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Historical Topography of Ancient Alexandria

Archaeological research in the area of ancient Alexandria and its suburbs has so far provided enough material which could serve as a basis for creating 'archaeological maps' of the city and its vicinity. As well as that, it enabled significant corrections in the 'canonical' city map drawn by Mahmud Bey (el-Falaki) which is still used as the basic one and also to verify certain essential fragments of Strabo's description. On the basis of the archaeological material it was possible to illustrate architectural styles, both in Alexandria and the whole Graeco-Roman Egypt. The most advanced methods were also used to review the street grid and the course of city walls defined by Mahmud Bey. The archaeological material also allows at least a tentative attempt at a reconstruction of the city plan and the buildings of ancient Alexandria in successive stages of its existence and during 'intermediate periods', in short, establishment of 'historical topography of ancient Alexandria'.

The history of Egyptian Alexandria is traditionally divided into three periods: Ptolemaic, Roman and Byzantine. The criteria of this division were always historical events and sometimes cultural or religious changes.

In the context of continuously increasing knowledge of the topography and architecture of ancient Alexandria, the periodization based solely on its history seems insufficient or even imprecise. Historical circumstances changed the political and religious situation or the population of the city, but its development as an urban entity and the architectural styles followed their own path, not always overlapping with the time of historic milestones.

HISTORICAL EVENTS AND NATURAL DISASTERS AFFECTING THE FABRIC OF THE CITY:

In the Ptolemaic and Early Roman Periods (third century BC-first century AD) the events concentrate at the turn of the eras:

- 'Alexandrian war' the destruction of *Vicus Aegyptiorum* on Pharos, the destruction of a part of architecture on the waterfront in Eastern Harbour, and the destruction of a certain number of buildings in the centre and in the eastern districts of the city.
- Initiation of the construction of Kaisareion.
- Demolition of Arsinoeion and emergence of a new forum(?).

¹ P. Pensabene, Elementi architettonici di Alessandria e di altri siti egiziani, *Repertorio d'arte dell'Egitto greco-romano*, Serie C, vol. III, Roma 1993; J. Mckenzie, The Architecture of Alexandria and Egypt *c.* 300 BC to AD 700, New Haven-London 2007 [= Architecture]; B. Tkaczow, Architectural Styles of Ancient Alexandria. Elements of architectural decoration from Polish excavations at Kom el-Dikka, *Alexandrie* VIII, Warsaw 2010 [= *Alexandrie* VIII].

² J.L. Arnaud, Un outil cartographique: le cadastre informatisé d'Alexandrie, [*in*:] Alexandrina 2, *EtudAlex* 6, Le Caire 2002, pp. 159–173; Id., Un restitution d'un reseau viaire antique à l'épreuve du dessin informatisé, Alexandrie, [*in*:] Alexandrina 3, *EtudAlex* 18, Le Caire 2009, pp. 373–397.

³ B. Tkaczow, The Historical Topography of Kom el-Dikka. Notes on Plans XII–XV, [*in*:] Z. Kiss, G. Majcherek. H. Meyza, H. Rysiewski, B. Tkaczow, Fouilles polonaises à Kom el-Dikka (1986–1987), *Alexandrie* VII, Varsovie 2000 [= *Alexandrie* VII], pp. 131–143.

In the Roman Imperial Period (second–third century AD):

- Anti-Jewish riots during Trajan's reign, serious damages in the city centre and its reconstruction initiated by Hadrian.
- The construction of 'a wall which cut through the city' ordered by Caracalla (AD 215).
- Pacification of the city by Aurelian (AD 272), destruction of the district of Brucheion and expulsion of its inhabitants; this date is associated with the desertion and ruin of a rich residential district on Kom el-Dikka.⁴
- Pacification of the city by Diocletian (AD 297).

In the Late Roman and Byzantine Periods (fourth–seventh century AD):

- An earthquake and tsunami, AD 365; that date could be associated with inundation of the Eastern Harbour and its buildings.⁵
- Anti-pagan riots in AD 391; the destruction of the Great Serapeum and its gradual demolition.⁶
- An earthquake, AD 535 it was probably then that the dome of the theatre building on Kom el-Dikka collapsed.⁷
- Persian invasion in AD 619; imperial baths on Kom el-Dikka cease to function and gradually turn to ruin.⁸

The reconstruction of the topography of the city in the Ptolemaic and Early Roman Periods (**Fig. 1**) was, for a long time, based exclusively on Strabo's description (sometimes supplemented with information provided by Diodorus, Polybius and Caesar). As new archaeological data appeared there were attempts to incorporate them into the 'ideal' plan of Ptolemaic Alexandria. Discoveries from the second part of twentieth century and the beginnings of twenty-first century enriched this plan and changed it significantly in some places.

The question of the shape of the city in the Ptolemaic Period together with the contour of the city walls – defined, as the tradition says, by Alexander the Great himself and erected by Ptolemy I – is still disputable. The eastern and northeastern borders of the city contrived by Mahmud Bey included – as proved by later discoveries – extensive Ptolemaic necropoleis. E. Breccia suggested such course of the city wall in this area which would place

⁴ M. Rodziewicz, Les habitations romaines tardives d'Alexandrie à la lumière des fouilles polonaises à Kôm el-Dikka, *Alexandrie* III, Varsovie 1984 [= *Alexandrie* III], pp. 50–53; see also Tkaczow, [in:] *Alexandrie* VII, p. 133 n. 1.

⁵ F. Jacques, B. Bosquet, Le raz de marée du 21 juillet 365. Du cataclysme local à la catastrophe cosmique, *MEFRA* 98/1, 1984, pp. 439–445.

⁶ Fr. Thelamon, Paiens et chrétiens au IV siècle. L'apport de la Histoire ecclésiastique de Rufin d'Aquilée, Études Augustiniennes, Rome 1981, pp. 167–177 and 236–257; see also Mckenzie, Architecture, p. 246.

⁷ TKACZOW, [in:] Alexandrie VII, p. 137.

⁸ W. Kolataj, Imperial Baths at Kom el-Dikka, *Alexandrie* VI, Varsovie 1992 [= *Alexandrie* VI], pp. 50–51. More than a century later, in AD 792, an earthquake causes the final collapse of colonnades of both porticos of the baths, the colonnade of the theatre portico, and perhaps the ruin of the majority of street colonnades as well.

the necropoleis outside the city. The western city wall – drawn by Mahmud Bey only as a hypothetic one – followed such a course that it was in harmony with the record of Strabo which said that *there is only a small part of the city beyond the canal*. Nevertheless, small sections of the Ptolemaic necropoleis were discovered between the canal and that hypothetic line of the western wall. 10

Mahmud Bey reconstructed the southern city wall on the basis of five sondages which yielded remains that he regarded as Ptolemaic. Due to the fact that in the southern part of the city (apart from the southwestern one, where the Serapeum is located) archaeological discoveries were scarce, the southern course of the wall is, for the time being, accepted as 'likely'.¹¹ The course of the coastline is another problem; the contour outlined by Mahmud Bey was – in the eastern section – significantly modified as a result of underwater examination performed by F. Goddio's team.¹² In addition to that, geophysical research contributed to a new course of Heptastadion.¹³

Mahmud Bey attributed the street grid that he outlined to Roman times. E. Breccia suggested a 'Ptolemaic' network (within the Ptolemaic city limits which he defined) with the same orientation as Mahmud Bey's but significantly 'reduced'; ¹⁴ he also placed in it 'resti di strada' which he identified and which later A. Adriani incorporated into Mahmud Bey's plan as $L'\alpha$ street. ¹⁵

Certain sections of streets suggested by Mahmud Bey could later be erased from the Ptolemaic network because their course – as excavations proved – lead over remains of buildings dated to the Ptolemaic Period. However, in several places, streets from Mahmud Bey's plan were identified as used in Ptolemaic times, namely canals carved in rock or objects corresponding to remains of buildings from that epoch.¹⁶

Polish excavations on Kom el-Dikka provided evidence that from third century BC until the end of third century AD – that is throughout the Ptolemaic, Early Roman and Roman Imperial Periods – the orientation of the streets was in line with the one suggested by Mahmud Bey, even though only the longitudal ones dividing land between streets

⁹ E. Breccia, s.v. Alessandria, [in:] Enciclopedia Italiana I, 1929; cf. A. Adriani, Topografia e architettura, *Repertorio d'Arte dell'Egitto greco-romano*, serie C, vols I–II, Palermo 1963 [= Repertorio C.I–II], p. 63, No. 11.

¹⁰ B. TKACZOW, La topographie des nécropoles occidentales à Alexandrie, *Eos* 70, 1982, pp. 343–345; EAD., Topography of Ancient Alexandria. An Archaeological Map, *TCAM* 32, Varsovie 1993 [= Topography], Sites 8, and 9,9A, see *infra*, n. 47.

¹¹ Ch. Benech, Recherches sur la tracé de murailles antiques d'Alexandrie, [in:] Alexandrina 3, *EtudAlex* 18, Le Caire 2009 [= Recherches], p. 412, Figs 17–18.

¹² F. Goddio, A. Bernand, E. Bernand, I. Darwish, Z. Kiss, J. Yoyotte, Alexandrie. Les quartiers royaux submergés, London 1998 [= Alexandrie], pp. 1–51.

¹³ A. HESSE, Arguments pour une nouvelle hypothèse de localisation de l'Heptastade d'Alexandrie, [*in*:] Alexandrina 1, *EtudAlex* 1, Le Caire 1998, pp. 21–23; ID. *et al.*, L'Heptastade d'Alexandrie, [*in*:] Alexandrina 2, *EtudAlex* 6, Le Caire 2002, pp. 191–273.

¹⁴ E. Breccia omitted, among others, street R4, whose Late Ptolemaic/Early Roman phase was confirmed by later excavations, cf. Rodziewicz, *Alexandrie* III, pp. 17–18; TKACZOW, Topography, Sites 53, 55; J.-Y. EMPEREUR, Alexandrie (Égypte), *BCH* 119/2, 1995, pp. 745 and 747.

¹⁵ ADRIANI, Repertorio CI-II, pp. 22, 63 (No. 11) and 269 (tav. d'agg. A).

¹⁶ See infra, n. 26; TKACZOW, Topography, Sites 100, 108.

L1 and L'2 were identified. One of them is regarded as continuation of L' α discovered by Breccia.¹⁷

So far, two streets of this kind were uncovered: in sector MX, with extension to the east and the west; and in sector F, with extension in sector W1N, but there are no data concerning its extension in the west.¹⁸

During season 1980–81 in the northwestern corner of Polish excavations (the so-called sector U) M. Rodziewicz discovered something which completely changed a long-established notion of the orthogonal street grid of ancient Alexandria – namely a fragment of a paved street of a so-called solar orientation – that is oblique in relation to Mahmud Bey's network. On the east side of the street, remains of rather humble buildings were found together with collapsed wall of limestone blocks which probably surrounded the enclave. ¹⁹ Its expanse is not known yet; remains of buildings discovered previously, whose untypical alignment did not draw attention then, could probably be included in it. ²⁰

In 1982 remnants of a similarly oriented street and a nearby building were discovered on the shore in the area traditionally regarded as a territory of the Royal Quarter;²¹ farther towards northeast there were traces implying that street R1 from Mahmud Bey's plan could – right before Cape Silsileh – 'turn' left in accordance with solar orientation.²² A peculiar, as it seemed, massive foundation of such orientation identified in 1930s on Cape Silsileh,²³ finally found appropriate archaeological context.

The 'solar' street from sector U, as well as the ones corresponding to Mahmud Bey's network from sectors MX and F, existed until the end of the third century AD when the houses which stood along its course were abandoned. It is likely to have resulted from the pacification ordered by Aurelian in AD 272.

The hypothesis which could be ventured is that the Ptolemaic and Early Roman street plan consisted of bigger segments (*insulae*) defined by some streets from Mahmud Bey's network, which were divided into smaller modules²⁴ with streets of similar alignment or of solar orientation. The reason why some segments have an inner 'solar' network is still open to dispute.

¹⁷ Cf. G. Majcherek, Alexandria, Kom El-Dikka Excavations 1997, PAM IX (Reports 1997), 1998, p. 34.

¹⁸ Ткасzow, Topography, Sites 34 i 34A, and 55, where the *alfa* house probably opened onto that street, cf. Rodziewicz, *Alexandrie* III, p. 43 (plans II and IX); Ткасzow, *Alexandrie* VIII, p. 133; G. Мајснегек, Alexandria 1994, *PAM* VI (Reports 1994), 1995, pp. 11–14; Id., Alexandria. Kom el-Dikka. Excavations 1995–1996, *PAM* VIII (Reports 1996), 1997, p. 31; Id., *PAM* IX (Reports 1997), 1998, pp. 25–34; Id., Alexandria. Excavations 1997/1998, *PAM* X (Reports 1998), 1999, pp. 35–39; Id., Alexandria. Kom el-Dikka Excavations 1998–1999, *PAM* XI (Reports 1999), 2000, pp. 32–34; Id., Alexandria. Kom el-Dikka Excavations 1999/2000, *PAM* XII (Reports 2000), 2001, pp. 28–33; Id., Alexandria, Kom el-Dikka Excavations 2000/2001, *PAM* XIII (Reports 2001), 2002, pp. 37–43.

¹⁹ TKACZOW, Topography, Site 45.

²⁰ Ibid., Sites 36, 46, 47.

²¹ *Ibid.* Site 72A; cf. M. Rodziewicz, Ptolemaic Street Directions in Basileia (Alexandria), [*in*:] Alessandria e il mondo ellenistico-romano. I Centenario del Museo Greco-Romano, Alessandria 23–27 novembre 1992, Roma 1995 [= Street Directions], pp. 227, 231, 233.

²² *Ibid.*, pp. 229–230, 231, 233.

²³ TKACZOW, Topography, Site 78D.

²⁴ J.-Y. EMPEREUR, Alexandrie redécouverte, Paris 1998 [= Alexandrie], p. 57.

The Early Roman Period is, in a variety of ways, a continuation of the Late Ptolemaic Period. Archaeological remains show that Late Ptolemaic buildings served as foundations where new houses were constructed in the first century AD, which in turn were rebuilt and extended in the second century AD, but the basic 'fabric' of architecture remained unaltered and so did the street grid. The type of architecture does not change either – at least in the segments of the city which have been examined – they are still residential districts. As far as styles of decoration and construction materials are concerned, the Ptolemaic Period does not finish in 30 BC but it lasted on at least until the mid- or even throughout first century AD.²⁵

Considering the changes in the street grid and type of architecture, in the segments examined in detail there is continuity from the first century BC until the end of the third century AD. Scarce, for the time being, remains from the third and second century BC imply that the continuity – with renovation, expansion and reconstruction of buildings along the same street network – lasted throughout the Ptolemaic Period. The question of association of these renovations with the reconstruction of the city after the Alexandrian War or after anti-Jewish riots during the reign of Trajan is still at the stage of speculations.

In several places – in the centre and in the eastern districts – remains of Ptolemaic buildings were discovered and above them there was the course of a street, generally dated to the Late Roman Period, corresponding to Mahmud Bey's plan.²⁶

The remains were often found with fragments of Ptolemaic and Early Roman mosaic floors;²⁷ the ones from the centre belonged to rich private villas but some of the ones found in the eastern districts are attributed to royal palaces.²⁸

The results of analysis of remains from the area located to the north of street L2, between streets R5 and R3bis, suggest that in the period mentioned street R3 must have finished slightly to the north of street L2, 29 and that streets L3, L' α and L5 did not exist (even though Breccia indicates L3 in his plan). Such interpretation and identification of fragments of streets and buildings of 'solar' orientation 30 indicate that in the Ptolemaic and Early Roman Periods, and in some places even until the end of third century AD, 31 this area had its own internal communication system. It is not certain if this phenomenon

²⁵ TKACZOW, Alexandrie VIII, pp. 21–23, 95–96.

²⁶ TKACZOW, Topography, Sites, 34, 80, 87, 89, 96, 107A, 112, 123A; some of them were identified as unfinished buildings (for instance Site 107), others were remnants damaged or deserted towards the end of the third century AD.

²⁷ *Ibid.*, Topography, Sites 34, 43, 44A, 47, 63, 78E, 95, 101, 109A, 116, 125?, 128, 129.

²⁸ *Ibid.*, Sites 78E, 116, 128 and D. SAID, Deux mosaiques hellenistiques récemment découverts à Alexandrie, *BIFAO* 94, 1994, pp. 377–379.

²⁹ See, RODZIEWICZ, Street Directions, n. 31; also ID., Le debat sur la topographie de la ville antique, [*in*:] R. Ilbert (Ed.), Alexandrie entre deux mondes, *Revue de l'Occident musulman et de la Méditerranée* 46, Aix-en Provence 1987, p. 45; see also G. GRIMM, Alexandria. Die erste Königsstadt der hellenistischen Welt, Mainz a/Rhein 1998, pp. 14–15 and 26–27 (plan by W. Hoepfner).

³⁰ See *supra*, nn. 21–23 and J.-Y. EMPEREUR, Alexandrie (Égypte) 1992–1993, *BCH* 118/2, 1994, pp. 505f.; J. ARNAUD, Sources et méthodes de restitution. Les obélisques et le Césaréum d'Alexandrie, [*in*:] Alexandrina 2, *EtudAlex* 6, Le Caire 2002, p. 187 n. 33.

³¹ See *supra*, n. 24.

might be connected to the time of devastation and reconstruction of the district – at the moment dates could only be speculated about.

During the following, Roman Imperial Period (Fig. 2), the topography and architecture were subject to certain changes, however, in the case of topography they are difficult to notice. All buildings and monuments of Roman Alexandria are known exclusively from written sources; so far no archaeological remains have been matched (with the exception of the Roman phase of the Serapeum and Caesareum).

Archaeological record proved the following – from the first until the end of the third century AD the centre is characterized by the same type of architecture: wealthy residences with mosaic floors and wall paintings, often built on Ptolemaic foundations. The expanse of the district must have been huge.³² Public buildings known from Strabo's records, situated by him in the city centre, would therefore be located in the area stretching from the east of the junction of L1 and R4 to the supposed Ptolemaic city centre near the junction of L1 and R1 and to the west of junction of L1 and R5 where some scientists place the Roman city centre.³³ In this area the sole significant archaeological remains are ruins of a large brick edifice of unknown function.³⁴

Remnants of wealthy residences were also identified in eastern districts,³⁵ and along the shore between the 'exits' of streets R4 and R2 ruins of two huge brick buildings, recognized as remains of baths, were visible until 1870s.³⁶

On the whole, in eastern districts (that is on the territory of the Royal Quarter) more than ten sites with remains dated to the second and third century AD were identified. Among them there are remnants of brick buildings founded on earlier limestone walls, limestone structures, street paving, numerous finds of statues, elements of decoration and inscribed dedications which provide information about erected buildings and monuments, even though they cannot be located.³⁷

The unchanged street grid is preserved in the city centre until the end of third century AD. It is difficult to prove that the same applies to the other parts of the city.³⁸ The problem of the time when construction of streets lined with columns began in Alexandria depends, to a great extent, on how Achilles Tatius' novel is dated.³⁹ The places where rubbles of huge columns made of Aswan granite⁴⁰ might indicate which streets were

³² Cf. TKACZOW, Topography, Site 133.

³³ Adriani, *Repertorio* CI–II, pp. 25–28.

³⁴ TKACZOW, Topography, Site 26; the other remains from that area dated to the Imperial Period are scattered mobile objects: *ibid.*, Objects 167–170, 217–219, 221, 225.

³⁵ EMPEREUR, BCH 119/2, 1995, pp. 745–747; ID., Alexandrie, p. 32; see also TKACZOW, Topography, Site 95.

³⁶ *Ibid.*, Sites 73, 75, 104; remains of Roman baths were also discovered several hundred metres farther to the south, see EMPEREUR, *BCH* 118/2, 1994, p. 750.

³⁷ TKACZOW, Topography, Sites 73, 75, 77A-B, 78B, 78E, 80, 87, 91, 92, 93, 104, 110, 111, 119A-B, 122C, 123A-B and Objects 184–186, 237–232; see also S. DEMOUGIN, J.-Y. EMPEREUR, Inscriptions d'Alexandrie I. Un nouveau procurateur alexandrin, [*in*:] Alexandrina 2, *EtudAlex* 6, Le Caire 2002, pp. 149–158; M. SEIF EL-DIN, Une statue cuirassée d'Alexandrie, [*in*:] Alexandrina 3, *EtudAlex* 18, Le Caire 2009, pp. 119–133.

³⁸ Adriani, *Repertorio* C.I–II, p. 28; Empereur, Alexandrie, pp. 60–61.

³⁹ Adriani, *op. cit.*, p. 17.

⁴⁰ TKACZOW, Topography, p. 333.

equipped with such colonnades; undoubtedly, there was a granite colonnade along streets L1, L'2 and R5.⁴¹

The enclave of 'solar' orientation in sector U remains unchanged in the second and the third centuries $^{\rm AD}$ while a similar enclave in the Royal Quarter was destroyed in the second century $^{\rm AD}$.

Archaeological record also shows expansion of the city towards east – for the time being, there is evidence for that only in the form of the ending of the use of eastern necropoleis⁴³ and of scattered remains of wealthy residences together with secondary streets to match, corresponding to Mahmud Bey's plan.⁴⁴ Perhaps the expansion of the city in that period reached the course of the city walls defined by Mahmud Bey.

The fact that a new big necropolis dated to the first–second century AD emerges in the southwestern corner of the city, to the south of the Serapeum and within the city walls defined by Mahmud Bey, was recently associated with Strabo's enigmatic remark about the desertion of the Serapeum sanctuaries and transfer to Nicopolis, constructed by Augustus. ⁴⁵ Ch. Benech suggests that it was not the Serapeum itself that was deserted but rather its surroundings were abandoned in the first century AD and during the second century it was engulfed by a necropolis. The unexamined 'tombs' and 'hypogea' which, according to T. Neroutzos, were supposed to occupy large stretches of land between the western city wall defined by Mahmud Bey and the canal are most probably – like the necropolis of Miniet el-Bassal⁴⁶ – Ptolemaic hypogea, abandoned later, and 'populated' again in Late Antiquity.

Only two of probably existing triumphal arches⁴⁷ were – very tentatively – located; 'the Arch of Titus' was supposed to be situated in the eastern suburbs next to the road from Alexandria to Nicopolis, 'the Arch of Trajan' – in the southern part of the city.⁴⁸

There is no archaeological record which would confirm the destruction in the city centre during Trajan's reign or its reconstruction ordered by Hadrian.

Written sources list names (sometimes also locations) of large edifices constructed at the initiative of emperors which have not been confirmed by archaeological record.

It is possible – even though not to full extent – to grasp the modifications in construction techniques and the style of architectural decoration; however it is difficult to estimate how much Alexandria began to resemble other big Roman cities. Definitely, the introduction of burned brick is an essential change. ⁴⁹ As far as the style of architectural decoration is concerned, only in the second century AD imported Roman marble decoration elements appear on a mass-scale. They are different from limestone decorations (mainly the capitals

⁴¹ TKACZOW, Topography, Sites 24, 31, 38–40.

⁴² Ibid., Site 72A.

⁴³ *Ibid.*, Sites 135, 139, 145.

⁴⁴ Ibid., Sites 138, 138A.

⁴⁵ Benech, Recherches, p. 421.

⁴⁶ TKACZOW, Topography, Sites 9, 9A, and Site 8.

⁴⁷ S. Handler, Architecture on the Roman Coins in Alexandria, *AJA* 75, 1971, pp. 57–74; H. Fragaki, Images antiques d'Alexandrie. I^{er} siècle av. J.-C. – VIII^e siècle apr. J.-C., *EtudAlex* 20, Le Caire 2011, pp. 40–43.

⁴⁸ TKACZOW, Topography, Site 140, Objects 233, 234; cf. ADRIANI, Repertorio CI–II, p. 206

⁴⁹ TKACZOW, Topography, p. 33 n. 39; it is difficult to define the date precisely.

of columns) which preserved traditional Alexandrian stylistic features throughout the first century AD.⁵⁰

Large stretches of the city in the centre and in the northeastern part were destroyed and the houses abandoned – as archaeological records show – at the end of the third century AD. Two dates are taken into account in this case – both connected to 'pacifications' which were performed in rebelled Alexandria by two emperors, Aurelian in AD 272 and Diocletian in AD 297. At the beginning of that fateful century (in AD 215) Caracalla – also as a form of sanctions – divided the city with a wall whose course is still a subject of speculation.

After that – at least in well-examined places – there is a rather long 'intermediate' period – when little happens in the districts occupied so far by wealthy residences, nothing apart from a slow degradation of the buildings, then a methodical scheduled demolition begins and next in some places new houses are built but this time of a significantly lower standard,⁵¹ in others – the levelling of the ground and emergence of completely new architecture of public character.⁵²

At the same time, the street grid changes. The enclave of 'solar' orientation on Kom el-Dikka is demolished and replaced with a kind of 'garden'. 53

In the area of the former Royal Quarter, apart from the streets from Mahmud Bey's network (R3, L3, L'α, L4 i L5), a few secondary 'R' streets were identified and dated to Late Antiquity. This could be associated with the dates of demolition and reconstruction of the district,⁵⁴ although the date is rather a conjecture.

This process begins at the turn of the third and fourth centuries AD, but its culmination takes place during the final decades of the century.⁵⁵

Consequently, the Late Roman and Byzantine Periods (**Fig. 3**), although traditionally placed in fourth–seventh centuries AD, are decidedly marked in the city topography only from the mid-fourth century AD, at least in the instances supported by archaeological record (the change of the street grid and the type of architecture). Definitely, the construction of churches is a significant change in the city architecture, ⁵⁶ but that process has not been confirmed by archaeological evidence. On the basis of written sources it is only possible to distinguish six chronological groups associated with about 20 churches built from the end of the fourth century to the seventh century AD. Location of ten of them has been identified and among them only four are located precisely to a particular *insula*. As far as

⁵⁰ Mckenzie, Architecture, pp. 223–227.

⁵¹ TKACZOW, Topography, Site 55; architecture of a similar type was also identified in the southeastern part of the city, *ibid.*, Site 134.

⁵² *Ibid.*, Sites 33, 42, 44; G. MAJCHEREK, The Late Roman auditoria of Alexandria. An Archaeological Overview, [*in*:] T. DERDA, T. MARKIEWICZ, E. WIPSZYCKA (Eds), Alexandria. Auditoria of Kom el-Dikka and Late Antique, *JJP Suppl.* VIII, Warsaw 2007 [= Auditoria], pp. 11–50.

⁵³ TKACZOW, Topography, Site 45; EAD., Alexandrie VIII, p. 79.

⁵⁴ For example: the theatre portico in the city centre, cf. TkAczow, Topography, Site 33.

⁵⁵ Kolataj, *Alexandrie* VI, pp. 47–50 (baths); Z. Kiss, Remarques sur la datation et les fonctions de l'édifice théâtral à Kôm El-Dikka, [*in*:] 50 years of Polish Excavations in Egypte and the Near East, Warsaw 1992, pp. 171–178 (theatre building); Τκαςzow, Τοροgraphy, Site 42 (cistern) and Μαισημέρεκ, Auditoria, pp. 29–38.

⁵⁶ MCKENZIE, Architecture, pp. 230–260; A. MARTIN, Alexandrie à l'epoque romaine tardive: impact du christianisme sur la topographie et les institutions, [in:] Alexandrie medievale 1, EtudAlex 3, Le Caire 1998, pp. 12–18.

archaeological material is concerned, it is possible, up to date, to locate 14 places were remains which could be associated with church architecture (portable and *in situ*) were found. The remains were tentatively identified with churches known from written sources but the most of these interpretations have not been confirmed.⁵⁷

Remains which could be connected to both civil and sacral architecture coming from the eastern districts of the city (that is to the north of street L2, between streets R5 and R2) and dated to the fourth–sixth centuries AD indicate that the burning and demolition of Brucheion ordered by Aurelian in AD 272 – if we agree that it was located in the eastern part of the city – did not cause its complete desertion. The process was extended in time and probably lasted until at least the turn of seventh and eighth centuries AD.⁵⁸

Part of eastern districts (that is the area located to the east of street R2bis) became partially necropoleis again at the turn of the third and fourth centuries AD; many Christian burials were installed in old Ptolemaic tombs.⁵⁹

Dumps of pottery, debris and other waste, the so-called *kopriai*, become a peculiarity in the topography of the city in the Late Antiquity. They are found not only in the peripheral areas, as written sources say, but also in the city centre.⁶⁰

The scale of damage caused by the earthquake and tsunami in AD 365 remains an open issue. Scientists wonder if it was the time of final inundation of a significant part of old Ptolemaic architecture located near the Eastern Harbour and identified during underwater researches by F. Goddio.

After the city had been captured in AD 642 by 'Amr ibn al-'Ās, there was another 'intermediate period' – transformation of Byzantine Alexandria into Arabic one, connected to a complete change of the city topography and architecture.

The period of transformation from a Byzantine city into an Arabic one is still a subject of research. Archaeological evidence indicates that the second part of seventh century and a part of the eighth century AD is still a phase of a Byzantine city, even though already populated by new settlers.⁶¹

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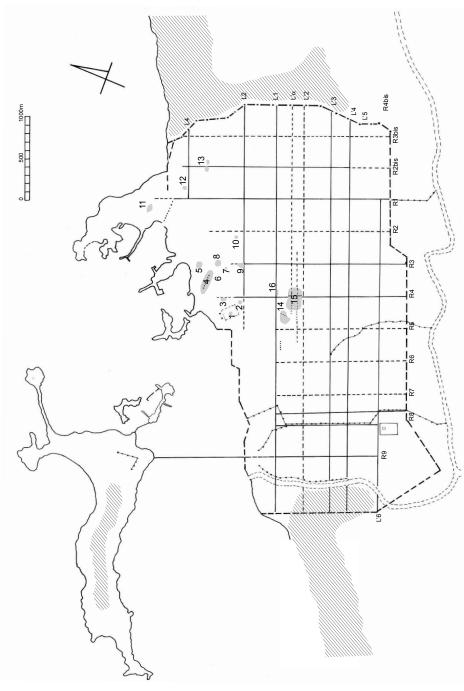
⁵⁷ B. TKACZOW, Topografia chrześcijańskiej Aleksandrii, [*in:*] Sympozja Kazimierskie poświęcone kulturze świata późnego antyku i wczesnego chrześcijaństwa, Lublin 1998, pp. 293–294, 301, 295–297 and plan.

⁵⁸ Ibid., p. 296.

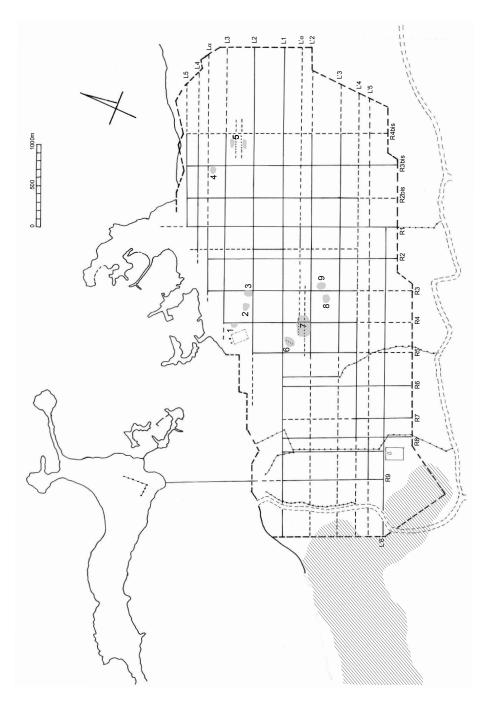
⁵⁹ *Ibid.*, p. 297; EAD., Topography, Sites 139, 145.

⁶⁰ RODZIEWICZ, Alexandrie III, pp. 25–26, n. 28 and p. 31, n. 57; MAJCHEREK, Auditoria, p. 16, esp. nn. 20–21 and p. 37.

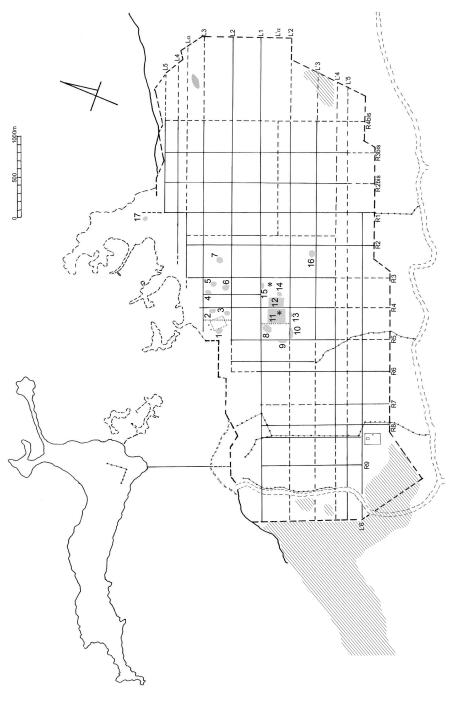
⁶¹ M. Rodziewicz, Graeco-Islamic Element at Kom el-Dikka in the Light of the New Discoveries, [in:] *Graeco-Arabica* I, Athens 1982, pp. 35–48; Id., Transformation of ancient Alexandria into a Medieval City, [in:] R.-P. Gayraud (Ed.), Colloque international d'archeologie islamique, *TAEI* 36, Le Caire 1998, pp. 369–384.



5 – fragment of large wall; 6 – remains of house; 7 – remains of house with mosaics; 8 – Ptolemaic structures under Late Roman street; 9 – street and buildings lining it; 10 – mosaic floor; 11 – mosaic floors; 13 – mosaic floors; 14 – Kom el-Dikka, sector U and surroundings; 15. Kom el-Dikka – sectors MX, F, 1. Alexandria in the Ptolemaic and Early Roman Period: 1 – massive limestone wall; 2 – fragment of a large wall; 3 – remains of houses; 4 – large walls and street; W1-W1N, 16 - remains of monumental structure (Plan: B. Tkaczow, after McKenzie, Architecture; digitizing J. Iwaszczuk).



2. Alexandria in the Roman Imperial Period: 1 – houses with mosaics; 2 – remains of the baths; 3 – street and buildings lining it; 4 – house with mosaic; 5 – street and houses with mosaics; 6 - Kom el-Dikka, sector U; 7 - Kom el-Dikka, sectors MX, F, WI-W1N; 8 - house with mosaic; 9 - street and ruins (Plan: B. Tkaczow, after McKenzie, Architecture; digitizing J. Iwaszczuk).



3. Alexandria in the Late Roman and Byzantine Period: 1 – ruins of the baths; 2 – houses and workshops; 3 – street and houses; 4, 5, 6, 7 – Late Roman structures built into Ptolemaic/Early Roman foundations; 8 - Kom el-Dikka, sector U ('garden'); 9, 10 - street colonnades and remains of buildings; 11 - Kom el-Dikka - 'theatre', baths, cistern (* - dump of waste); 12 - houses and workshops; 13 - bath (part of the house); 14 - poor habitations (* - dump of waste); 15 - large house (villa?); 16 - houses and workshops (Plan: B. Tkaczow, after McKenzie, Architecture; digitizing J. Iwaszczuk).