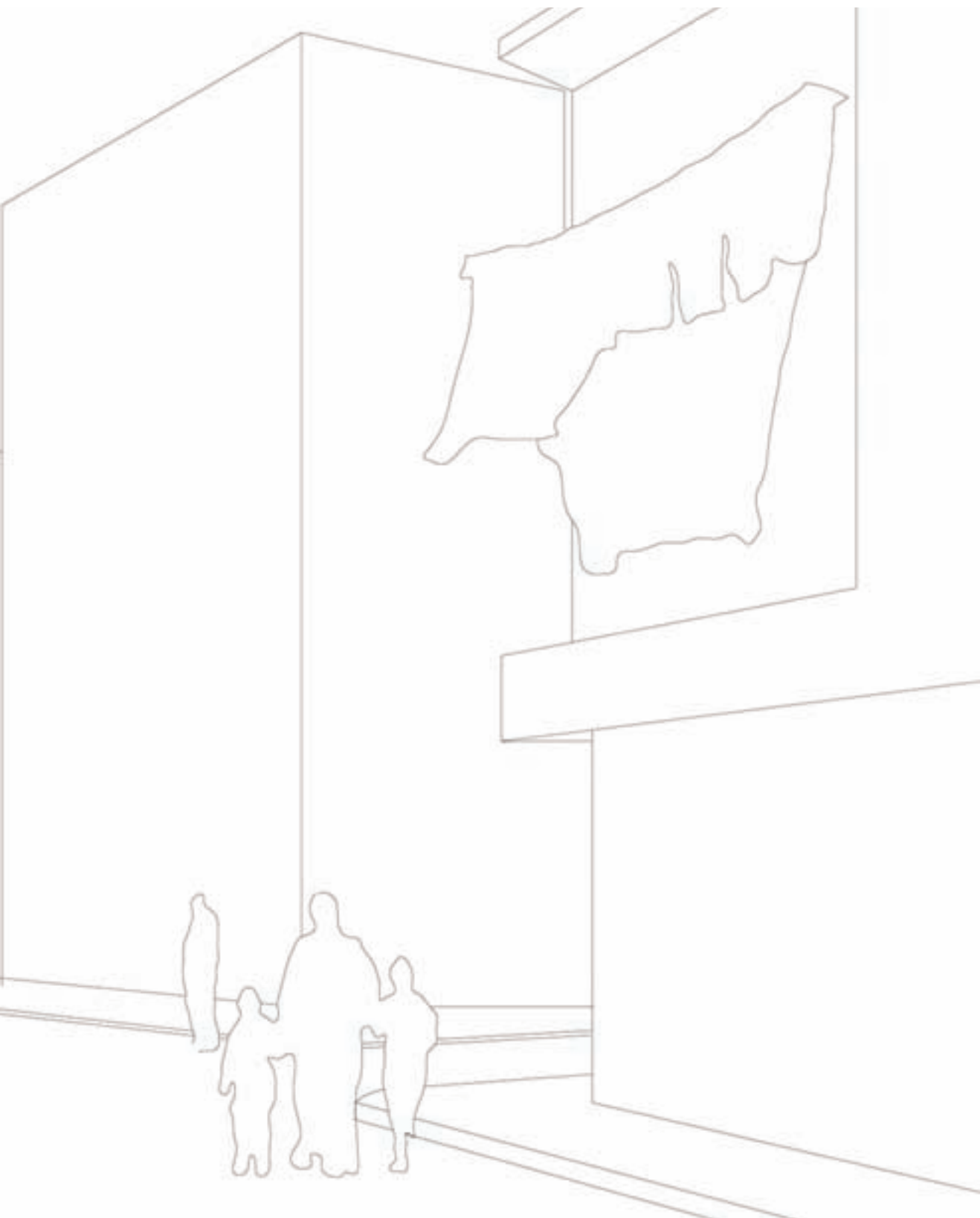


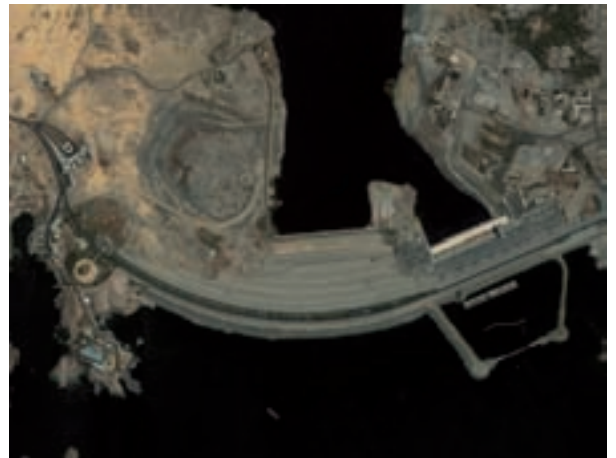




3.1.THE GENESIS







1891

The Bridges

Making the area accessible



Cultivation of the area and connection to the rest of Cairo

1899 - 1930

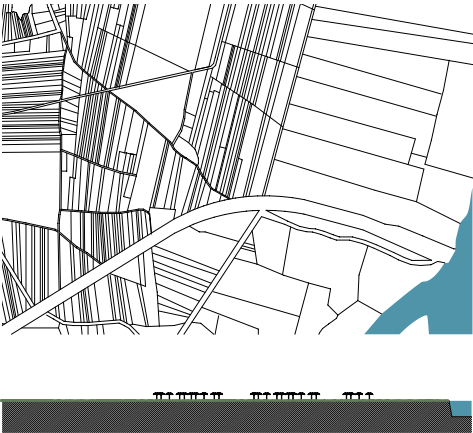
Construction of the Aswan Dam

Decrease of water - level & increase of salinization

Gaining new lands along the Nile and migration into cities

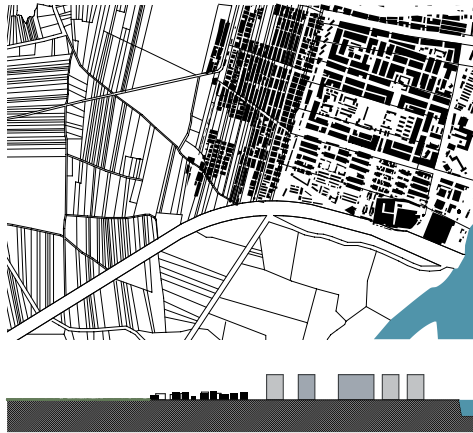


3.1. THE GENESIS



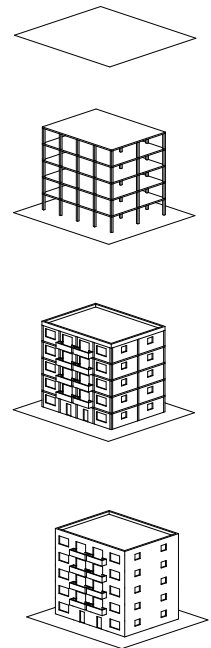
until 1950
The Beginning
Rural Background

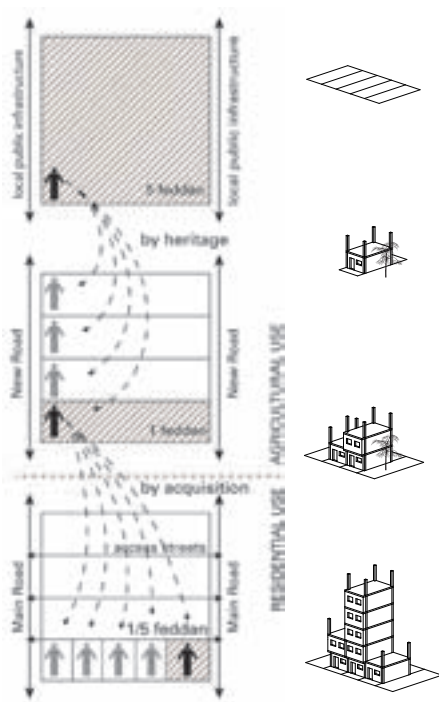
Small lots in the hinterland and
big lots on the boarder - area



1952
The Nasser Era
First public housing projects built on big lots

Foundation of the new Imbaba and attempt to solve the
housing shortage





after 1952

The informal land use
Beginning of the growth of
informal units

Uncontrolled, narrow urban fabric
with a highly flexible structure

1976

Crossing the Suez Canal
Horizontal spreading continues

Enormous increase of population
due to industrial growth

1960 - today

The Souk
Important source for local
supply & social interaction

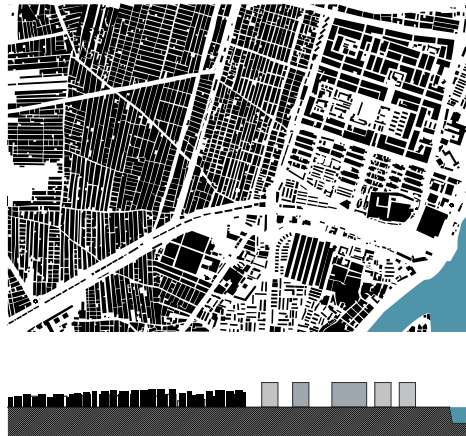
Strong social community
and identity



today

Public Interventions due to the lack of infrastructure

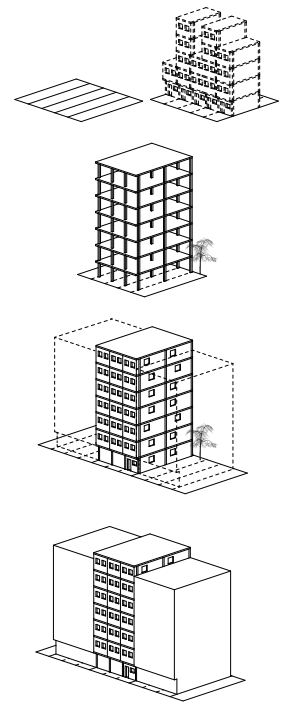
Disturbances and distrust by residents

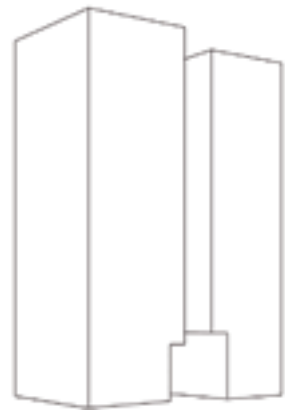
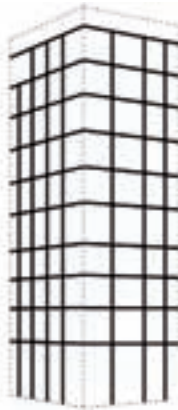


today

The ongoing growth
Formalization of the approved hybrid typologies

Increase of real estate speculation by private investors

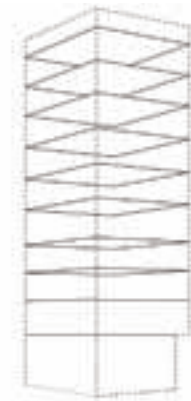
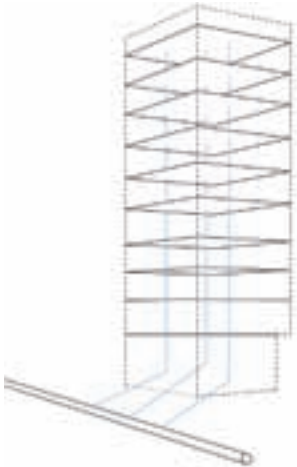




Typology

Building Techniques

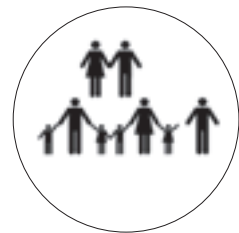
Density



Watersupply



Greenspace



Apartment





3.2. INTERDEPENDENCIES





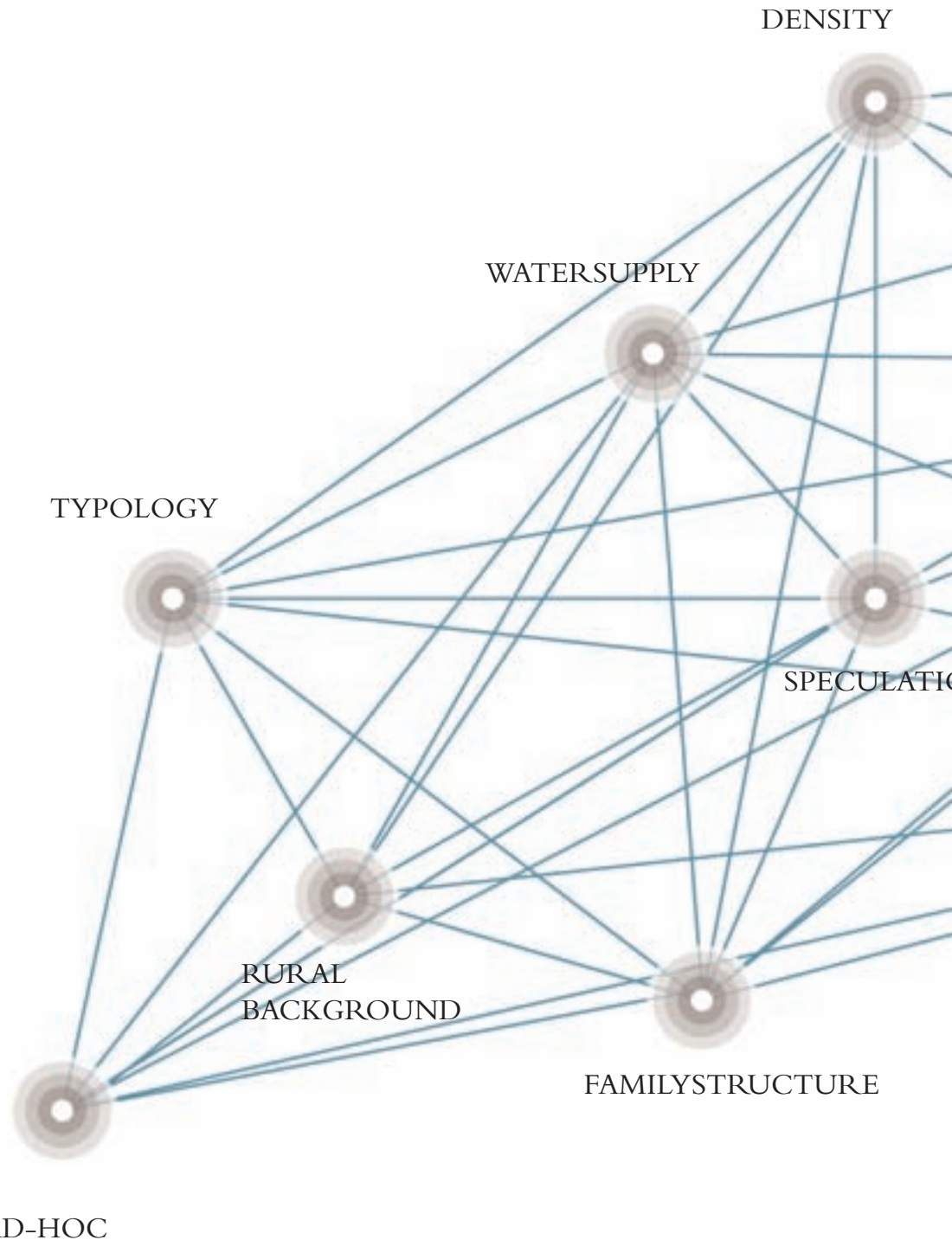
Since it is known that the government is implementing new plans to Imbaba the real estate value starts to rise. Private investors try to buy several lots on spots they expect to become important in the future like the ones on the main

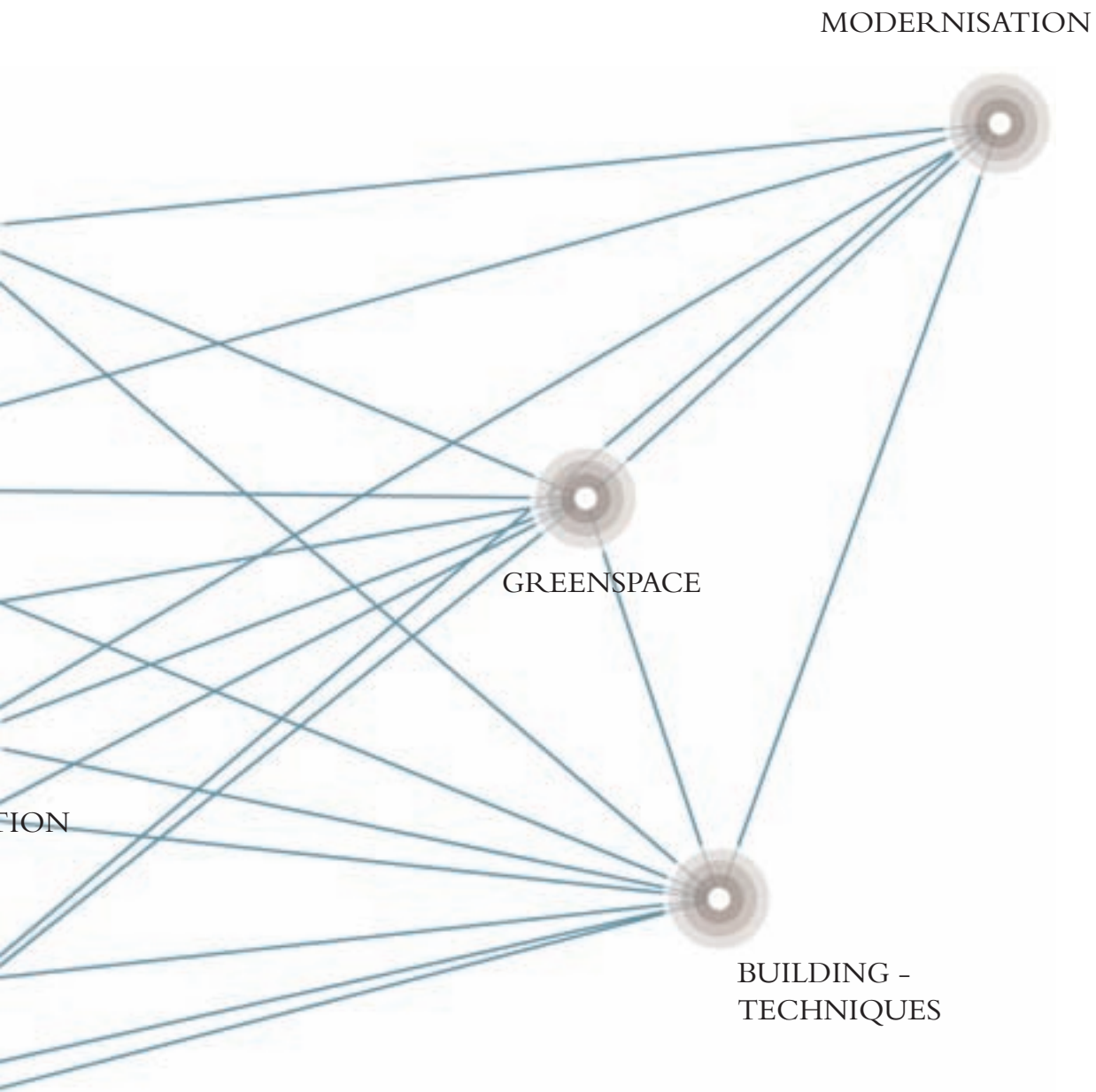
roads. Although the building structure and typology seems to be “informal“ it is in a kind formalised. The buildings have no good infrastructure, only the facades facing the streets are treated like middle class types.





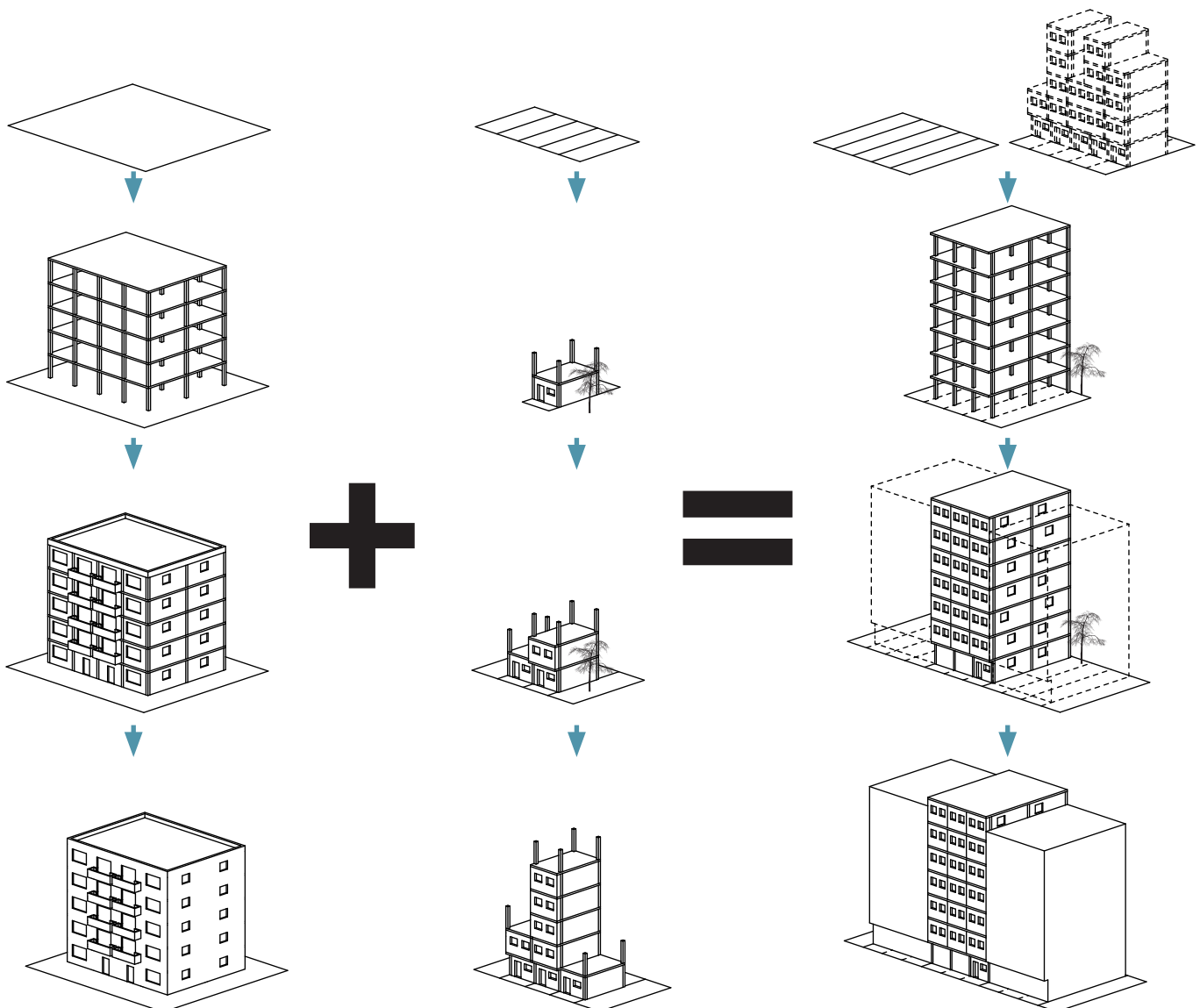
3.3. OUTLOOK







3.3. OUTLOOK



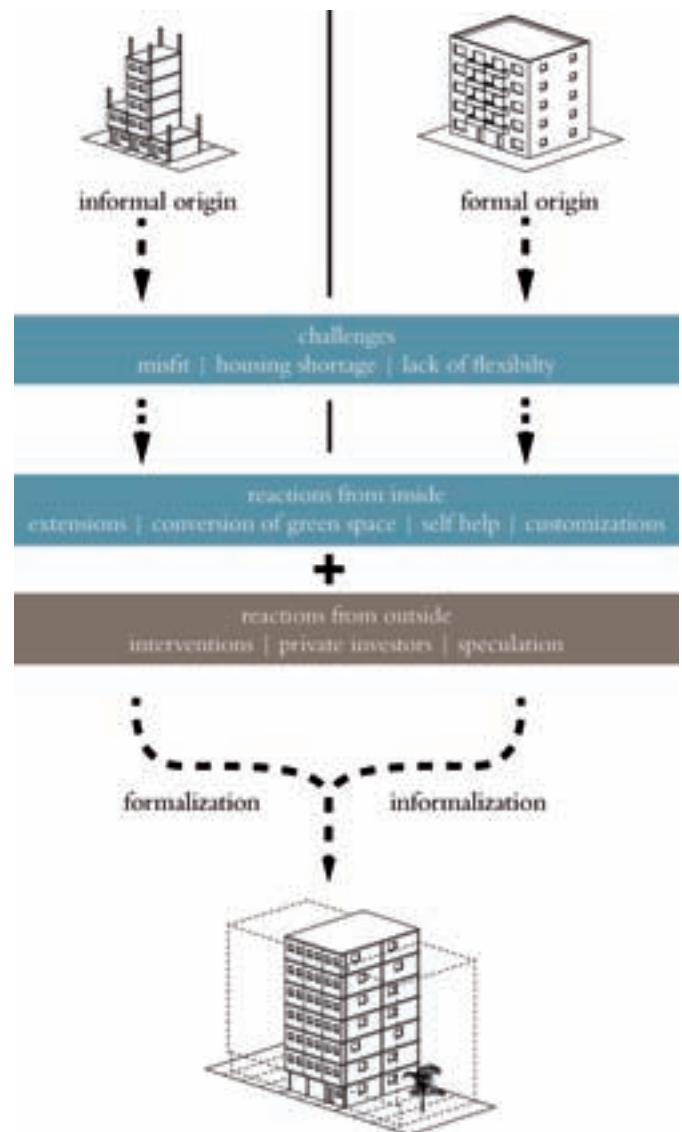


Our research on Imbaba lead to many important facts of controlled and uncontrolled growth. It is obvious that there are several soft facts and hard facts influencing the development of housing. On the previous the diagram gives an overview of these facts and their interdependency to each other.

On the one hand the structures of community like the clan movements in the past create a certain need of flexibility of the dwellings. The amount of money one can spend for a lot and the construction of a house seems to be one of the most important factors as well.

On the other hand public interventions also try to solve the problem of enormous growth by creating a well organized environment. But as we figured out both typologies have their advantages and disadvantages. There seem to be a parallel movement based on the cultural duality of cairo towards a mostly fitting typology which could be a mixture of the formal and the informal dwellings in the end. The creation of a building at once accommodates living space for several families. But in the future, the people will go on customizing their homes, building extensions.

Due to that, the real estate in Imbaba is increasing. Many private investors try to combine lots in order to build large buildings at once. But they do not take care for the infrastructure.





3.3. OUTLOOK

15th of may

- 10 km²
- 90.000 inhabitants total
- 9.000 / km²





imbaba

- 7.8 km²
- 1.000.000 inhabitants total
- 130.000 / km²





3.3. OUTLOOK

With an population density like in imbaba and the implementation of the hybrid the space requirement of 15th of may would be only 7% of the actual size. This could be a strategy to handle the immense population growth.





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