Historical Transitions of the *Qisms* (Districts) of Greater Cairo

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Introduction

The most important data for the geographic study on Greater Cairo are published by the Central Agency for Public Mobilization and Statistics (CAPMAS). Indeed, most studies on Greater Cairo have used CAPMAS macroaggregated data, especially its population census data.

These macroaggregated data show general demographic and socio-economic trends and patterns, by administrative unit, for the Greater Cairo people. However, they are rarely used in connection with the institutional transition of administrative units. One reason for this is the repeated shifts in administrative units due to the rapid expansion of Cairo's residential area since the middle of the 20th century.

The purpose of this paper is to examine the historical changes in Cairo's residential area from a long-term perspective, focusing on the vicissitudes of the district (*qism*) administrative unit and using population census data and geographic information.

I. Concepts and Source Materials

1-1 What is Greater Cairo?

The presence of Cairo in Egyptian society is so overwhelming that without analyzing Cairo, we cannot understand Egyptian society. Since its foundation, Cairo has continuously expanded its residential area. In modern times, especially during the 20th century, this expansion was so remarkable that residential areas expanded far beyond the administrative border of Cairo municipality.[1]

Moreover, the advent of a motorized society in the 1980s fundamentally changed Cairo's

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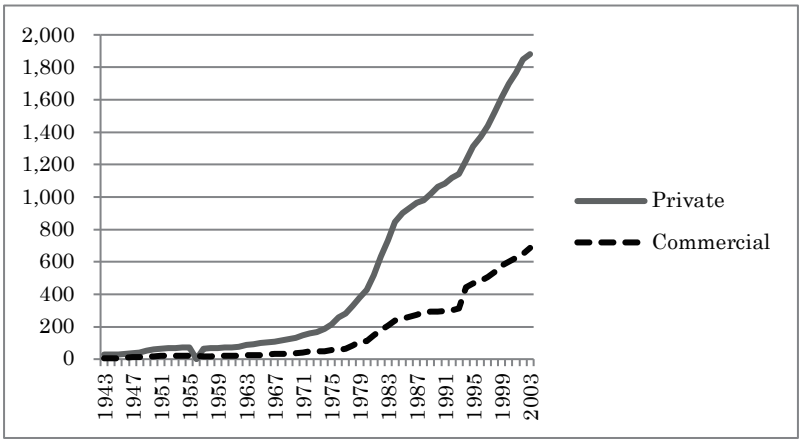
1 The literature on modern Cairo is innumerable. Herein, we refer the reader to a classic source on the history of Cairo: Janet Abu-Lughod, Cairo: 1001 Years of the City Victorious. Princeton University Press, 1971.

landscape and social functions. Cars flooded the streets, as shown in Fig.1, trolleys were abolished, and subway construction was planned.

Before the advent of the motorized society and the modernization of the commercial distribution system, farmers carried produce harvested the same day by wagons to street markets in the early morning. Even at the beginning of the 21st century, we could see a wagon running next to a luxury car Mercedes-Benz come and go on the streets of Cairo. Thus, Cairo became referred to not as the municipality or governorate (*muḥāfaẓa*), but as a living area that included neighboring governorates This became the so-called Greater Cairo, which is now a mega location with a population of 20 million.



Source: B. R. Mitchell, International Historical Statistics Africa, Asia & Oceania, 1750–1993, Fifth edition. Macmillan Publishers Ltd., London, 2007.

Fig.1 Number of vehicles in Egypt during 1943–2003

In other words, Greater Cairo is not a formal administrative unit, but rather an informal residential area, the geography of which has been undefined and has shifted historically depending on demographic and socio-economic circumstances.

Historically, Cairo was the space into which people flowed. However, population growth in the Cairo governorate began to decrease relative to neighboring Qalyubiya and Giza governorates beginning around 1940, as shown in Fig.2. This also influenced the formation of Greater Cairo.

This population shift in the motorized society occurred coincident with the globalization of socio-economic systems in Egypt. In recent decades, the population has begun to migrate

from Greater Cairo to the newly developed suburban centers, satellite cities of neighboring desert areas, and local cities.

At the beginning of the 21st century, Cairo's living conditions were the tipping point from the perspectives of living space, topography, demographics, and socio-economics. As described above, the cityscape completely transformed, leading to irreversible congested traffic conditions and pollution.[2]

1-2 Source Materials: Population Census and Geographic Information

Cairo's first population census was conducted in 1882. This was a preparatory step for the first true population census, conducted in 1897. Thereafter, a census was executed at nearly 10-year intervals: 1907, 1917, 1927, 1937, 1947, 1960, 1966, 1976, 1986, 1996, 2006, and 2017. In addition to demographic information, the census data include many socio-economic statistics for the management of the state.

Though these population census data are generally useful for the study on Greater Cairo, there are four specific reasons we used these source materials for our research. First, they are the most accessible data officially published by CAPMAS. Second, these time-series data were produced nearly every 10 years starting in 1897, the year of the first true population census, although some of their formats vary. Third, they include both basic demographics and other socio-economics such as occupational statistics. Fourth, they include statistics for the smallest Egyptian administrative units, the rural village (*qarya*) and urban town (*shiyākha*), although not all census data are reported at these levels.

Regarding geographic information, the first mapping of modern Egypt was the remarkable, so-called, Napoleon's maps produced at the beginning of the 19th century by French scholars during Napoleon's 1798 expedition to Egypt.

After that, the most important modern mapping contribution used scientific ordnance survey techniques, which began as part of the agricultural land survey project from 1892 to 1907.[3] Complete mapping of Egypt was finished by the 1930s. Based on these published maps, the maps that contained specific information, such as irrigation and transportation were producted.

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2 In 2001, the Cairo person trip survey was carried out to collect traffic data. Akita Nakamura et al. "The Introduction on the database of the urban traffic development surveys by JICA: Person trip data on 11 cities in the world", (Japanese) *Journal of the Japan Society of Traffic Engineers*, Special issue, 2004 (http://www2.kaiyodai.ac.jp/~hyodo/JICA-PT.pdf). After the person trip survey, JICA undertook a global survey of the urban development and maintenance plan of Greater Cairo in 2007–2008. This was titled "The survey on the sustainable urban development and maintenance plan of Greater Cairo" (https://openjicareport.jica.go.jp/618/618/618_405_11893401.html). See the paper titled "Person trip survey data as a source material for the study on the residential area in Greater Cairo—A case study on the animal drawn at the Beginning of 21st century" in this volume.

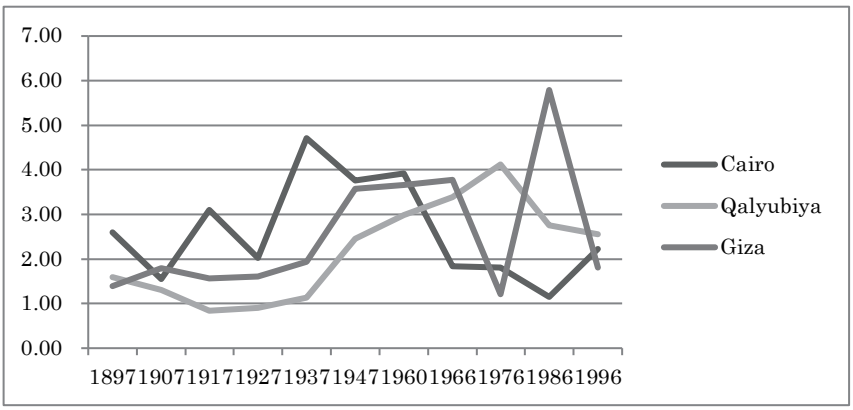
3 H. G. Lyons, *The Cadastral Survey of Egypt*, 1892–1907, Cairo, 1908.

In addition to these historical and contemporary maps, many types of satellite imagery are available. Especially valuable are the digital administrative maps that use the smallest villages and towns as units, which CAPMAS created for the population census survey. These maps are useful in our research to product many kinds of digital maps, by data coding of population census data and overlaying it on the three map types (i.e., historical and contemporary maps, satellite imagery, and administrative digital maps) based on GIS.

II. History of Greater Cairo

2-1 Expansion of Cairo

It is unclear when the use of the term Greater Cairo began to signify Cairo's residential area. Regardless of its designation or rationale, the general population trend shows an apparent turning point in the expansion of residential space in Cairo. Around 1940, as shown in Fig.2, the rate of population growth in Cairo governorate began to decrease, while those of neighboring Qalyubiya and Giza governorates, which would eventually comprise Greater Cairo with Cairo governorate, began to increase.



Source: Population census

Fig.2 Population growth rate of Cairo, Qalyubiya, and Giza Governorates, 1897–2006

This is visualized by the historical maps. Map 1 was drawn by the French during their occupation.[4] The outlined space shows what French scholars considered Cairo's urban area at

4 Municipality of Cairo, *Master Plan of Cairo*, Ministry of Municipal & Rural Affairs,

the beginning of the 19th century.

Map 2 shows Cairo and its surroundings during the 1910s.[5] The blue space shows the densely built areas of Cairo at that time. The space outlined in Map 1 and the densely built areas in Map 2 nearly overlap. This indicates that Cairo's urban area hardly expanded between the beginning of the 19th century and the 1910s.

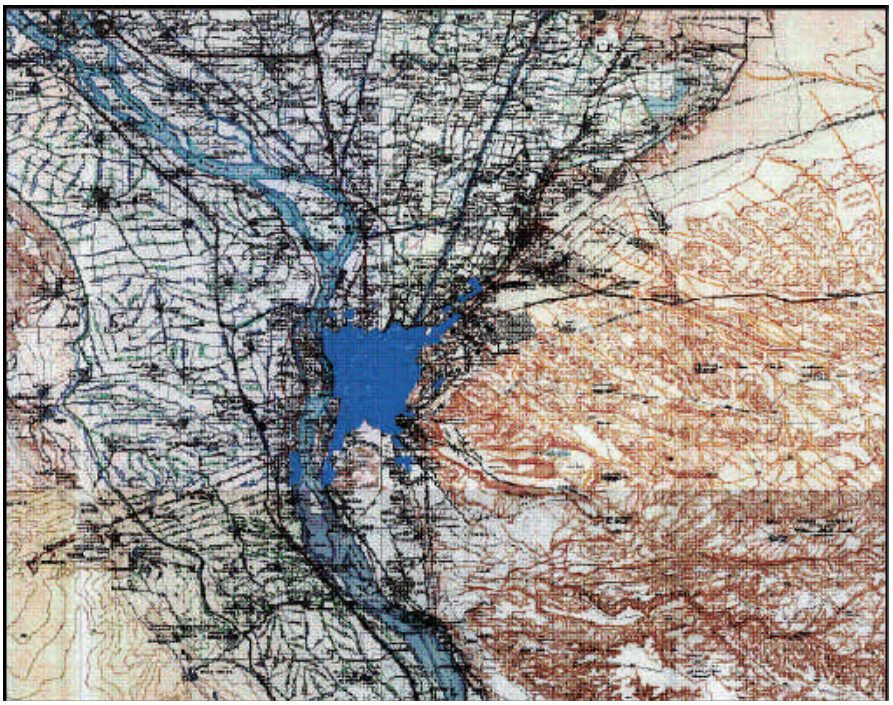
Cairo subsequently expanded, as shown in Maps 3–5, which depict Cairo and its surroundings in 1945, 1954, and 1985, respectively; the blue spaces show the areas where houses were built during these three years. It is apparent that the building agglomerations expanded remarkably beyond Cairo's urban area in 1945, being compared with 1910s. It certifies that around 1940 was the start point for the formation of Greater Cairo.

Map 1-1 Napoleon's map around Cairo (1818)

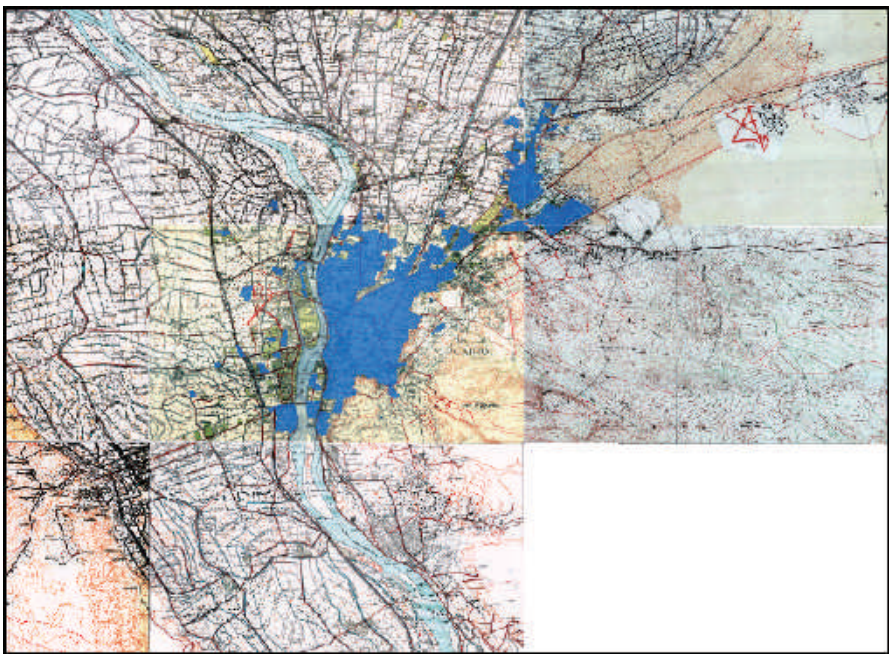
Map 1-2 Cairo drawn by French during the French occupation (Municipality of Cairo, *Master Plan of Cairo,* plate IX)

Municipality of Cairo, Planning Commission, S.O.P.-Press, 1957.

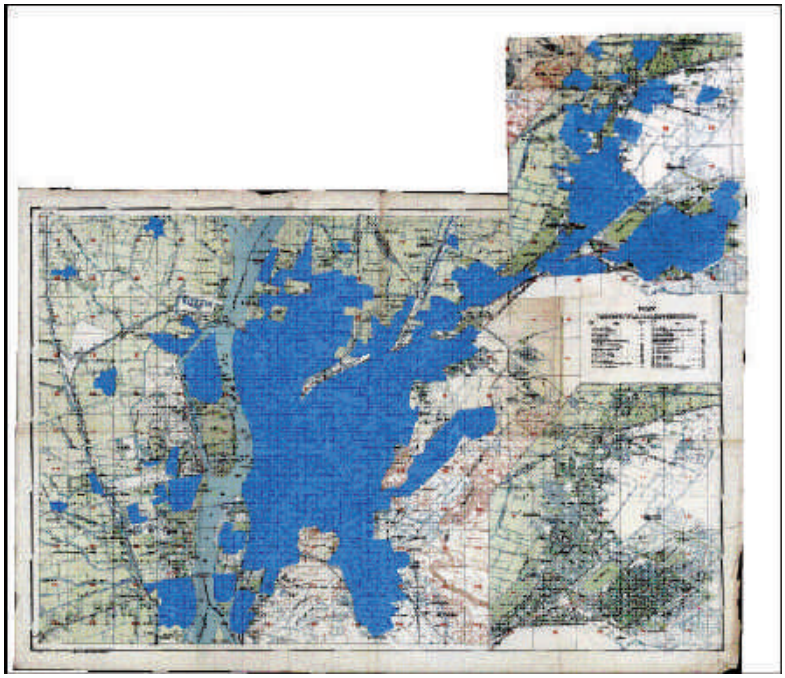
5 Revised in 1914, 1917, and 1918. Kazuhiro Arai (Keio University) joints four maps around Cairo.



Map 2 Cairo and its surroundings in the 1910s



Map 3 Cairo and its surroundings in 1945



Map 4 Cairo and its surroundings in 1954

Map 5 Cairo and its surroundings in 1985

2-2 Formation of Greater Cairo

Map 6 shows Cairo and its surroundings in 2003. The line represents the road surrounding the building agglomerations in 1956,[6] four years after the Egyptian Revolution in July 25, 1952. Many previous studies have emphasized the 1950s and 1960s, after the revolution, as the turning point in the rapid expansion of Cairo, that is, the formation of Greater Cairo.[7]

As will be explained in detail below, the number of district-level (*qism*) administrative units increased remarkably in Cairo governorate during the 1960s. The population growth in Cairo during this period was supposed to be handled by forming new *qisms* within the so called Greater Cairo. Today, as shown from 2020 satellite imagery in Map 12, building agglomerations were developed in desert wastelands.[8]

Source: Municipality of Cairo, *Master Plan of Cairo*.

Map 6 Building agglomerations in Cairo in 1956

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6 Municipality of Cairo, *Master Plan of Cairo*, Ministry of Municipal & Rural Affairs, Municipality of Cairo, Planning Commission, S.O.P.-Press, 1957.

7 Heba Adel Ahmed Hussein, *Crime and Urban Planning in Egypt. Case Study: Greater Cairo*, A Thesis Submitted in Partial Fulfillment of the Requirements of M.Sc. Degree in Architecture (Urban Planning), Department of Urban Planning and Design Faculty of Engineering, Ain Shams University, 2011. Chapter Three "The Greater Cairo Region".

8 On the history and planning of the new towns in Egypt from the administrative point of view, see "Arab Republic of Egypt towards an Urban Sector Strategy", The World Bank, 2008 (http://documents1.worldbank.org/curated/en/828841468023412033/pdf/411780v20ESW0E1Box032739 3B01PUBLIC1.pdf).

III. Historical Transition of Qisms of Greater Cairo

3-1 History of Greater Cairo from the Aspect of the Transition of the *Qism*

From the governmental point of view, Greater Cairo is a political entity, which is composed of administrative units. Today, the largest administrative unit is the governorate. The governorate is subdivided into urban *qisms* and rural *markaz*. The smallest administrative units are the urban town (*shiyākha*) and rural *qarya*.

Herein, we use the *qism* as the analytical unit for tracking the expansion of Greater Cairo from the institutional point of view. In fact, the expansion of Cairo's residential area has been reflected in the vicissitude of *qisms* since 1897, the year of the real first population census.

Fig.3 shows the historical transition of the *qism* in Cairo's residential area, or Greater Cairo, from 1897 to the present (2019).[9] The vertical axis shows the name of *qisms* in Greater Cairo in 2019, and the horizontal axis shows the population census year, in which the *qism* concerned in the vertical axis began to be recognized as *qism*, shown by gray color. For example, 13 *qisms* of nos. 1–5, 7–11, 13, 17, and 39 are categorized as the urban areas belonging to Cairo and called "*qism*."

The *qisms* in Fig.3 may be categorized into seven regions:

1) *Qisms* of the urban area of Cairo: nos. 1–12
2) *Qisms* of the suburbs of Cairo: nos. 13–15
3) *Qisms* of the northern area (Cairo governorate): nos. 16–29
4) *Qisms* of the northern area (Qalyubiya governorate): nos. 30–36
5) *Qisms* of the southern area (Cairo governorate): nos. 37–44
6) *Qisms* of the eastern area (Cairo governorate) including Sharqiya governorate: nos. 45–53
7) *Qisms* of the western area (Giza governorate): nos. 54–69.

As will be discussed in detail later, since Giza governorate has strong ties with Cairo, many of its districts were relatively early recognized as *qism*–in this case, *qism* means an urban distruct. On the other hand, in the case of Qalyubiya governorate, which has been an agricultural area, it is uncertain when its administrative districts, except those near Cairo governorate, began to be recognized as *qisms* in Greater Cairo, although the rapid urbanization can be confirmed in the second half of the 20th century. As for the topographic features of Qalyubiya governorate, see Maps 12 and 13 prepared using satellite imagery.

The history of the expansion of Cairo's residential areas also illustrates when and where the *qisms* of Greater Cairo were formed, and the processes of their expansions, as illustrated in

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9 For detailed demographic information on *qism*, see Fig.6, which is based on the *qism*-based population data presented in the Appendix.

Fig.3 and visualized in Maps 7 and 8. The green, yellow, blue, brown, and pink spaces show the urban *qisms* during the population censuses in 1897, 1927, 1947, 1960, and 1986.

3-2 Some Statistics Reflect the Transition of *Qisms*

Population census data can be used to follow the vicissitude of *qisms* statistically, since they contain time-series data of *qisms* (the database of Fig.6 in the Appendix is a time series of *qism*-based population statistics).

Unfortunately, the population census was not implemented uniformly, and the indicators and their classification criteria differed by the census. Therefore, except for macro statistics, such as the total population, the time series statistics cannot be obtained for all indicators. Thus, we focus herein on three indices to track the vicissitude of *qisms*: population density, the population aged 0–5 years, and the ratio of the number of farmers to total population.

For comparisons, 1927, 1947, and 1986 are used. The first two years were chosen because they represent before and after the turning point in the history of Greater Cairo, that is, the 1940s, as described above, when the great expansion of Cairo began. The latter year was chosen because the 1980s was when globalization, which would form the present (2020) Egyptian society, started.

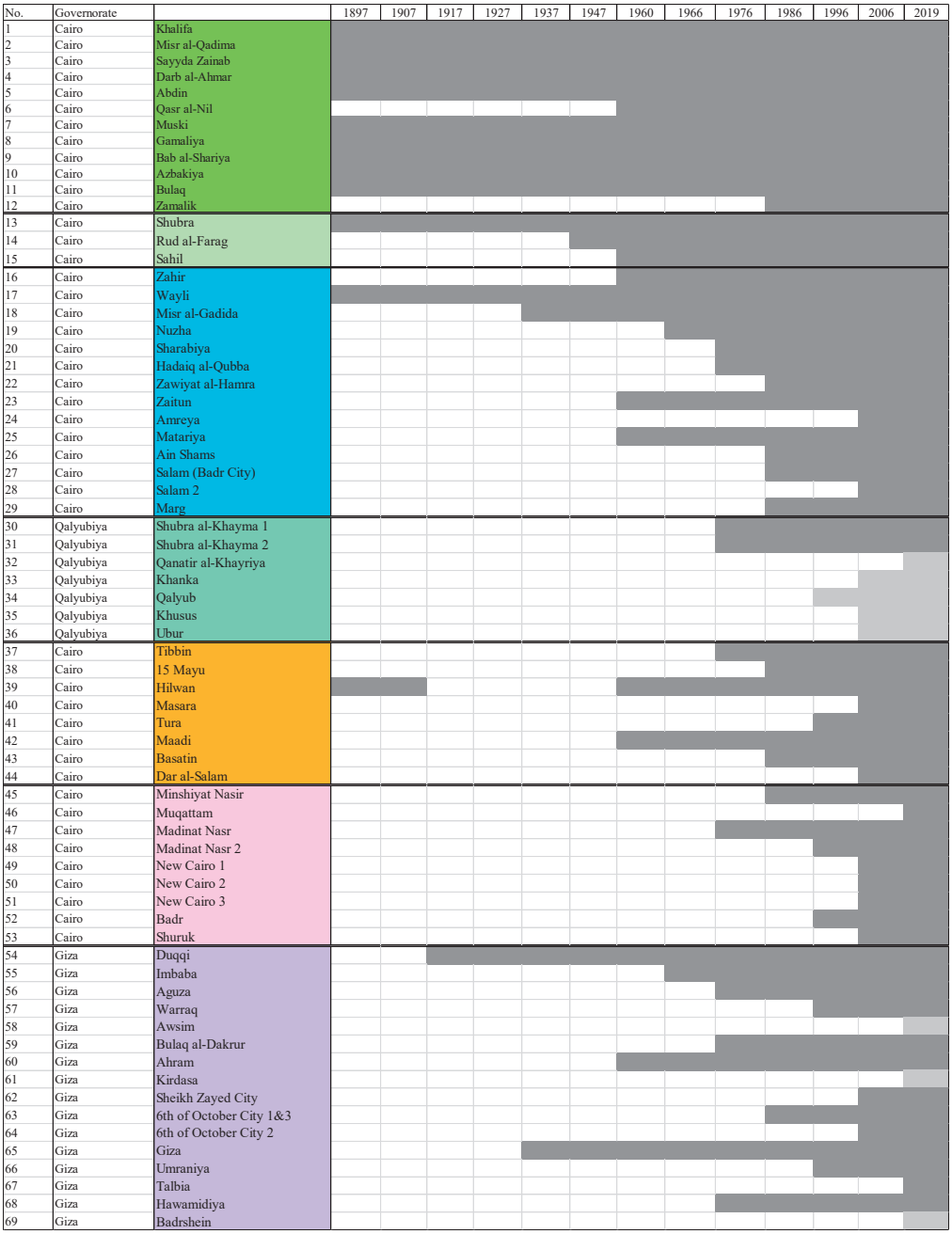
Population density was chosen because it is thought to explain the "density" of living spaces more clearly than the absolute value or ratio, since the areas of *qisms*, the unit of analysis, differed greatly. Map 9 shows the population density of *qisms* in 1927, 1947, and 1986.

Among the demographic indicators, special attention was paid to the population of 0–5-year-olds, since they are thought to show the spatial structure of Greater Cairo more clearly than population density using other age groups.

Older adults most likely moved during their careers. By contrast, individuals aged 0–5 years most likely live where they were born. In other words, the locations where more 0–5-year-olds live are thought to be newer areas where a younger generation lives. Map 10 shows the population of 0–5-year-olds in *qisms* in 1927, 1947, and 1986.

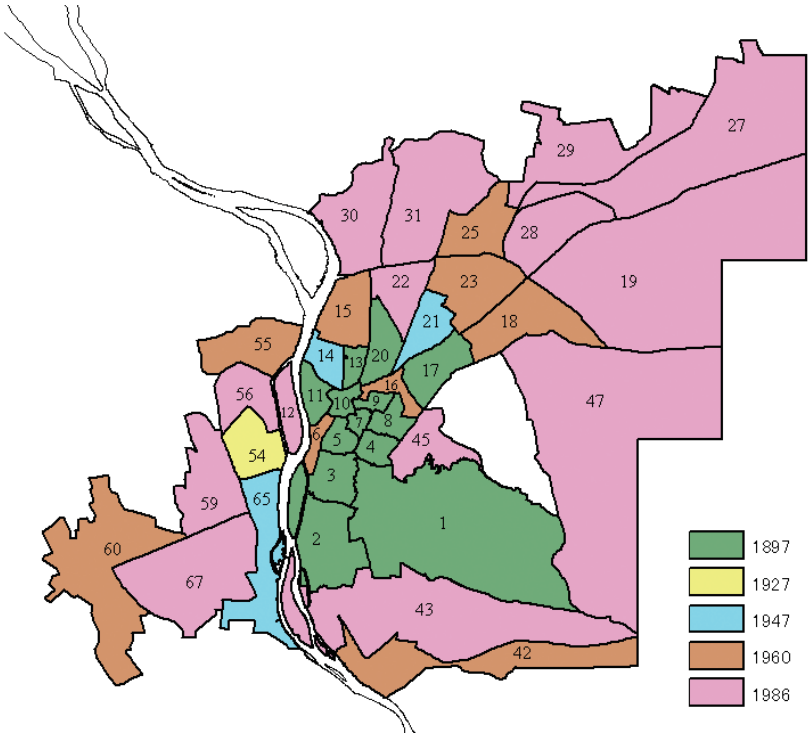
The ratio of the number of farmers to total population in *qisms* was chosen because it should clearly reflect the urbanization of Greater Cairo, or the expansion process of its residential areas towards the agricultural suburbs. Map 11 shows the ratio of the number of farmers to the total population in *qisms* in 1927, 1947, and 1986.

It becomes clear by comparing the three *qism* map types, for the three indicators, that they are highly intercorrelated. As also shown in the *qism* transition in Fig.3, Cairo's urban area sequentially expanded to the northeast, west, and south.



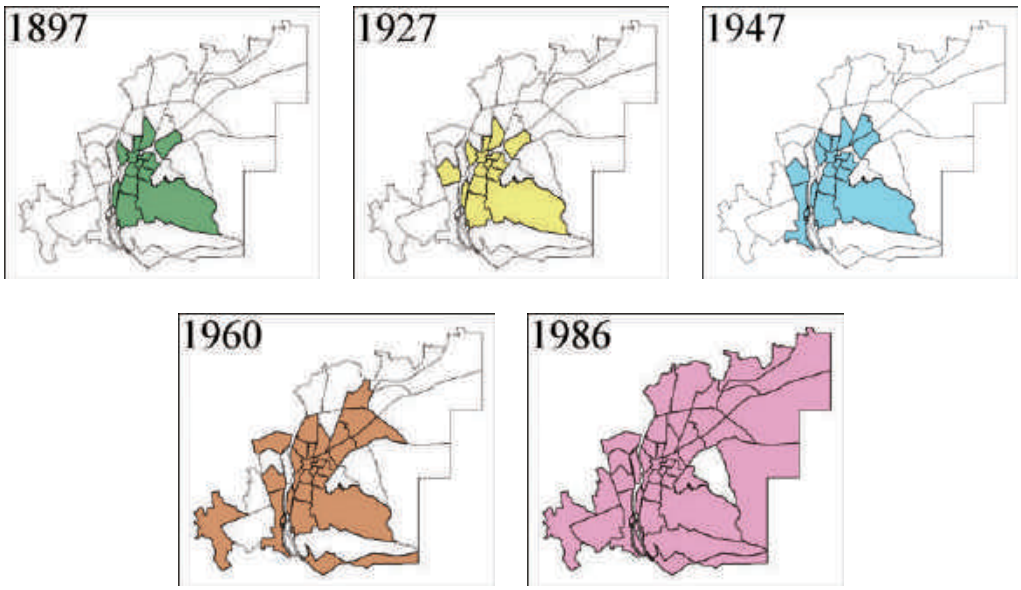
Note: (1) The light gray units are classified as markaz (nos. 32, 58, 61, and 69) or suburban cities (nos. 33-36), though they were considered to constitute Greater Cairo in 2019. (2) Duqqi (no. 54) belonged to Cairo governorate from 1917 to 1960. (3) Giza (no. 65), part of which belonged to Cairo in 1937. (4) Part of Imbaba (no. 55) was a qism in 1966, while its other part has been a markaz that means a rural district until the present.

Fig. 3 Historical transition of qisms in Greater Cairo, 1897-2019

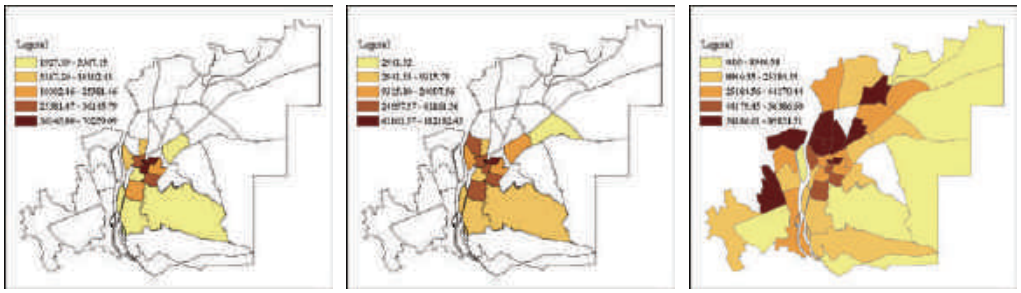


Note: The qism number is consistent with its serial number in Fig. 3.

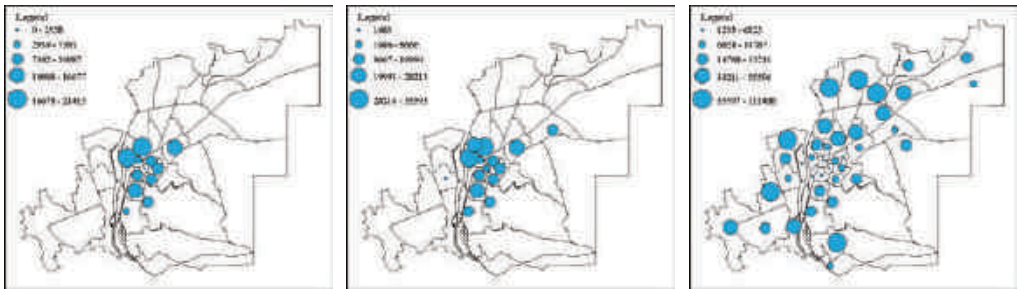
Map 7 Expansion of Greater Cairo viewed from the transition of *qisms*, 1897-1986



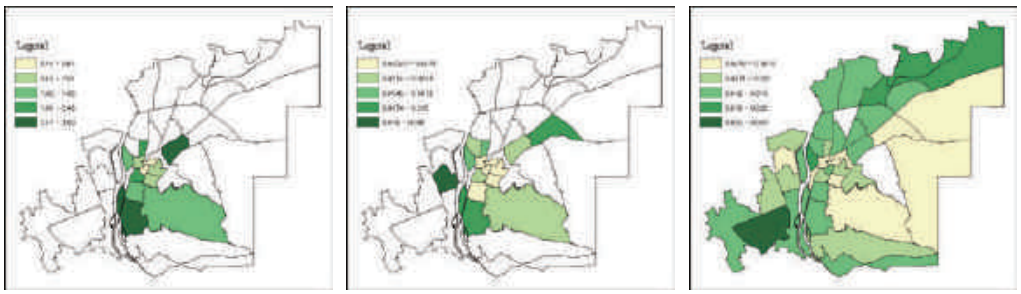
Map 8 *Qisms* in 1897, 1927, 1947, 1960, and 1986



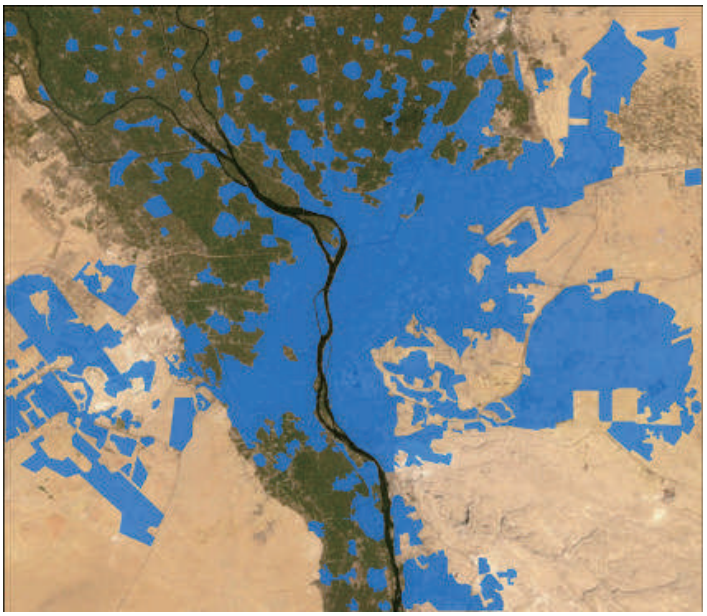
Map 9 Population density of *qisms* in 1927, 1947, and 1986



Map 10 Population of 0-5-year-olds in *qisms* in 1927, 1947, and 1986

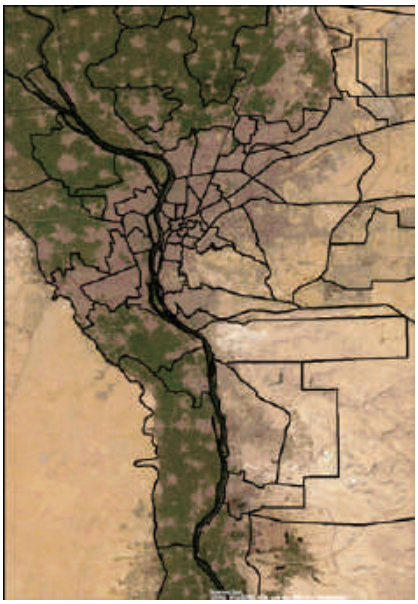


Map 11 Ratio of the number of farmers to total population in *qisms* in 1927, 1947, and 1986



Note: The blue, green, and light brown spaces are “urban or settlement area”, “agricultural area”, and “wilderness such as mountains and deserts” respectively.

Map 12 Satellite imagery of Cairo and its surroundings (i.e., Cairo, Qalyubiya, and Giza governorates) in 2020



Note: Line represents the borders of *qisms* and *markaz*

Map 13 Satellite imagery of Cairo’s surrounding regions in 2020

IV. Patterns of the Expansion of Greater Cairo

4-1 Topographic Features Around Cairo

Based on the discussion presented above, we tried to look more closely at the paths by which Cairo's urban area expanded. The first thing to point out is that this expansion was largely constrained by the topography of the surrounding region.

Today's Cairo (*al-Qahira* in Arabic) was built at the foot of Muqattam Mountain in the 10th century, as a political city surrounded by walls and canals. In the second half of the 12th century, after the fall of the former Cairo (Fustat), which had been the economic center, Cairo also developed an economic center beyond its walls and canals.

As shown in topographic Map 13, the eastern area over Muqattam Mountain is a desert wasteland. Thus, Cairo's urban area was forced to the north, south, and west.

4-2 Paths of Expansion of Cairo's Urban Area

In modern times, the urban area of Cairo expanded following different paths, depending on the topographic conditions.

Path 1: Urban area and suburbs.

The border between the city and its suburbs has been unclear since, soon after its construction, Cairo developed beyond its surrounding walls and canals. Herein, Cairo's city area is defined as the urban area, which comprises the 10 *qisms* that were recognized in 1897, when the first real population census was performed.

After 1897, there were no changes to these administrative *qisms*, except for the minor divisions of Qasr al-Nil (no. 6) from Abdin (no. 5) in 1960 and Zamalik (no. 12) from Bulaq (no. 11) in 1986. The increasing population was absorbed in the urban area by building houses in empty areas and constructing high-rise buildings.

Path 2: Northern area.

The northern area was an agricultural region before 1897. It was divided into two regions, with the Ismailiya Canal serving as the border. The region nearer to the urban area was within the Cairo governorate, while the region beyond the Ismailiya Canal was in the Qalyubiya governorate.

The region between the urban area and the Ismailiya Canal was the so-called Cairo suburbs, with hubs in Shubra (no. 13) and Wayli (no. 17). Shubra developed as a suburban residential area; Wayli was a large village near the Ismailiya Canal. They became independent *qisms* in 1897.

Subsequently, Shubra developed along the Nile as its population increased, and Rud

al-Farag (no. 14) and Sahil (no. 15) were subdivided from Shubra in 1947 and 1960, respectively. Wayli's development to the northeast was so remarkable that it was divided into many *qisms* after 1960, as shown in Fig.3.

Path 3: Southern area.

The southern area was also agricultural before 1897. Misr al-Qadima (no. 2) was the border *qism* between Cairo's urban area and the south. Compared with the northern area, development in the south was unremarkable because it was narrow and less fertile, on the east bank of the Nile.

Hilwan (no. 39) is a city in this area. It belonged to Giza governorate in 1897, and after belonging to Giza governorate for a while, came to belong to Cairo governorate again from 1960 as a *qism*, This area developed as a suburban residential area in the 1960s. Maadi *qism* (no. 42) was subdivided from Hilwan *qism* in 1960.

After Hilwan city was connected to Cairo by subway in 1987, growth of the residential area accelerated, with many *qisms* subdivided from Hilwan *qism*. Furthermore, with the population increase in Hilwan city, 15 Mayu (no. 38) was constructed in 1978 as a new city in eastern Hilwan.

Path 4: Eastern area.

The eastern area was developed much later since it was difficult to use it for residential space. The region between Cairo's urban area and Muqattam Mountain was called the City of the Dead (*al-qarafa*), with large Islamic-era necropolises and cemeteries. Khalifa *qism* (no. 1) bordered Cairo's urban area to the east, and its southern region was a wasteland unsuitable for farming.

The region crossing Muqattam Mountain to the east was also a vast desert wasteland. The turning point for its development was the construction of Madinat Nasr (Nasr City) (nos. 47 and 48) in the 1960s, after the 1952 Revolution. It was an extension to the neighboring settlement Misr al-Gadida (no. 18), which was established as a wealthy residential area near the Cairo International Airport in 1905 and registered as Misr al-Gadida *qism*.

During the last decade, the eastern desert wastelands have been the focal regions for development, symbolized by the establishment of a new town called New Cairo, which was included as New Cairo *qism* (nos. 49, 50, and 51) in 2006. It is easy to construct new towns and satellite cities in the desert, even though supplying water is challenging.

Path 5: Western area.

The western area was the region on the west bank of the Nile, belonging to the Giza governorate. This was agricultural land between the Nile and the Giza Plateau, where the

Pyramids lay. Interchange between the east and west banks of the Nile was infrequent before the construction of bridges between them.

As such, the west bank developed relatively separately from Cairo's east bank, which belonged to the Giza governorate, and was only later connected to Cairo's urban area (on the east bank). Duqqi (no. 54) connected the west bank to the east bank, and it, that was called *shiyākha*, belonged to Cairo governorate from 1917 to 1960.

Giza governorate near Cairo governorate was composed of two areas bordering Duqqi, the northern area named Imbaba (no. 55) and the southern area administratively-called Giza. As the population increased rapidly, Imbaba was divided into *qisms*, one of which was Warraq (no. 57) in 1996.

During the 20th century, Giza (no. 65) became the center of culture and tourism. Giza city was a hub of education and educational services. It had many schools and institutes of higher learning including Cairo University, which was moved to Giza in 1924. Besides these educational facilities, Giza had a zoo and several parks, as well as many ancient Egyptian monuments. Many roads, streets, and buildings were constructed.

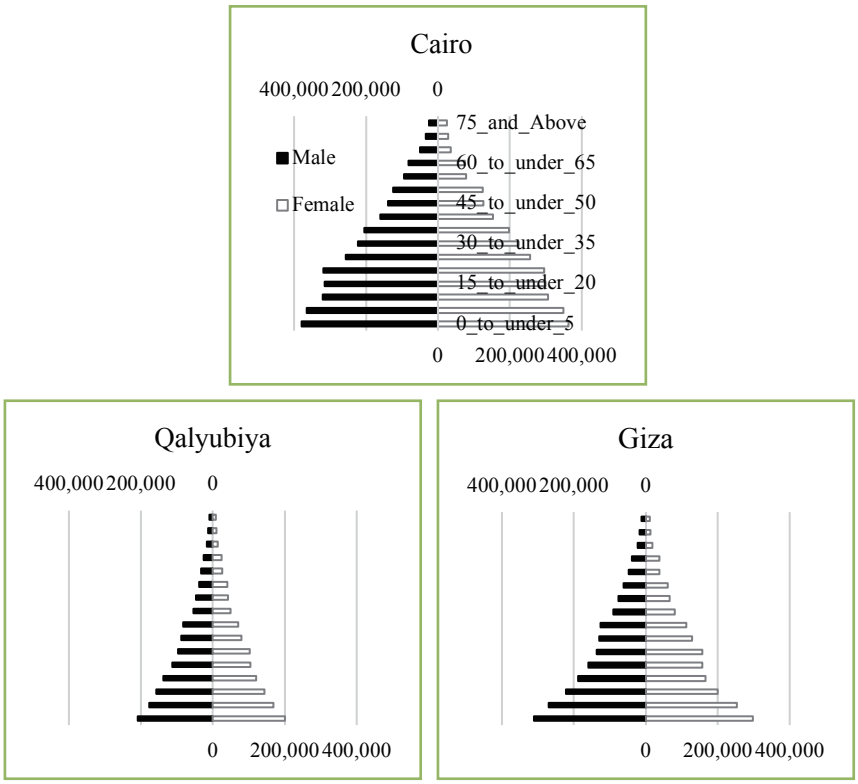
After the 1952 Revolution, residential space expanded remarkably into the agricultural land, because of the vast migration of people from rural areas to the Cairo suburbs. Many migrants illegally settled in this region, especially near the Pyramids in Ahram (no. 60). The population increased so much that Giza became a core *qism* of Greater Cairo. Later, satellite towns including Sheikh Zayed City (no. 62) and 6th of October City (nos. 63 and 64) were established in the desert.

4-3 Paths of Cairo's Expansion Viewed as *Qisms'* Population Pyramids in 1986

A population pyramid reflects a population's composition by age and gender, and the population pyramid of a *qism* reflects both its demographic characteristics at a specific time, from a structural perspective, and its path of development from a historical perspective.

As explained above regarding the meaningfulness of the population of 0–5-year-olds as an index of *qism* development, the population structure shows whether a *qism* constitutes Cairo's urban area or one developing in its surrounding regions. Fig.4 shows population pyramids for the governorates of Cairo, Qalyubiya, and Giza in 1986, while Fig.5 shows population pyramids for *qisms* in Greater Cairo that year. The population of "age not stated" is excluded.

The number of qism is the serial number of qism in Fig.3. To make the figure in Fig.5 easier to see, the maximum population of qisms of Bulaq al-Dakrur and 6th October are set to 50,000 and 150 respectively. The units (nos 32, 58, 69) are not *qism*s in 1986, but are classified as *markaz* that means a rural district.

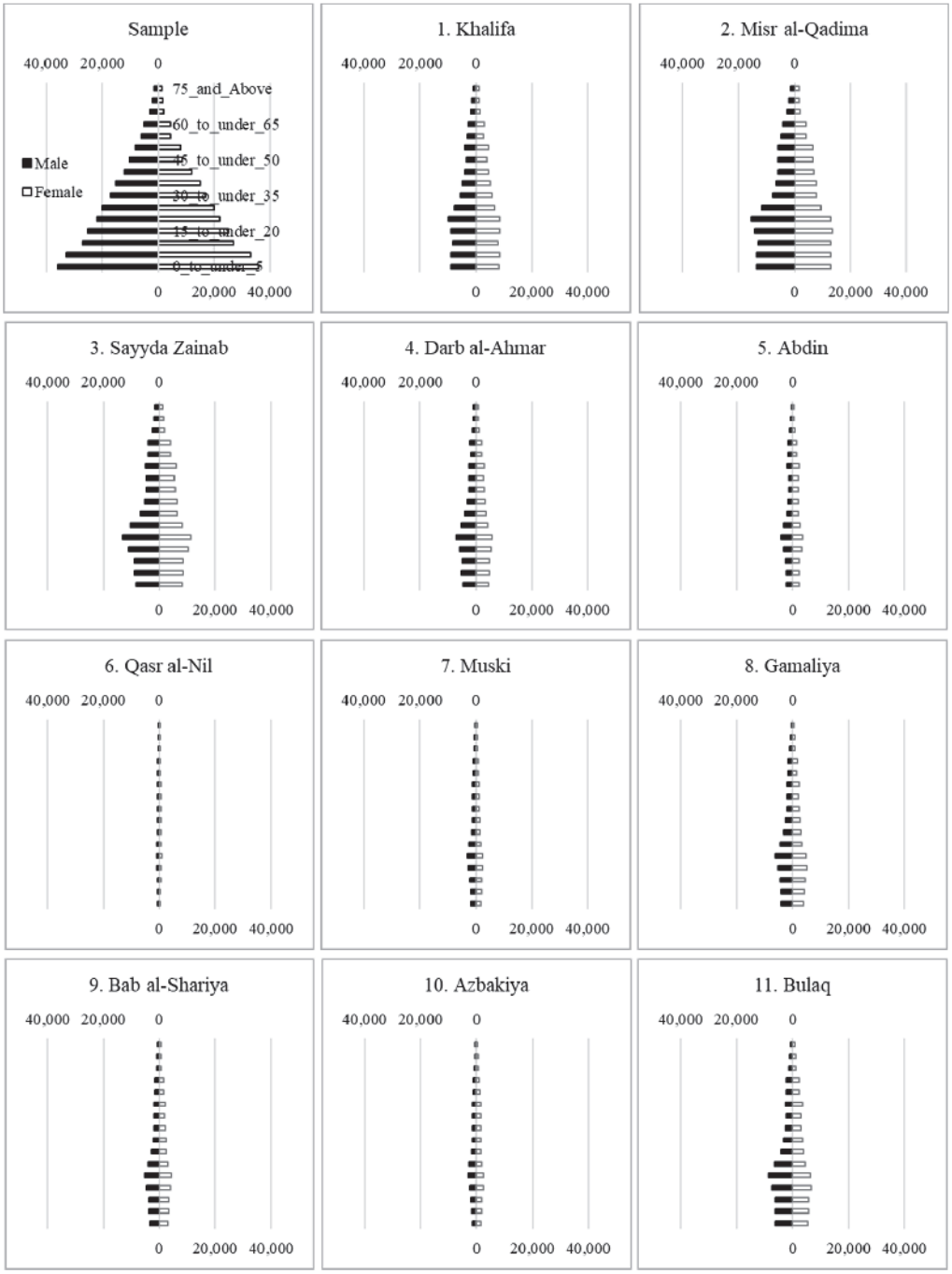


Source: 1986 Population census

Fig.4 Population pyramids of the governorates of Cairo, Qalyubiya, and Giza in 1986

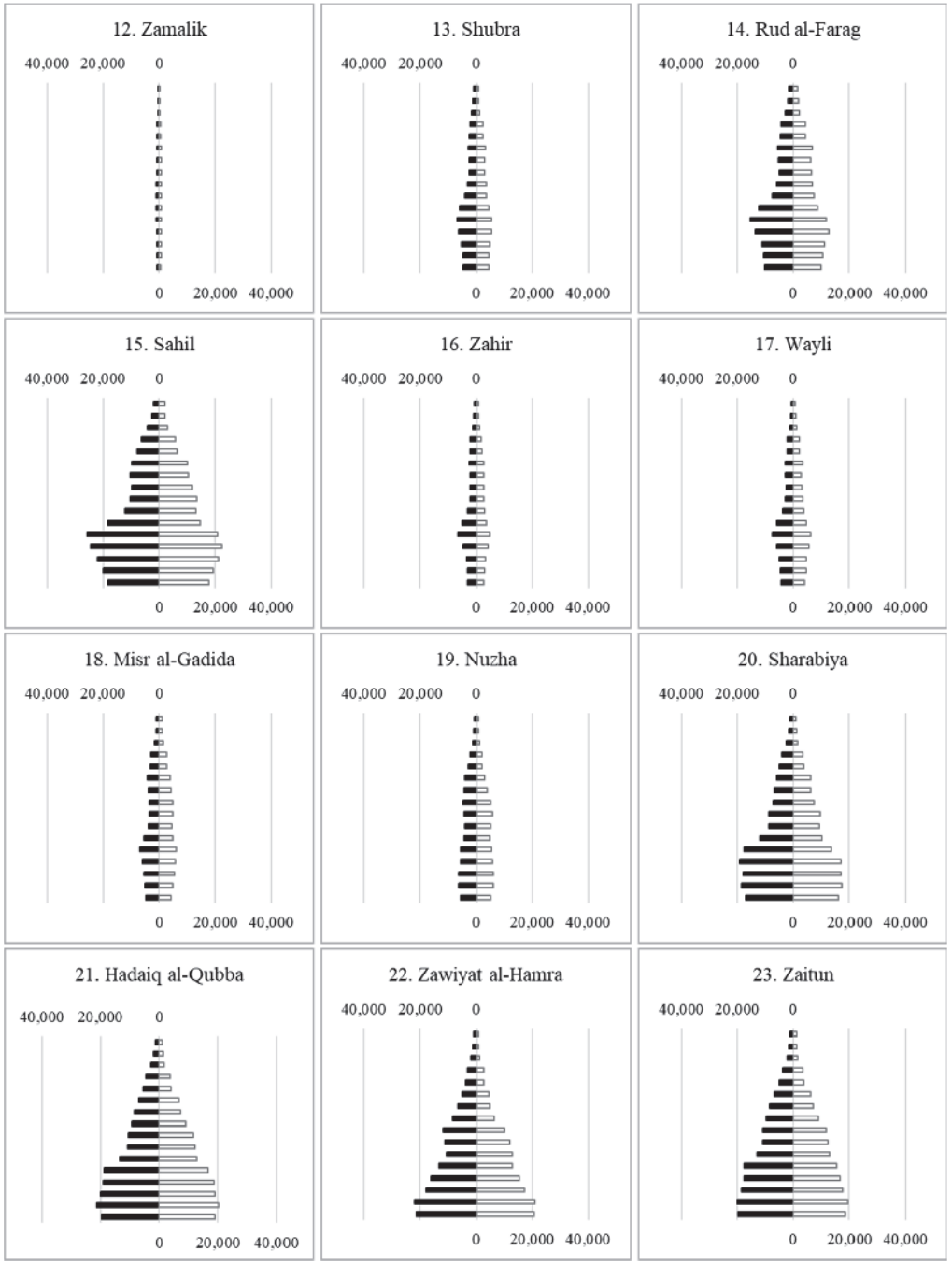
Population pyramids can be roughly classified into three types: divergent, tubular, and intermediate. The divergent type of population pyramid is found in rural areas, while the tubular type is found in urban areas. As shown in Fig.4, the population pyramids of not only Qalyubiya and Giza but also Cairo governorates are tubular types. This means that, in population pyramid terms, the *qisms* that made up Cairo governorate in 1986 are a diverse set.

Among the *qisms* of Greater Cairo in 1986 (Fig.5), the divergent *qisms* were nos. 22, 23, 25, 26, 30, 31, 32, 39, 43, 55, 58, 59, 60, 68, and 69; the tubular *qisms* were nos. 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 16, 17, 18, 19, 38, and 54; and the intermediate *qisms* were nos. 1, 2, 3, 14, 15, 20, 21, 27, 29, 37, 42, 45, 47, 56, 63, and 65.



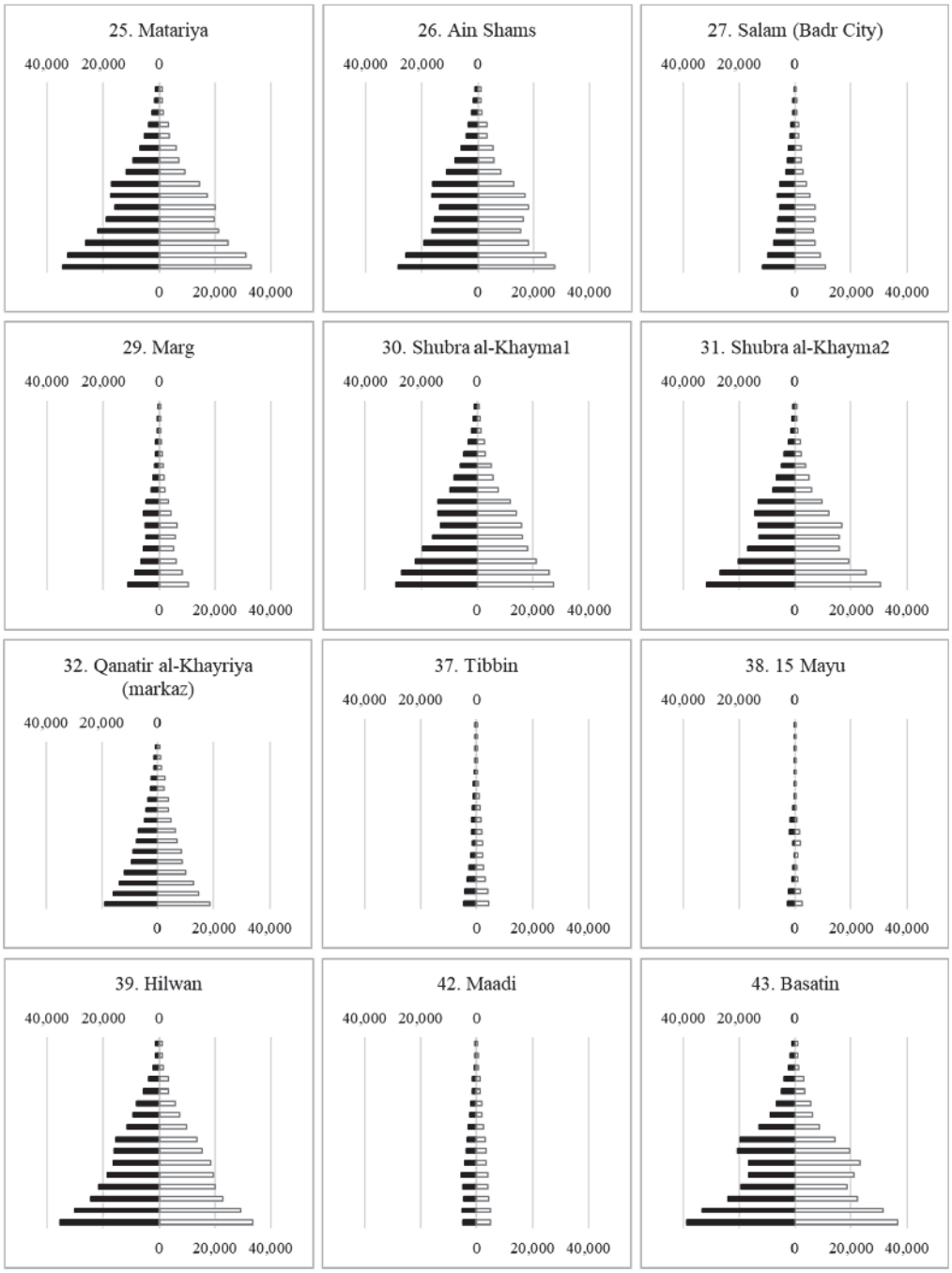
Source: 1986 Population census

Fig. 5 Population pyramids of *qisms* of Greater Cairo in 1986



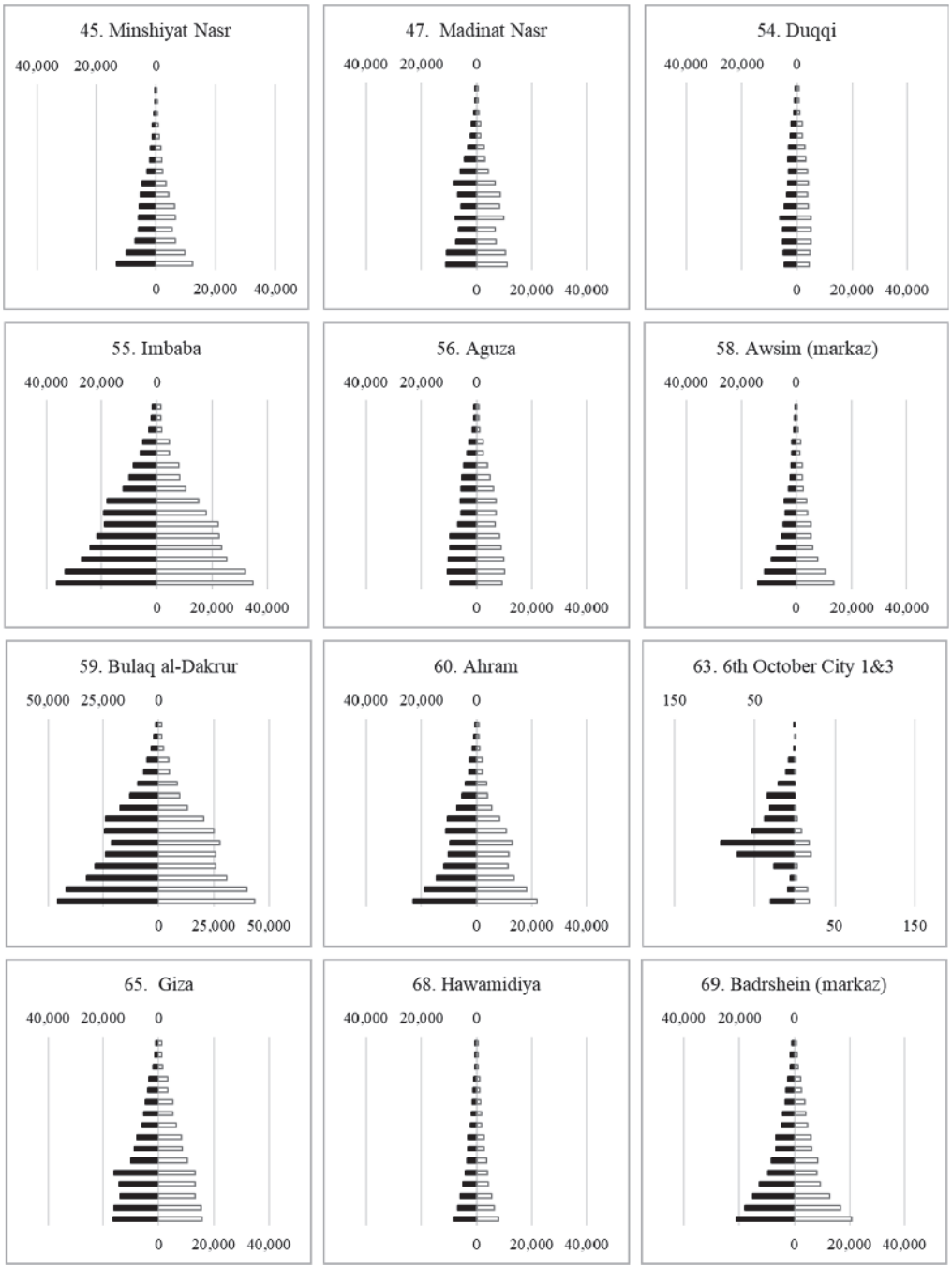
Source: 1986 Population census

Fig. 5 Population pyramids of *qisms* of Greater Cairo in 1986



Source: 1986 Population census

Fig. 5 Population pyramids of *qisms* of Greater Cairo in 1986



Source: 1986 Population census

Fig. 5 Population pyramids of *qisms* of Greater Cairo in 1986

Compared with Map 12 showing the expansion of Greater Cairo, it is apparent that the tubular-type *qisms* are in Cairo's old urban area, the *qisms* of the divergent type are in the former rural area, and the *qisms* of the intermediate type are in the suburbs of Cairo between the old urban area and the former rural areas. In other words, the form of the population pyramid reflects Greater Cairo's process of expansion.

V. Concluding Remarks

The population census gives us time series statistical data by administrative unit, herein the *qism*. It shows us the general trends and patterns of Greater Cairo's development process. However, these macroaggregated data are insufficient to provide insight into the development process of the actual residential area of Greater Cairo.

Our goal herein was to show the value of connecting aggregated data—based herein on the *qism* administrative unit—within the population census, with geographic information, including historical maps and satellite images, for examining the actual residential area of Greater Cairo.[10]

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Figure

Map

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10 Another valuable source of information for this examination was person trip data explained in note 2.

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Map 13 Satellite imagery on the topography of Cairo's surrounding regions in 2020

Acknowledgments

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			1897	1907	1917	1927	1937	1947	1960	1966	1976	1986	1996	2006	2019 (estimation)
		Total Population	570,062	654,476	790,939	1,064,567	1,349,875	2,156,810	3,505,795	4,791,102	6,759,723	8,759,486	10,536,759	11,916,139	19,085,585
No.	Governorate	Total Number of qisms	13	13	12	12	14	15	23	26	35	44	50	60	69
1	Cairo	Khalifa	47,196	53,886	59,802	73,926	81,045	122,194	161,958	233,225	186,359	164,697	191,389	—	108,560
2	Cairo	Misr al-Qadima	31,849	31,457	34,968	49,495	66,793	116,843	212,233	254,353	270,343	254,922	228,683	217,390	258,214
3	Cairo	Sayyda Zainab	53,611	64,999	76,616	104,064	128,214	192,705	253,648	276,660	252,090	199,359	156,142	132,249	140,593
4	Cairo	Darb al-Ahmar	68,592	67,132	69,079	81,516	81,120	122,080	148,606	151,947	146,399	105,013	78,375	60,488	60,336
5	Cairo	Abdin	49,323	53,356	72,394	91,779	111,271	159,300	94,969	98,530	87,759	64,949	48,704	42,223	41,605
6	Cairo	Qasr al-Nil							43,094	40,979	38,316	17,708	12,935	10,035	10,901
7	Cairo	Muski	23,238	22,031	23,659	25,862	25,919	35,963	38,469	36,296	58,189	43,275	28,582	22,294	17,192
8	Cairo	Gamaliya	57,897	59,054	62,329	74,872	74,289	107,692	141,724	150,873	166,802	90,204	59,159	49,834	37,517
9	Cairo	Bab al-Shariya	51,600	56,483	65,103	77,285	87,113	132,824	153,131	149,638	110,293	79,284	59,956	54,084	48,146
10	Cairo	Azbakiya	36,070	46,551	56,402	68,677	54,549	75,422	64,032	63,697	59,473	45,188	30,375	28,033	20,393
11	Cairo	Bulaq	76,281	89,613	111,543	144,465	156,638	232,423	202,023	201,571	177,476	123,628	75,098	62,470	49,673
12	Cairo	Zamalik										22,172	15,343	17,365	15,420
13	Cairo	Shubra	32,779	48,870	80,544	140,407	233,625	227,003	296,008	412,312	128,931	108,573	83,753	71,118	79,123
14	Cairo	Rud al-Farag						193,906	265,139	283,024	272,091	231,956	178,145	144,510	150,244
15	Cairo	Sahil							303,602	376,879	438,180	400,922	333,929	305,322	326,417
16	Cairo	Zahir							99,617	109,332	104,354	84,046	67,031	64,009	74,145
17	Cairo	Wayli	36,751	53,398	78,500	132,219	123,749	207,380	307,173	362,198	141,849	110,729	89,758	77,649	81,804
18	Cairo	Misr al-Gadida					87,771	164,919	124,774	166,315	127,196	126,384	120,977	113,611	138,355
19	Cairo	Nuzha								63,232	101,876	124,704	154,969	161,946	238,550
20	Cairo	Sharabiya									443,098	295,963	247,433	215,595	193,121
21	Cairo	Hadaiq al-Qubba									314,362	340,554	304,478	289,758	326,061
22	Cairo	Zawiyat al-Hamra										300,167	306,165	315,465	328,226
23	Cairo	Zaitun							100,374	129,314	267,402	327,340	323,383	156,910	179,691
24	Cairo	Amreya											—	165,407	157,378
25	Cairo	Matariya							160,820	315,487	533,391	440,228	498,670	498,663	621,495
26	Cairo	Ain Shams										369,075	469,030	525,034	633,798
27	Cairo	Salam (Badr City)										139,077	356,882	441,000	495,886
28	Cairo	Salam 2											—	108,000	158,618
29	Cairo	Marg										118,652	251,589	507,035	823,856
30	Qalyubiya	Shubra al-Khayma 1									233520	369288	416,813	461,689	501,024
31	Qalyubiya	Shubra al-Khayma 2									160703	345306	453,963	563,880	706,473
32	Qalyubiya	Qanatir al-Khayriya													522,733
33	Qalyubiya	Khanka												59,077	79,484
34	Qalyubiya	Qalyub											97,186	107,303	152,229
35	Qalyubiya	Khusus												291,242	475,978
36	Qalyubiya	Ubur												43,600	135,312
37	Cairo	Tibbin									33,575	50,973	59,366	68,897	74,320
38	Cairo	15 Mayu										24,106	65,560	90,740	96,522
39	Cairo	Hilwan	4,875	7,646					94,385	203,458	282,647	427,420	537,417	396,791	537,719
40	Cairo	Masara												252,780	278,569
41	Cairo	Tura											67,270	94,107	237,390
42	Cairo	Maadi							83,000	140,533	266,673	89,454	70,415	78,122	91,384
43	Cairo	Basatin										449,556	666,928	390,894	511,052
44	Cairo	Dar al-Salam											—	430,763	542,218
45	Cairo	Minshiyat Nasir										131,423	168,425	262,050	266,527
46	Cairo	Muqattam													231,213
47	Cairo	Madinat Nasr									64,892	166,994	291,571	501,597	654,828
48	Cairo	Madinat Nasr 2											102,859	75,917	74,453
49	Cairo	New Cairo 1												27,990	140,117
50	Cairo	New Cairo 2												40,005	93,534
51	Cairo	New Cairo 3												54,344	73,116
52	Cairo	Badr											248	17,158	32,278
53	Cairo	Shuruk												22,570	90,033
54	Giza	Duqqi			6,435	11,765	6,823	11,084	70,818	134,157	101,343	107,377	93,660	83,430	73,309
55	Giza	Imbaba								225,988	325,023	483,642	523,265	598,882	653,780
56	Giza	Aguza									144,266	181,721	174,460	258,511	287,818
57	Giza	Warraq											395,258	509,129	751,724
58	Giza	Awsim													400,914
59	Giza	Bulaq al-Dakrur									321,931	589,256	453,884	701,655	992,209
60	Giza	Ahram							11,684	15,451	129,459	262,388	200,076	—	681,383
61	Giza	Kirdasa													468,329
62	Giza	Sheikh Zayed City												29,422	93,742
63	Giza	6th of October City 1&3										528	35,354	38,791	157,604
64	Giza	6th of October City 2												115,302	202,945
65	Giza	Giza					37,779	66,156	145,332	195,653	208,424	258,805	238,567	251,596	295,310
66	Giza	Umraniya											537,905	—	378,333
67	Giza	Talbia													473,025
68	Giza	Hawamidiya									61,038	92,480	115,376	140,408	198,042
69	Giza	Badrshein													563,294

Note: (1) *Qisms*, whose populations are not listed, are indicated by "—". (2) Total number of qisms and total population are the aggregate values of qisms in the years concerned from No. 1 to No. 69, excluding Dukki. Duqqi was included in Abdin from 1917 to 1947 and in Giza in 1960. (3) The population in 2019 is based on the following web site. (https://www.citypopulation.de/de/egypt/). (4) the light gray units in 2019 are classified as markaz (nos. 32, 58, 61, and 69) or suburban cities (nos. 33-36).

Fig. 6 Database on the population in *qisms* in Greater Cairo, 1897-2019