Proceedings of
the Fifth Central European Conference of Egyptologists.
Egypt 2009: Perspectives of Research.
Pułtusk 22-24 June 2009

Edited by Joanna Popielska-Grzybowska, & Jadwiga Iwaszczuk

Institute of Anthropology and Archaeology
PULTUSK 2009
Tell Farama, Pelusium. City Urban Planning Reconstruction in the Light of the Last Researches

When Jean Clédat, who was one of the first visitors and excavators of Tell Farama ruins ancient Pelusium appeared in archaeological literature as one of the most important urban centres of the Graeco-Roman Egypt. Clédat was the first who published a sketch plan of the site but unfortunately it was not done to the scale. It was one of the best sources to study the archaeological site but also some characteristic elements which survived in relatively good condition. The plan drawn by Jean Clédat made it possible to recognise structures which survived on the site. One can even find place where Clédat situated ruins of the Zeus Casius temple. The temple was one of the most important urban sanctuaries and, as mentioned, was dedicated to Zeus, or perhaps better, Semitic deity associated with Phoenician pantheon. Mount Casius is identified as Jebel Arka on a coast near a border between Syria and Lebanon or another more probable identification was given by Strabo who situated Mount Casius near Antioch. The city rather on Oriental than Egyptian character as the main deity of Pelusium, (even if strongly Hellenised or Romanised in cult and liturgy), had strong Semitic origins that clearly supported. Except for the ruins of the Zeus Casius temple the first Pelusium’s plan shows such constructions as El Kasr, which is visible on the surface east from the Zeus temple. It is also possible to recognise in two places remains of column shafts along city streets, ruins of a theatre. Tell Maqsan is also mentioned as a separate site, which belonged to the Pelusium’s urban structure.

From the times of Clédat research many other expeditions have conducted excavations on the ruins of ancient Pelusium which brought to light constructions and buildings constituting parts of the city urban structure. A short list of various expeditions which have excavated in Pelusium reflects the scale of fieldworks that the Egyptian, French, Canadian, Swiss, and Polish teams have carried out at the site. It resulted in relatively good recognition of the ancient city.

Based on the published fieldwork results, the present article is an attempt to study Pelusium’s urban planning’s. Pelusium was of one the most important cities on the Via Maris, road connecting Levantine coast with heartland of Egypt.

Besides excavations, Polish activity in Pelusium also focused on magnetometric research. The results made possible further studies of the city’s layout. This activity of Polish team was an inspiration for the text. As a consequence the results of Polish excavations discussed below are an entering point for the studies on the city plan reconstruction, its functioning and identification of city quarters.

---

1 J. Clédat, Le temple de Zeus Casios à Péluse, ASAE 13 (1913), pp. 79-85.
4 Unfortunately some of the results of excavations in Pelusium are still unpublished.
5 The magnetometric researches were conducted by Tomasz Herbrich, who was only responsible for this part of the Polish-Egyptian project.
decorated with columns, which divided an embankment of the Pelusiac breach of the Nile, which could have been functioning as a landing pier from the open space of the square. The hypothesis that the line of columns was closing the northern edge of the square is based on the assumption that finishing all of the square sides should be similar. If the assumption is correct, the southern part of the square was finished with columns being a part of the northern street and consequently the other three sides of the square had to be decorated in the same manner.

The third and fourth transversal streets, found thanks to the magnetometric survey, were localised nearby the northeastern corner of the theatre. During the research two large constructions were found west from one of these narrow streets. One of them is an unidentified structure located directly north-east from the corner of the theatre. Taking into a consideration other buildings known from Pelusium structure, situated in southern part of an *insula*, seems to be a peculiar construction. The peculiarity of the discovered remains is strongly associated with its layout. In the central part the round structure is ca. 30–35 metres in diameter and formed the most characteristic element of the architectonic structure. Possibly the round shape of the building was never visible from outside. The round chamber was a central and the most representative room in the architectonic structure, found thanks to the magnetometric measurements. It was possible to recognise several additional chambers or rooms which formed an almost square in plan building around the central room. This building was constructed in such a way that three elevations were opened on three different streets. The only wall was attached to another large construction occupying a northern part of the *insula*. The building was probably a large house with a courtyard and small shops situated along western transversal street. Possibly several small rooms found in the western part of the structure had such function. The hypothesis that these rooms were constructed for other purposes and functions cannot be rejected. Without excavations such a thesis cannot be supported. Similar problem is observed in the southern part of the *insula*. The function, general character, and even a full layout of the building found there still remains not completely understood. Only the excavations would be able to help us understand better and properly interpret the building's original function. At present two interpretations seem to be possible. The first one, the round structure and additional architectonic elements belonged to a technical building such a granary or a water cistern. The comparative studies of such structures existing in Pelusium's landscape make this evaluation and interpretation less likely taking into consideration the fact that the structures were completely different in their constructions and layouts. The other interpretation seems to be more adequate, but can also be challenged. According to the last hypothesis the square structure with a round central chamber could have originally been a *bouleuterion* building. For instance a *comitium* building found in Paestrum in Sicily was similar in plan. As Pelusium was a Greek city it seems to be more possible that such a round structure could have functioned as the *bouleuterion*. The size of both structures i.e. from Pelusium and from Paestrum were similar, which could be an argument supporting the last interpretation. Moreover, the localisation of such untypical construction, nearby the theatre, in the wealthy part of the town, supports the hypothesis about an extraordinary function of the building.

The area situated east from the theatre, with no doubt, also belonged to the most significant part of the city. Here in the area of one or two *insulae* were concentrated probably other dwelling structures. As this part of the city survived in very bad condition only damaged remnants of houses are still visible on the surface. They seem to be similar to the dwellings excavated by Polish team in the northern part of the site. As these parts of *insulae* are so

---

badly preserved and devastated even a hypothetical ground plan of the houses cannot be fully recognised. The only relatively well preserved part of the examined area belonged to ruined granary situated in the southern part of the site. 10 The interpretation of the construction was only hypothetical as at closer observations the building was rather constructed for hydraulic purposes. The building is connected with remains of terracotta pipelines and is also possibly connected with the sewage system. Moreover, the pipes were running in the direction of east wad west along the southern partly colonnaded street, which was slightly bent into the north and running parallel to the southern shore of the island. The whole construction was built of red bricks and what is most characteristic the reservoirs situated on the upper floor were made of waterproof material mixed with potsherds, which seems to support the hypothesis about the hydraulic function of the building.

Further east, where the city starts to be narrower, several other dwelling insulae are visible on the surface. This part of the site is not only badly eroded but was a target of illegal diggings. Consequently many of robber pits are dominant element of that part of Pelusium’s landscape. However, the visible dwelling quarter even if partly destroyed should have been treated as most characteristic type of the architecture. In other words, the red brick structures should have been dated back to the Roman period. Supposedly, the urban layout could have survived unchanged from the Hellenistic times. Such an interpretation is supported by pottery analysis. The ceramic material was found in the area where robber pits destroyed and disturbed stratigraphical sequence. It resulted in removing the archaeological material from older layers. Fragments of Rodian amphorae, black glazed pottery, fishplates, Egyptian black glazed pottery and many other deserved an attention among the pottery observed on the surface.

Possibly a church should have been situated among heavily damaged dwellings in the southern part of this quarter. Several robber pits destroyed and damaged architectonic structures in here too. The most important element observed in the field was a white marble coated baptistery which was partly unearthed and destroyed. If a church existed there it was constructed in the urban layout that did not change the orthogonal plan of the city.

The traces of eastern part of the city disappeared among modern paved road which runs in the north-south direction. Several low mounds are located east from the road and one large mound – Tell Maqsan – dominates over this part of Pelusium.

A large church complex with remains of a convent attached to the main sacral architectural body functioned on Tell Maqsan. One of the most important Christian sacral complexes of Pelusium was probably originally situated there as the largest baptistery was unearthed there by Ch. Bonnet’s and M. Abd El-Samie’s team. 11 The baptistery and large martirae, which was a part of this sacral complex indicates the rank and importance of the church. The importance of the complex is also emphasised by a bathhouse constructed southern-west to the church-convent complex. Both monumental buildings were supposedly constructed not only for the citizens of Pelusium, but also for pilgrims who visited the complex. Due to the fact that the monumental church was constructed on the city outskirts as a destination for visitors and pilgrims seems to be very smart. Moreover, on the outskirts a Pelusiac necropolis

---

10 The results of excavations have not been published yet.
was located; so the church complex was built on a terrain which was directly attached to the necropolis. Due to the localisation of the complex the large numbers of pilgrims did not enter the city centre.

East from Tell Maqsan the landscape is dramatically changed. Supposedly this part of the site was formed during the last stage of alluvial accumulation. That is why the character of the landscape is so different in the western part of Pelusium. The island character of the site, so typical of the Pelusium West, is replaced by lagoon like environment. There were many problems with communication in the eastern part of this marshy land spread among small mounds slightly raised above the ground level site. Such a situation affected constructions of roads necessary for comfortable communication from one small island to another. Traces of such a structure were observed between Tell Maqsan and Tell Kana'is (island 10), where ruins of Small or Eastern Theatre were excavated by Jaritz.12 Generally, the character or layout of the settlement in the eastern part of Pelusium was hardly recognisable. Nevertheless, in some cases it was possible to recognise peculiarity of urban planning in that part of the city. Eastern outskirts of the city were located there. With no doubt, next to Eastern Theatre on Tell Kana'is were recognised traces of a necropolis with ruins of a mausoleum, and possibly architectonic structures which could have functioned as dwellings. Traces of possible dwelling structures south from Tell Kana'is were found, but generally the character of the architecture in that part of Pelusium is rather unclear.

Necropoles were located in the southern-east part of the site on islands 38 and 39 what clearly supports a hypothesis that settlement located there had possibly an extra mural character. The last group of the islands (44-55 according to Jaritz), which belongs to the eastern part of Pelusium, is situated to the south from Tell Maqsan and Tell Kana'is.13 Special attention should be drawn to some structures discovered during the survey and short excavations. The structures discovered there were probably a part of an industrial zone functioning on the city outskirts. Ruins of a seriously damaged house, with a row of amphorae situated along the traces of a ghost-wall, was the most spectacular discovery. Moreover, a part of a channel or a sewage system and a longitudinal kiln were unearthed there during the fieldworks. All of the evidences seem to support a thesis about the industrial character of the Pelusium's eastern suburbs.

Probably the oldest part of Pelusium spreads west from the central part of the city. Collapsed column shafts which could have been remains of a transversal street were visible west from the ruins of the theatre on the city plan first published by Clédat. If Clédat's observation was correct a small street finishing in a monumental way would be very uncommon. It is much more probable that the above-mentioned remnants belonged to a large and monumental cistern which survived in relatively good condition. In other words, it is possible that the columns drawn on the Clédat plan could have been a part of the cistern façade.14 Moreover, it is possible that the shafts of columns could have been drag away from their original place.

in one of the columned portico or from any other monumental building. These column shafts are still visible on the site surface. Closer analysis and measurements clearly show that the shafts are very similar to those found in the northern part of the city, as well as to the column one from the north-eastern part of the site, survived vertically in situ. All of the monumental column shafts were hewn from the gray Aswan granite and probably belonged originally to the porticoes street or street decorations, which were found in different places of the site.

The above-mentioned water cistern is badly destroyed along its eastern façade. Other elevations of the building probably preserved up to 3-4 metres high. Nevertheless, till now the structure was not excavated and consequently it is difficult to estimate the full state of preservation as well as the ground plan of the building. The shape of the surface where ruins of the cistern are located, shows that the building must have been very large. If such public and technical buildings served as fresh water supplies of the whole urban community it is not surprising that such a monumental structure was constructed almost in the middle of the city. It is estimated that this cistern building was constructed probably on a surface of four insulae. If the observations are correct the cisterns would belong to the most monumental public buildings in Pelusium. As the eastern part of the cistern is heavily damaged it is possible to enter water reservoirs system situated on the ground level of the building. These structures survived up to their ceilings which makes possible to estimate the height of the ground floor of the cistern. It is worth to add that the area between the cistern and the great theatre was probably used as a living quarter. There is enough space to locate two insulae which perfectly filled the space.

Another public and monumental building possibly was functioning north from the cistern. One of the elevations, or the most probably a façade, was opened to the city square. It cannot be excluded that both buildings i.e. the above mentioned and the cistern were built in the same line along a transversal street and than along the western edge of the square.

Ruins of another monumental architeconic complex are located several hundred metres south-west from the cistern. According to the reports of the excavators this large construction served as a southern bath. The building is characterised by relatively complex structure. Except for typical bath elements such as stoves, water pipes, hot air canals and basins numerous small rooms were brought to light there. Here, during the earlier phase of functioning nearby the spot where the bathhouse was constructed, a gymnasion had possibly been constructed. The thesis seems to be supported by a Greek inscription found in a presbytery of the church. The discovery was published by Carré-Maratray. Nearby the bath complex was constructed a large tetraconchos chamber, which had been the most dominant element of the excavated monument. In the Late Antiquity the western apse was partly remodel which lead to partial destruction of the original structure. A doorway was constructed in the most western part of the apse wall. As a consequence, the function of the building was changed. The most splendid hall of the bath was turned into a monumental church. The revitalisation of such monumental building shows the process of Pelusium's

---

citizens Christianisation and also indicates that old public and monumental buildings were not functioning according their original design anymore. It seems possible that the cathedral church of Pelusium was located there. The unearthed building with no doubt belonged to the most spectacular and most monumental Christian sacral buildings discovered and ever existing in Pelusium. Probably such a monumental bath was not longer needed, or even partly abandoned, which lead to the change of its original function.

The most characteristic element of the landscape of the western part of Pelusium’s urban layout is a military camp. This construction was built on a pentagonal-like plan. Typically for Late Roman legionary camps three curtain walls were constructed as well as very characteristic round and U shape towers. The northern curtain wall in the eastern-north part is bent and in consequence forms untypical pentagonal shape of the fortress. The northern gate was situated in the most north exposed point of the curtain wall. Generally, it is difficult to tell why the fortress was constructed in such a manner. There are two possibilities. Firstly, the fortress could have been constructed hurriedly when to Egypt was approached by Sasanian forces. Secondly, it is also possible that the layout of the fortress could have been forced by the natural shape of the terrain and was associated with empty spaces inside Pelusium’s urban plan. Only the further excavations inside the fortress will be able to bring to light new data. The new evidence could help in reconstruction of Pelusium urban planning arrangement dated back to the times before the fortress’s construction.

Excavations conducted by the Egyptian team brought to light another smaller bathhouse on the opposite side of the city, on its northern outskirts, just nearby the fortress’s northern enclosure wall. A Greek mosaic inscription placed in a tondo was one of the most spectacular findings discovered in the ruins. The mosaic with additional geometric elements was found among the remains of the floors. According to Maqsood and Wagner the mosaic inscription is dated back to the 3rd century CE. As a consequence it is believed that the whole bath complex started functioning around that time. However, the bathhouse could have been constructed earlier and the discovered inscription could have been an element of later reconstruction of the bath’s interior. The results of excavations conducted in the bathhouse are still waiting for publication. It is possible that a landing pier which extended along the Pelusiac branch of the Nile to the east and reached up the northern city square was situated near the northern thermal bath. In other words, the bathhouse could have been an element of the Pelusium’s harbour equipment.

Another transversal street could have been originally built up west from the fortress along its western enclosure wall. If the assumption is correct the street could have been a part of early urban street layout, which survived there until the Late Antiquity. Further west survived remnants of several architectonic monuments what opened a possibility for another city quarter partial reconstruction. Grossmann, El-Tahir and Hafiz excavated there a round church with additional atrium like structure in the northern part of the city. This discovery clearly reveals that western part of Pelusium was still functioning and played significant role in the city life. The thesis is supported by the conducted fieldworks. A cistern

---


21 R. El-Tahir, P. Grossmann, Excavations of the Circular Church at Farama-West, MDAIK 53 (1997), pp. 255-262; P. Grossmann, A. Hafiz, Results of the 1997 Excavations in the North-West Church of Pelusium (Farama-
building was unearthed south of the church.\textsuperscript{23} It is possible that both monumental buildings were parts of larger urban planning arrangement dated back to the Late Roman period. Other structures which survived there are in much worst condition or are still waiting for excavations.

The western part of Pelusium seems to be one of the oldest parts of the ancient city. This hypothesis seems to be supported by Clédat’s observations, who first described the place where the temple dedicated to Zeus Casius was originally situated.\textsuperscript{23} Just several column shafts are visible on the surface, which possibly marks the place where the most important temple of the city was built. The place was identified thanks to an inscription discovered among architectonic remains manifested on the site surface. It seems that only lowermost fragments of the ancient temple survived there. Nevertheless, it is supposed that in the Zeus Casius temple and its surrounding area the most important part of Pelusium was situated. Moreover, it cannot be excluded that a city agora could be reconstructed there. The oldest public spaces and public buildings of Pelusium belonging to the Hellenistic and early Roman times should be placed besides the temple and hypothetical agora. It is possible that there the earlier structures could be found dated back to the times of Psamtik I (664–619 BC) who was the founder of the city and who brought Ionian and Carian citizens to the city. The traces of such early settlements are supposedly located nearby the Zeus Casius temple and could also extend further west up to the western city outskirts. Without excavations, however, the assumption cannot be proved.

A hippodrome was located beyond the western outskirts of the city. An industrial quarter with many furnaces, heavily damaged ruins of industrial buildings and a granary were also identified east of the hippodrome building.\textsuperscript{24} Localisation of the hippodrome is not surprising as almost all circus were located outside the city space. Moreover, localisation of the industrial zone was also not chosen accidentally. The city was not disturbed by the polluting air as the north-eastern winds are prevailing. The only building where people could suffer from the pollution was the hippodrome, but possibly due to the building’s construction and layout the inconvenience was marginal.

Concluding, taking into consideration all published and unpublished data, it is possible to reconstruct the Pelusium’s urban layout. Of course, most of information which we have in our disposal considers architecture of the city from the Late Roman period. According to above data it is possible to reconstruct the original city plan. The hippodrome or circus with the industrial quarter attached east to the hippodrome is located in the westernmost part of Pelusium. The area between the industrial quarter and two important buildings constructed for religious purposes – the temple of Zeus Casius and round church discovered by Grossmann – have not been excavated yet. The most important part of Pelusium’s urban layout was placed supposedly in the vicinity of the Zeus Casius. It is possible that the main city agora was planned there. The two bathhouses complexes situated in the northern and on the southern outskirts of the city are also important elements in the city landscape. It needs to be added that the western part of the southern bathhouse complex with the so-called tetra-conchos was turned into a church, one of the biggest in the city. The most disturbing elements, which make impossible to reconstruct the early phase of the city development, are the Late Roman fortresses. This legionary camp occupied the central-west part of the site. As suggested only the excavations conducted inside the military structure would enable us to answer that important question.

\textsuperscript{23} J. Clédat, ASAE 23 (1913), p. 80.
East from the fortress, the dwelling quarter was broadly spread. This part of the city area started from the water cistern which survived in relatively good condition. As mentioned above, wealthy part of the city with the theatre, columned monumental street, and even a city square were possibly located nearby the landing pier. Further east, on Tell Maqsan another monumental church complex opens the easternmost part of Pelusium. This part of the city was situated on a lagoon like area, with small island place on a marshy land. Definitely the Tell Maqsan church was the pilgrimage centre located on the eastern city outskirts. The second, smaller theatre was constructed on Tell Kana’s the eastern suburbs, east from Tell Maqsan. Moreover, another industrial area and necropolis were situated, which supports hypothesis about the industrial character of the eastern city outskirts. Due to the results of many years of archaeological activity and the results of the excavations conducted on Tell Farama, Tell Maqsan and Tell Kana’s it is possible to reconstruct the city’s urban layout. Moreover, it is possible to describe, the city development in antiquity and spread from west to east. Possibly during these times Pelusium reached its peak and flourished the most.

The last element of the city urban planning, which needs to be mentioned, is associated with hypothetical existence of columned streets. The only evidence supporting the thesis concerning the so-called northern street, has already been analysed above. The other two main streets of Pelusium could have had porticos in several sections. It seems to be highly possible that in the central street in its theatrie part of the street a portico was constructed for monumentalizing the theatre building. Except for traces of columned portico in the theatre elevations we do not have any additional evidences which could support a thesis confirming portico constructions along the whole street. Similar situation is observed in the so-called southern street. Only in one place in the eastern part of the street column shafts which could have been originally a part of a portico were observed. The question arises, if the portico belonged to a monumental building constructed there, or was a part of the portico street. The last supposition is rather less possible. If there were any porticos, the structures were built along short sections of the street and could have been similar to the central street. It seems to be possible that a decumans street existed along the theatre.25 In other words, there were three main streets running generally in east-west direction in Pelusium. But only, the north street was the most important, the most spectacular, and monumental in the whole city. The two other were not so representative, but also played very important role in the city’s planning. Functioning of three monumental streets clearly shows the metropolitan character of Pelusium and emphasises the significance of the city on the border between Middle East and Egypt.

25 Bonnet, Carrez-Martray, Abd El-Samie et al., GENAVA, Revue d’Histoire de l’Art et d’Archéologie Musée
Fig. 25. Central part of the site (drawing by J. Iwaszczuk, A. Chabiera)
Fig. 26. The so-called Great Theatre (drawing by M. Smola, S. Maślak)

Fig. 27. Remains of dwellings from the northern part of the site (drawing by S. Maślak)
Fig. 28. Mosaic floor decoration from a dwelling situated in the northern part of the city

Fig. 29. Urban planning reconstruction (T. Herbich)
Fig. 30. Urban structures north from the theatre (T. Herbich)

Fig. 31. Urban planning reconstruction