

Article

Uncovering the morphology of Kōm ad-Dikka in Alexandria

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Abstract: The historical residential area of *Kōm ad-Dikka* in Alexandria has experienced subsequent morphological transformation since the ancient era until present. Each historical period had a physical impact on the city's urban structure that in turn struggled to survive its successive one with its different urban conception. However, the sinuous streets of this area, which probably date back to the late Egyptian Medieval period, are characterized as the only surviving organic fabric *intra-muros* that was not altered during the Egyptian Modern period. This paper elaborately investigated the chronological history of the historical residential area since the ancient era until the mid-twentieth century. Based on in-depth investigation of historical maps and memoirs, it revealed the possible reasons behind its extant sinuous urban form and postulated reconstructions of its urban morphology through sequential phases.

Keywords: Alexandria, Kōm ad-Dikka, urban morphology

1. Introduction

Until the 1950s, Kōm ad-Dikka [1] consisted of two adjacent mounds: the western mound with the Crétin Fort where the Greco-Roman archaeological site was unearthed underneath, and the eastern mound where the historical neighborhood still stands [2]. This neighborhood is the main topic of this paper. The neighborhood is not only characterized by its location on the only artificial mound in the historic city center of Alexandria, but also by its dominant extant medieval sinuous street structure that is surrounded with the integrated traces of the westernized orthogonal street pattern. The irregular and organic street structure of this neighborhood, with its small parceled late Ottoman buildings, is predominantly similar to those of the so-called Turkish Town [3]. Starting with the name origin of Kōm ad-Dikka, a number of published literature refer to it as Kom el Dekka [4], Kōm El-Dik, Kom el Dikk, Com-el-Dikkéh, and Com-el-Dikeh [5], which derive from the Arabic language: The word Kōm means a stack, and ad-Dikka, signifies a bench [6]. The ancient Greek geographer Strabo describes a height where one can overview all Alexandria over its hilltop [7]. This information is also confirmed by the engineer and astronomer Mahmoud-Bey al-Falaki [8]. The older inhabitants of the neighborhood report that rooster-fights took place on the mound in the past. Hence, the mound's name evolved from Kōm ad-Diākah, deriving from the Arabic word Dīk, namely a rooster. This announcement is confirmed by the French physician Clot-Bey, where he identified the quarter as Kom-el-Dyck and coline du coq [9].

Unlike the Turkish Town which morphed and developed outside the city's ancient and medieval city walls, the area of this study is regarded as the only settlement—intra muros—where its urban characteristics were bordered and not eliminated by the westernized new urban

conception. Nevertheless, this tangible aspect of Kōm ad-Dikka has received very little attention in the scientific literature. On the one hand, former scientific publications were mainly carried out on the archaeological site, namely the former western mound, on the other hand there is scarce publication on the history of the eastern mound. In the lack of archaeological evidence in situ, as well as reliable publications about this historical residential area, the methodology carried out for this study relied on a critical investigation of historical maps and historical memoirs and publications.

2. Materials and Methods

This investigation depended on comparing historical maps with concurrent memoirs and relevant literature, in order to analyze the chronological morphology of Kōm ad-Dikka, as well as the probable reasons behind its current urban survival. In this paper, its scrutiny of the history is divided into three parts. Each part represents an urban form reflected by its historical urban ideology. The first part comprises the ancient urban form in Alexandria, the second depicts the early evolution of the sinuous structure during the Egyptian medieval period, and the third represents the integrated westernized street structure by the nineteenth century. Besides examining the chronological development, its urban morphology is reconstructed through five perceptive illustrated maps. This paper opens up new research ideas on historical comparative investigations; it aims at shedding light on the physical urban regeneration which occurred in the city of Alexandria, especially during the Egyptian medieval period.

3. Ambiguity of ancient and early medieval Kōm ad-Dikka

After the Early Arab conquest by the sixth century AD, the ancient city of Alexandria lost its ancient global cultural prominence; however, it managed to mainly maintain its status as a Mediterranean entrepôt under the Arabs' authority [10]. By appointing Fustat as the new capital of Egypt, building materials were used as spolia to build the new capital, thus leading to a gradual physical state of decay of the once monumental ancient city. Left in ruins, especially after the number of earthquakes which destroyed it, new Arab settlements developed with their sinuous urban conception above the ancient one. Stratigraphically, the existing block of Kōm ad-Dikka lies above the ancient city layer of Alexandria.

3.1. The Hippodamian salient features

The first systematic archaeological study of the ancient Alexandria began in the nineteenth century when El-Falaki was commissioned by Khedive of Egypt Ismail Pasha to submit a reconstruction of the ancient city. Ancient Alexandria was designed by Dinokratous, the architect, and advisor of Alexander the Great [11]. By examining the aboveground ruins the Hippodamian grid plan, as well as the ancient quarters of the city, were identified and mapped. This reconstruction attempt was revised by the end of the nineteenth century by the German archaeologist Ferdinand Noack [12].

By overlaying both reconstruction attempts with the current map of Kōm ad-Dikka, some of the reconstructed Hippodamian streets correspond to its current street raster (Figure 1) [13]. According to the map of El-Falaki, the current neighborhood lies approximately two point five kilometres to the west from the former eastern Canopian city gate and about one kilometre to the north from the southern ancient city wall. The four enclosing streets of the neighborhood area overlap the Hippodamian grid: horizontally the Fouad street with the ancient L1 from the north and traces of the ancient L'2 with 'Omar Tusun street from the south. Vertically, Dr. Ibrahim 'Abd as-Saiyid street overlaps the R2 from the east, and Sidī Quštum street the ancient R3 from the west. The location of the main orthogonal grids also matches with the map by Ferdinand Noack. Noack improved El-Falaki's map by reconstructing the Hellenistic secondary grid raster. Each orthogonal

street grid is rectangularly shaped, and represents a neighborhood consisting of 18 insulae [14],
rationed 1:2 [15]. The grid of some of this insulae matches the grid of this paper's study area.

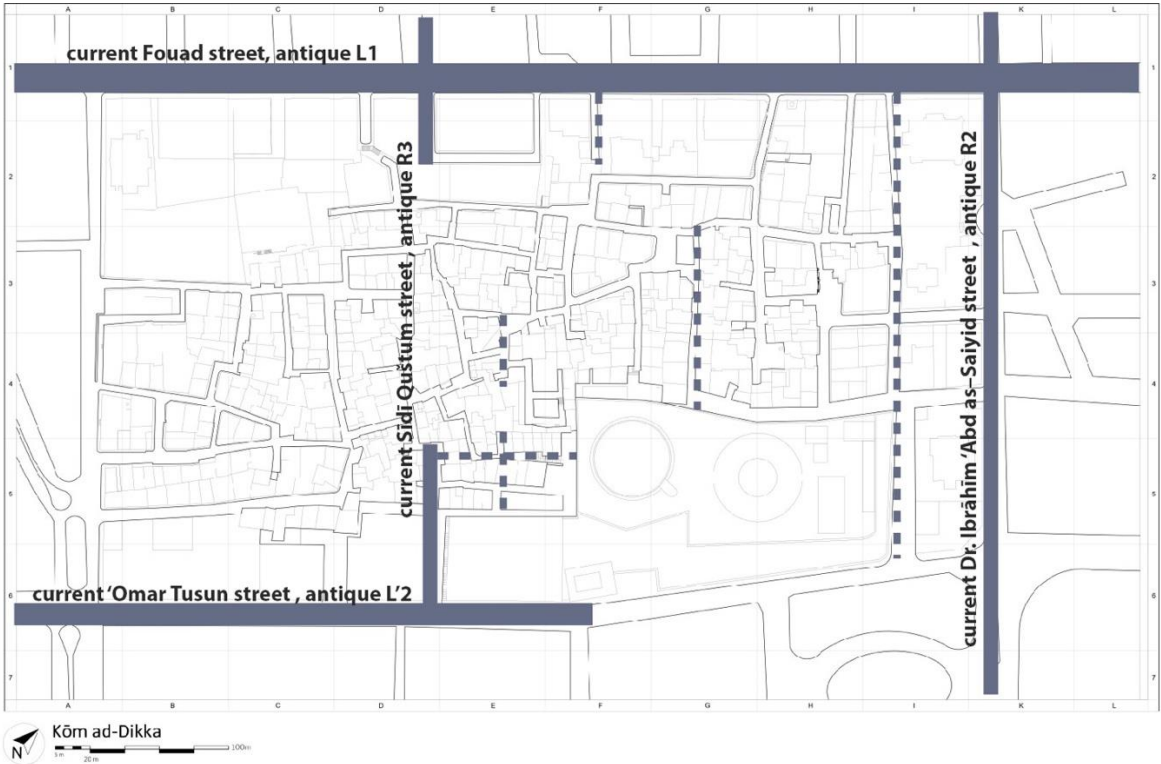


Figure 1: Map of present Kōm ad-Dikka with overlapped matching reconstructed ancient streets by both al-Falaki and Noack. (overlapping reconstructed insulae by Noack in dashed lines). edited by author.

El-Falaki divided Alexandria into five districts on his map; he marks contour lines on the location of the two mounds of Kōm ad-Dikka and refers to them as Paneum [16], based on the description of Strabo. He describes the Paneum as a man-made hill: 'Here, too, is the Paneum, a "height", as it was, which was made by the hand of man; it has the shape of a fir-cone, resembles a rocky hill, and is from a spiral road, and from the summit one can see the whole of the city below it on all sides' [17]. Since 1960, the Polish Center for Mediterranean Archeology was commissioned to undergo an archaeological survey on the western artificial hill, located about 20m above sea level. A large Greco-Roman archaeological complex was uncovered 12 meters below sea level. The Polish team did not find any evidence of the Paneum. Among their successful findings was the ancient road R4, situated on the same location indicated on both maps of El-Falaki and Noack. On the east side of the excavated street R4, the archaeologists discovered ruins of a Greco-Roman neighborhood dating from the 1st until third century AD [18]. This neighborhood extends beyond the eastern border of the archaeological site and thus its ancient actual area cannot be estimated. It is therefore claimed that the rest of the ancient neighborhood area extends further to the east underneath the present neighborhood [19]. And since it is densely inhabited, no excavations took place to justify this claim; until now the ancient nature below remains unknown.

3.2. Kōm ad-Dikka and the Early Medieval Egypt

When the city of Alexandria was conquered by the Persian king Khosrau in 619 AD and then came into possession of Khalif Omar in 642 AD, Alexandria sank into insignificance compared to its ancient stature [20]. When the Arabs founded Fustat, today's Cairo, as the new Egyptian capital, Alexandria's role was limited to the port as a gateway to the Mediterranean trade which has always been pivotal to the city. Accordingly, new land was silted up, by the port on the Heptastadion, extra muros to comply to the new city role. Intra muros, the ancient city suffered drastic topographical changes due to earthquakes, tsunamis, as well as the maintenance neglect of the ancient water

system. Scarcely inhabited, the ancient city walls shrunk [21]. According to the Egyptian historian As-Saiyid Abd al-‘Azīz Sālim, the Arab military commander, Amr Ibn al-Āas brought seven Arab tribes to take Alexandria as their new home, after the sixth century. Among them was the tribe of Laḥm, which settled in Kōm ad-Dikka to best guard the city on its hill. However, it is not specified whether the Laḥm tribe inhabited the eastern or western mound [22].

On the western hill, the Polish archaeologists revealed three superimposed necropolises dating back to the Egyptian medieval period: the so-called lower necropolis from the Umayyad and Abbasid dynasties between the eighth and tenth centuries, the middle necropolis from the Fatimid dynasty in the eleventh century, and the upper necropolis from the Ayyubid dynasty from in the twelfth century. At that time, the ancient ruins were reused as burial chambers and tombstones [23]. It is assumed that the same stratigraphy is located underneath the neighborhood, especially due to the still standing shrines in it [24].

The soil of the three necropolises in the archaeological complex consisted mostly of rubble and debris from the Muslim period. This was described by travelers like Nicolas Martoni in 1394, who illustrated the area as an artificial hill consisting of masonry and houses wreckage. The Andalusian traveler Léo Africanus compared the artificial hill with the Roman Testaccio and reported its fragments of antique vases [25]. During the 1950s, the Polish team uncovered ruins of Arab huts with animal enclosures along with the middle necropolis [26]. This denotes that during the Fatimid dynasty a small settlement existed next to the cemeteries. However, it cannot be verified whether the same settlement also existed underneath the current neighborhood at the same period. The early development of the current urban fabric of Kōm ad-Dikka assumably morphed before the end of the eightieth century, most likely at the beginning of the sixteenth century.

4. The metamorphosis of Kōm ad-Dikka

During the Egyptian medieval period, Alexandria faced drastic urban changes. Over the years, a new urban settlement was created by the harbor, transforming the Heptastadion into an urban settlement. Since this settlement mainly morphed during the early Ottoman period, it was referred to as the Turkish Town. In historical maps, the Turkish Town is marked as Alexandrie Nouvelle, where the settlement intra muros was named Vieille Alexandrie [27].

4.1. The hypothetical vestige of early urban morphology

There is no direct evidence to indicate the origin of the sinuous urban fabric of Kōm ad-Dikka. La description de l’Egypt was the first documentation to publish accurate 2D maps of Alexandria; maps from 1798 show the main sinuous street pattern. The morphology origin of the urban fabric before that year can only be hypothetically derived with the help of medieval travelers’ memoirs and isometric maps. One of these maps is in 1566 by the German Orient traveler Johann Helffrich; based on it, an assumptive inkling of the urban genesis of the historical area can be derived (Figure 2) [28]. On Helffrich’s map, a noticeable scene is illustrated within the city wall: a water channel runs with close adjacent buildings on both its sides with an access gate located over the channel, at both edges of the buildings’ alignment. Bridges are drawn to indicate crossings from one side to the other, yet, his textual description does not mention any water artery. The artery with bridges can presumably, therefore, indicate a road, under which runs a water channel. Johann Helffrich identifies this illustrated scene as a bazaar, consisting of caravanserais and boutiques. In his travel diary, he reports that upon his arrival from Cairo through the eastern Rosetta Gate in Alexandria he stayed in the French Fonticum that was located by the eastern city gate. He describes this Fonticum as a two-story rectangular caravansary with courtyard dedicated for foreign merchants. At night, the doors of the bazaar are closed and protected by an Arab guard [29].



Figure 2: Map of Alexandria by Johann Helffrich, 1566.

In the twelfth century, Alexandria regained its role as an important port and trade city. Since European trade was not allowed in Cairo, Alexandria grew into an important trading hub connecting the East with the West [30]. Through the centuries, merchant houses developed for foreign merchants and by the end of the seventieth century. These took the form of caravanserais and boutiques, located and developed inside the city walls, especially by the city gates. Due to the shrinkage of the city wall during the Egyptian medieval period, the distance between the eastern border of Kōm ad-Dikka and the eastern Rosetta Gate decreased to about 350m. The southern course of the Arab city wall ran on the antique L'2 street, where the southern 'Omar Tūsun street, of today's neighborhood, is currently located. According to the Ottoman explorer Evliya Çelebi, 100 boutiques took place by the eastern Rosetta gate, near which lay the artificial mound [31]. These were either owned by indigenous or foreign merchants; each of these structures was surrounded by a settlement of gatekeepers and porters, located next to or around the trading area [32].

When the Turkish Town developed extra muros by the end of the seventieth century, new caravansaries and boutiques were structured on this peninsula. Merchants moved from the bazaars intra muros to the newly populated area on the silted land. This may have caused great decay to the ones intra muros; the once lively trading facilities at the city gates might have been later populated by poorer inhabitants due to new habitation in the Turkish quarter. These poorer inhabitants were presumably the poorer traders or gatekeepers and porters who lived next to the bazaar.

4.2. The detectable phsyiognamy of Kōm ad-Dikka

In 1798 the engineers of l'armée d'orient of the French Expedition created the first accurate map of Alexandria with its settlements and urban features (Figure 3) [33]. The largest populated settlement intra muros was located by the eastern city gate and can be divided into two areas: The first located directly at the Rosetta gate extending on both sides of the traces of the ancient road L1 [34]. The second area is located southwest from the first area on the artificial hill where the extant sinuous urban fabric of Kōm ad-Dikka is located [35]. By analysing historical maps and memoirs, two hypothesizes can be displayed regarding the origin of the current urban fabric. The first hypothesis develops from the German orient traveler Johann Helffrich's map in 1566. The bazaar

spine illustrated by Helffrich with the street gates is not indicated on any later-produced maps. Nevertheless, it is possible to make a presumption from his map, comparing it with maps from 1798, 1801, and the present condition. The historical map from 1801 represents the main outline of the historical area with its diagonal running spine, namely the present street of Saiyid Darwīš. During the sixteenth century, two opposing rows of boutiques with caravanserais formed a street, called a bazaar. During his trip in Alexandria in 1643, the French traveler Gabriel Brémond described the bazaars as settlements inside the city walls, each consisting of a commercial street accessible from both ends by gates. The bazaar contained houses, boutiques, and caravanserais. In it, various goods are sold by the merchants, who also live in the same buildings. At the end of the day, the doors of the caravanserais, the boutiques and the street gates are closed and are guarded overnight [36]. The previous name of the street of Saiyid Darwīš was Sūq Kōm ad-Dikka [37]. The Arabic word Sūq means market or bazaar; this may be an argumentation that this street was probably originally one of the bazaar streets that Helffrich reported of. This diagonal street can be interpreted from the examination of the maps of 1798 and 2013 as the main access road, on which the quarters have developed structurally. On the isometric map of the English traveler Richard Pococke from 1743, the second hypothesis can be deduced. Pococke illustrates the settlement area by the Rosetta gate; only indicating it as a mound, Pococke identifies the mound as 'Porters' Hill' [38]. This contradicts the claim that today's neighborhood was originally a bazaar. It can be assumed that the hill was inhabited by the porters who worked for the merchants in the bazaar [39].

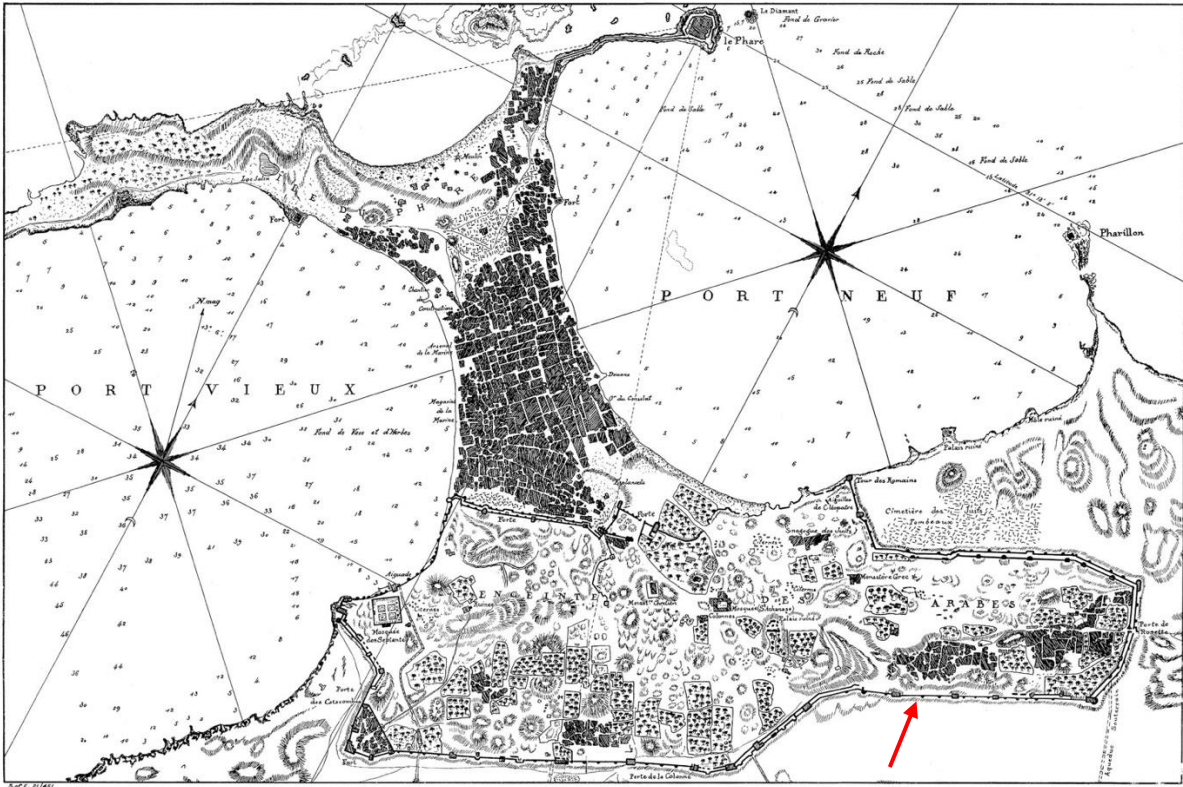


Figure 3: Map of Alexandria by the engineers of l'armée d'orient of the French Expedition, 1789. The location of Kōm ad-Dikka is pointed out with arrow.

Nowadays, the oldest buildings in the area date back to the late Ottoman period. It is stylistically similar to the ones in the Turkish quarter. The urban fabric is probably the only surviving element from the medieval period until before the late Ottoman period [40]. Presumably, the medieval structures of the historical neighborhood deteriorated with the development of the Turkish Quarter by the end of the sixteenth century. Alike the ancient era, the bazaar building materials may have been reused elsewhere, possibly for the construction of the new ones in the Turkish Town.

The German traveler Johann Michael Vansleb reports in his memoir that in 1672, the French built a garden planting project within the city walls that they called Jardin du Marchand [41]. On the historical maps of 1798 and 1801, such gardens are illustrated around Kōm ad-Dikka. A map in 1848 by Lemaitre illustrates the southern part of the outlines of the settlement and refers to it as Jardins [42]. This historical habitation might have developed into a village-like settlement, whose poor inhabitants were engaged in limited trade and agricultural work; this is pictured on the historical photograph of 1905, entitled Village de Kom-el-Dick, probably shows its southern area (Figure 4). This area continued to develop, while preserving its urban pattern until the first half of the ninetieth century.

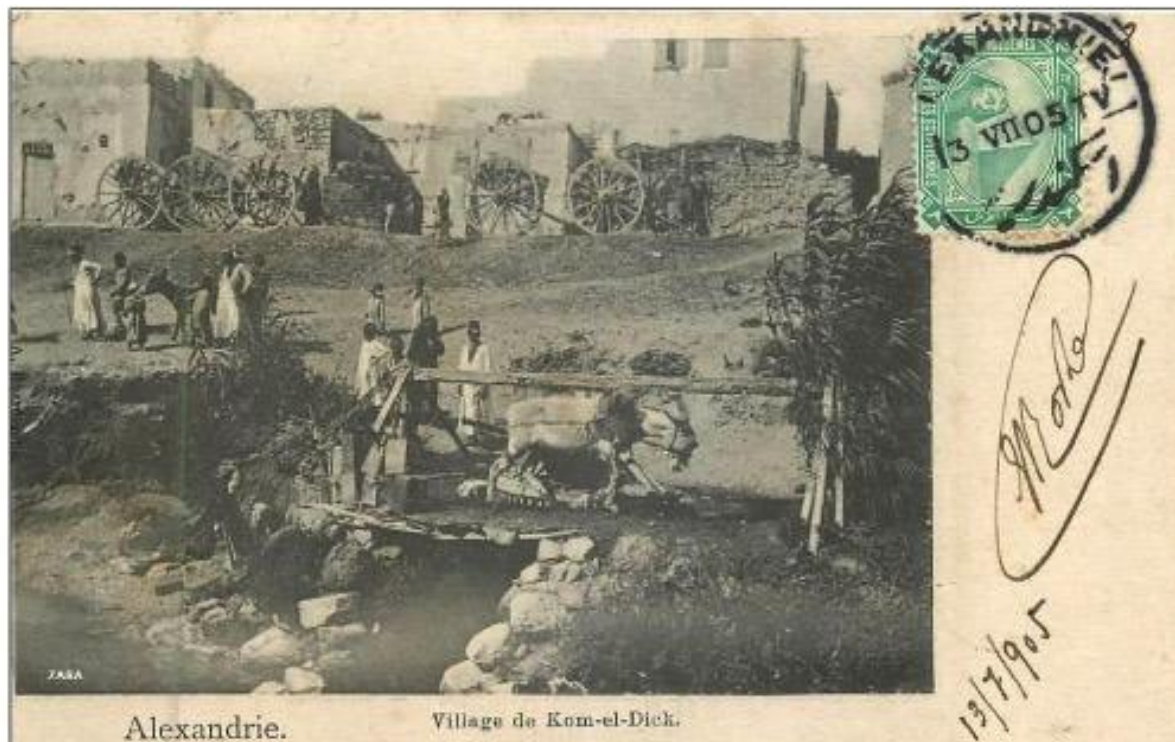


Figure 4: Postcard of Alexandria of the village of Kōm ad-Dikka, signed in 13/7/1905.

5. The homogeneous heterogeneousness

The foundation of modern Egypt began in 1805 by Mohammad Ali Pasha, who was appointed as Wālī of Egypt by the Ottoman Empire. By 1805, Alexandria was a harbor city with about eight thousand inhabitants, who mostly lived on the Turkish Town [43]. In 1824, the first city planning institution of Alexandria, Le Conseil de l'Ornato, was initiated and commissioned to provide new urban and architectural regulations [44]. And since the Turkish Quarter was densely built and inhabited, the Ornato regulations were actively implemented within the city walls' settlements. As a tool to colonial influence, the Ornato regulated European-like urban and architectural structures to best accommodate the modern commercial traffic, thus attract Europeans to Alexandria. The indigenous inhabitants lived in so-called bidonvilles as artisans, merchants and peddlers. They were mainly categorized by their congested density and by the residual epidemics that hit the city during the medieval period [45]. For this reason, the new westernized ad hoc urban planning scheme destroyed most of the structures and settlements intra muros, except the neighborhood on the eastern mound.

The historical map of 1855 by Charles Muller shows the first implementations of le Conseil de l'Ornato: The northern part of the city wall is demolished and a new orthogonal urban structure is implemented, based on European urban ideologies. Interesting to notice is that Kōm ad-Dikka is the only remaining urban pattern intra muros drawn on the map (Figure 5). In former historical maps of

Alexandria, the historical area is characterized by the number of Maqām, namely the shrines of Muslim saints, which still stand until today, as well as its recognition as porters’ hill.

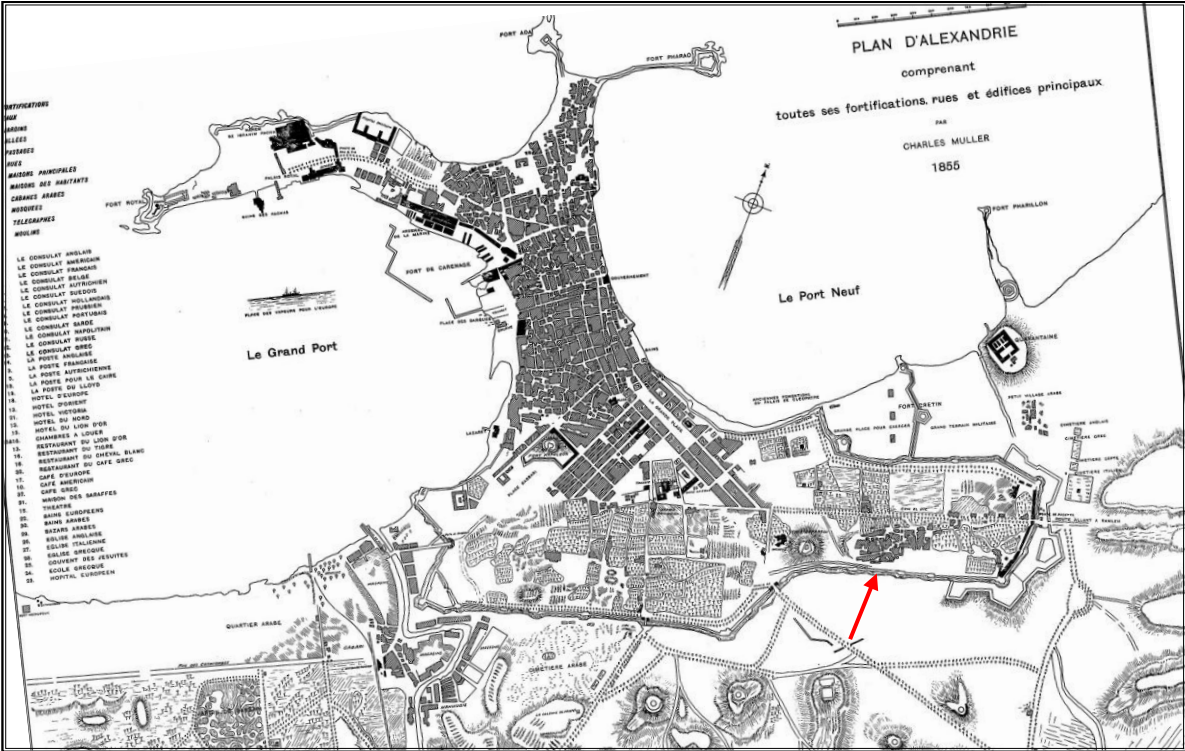


Figure 5: Map of Alexandria by Charles Muller, 1855. (rotated by author). The location of Kōm ad-Dikka is pointed out with arrow.

6. The formation of an urban and social strata

It was not until the second half of the nineteenth century that Alexandria’s new European urban developments extended to the area of Kōm ad-Dikka. This is seen on the historical city map of Les Services Techniques de la Municipalité in 1902 (Figure 6). Its new displayed settlement is referred to as the Latin Quarter, in Arabic al-Ḥaiy al-Latīnī, where its urban form is largely adapted to the ancient urban traces. The residential area, whose urban pattern dates back to the medieval period did not coincide with the Ornato development plan and replaced by the westernized street course. Nevertheless, these urban constructions enclosed the populated settlement to prevent the visual distraction from the new westernized European city appearance; this also prevented its further urban extension. This urban enclosure does not only exemplify a connection of two different urban conceptions but also the relationship between two social strata: The richer inhabitants in the orthogonal new urban settlement, in Arabic kharij al-ḥukuma encompassing the organic residential quarter populated by the poorer, in Arabic dakhil al-ḥukuma [46]. The factual argumentation behind the perpetuation of Kōm ad-Dikka remains unknown. Hypothetically, it is possible that its location, on the artificial hill, did not stand in the way of the Ornato’s urban planning development. Additionally, the existence of a poorer settlement next to the richer one might have rightly created a social coherence, where the poorer labors lived and worked next to wealthy elite [47]. The same concept can be historically derived from the porter’s hill, indicated in previous maps. The same practice might have been regenerated for the same purpose but with a new interpretation.

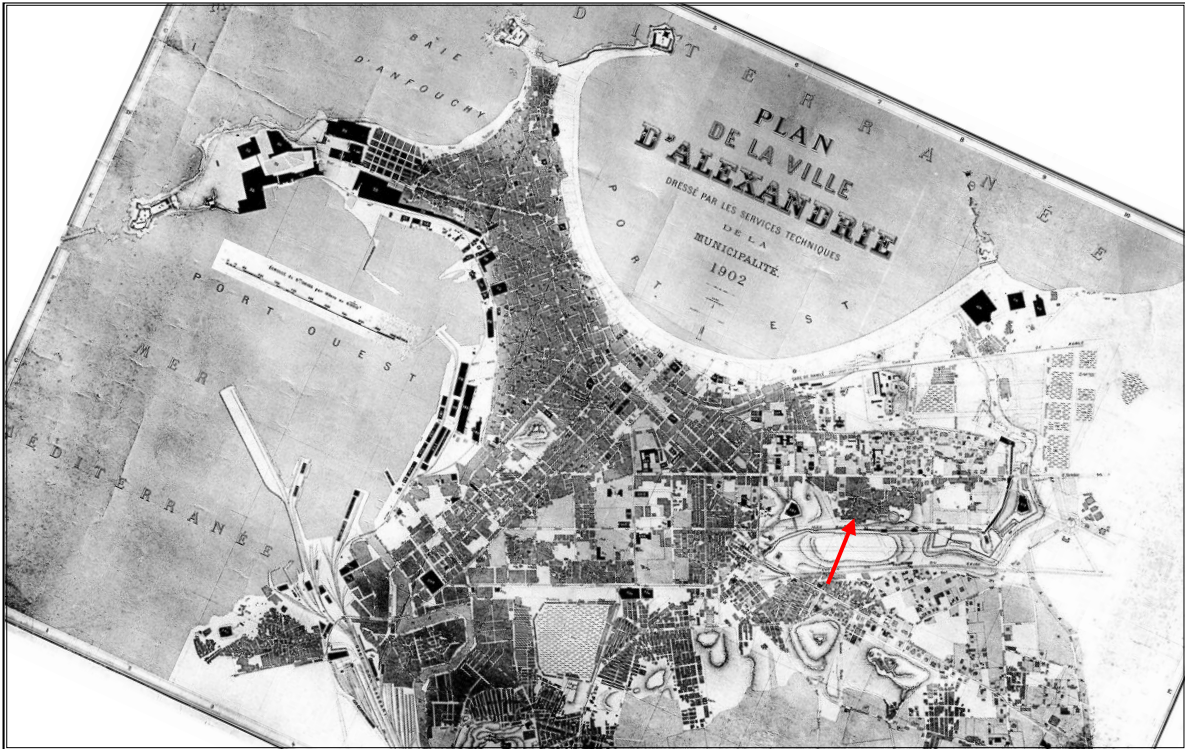


Figure 6: Map of Alexandria by the municipality’s technical service, 1902. (rotated by author). The location of Kôm ad-Dikka is pointed out with arrow.

7. Results

Kôm ad-Dikka has developed through different time spans and urban styles. This derives from the historical investigation mainly based on the historical maps. The former parts of this paper comprised a narrative elaboration of the history of the neighborhood. This part of the paper, however, is an attempt to interpretably reconstruct its urban morphology in different phases. The morphological phases are conceptualized based on historical maps, reconstruction attempts, and travel book descriptions, and are accordingly divided into five morphological phases. The first two phases represent each a time cycle due to the lack of reliable references, as well as the similar cartographic similarities in the reliable ones. The remaining phases —the third to the fifth—are each relatively divided into semi approximate time interval. These are also based on the illustrated historical city maps since the French expedition in 1798. This reconstruction portrays the development of the urban pattern since the antique era until today, even if it is not stratigraphically successive.

7.1. First morphological phase

The first phase encompasses the Hippodamian traces of the antique Alexandria (Figure 7.a.). The streets’ pattern is based on the reconstruction maps of El-Falaki and Ferdinand Noack. These correspond to the current main access streets of the neighborhood: Fouad street from the north, Ibrāhīm ‘Abd as-Saiyid street from the east and the western part of the southern ‘Omar Ṭusun street. Based on his reconstruction map of antique Alexandria, Ferdinand Noack illustrated the insulae and their side streets, from which the current ad-Damāmīnī street overlays one of them. There is as yet no clear evidence of the ancient urban character of the current Kôm ad-Dikka; however, the exploration of the reconstruction maps of Noack and al-Falaki, the historical publications, and the reports from the Polish archaeologist provide the impetus for assuming an ancient neighborhood character more than of a Paneium.

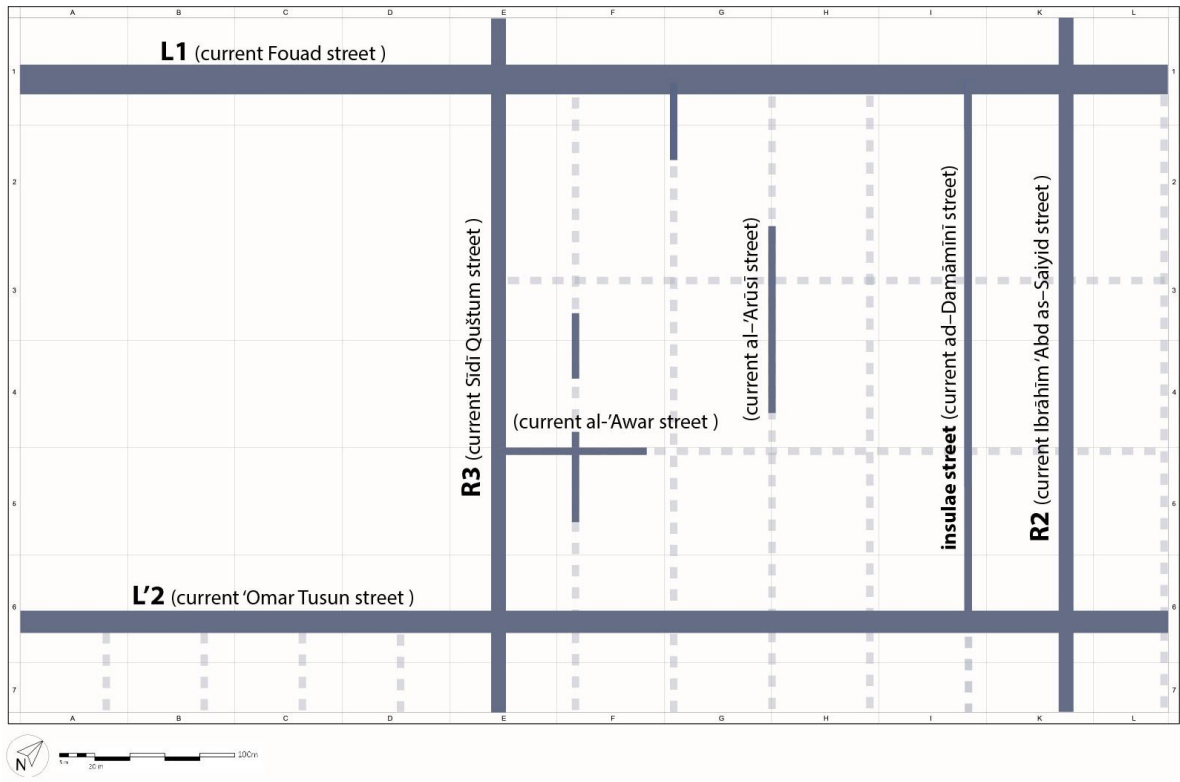


Figure 7.(a): Kōm ad-Dikka. Reconstruction of phase 1.

7.2. Second morphological phase

The second phase begins in the seventh century AD, where the city’s ancient physiognomy altered immensely; the traces of the orthogonal roads disappeared and a sinuous urban form emerged. This urban change is mostly detectible in the travel book descriptions and maps. The various cartographic maps of Alexandria that were illustrated until mid—sixteenth century, don’t explicitly mention the neighborhood. Still, two assumptive scenarios can be derived from them. The first one arises with the help of the historical map by Johann Helffrich. Based on his perspective map of 1566 and his travelogue description, the illustrated spine comprising the non-indigenous merchants’ Fonticum can be assumed as the early nascence of Sūq Kōm ad-Dikka—the current Saiyid Darwīš street. The second scenario is based on the presumption of the morphology of the same spine, yet not upon a commercial genesis but a religious one. On the current Saiyid Darwīš street stands the mosque of Sīdī Surūr, where his shrine is located. It can be presumed that the spine of the current Saiyid Darwīš street first originated upon settlements next to Sufi Figures (Figure 7. b.).

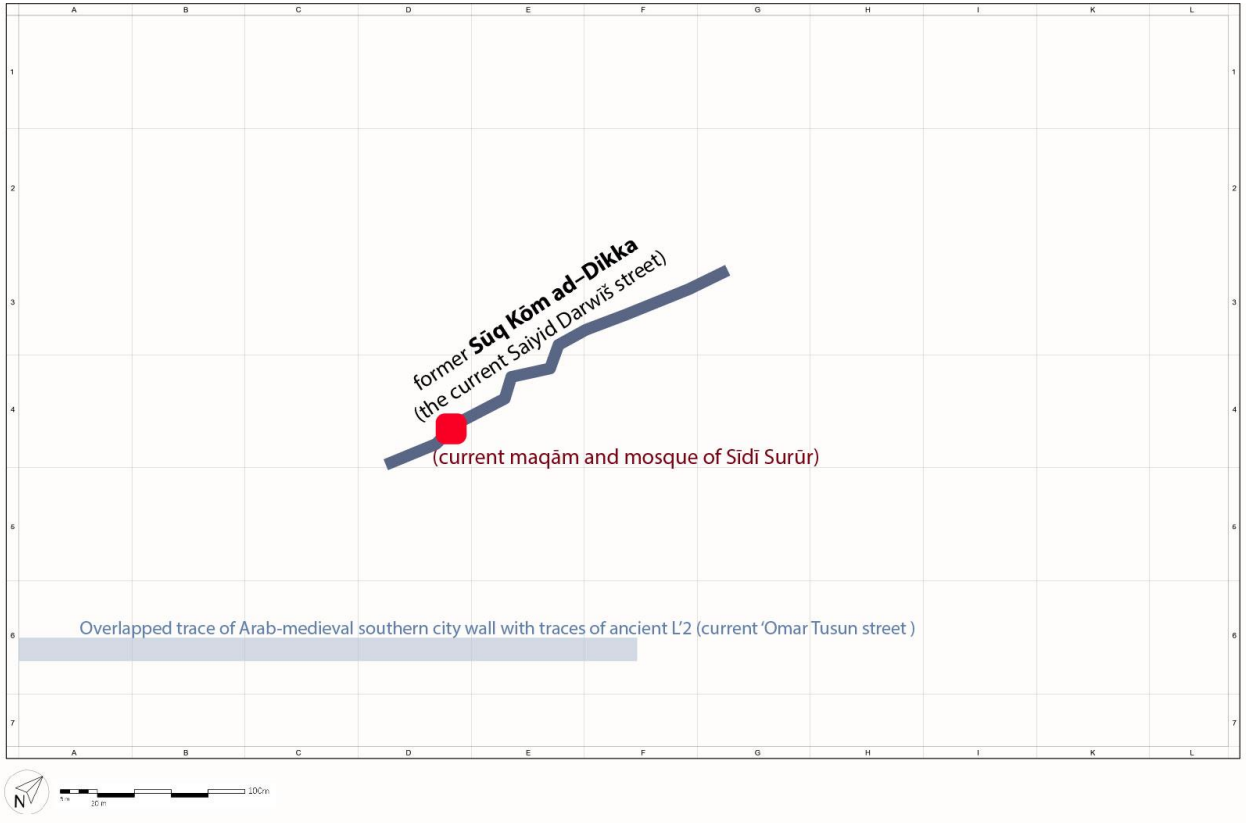


Figure 7.(b): Kôm ad-Dikka. Reconstruction of phase 2.

7.3. Third morphological phase

The third phase proceeds with the two above-mentioned scenarios, and is placed between the mid—sixteenth century and the End of the eighteenth century. The commercial genesis proceeds with a probable development of the original path of Sūq Kôm ad-Dikka into a village, based on Vansleb’s description of the Jardin du Marchand—in the 17th century—and the concurrent illustrations on historical maps. The first survey map of the city of Alexandria, conducted during the French expedition in 1798, is the first map to clearly illustrate the urban fabric of the residential area. Based on it, it can be deduced how the street path developed between the state of 1566 until 1798. During this phase, new sinuous streets were formed and branched off the main spine of the current Saiyid Darwīš street. Among these branching streets are the current Sīdī Qušṭum that is perpendicular to the present Saiyid Darwīš street, Sīdī Alī al-Badawī, and Sīdī Miḥriz. Their origin, history and importance are believed to be related to the location of the shrines of Sīdī Miḥriz and Sīdī Qušṭum. Both shrines are located along the above-mentioned streets, which in turn justify the urban progression based on the religious scenario (Figure 7.c).

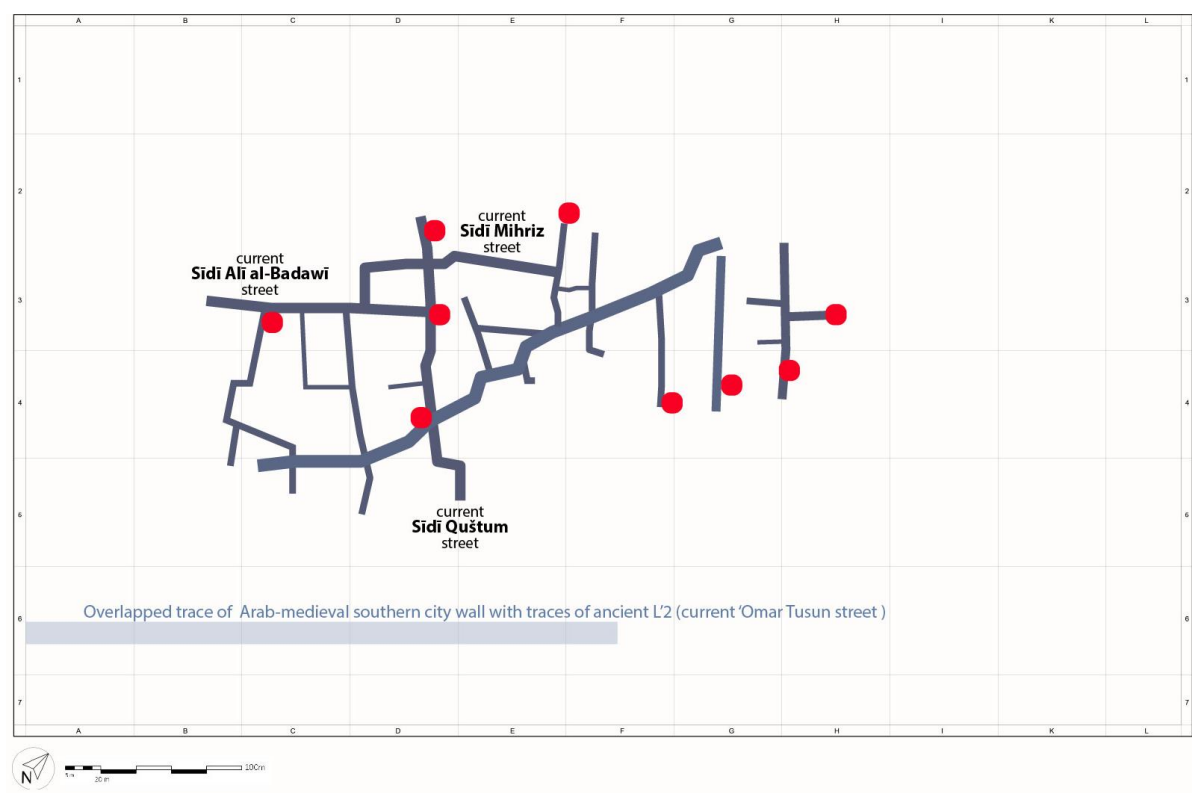


Figure 7.(c): Kôm ad-Dikka. Reconstruction of phase 3 with existing Sufi shrines (marked in red dots).

7.4. Fourth morphological phase

The historical map of 1855 by Charles Muller best illustrates the ensuing development of the historical settlement after 1798. This fourth phase is between the end of the eighteenth century and mid –nineteenth century and witnesses the main readable footprint of the sinuous urban structure. Both probable scenarios don’t continue separately but merge into one. During this phase, Saiyid Darwīš street extends further, where other byways branch of it (Figure 7.d.). From the main spine of the current Sīdī Quštūm street other paths branched such as Sīdī Miḥriz, the current street of Ibn Nubātā, and al-Fasqiya. These later developed into subsequent main access streets; their significance as main access streets can also be justified by the existing Sufi shrines. After 1855, Le Conseil d’Ornato applied the first urban adjustments in Kôm ad-Dikka. This included the reconstruction traces of the antique L1 road— the current Fouad street—regaining its role as Alexandria’s main road.

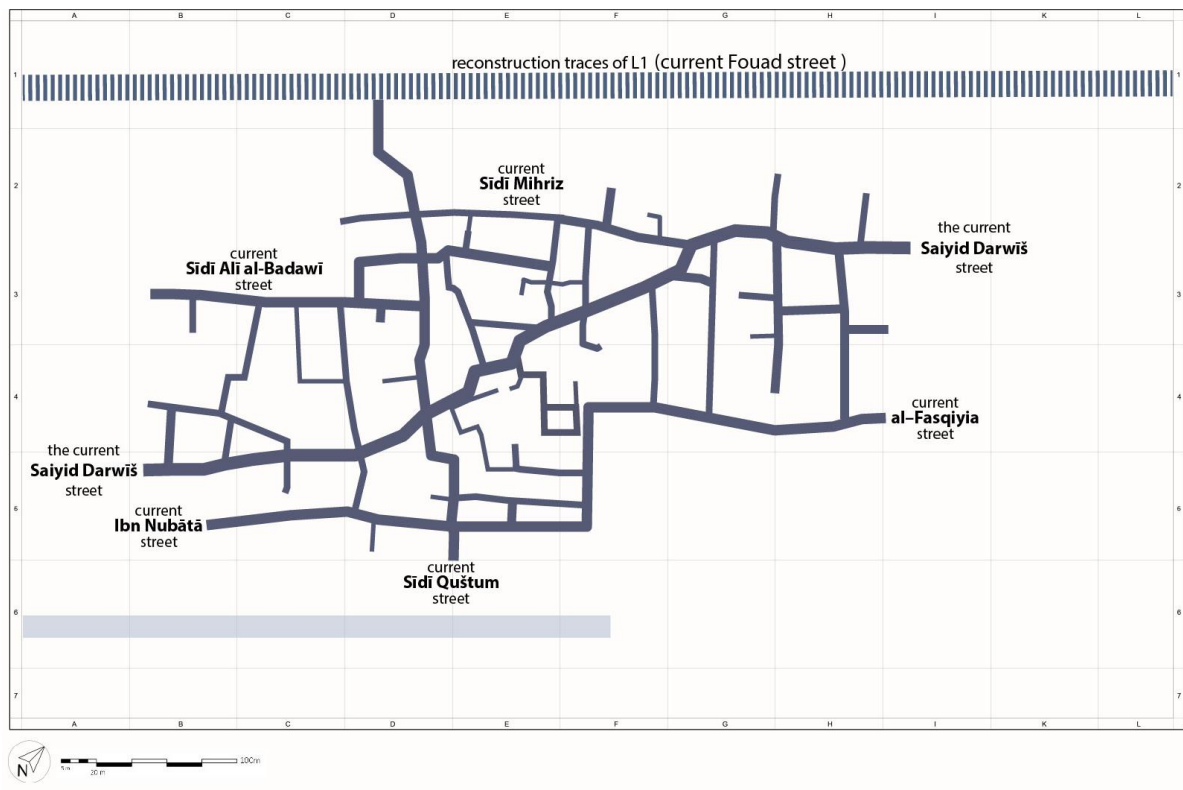


Figure 7.(d): Kōm ad-Dikka. Reconstruction of phase 4.

7.5. Fifth morphological phase

The fifth phase covers the urban enclosure with the westernized urban vicinity—from 1855 until mid—twentieth century (Figure 7.e.). These changes mark the explicit juxtaposition of the two western and sinuous urban form. During the early nineteenth century part of the southern city gate was demolished and altered with the current ‘Omar Ṭusun street. In the historical neighborhood, more byways extended from the sinuous pattern into the current Fouad street, to the north, and the current ‘Omar Ṭusun, to the south. One of them is ad–Damāmīnī street; based on the reconstruction map of Noack, it is probably located above the traces of an ancient street. The city map of 1902 by *Les Services Techniques de la Municipalité* displays the enclosure application of the sinuous fabric by the new westernized streets. These are the eastern street Dr. Ibrāhīm ‘Abd as–Saiyid, the western street Sīdī al–Ḥāiāšī and the southern street ‘Omar Ṭusun. This phase marks the current predominant urban formation of Kōm ad–Dikka. Between the early twentieth century and today, little has changed regarding the urban development. The four perpendicular new main access roads of Fouad street in the north, ‘Omar Ṭusun in the south, Dr. Ibrāhīm ‘Abd as–Saiyid in the east and Sīdī al–Ḥāiāšī in the west frame the organically morphed completely.

This example of the urban morphology of Kōm ad–Dikka can be assumedly found in other examples, not only in Egypt, but in the surrounding Mediterranean and Arab region. Accordingly, comparable analysis can be undertaken to further study the relation between such an integrated social and urban juxtaposition, where new urbanization are taking place while preserving older ones.



Figure 7.(e): Kōm ad-Dikka. Reconstruction of phase 5.

8. Discussion

The historical residential quarter of Kōm ad-Dikka has rectangle–elongated shape and is immediately recognizable with its urban non–uniform physiognomy. Generally characterized by two different urban patterns, it exemplifies two juxtaposing, yet complementary, urban forms and social groups. The first urban form comprises of sinuous street structure, probably dating back to the 16th century, and is inhabited by the social underclass. The second urban form was initially constructed for the social elite back in the nineteenth century and consists of a westernized orthogonal street structure. This westernized urban style encloses the sinuous urban structure and forms the framing enclosure of the medieval residential quarter. This enclosure is crossed by four perpendicular streets (Fouad Street, 'Omar Tusun , Dr. Ibrāhīm 'Abd as-Saiyid and Sīdī al-Ḥayāšī). These streets represent the rectangular enclosure and current main access roads to the area. The entire complex of this residential district is an example of an extant urban and social system with a homogeneous heterogeneousness.

While conducting this type of research to uncover the morphology of Kōm ad-Dikka, it was important to put in mind that most of the results are based on possibilities rather than explicit facts. Based on historical maps, as well as memoirs, the information extracted was sometimes unclear and confusing. Whether the current street of Saiyid Darwīš was a bazaar street, enclosed by gates at its ends, and represents the begin of the urban morphology of the neighborhood, still remains a hypothesis. The traces of the street gates are nowadays not visible. Based on the maps of 1798 and 1801 the positions of the former street gates can be assumed in two places: by the intersection west with the street Sīdī Miḥriz or with the street al-Šaiḥ ad-Darwīš, and to the east with the intersection Rustum Afandī street. Therefore, the morphological analysis and reconstruction results can be considered as interpretations more than definite facts. However, since this paper is mainly based on historical material and on sparse modern literature, it can be perceived as an added contribution towards the urban history of the city of Alexandria. This study is a gateway generating leads to be

followed by further academic research and analytical representations, either for the city itself or for another comparable cities.

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2. The former western mound is now an archaeological site 12m below sea level with ongoing excavations undergone by the Polish Center for Mediterranean Archaeology.
3. The Turkish Town is an artificial peninsula located between the Alexandrian Eastern and Western harbor. Compare building typologies in: M. Annaloro and G. Lange, *Alexandrie: Une Architecture Ottomane* (Éditions Parenthèses, 2011) and M. Damir, 'Kôm ad-Dikka Quarteruntersuchung', Technical University Berlin master thesis, 2014.
4. 'Kom el Dekka et non Kom el Dick, comme il est communément appelé, est le nom donné à une butte au centre de la ville d'Alexandrie aujourd'hui rasée. Kom el Dekka et non Kom el Dick est le vrai nom arabe' Lackany, Radames. „Notes sur quelques nomenclature Alexandrines' In *Cahiers d'Alexandrie. Série II Fascicule 1. Alexandria. Alexandria* (Le Centre d'Études Alexandrines – CEA, 1964), 58. http://www.cealex.org/pfe/diffusion/PFEWeb/pfe_009/PFE_009_002_w.pdf
5. In his book, El-Falaki identifies it as 'Com-el-Dikkéh' on page 57 and 'Com-el-Dikeh' on page 20. M. El-Falaki, *Mémoire Sur l'antique Alexandrie, Ses Faubourgs et Environs Découverts, Par Les Fouilles, Sondages, Nivellements et Autres Recherches* (Bianco Luno, 1872) http://www.cealex.org/sitecealex/diffusion/etud_anc_alex/LVR_000021_w.pdf
6. Langenscheidts Handwörterbuch Arabisch-Deutsch. Langenscheidt KG, Berlin und München, 1996, 216.
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11. J. McKenzie, *The Architecture of Alexandria and Egypt c. 300 BC to AD 700*. (Yale University Press, 2007), 39.
12. G. Grimm, 'City Planning?' In: *Alexandria and Alexandrianism*. (Getty Publications, 1996), 57. <http://d2aohiyo3d3idm.cloudfront.net/publications/virtuallibrary/0892362928.pdf>
13. The map of Kôm ad-Dikka is drawn by the author documenting the 2013 state based on an update of the Cadastral Map by the Survey of Egypt published between the 1930s–1940s.
14. „Vielmehr bestehen die Insulae immer aus acht Häusern und haben übersichtliche Form.' W. Hoepfner, and E.L. Schwandner, *Haus und Stadt im klassischen Griechenland*. (Deutscher Kunstverlag, 1986), 251.
15. Ibid., 241.
16. In his book, El-Falaki refers to it as the Paneum, wherein other literature it is referred to as Paneium (Strabo. *The Geography of Strabo VIII, Book XVII*. Translated by Jones HL. (Harvard University Press,

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504 http://www.cealex.org/sitecealex/diffusion/etud_anc_alex/LVR_000025_w.pdf
- 505 39. In a paper by Niall Christie, the example of Funduq Al-Bayḍ Wa-Al-Qaşab that dates back to the
506 fourteenth century is described and reconstructed upon historical sources. She cites that it was located 'on
507 the southern side of the Maḥajjah al-'Uzmá, the main road that runs from the Rosetta Gate at the east end
508 of Alexandria to the Green Gate at the west end'. This also supports the hypothesis that Kôm ad-Dikka
509 might have been a bazaar or at least a settlement to serve one. See N. Christie., 'Reconstructing Life in
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528 https://www.persee.fr/doc/remmm_0035-1474_1987_num_46_1_2194
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530 al-ḥukuma', comprised of 88.7%, and the non-Arabs and Europeans with 11.3%, in Arabic 'kharīj
531 al-ḥukuma'.
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533 Nubian community can be found in M. Damir, 'Kôm ad-Dikka Quarteruntersuchung', master thesis
534 , Technical University Berlin, Berlin, 2014.