Alexandrian Public Architecture Reconsidered The Ptolemies, Egypt and Roman Monumental Interventions A Reassessment Based on Recent Underwater Discoveries

KYRIAKOS SAVVOPOULOS

In this paper I would like to introduce a case study that relates to one of the most problematic disciplines of Alexandrian archaeology, the architecture. While sculpture, coinage and other types of material evidence offer a much clearer picture, one faces serious problems with the city's architecture, once admired by the whole *Oikoumene*. Today, apart from the *necropoleis*, only two Graeco-Roman sites survive in Alexandria, the Sarapeion and Kom el Dikka. However, only the latter provides us with a coherent picture of architecture in Alexandria, and this mostly dates to the Byzantine period. The rest of the material consists of fragments, which can barely be joined together, including a series of beautiful mosaic floors in the Royal Quarters and at the city centre, all of which today are out of context. Yet, even such limited evidence attests to the glory of ancient Alexandria, which is condemned to remain buried under the modern city.¹

An attempt will be made here to briefly reconsider the nature and role of Alexandria's public architecture, taking into account a series of new discoveries made underwater by the Hellenic Institute of Ancient and Mediaeval Alexandrian Studies (HIAMAS).² These discoveries have been made on the eastern side of present day Cape Silsileh, which coincides with the submerged Acra Lochias of the Graeco-Roman city, the eastern border of Alexandria's Great Harbor, and the northeastern limit of the Royal Quarters (Fig. 1).³

¹ We need to emphasize the importance of major studies which tackled this field, such as this of Barbara's Tkaczow (1993) and more recently the work of Judith McKenzie (2007), which put in order all the available –to date of publication- evidence, offering a more stable ground for future scholars of Alexandrian architecture.

² I am more than indebted to the director of the underwater surveys of the Greek Mission Harry Tzalas for his kind permission to include this material in to the scope of the present paper.

³ HIAMAS underwater surveys started in 1998 after a concession was granted in 1997 by the Supreme Council of Antiquities of Egypt. The area originally extended East of Silsileh Promontory for 5 kilometers of littoral; in 2008 there was an addition of another 5 kilometers reaching Sidi Bishr Promontory. The total surface is of 10 square kilometers. See Tzalas, H., 2009; 2010; 2014 (forthcoming)

Without a doubt, the most important find in this area is a monolithic Aswan granite tower of a pylon of ca. 2.26 meters high and weighing almost 7 tonnes, an *uniqum* not just for Alexandrian archaeology (Fig. 2 A & B). It was found at the northeastern corner of Cape Silsileh, together with many other architectural fragments, including a colossal threshold. The front of the tower stands at 90 degrees to the ground, while there is a slight inclination to the back surface, which remained undecorated. There are also traces of further attachments on the sides, obviously of walls and the doorframe, as well as on the top, implying crowning with possibly a cavetto cornice. The total height could have been around 3 meters.

The pylon seems to be a miniature version of the traditional pylons found in the temple complexes of the Egyptian *chora*. The vertical recesses in the façade would have allowed flag poles to stand firmly on the base of the structure, while the square holes in the upper portion of the tower would have stabilised the masts with wooden clamps along its length. Despite this, these square holes can also be interpreted as false windows, representing an aspect of illusionism in such a solid piece of granite. Other finds discovered in the area contribute further to the picture of a temple complex:

- A monolithic granite miniature staircase, which according to its size (1,77 x 0,53 m), could fit with the pylon (Fig. 3).
- Fragments of at least two black granite naiskoi, with clear signs of reuse as basins at a later stage (Fig. 4).
- Various architectural elements, including blocks and parts of columns.
- A monumental base of red granite.
- A trachyte block in a "bowl" form at top, possibly a grinder (Fig. 5).
- A series of Pharaonica; various architectural blocks dating to 26th Dynasty, originally from Heliopolis.⁴

One can begin the discussion of the identification and dating of the pylon temple of Akra Lochias using well-known ancient literary sources. According to these sources, Cleopatra VII Philopator, the last of the Ptolemies, built a new complex on the cape, which included a palace, her Mausoleum and a temple dedicated to Isis.⁵ Yet some indications dating to the Roman period

⁴ According to Gallo (2010), these pieces are related to a Sed-Festival (Jubilee).

⁵ Plutarch, Antony, 74.

suggest a subsequent intervention of monumental proportions after the Ptolemaic period.⁶

Firstly, there are numerous depictions of pylon-style temples in Alexandrian coinage from Trajan to Marcus Aurelius, accompanied by images of Isis and Oriris Hydreios, the patron deities of those temples (Fig. 6 and 7).⁷ So far scholars have suggested various identifications with temples of either Canopus or Taposiris Magna, or even the temple of Isis in Alexandria, which according to ancient sources was built by order of Alexander the Great. The pylon of Akra Lochias, however, represents the very first evidence on which a hypothesis for an Alexandrian pylon-style temple could be based.

Interestingly, the temples of Isis depicted on the coins of Trajan and Hadrian bear quite similar characteristics to the temple of Akra Lochias, both in shape and decoration with false windows. Nonetheless, a relation with Osiris Hydreios should not be dismissed, since a statue of a priest of Osiris Hydreios was discovered in the nearby-submerged area of the Great Harbor (SCA 449).8 In any case, the cults of Isis and Osiris Hydreios in the Roman period were much related to each other as well as to other so-called Alexandrian deities such as Sarapis, Hermanubis and Harpocrates.9

Of course, one could argue about the temple's original appearance both at Akra Lochias and in coinage, referring back to the late Ptolemaic period. This argument could be confounded by the fact that Romans, like many other rulers, were keen to 'advertise' their own programme of monumental

⁶ Besides, this project could have remained unfinished, as might have occurred in other cases of Cleopatra's monumental programme in the city.

⁷ For Isis temples with Pylons see coinage of Trajan (Poole, R. S., 1892: 542) and Hadrian (Dattari, G. 1901: 1172). For Osiris Hydreios temples with pylons see coinage of Trajan (Dattari, G., 1901: 1035), Lucius Verus (RPC: 14618) and Marcus Aurelius (Dattari, G., 1901: 3568). See also Naster, P., 1868; Bakhoum, S., 2002;

⁸ For the statue of the priest holding a figure of Osiris Hydreios see Dunand, F., 1998.

⁹ Another statue of a priest holding a figure of Osiris Hydreios was discovered in Sarapeion (Graeco-Roman Museum 4309, Gallo, P. 2002: 21-24). See also the so-called temple of Isis in Ras el Soda. There, the sculptural repertoire included Isis (Graeco-Roman Museum 27583), two statues of Osiris Hydreios (Graeco-Roman Museum 27586-7), Hermanubis (Graeco-Roman Museum 27585) and Harpocrates (Graeco-Roman Museum 27584). For description see Savvopoulos, S. and Bianchi, R. S., 2012: 162-174, no. 48. In addition, themes with various combinations of those deities, apart from individual depictions, are displayed on Roman Alexandrian coinage from Trajan to Caracalla. See Datarri, G., 1901: 830, 1030, 1035, 1042 and 3623; RPC: 15461.

architecture such as triumphal arches and altars, both new constructions and renovations or alterations of older ones. It is also worth mentioning that, despite the Graeco-Roman character of these structures, in several cases they include distinctive Egyptian elements, such as the winged solar disc which adds a distinctive 'local' Alexandrian form to the structure, or the pylon at the temple of Akra Lochias which adds a strong Egyptian feel.¹⁰

Furthermore, a miniature monolithic pylon such as this could be regarded as a Roman interpretation of traditional Egyptian architecture, also to be seen outside Egypt, in Attica at the temple of Egyptian deities in Marathon with its four stone-built pylon gates,¹¹ (which must have been slightly taller than those of Akra Lochias) or in a broader sense in the miniature pyramid of Cestius in Rome.¹² Both examples reflect, though in a diluted fashion, the legacy of Egyptian architecture in the Roman period.

Finally the possibility of a Roman date is further strengthened by the numerous Pharaonica found at the site; these have also been discovered in other major public places in Alexandria, such as the Pharos Island, the Royal Quarters and the Sarapeion. Today, most scholars believe that Pharaonica were mainly brought to Alexandria during the Roman period.¹³ The earliest evidence for such a practice comes from the Caesareum, the temple built by Cleopatra in honor of Julius Caesar. After the Roman conquest, the temple was re-dedicated by Augustus to himself, *Augustus Epibaterios*, turning it into Alexandria's Imperial Cult temple. Furthermore, the two colossal obelisks, erroneously known as Cleopatra's Needles, were transferred from Heliopolis to the Caesareum during the reign of Augustus.¹⁴

¹⁰ See for example the silver tetradrachm of Domitian, depicting a triumphal arch with a winged solar disc on its tympanum. (Poole R. S., 1892: 86; Dattari, G., 1901: 449; Milne, J. G., 1933: 484). Also, temples of Sarapis, depicted on coinage of Trajan (Dattari, G., 1901: 1154), Antoninus Pius (Dattari, G., 1901: 3053 and 3060; Scavio, A., 1999: 8897; RPC: 15760 and 15762), Lucius Verus (RPC: 14616) and Marcus Aurelius (Geissen, A., 1983: 2107; Scavio, A., 1999: 9345; RPC: 15641). For a recent interpretation on Alexandrian architecture (buildings and monuments) in relation to depictions on coinage, wall painting and mosaics see Fragaki, H., 2011.

¹¹ Dekoulakou, I., 2011.

¹² Curl, J. S., 2005: 39-40.

¹³ Gallo, P. 2002: 192; Ashton, S. A., 2004: 16-19, 32; McKenzie, J., 2007: 185-186. For an overview of Alexandria's Pharaonica see Corteggiani, J. P., 1998; Gallo, P., 2010; Savvopoulos, K., 2011.

¹⁴ Neroutsos, T. D., 1888: 15-20.

The discoveries in Akra Lochias would seem to be part of a broader religious assemblage in the submerged area of the Royal Quarters. Since the 1990s Frank Goddio's investigations have yielded important finds, primarily of a religious nature, including statues of Thoth in the form of an ibis (SCA 87), Agathos Daimon (SCA 543), a priest of Osiris Hydreios (SCA 449) and Sphinxes, along with numerous architectural fragments.¹⁵ The overall picture suggests that perhaps the most important development in the area, the ideological core of the Ptolemaic city, was its conversion to a much more religious site, which included the promotion of cults, mostly known from the Hellenistic period.

A similar picture is painted in other formerly Ptolemaic public places. The Ptolemaic Sarapeion was the most important sanctuary of Alexandria, dedicated to the close relationship of Sarapis to the Alexandrian royal house, rather than to the religious capacities of the god. Furthermore, it was a field for the expression of loyalty to the crown by elite Alexandrians, as indicated by various dedications to the royal family and to the principal deities of the sanctuary.¹⁶ In terms of architecture, the sanctuary seems to have been an assemblage of Greek and Egyptian traditions, including a typical Hellenistic temple, with a colonnaded rectangular court (possibly inspired by the colonnaded courts of Egyptian complexes), an underground gallery similar to those of the sacred animal necrolopeis of Memphis, a nilometer, and a causeway guarded by Egyptian sphinxes.¹⁷ The composite nature of the sanctuary is further emphasized by the sculpture, in both Greek and Egyptian style, which, as well as the royal figures, included at least three images of Memphite high priests, undoubtedly the most important Egyptian supporters of the Ptolemies.18

¹⁵ See in detail Goddio, P., 1998; 2006.

¹⁶ This is indicated by the royal statues and dedications of monuments by Alexandrian elite to the royal family such as those of Arsinoe II Philadelphus (Graeco-Roman Museum 14941), a base of a statue dedicated by Thestor son of Satyros (in situ) and the heads of Berenike II (Graeco-Roman Museum 3908) and Ptolemy III Euergetes or IV Philopator (Louvre Ma 3168). For the queens see Ashton, S. A., 2001: no. 69; 2003: 21-22; Albersmeier, S., 2002: 285, no. 10; Savvopoulos, K. and Bianchi, R. S., 2012: nos. 22 and 32; for Ptolemy III Euergetes or IV Philopator see Ashton, S. A. and Seif el-Din, M., 2001: no. 54 (authors of the entry in Walker, S. and Higgs, P., 2001).

¹⁷ For a detailed description of the architectural evidence of Sarapeion see Sabottka 1989; McKenzie et. al. 2004; 2007, 52-56, 64 and 195-202. For the Ptolemaic sculpture of Sarapeion see also Ashton 2004; Savvopoulos, K. and Bianchi, R. S., 2012: 15-16.

¹⁸ Statue of Petobastis (Graeco-Roman Museum 27806), Savvopoulos and Bianchi 2012 Appendix I. Two statues of Psenptais (Graeco-Roman Museum 17533-17534) Savvopoulos, K. and Bianchi, R. S., 2012: 116, no. 34.

In the 2nd and 1st centuries BC the sanctuary seems to have declined along with the ruling dynasty, as indicated by the rarity of dedications in the late Ptolemaic period, when the Ptolemies reduced to a minimum the financial support of the cult of Sarapis. ¹⁹ Despite this, the Sarapeion experienced a true revival during the Roman period, becoming one of the most popular sacred destinations in the Mediterranean. While under imperial patronage, ²⁰ a series of major renovations took place, including the enlargement of the court (Fig. 8). Sarapis gradually became an all-powerful god, *Pantheos*, incorporating the identities of all the most important Greek and Egyptian deities, such as Zeus, Hades, Ammon, Osiris, Asclepius, Helios, Hercules, Nilus and Poseidon, much more intensively than during the Ptolemaic period. ²¹ Thus, under Roman imperial patronage, the Alexandrian Sarapeion became much more of a religious centre than it was during its Hellenistic phase when the Ptolemies were 'synnaoi'.

The Egyptian tradition seems much more evident in the Roman Sarapeion, with the addition of several Egyptian monuments, such as the basalt statue of Apis-bull, the Egyptian counterpart of Sarapis. This was the first ever 'Alexandrian' Apis, dedicated by Hadrian, which co-resided in the sanctuary with several Graeco-Roman images of Sarapis, corresponding to his amalgamated Graeco-Egyptian identity.²² In addition, a large collection of

¹⁹ Fraser, P. M., 1972: 233-234; Hölbl, G., 2001, 112.

²⁰ Several times emperors are portrayed with Sarapis and/or in the Sarapeion, such as Hadrian (Milne, J. G., 1933: 1379), Commodus (Poole, R. S., 1892: 1432/3; Dattari, G., 1901: 3847, VII; Milne, J. G., 1933: 2265; Geissen, A., 1983: 2212) and Caracalla (Dattari, G., 1901: 4054; Milne J. G., 1933: 2732b; Geissen, A., 1983: 2284; Dattari, G., 1901: 4056; Geissen, A., 1983: 2285. The Emperor on a chariot in front of Sarapis' bust, Dattari, G., 1901: 4056; Geissen, A., 1983: 2285). Such evidence coincides with literary sources, referring to imperial visits to the sanctuary by emperors including, Vespasian, Titus, Trajan, Hadrian, and Caracalla. c.f Witt, R. E., 1997: 233-238.

²¹ Figures of Sarapis Pantheos are often depicted in Alexandrian Roman coinage in multiple variations such as Zeus- Sarapis (Poole, R. S., 1892: 258; Dattari, G., 1901: 44; Milne, G. J., 1933: 450), Helios-Sarapis (Milne, G. J., 1933: 482), Sarapis-Ammon-Helios-Nilus (Scavio, A., 1999: 2730), Sarapis-Ammon (RPC: 15680), Sarapis-Ammon-Asclepius-Helios-Nilus-Hermanubis (RPC: 15860), Sarapis-Ammon- Asclepius-Helios-Poseidon (RPC: 14835), Serpent headed Sarapis (Dattari, G., 1901: 3762; Milne, G. J. 1933: 2595; Geissen, A., 1983: 2183), Sarapis-Ammon-Asclepius-Helios-Nilus-Poseidon (Geissen, A., 1983: 1847; RPC: 14984), and Sarapis-Ammon-Asclepius-Helios-Heracles (Dattari, G., 1901: 3383; RPC: 14442).

²² For an updated discussion on Sarapeion's Roman sculptures see Savvopoulos and Bianchi 2012, 20-25.

Pharaonica was discovered, including sphinxes, obelisks, architectural blocks and statues of Pharaohs from the Rammeside and the Late periods.²³ In this way, the monumental environment of the Sarapeion was both stylistically and chronologically widened to include representatives of the indigenous dynastic period, and was no longer exclusively Ptolemaic (Fig. 9).

Last but not least, the submerged area around the Qait Bey fortress, where once stood the Pharos lighthouse, reveals a similar picture of Roman intervention. As the greatest architectural wonder of its time, the lighthouse was dedicated to *Theoi Soteres* (the Saviour Gods), the first royal couple Ptolemy Soter and Berenike. In the course of the Hellenistic period, the site was further adorned with colossal statues of the Ptolemies, such as those in Pharaonic dress discovered by an underwater mission of the Centre d'Études Alexandrines (CEAlex), directed by Jean-Yves Empereur. During the Roman period, there seems to have been a strong emphasis on the religious aspect of the Pharos lighthouse, particularly in relation to the cult of Isis Pharia. During the CEAlex mission, many Pharaonic blocks, obelisks and statues were once more raised from the sea, some of which are now exhibited in the Kom el Dikka open-air museum. As in the cases mentioned above, these Pharaonica might either have replaced the Ptolemaic monuments or at least coexisted with them, occupying much of their space.

Taking all the above into account, we could suggest that the Romanisation of Alexandria's topography included among other things, a process – at least partial – of monumental "de-Ptolemaisation", through refocusing several Hellenistic cultural assets towards Roman aspirations. Indeed, despite its political decline, the Ptolemaic cultural legacy remained alive, when the process of Graeco-Egyptian interaction, initiated during the Hellenistic period, seems to have continued uninterrupted, whilst also incorporating Roman factors. Hence, the Romans seem to have attempted a blurring or even obliteration of the memory of the Ptolemaic dynasty, with the latter's

²³ For a list of Sarapeion's Pharaonica see Savvopoulos, K., 2011; Savvopoulos, K. and Bianchi, R. S., 2012: Appendix I.

²⁴ Empereur, J. Y., 1995; 1996; 1996b.

²⁵ Isis in the role of the 'mistress of the sea', known also as Pelagia, was popular in the Mediterranean, especially in the Aegean (e.g. in Delos) since the Hellenistic period, but in the Roman period she met immense popularity all over the Roman word. For an updated study on the sea-role of Isis see Bricault, L., 2006. For the diffusion of Isiac cults in the Hellenistic and Roman worlds, Ibid 2001; 2005.

own cultural 'weapons'. In this respect, there was not much to add or innovate, but rather to reconsider and redirect.

From an Egyptian point of view, Egyptianisation seems to have been part of the general Romanisation process. The Egyptian tradition played a vital role, being more visible in the city's public space, contributing to Alexandria's political reorientation, in a sense provincialisation, in Aegypto, 'within Egypt'. The presence of Pharaonica, particularly, would have had a considerable effect by confining and confusing, as much as possible, Alexandria's Ptolemaic image. Yet, Pharaonica, like the rest of Egypt's representatives in Alexandria, seem to have passed through their own process of Alexandrianisation. Far from their original role, they seem to have served as an 'open-air museum' dedicated to the long history of the land of the Pharaohs, symbolically emphasizing the political adaptation of Alexandria, once the capital of the Ptolemaic empire, to her new role as the capital of the Roman province of Egypt.

In fact, all the cultural 'ingredients' mentioned above seem to have passed through a process of Alexandrianisation in order to fully adjust to the Alexandrian eternal *Modus Vivendi*. Despite its political decline, Alexandria remained a major center of trade, knowledge and multiculturalism, an advanced cosmopolis, and a successful prototype of what the Roman Empire in its totality intended to be: a world in which different peoples and cultures shared common values.

References

- Abd el-Fattah, A. and Gallo, P., 1998: Aegyptiaca Alexandrina. Monuments pharaoniques decouverts rècemment à Alexandrie, in: J.Y. Empereur (ed.), *Alexandrina* 1, Cairo, 7-20.
- Albersmeier, S., 2002: Untersuchungen zu den frauenstatueen des Ptolemäischen Ägypten, Mainz am Rhein.
- Ashton, S. A., 2001: Ptolemaic Royal Sculpture from Egypt. The Interaction between Greek and Egyptian Traditions, Oxford.
- Ashton, S. A., 2003: *The Last Queens of Egypt*, Harlow.
- Ashton, S. A., 2004: The Egyptian Tradition, in: A. Hirst and M. Silk (eds.), *Alexandria Real and Imagined*, Aldershot, 15-40.
- Ashton, S. A., 2005: Roman Egyptomania, London.
- Bakhoum, S., 2002: Dieux égyptiens à Alexandrie sous les Antonins: Recherches numismatiques et historiques, Paris.
- Bianchi, R. S., 2007: Images of Isis and her cultic shrines reconsidered. Towards an Egyptian understanding of the interpretatio graeca, in: L. Bricault et.al. (eds.), Nile into Tiber. Egypt in the Roman World. Proceedings of the IIIrd International Conference of Isis studies, Faculty of Archaeology, Leiden University, May 11-14 2005, Leiden and Boston, 470-505.
- Bricault, L., 2001: Atlas de la diffusion des cultes isiaques: IVe s. av. J.-C. IVe s. apr. J.-C., Paris.
- Bricault, L., 2005: Recueil des inscriptions concernant les cultes isiaques, Paris.
- Bricault, L., 2006: *Isis. Dame des Flots*, Liège.
- Corteggiani, J. P., 1998: Les Aegyptiaca de la fouille sous-marine de Qaitbay, *Bulletin de la Société Française d'égyptologie 142*, Paris, 25-40.
- Curl, J. S., 2005: The Egyptian Revival: Ancient Egypt as the Inspiration for Design Motifs in the West, London.
- Daszewski, W. A., 1985: Corpus of Mosaics from Egypt, Mainz am Rhein.
- Dattari, G., 1901: Monete imperiali Greche. Numi Augg. Alexandrini. Catalogo della collezione G. Dattari. Compilato dal propietario, Cairo.
- Dekoulakou, I., 2011: The Egyptian Sanctuary at Marathon, in: K. Savvopoulos (ed.), Second Hellenistic Studies Workshop Proceedings, Alexandria 4-11 July 2010, Alexandria, 24-44.
- Dunand, F., 1998: Priest Bearing an Osiris-Canopus in his Veiled Hands, in: F. Goddio (ed.), *Alexandria: the Submerged Royal Quarters*, London, 189-194.
- Empereur, J. Y., 1995: A short Guide to the Graeco-Roman Museum Alexandria, Alexandria.

- Empereur, J. Y., 1996: The Discovery of the Pharos in Alexandria, *Minerva* 7, London.
- Empereur, J. Y., 1996b: The Underwater Site near Qaitbey Fort, *Egyptian Archaeology, The Bulletin of Egypt Exploration Society 8*, London, 7-10.
- Empereur, J. Y., 1996c: The Discovery of the Pharos in Alexandria, *Minerva* 7, London, 5-6.
- Empereur, J. Y., 1997: Les fouilles sous-marines du Phare d'Alexandrie, Égypte, Afrique et Orient 6, Paris, 2-8.
- Empereur, J. Y. (ed.), 1998: Alexandria Rediscovered, London.
- Empereur, J. Y. (ed.), 1998b: Alexandrina 1, Cairo.
- Empereur, J. Y., 1998c: Commerce et artisanat dans l'Alexandrie hellenistique et romaine: actes du colloque d'Athènes organisé par le CNRS, le Laboratoire de céramologie de Lyon et l'école française d'Athenes, 11-12 decembre 1988, Athens and Paris.
- Empereur, J. Y., 1998d: Le Phare d'Alexandrie: la merveille retrouvée, Paris.
- Empereur, J. Y. (ed.), 2002: Alexandrina 2, Cairo.
- Fragaki, H., 2011: *Images antiques d'Alexandrie: Ier siècle avant J.-C. VIIIe siècle après J.-C.*, Institut Français d'Archéologie Orientale, Cairo.
- Fraser, P. M., 1972: Ptolemaic Alexandria I-III. Oxford.
- Gallo, P., 2002: Aegyptiaca Alexandrina VI: Une nouvelle statue en granite d'un prêtre portant l'«Osiris-Canope», in: J. Y. Empereur (ed.), *Alexandrina* 2, Cairo, 21-24.
- Gallo, P., 2010: Une fête-sed sous l'eau de la Méditerranée: Etude préliminaire sur les blocs d'époque pharaonique retrouvés à l'Est du Cap Lochias par la Mission Grecque d'Alexandrie (HIAMAS)", in: K. Savvopoulos (ed.), First Hellenistic Studies Workshop Proceedings, Alexandria 12-18 July 2009, Alexandria, 64-88.
- Geissen A., 1983: Katalog Alexandrinischer Kaisermünzen der Sammlung des Instituts für Altertumskunde der Universität zu Köln I-V (Opladen 1974-82).
- Goddio, F (ed.), 1998: Alexandria: The Submerged Royal Quarters, London.
- Goddio, F. and Bernand, A. 2004: Sunken Egypt: Alexandria, London.
- Goddio, F. and Clauss, M., 2006: *Egypt's Sunken Treasures*, Munich, Berlin, London and New York.
- Grimal, N., 1996: Foulles sous-marines á l'est du fort Qaitbay", Bulletin de l'Institut Français d'Archéologie Orientale 96, 5, 63-570.
- Hölbl, G., 2001: A History of the Ptolemaic Empire. London.
- Kiss, Z., 1998: The Sculptures, in: F. Goddio (ed.), *Alexandria: the Submerged Royal Quarters*, London.

- McKenzie, J., 2003: Glimpsing Alexandria for Archaeological Evidence", *Journal of Roman Archaeology* 46, 35-61.
- McKenzie, J., 2007: *The Architecture of Alexandria and Egypt. c. 300 B.C. to A.D. 700*, New Haven and London.
- McKenzie, J. and Arbor, A., 1996: The Architectural style of Roman and Byzantine Alexandria and Egypt. Archaeological Research in Roman Egypt, *Journal of Roman Archaeology* 19, 128–142.
- McKenzie, J., Gibson. S., Reyes. A. T., 2004: Reconstructing the Serapeum in Alexandria from the Archaeological Evidence", *Journal of Roman Studies* 94, 73–114.
- Milne, J. G., 1933: Catalogue of Alexandrian Coins, Oxford.
- Naster, P., 1968: "Le pylône égyptien sur les monnaies imperials d'Alexandrie, in: *Antidorum W. Peremans Sexagenario Ab Alumnis Oblatum"*. Studia Hellenistica 16. Löwen, 181-190.
- Poole, R. S., 1892: Catalogue of the Coins of Alexandria and the Nomes, London.
- Rowe, A., 1946: Discovery of the Famous Temple and Enclosure of Serapis at Alexandria by A. Rowe [with plans]. With An Explanation of the Enigmatical Inscriptions of the Serapeum Plaques of Ptolemy IV by Étienne Drioton. (Plaques bilingues de Ptolémée IV.), Cairo.
- Sabottka, M., 1989: Das Serapeum in Alexandria: Untersuchungen zur Architektur und Baugeschichte des Heiligtums von der freuhen ptolemaischen Zeit bis zur Zersterung 391 n. Chr., PhD Dissertation. Technischen Universität, Berlin.
- Savvopoulos, K., 2010: Alexandria in Aegypto. The Use and Meaning of Egyptian Elements in Hellenistic and Roman Alexandria, in: L. Bricault and M. J. Versluys (eds.), *Isis on the Nile. Egyptian Gods in Hellenistic and Roman Egypt. Proceedings of the IVth International Conference of Isis studies, Université de Liege, November 27-29 2008, Michel Malaise in honorem, Leiden, 75-86.*
- Savvopoulos, K., 2011: Recycling the Past in Graeco-Roman Alexandria: The Case of Pharaonica Reconsidered, in: K. Savvopoulos (ed.), Second Hellenistic Studies Workshop Proceedings, Alexandria 4-11 July 2010, Alexandria, 77-96.
- Savvopoulos, K. and Bianchi, R. S., 2012: *Alexandrian Sculpture in the Graeco-Roman Museum*. Graeco-Roman Museum Series 1, Alexandria.
- Scavio, A., 1999: Catalogo completo della collezione Dattari: numi augg. alexandrini: 323 tavole conl'aggiunta di oltre 7000 monete rispetto al catalogo del 1901, Trieste.

- Stanwick, P. E., 2002: Portraits of the Ptolemies. Greek Kings as Egyptian Pharaohs, Austin.
- Tkaczow, B., 1993: The Topography of Ancient Alexandria. An Archaeological Map, Warsaw.
- Tzalas, H., 2010: The Underwater Archaeological Survey of the Greek Mission in the Coastal Area of Ramleh, Alexandria, Egypt (1998-2009), in: K. Savvopoulos (ed.), First Hellenistic Studies Workshop, Alexandria 12-18 July 2009, Proceedings, Alexandria, 56-63.
- Tzalas, H., 2014 (forthcoming): The Underwater Archaeological Survey conducted by the Greek Mission in Alexandria, Egypt (1998-2010), in: Shipwrecks around the world: Revelations of the Past. The Marine Archaeology Centre, CSIR-National Institute of Oceanography, Dona Paula, Goa 403 004, India.
- Wace, A., 1944: Greek Inscriptions from the Serapeum, *Bulletin of the Faculty of Arts, Alexandria University II*, 17-26.
- Walker, S. and Higgs, P. (eds.), 2001: Cleopatra of Egypt. From History to Myth, London.
- Walker, S. and Ashton, S. A. et al. (eds.), 2003: Cleopatra Reassessed, London.
- Walker, S. and Ashton, S. A., 2006: Cleopatra, London.
- Witt, R. E., 1997: *Isis in the Ancient World*, Baltimore and London.
- Yoyotte, J., 1998: Pharaonica, in: F. Goddio (ed.), *Alexandria: the Submerged Royal Quarters*, London, 199-220.

Sources

- Diodorus *Diodorus of Sicily*, Loeb Classical Library, VIII, (Transl. C. H. Oldfather), London and Cambridge, 1963.
- Plutarch *Lives. Demetrius and Antony*, Loeb Classical Library, IX, (Transl. B. Perrin), London and Cambridge, 2002.
- Strabo *Geography*, Loeb Classical Library, VIII, (Transl. J. H. Leonard), London and Cambridge, 1932.

Online sources

• RPC= RPC (Roman Provincial Coinage) online database of the Ashmohlean Museum, Oxford: http://rpc.ashmus.ox.ac.uk

List of Figures

- **Fig. 1:** Map of the surveys on the seabed east of cape Silsileh, ancient Akra Lochias. HIAMAS.
- **Fig. 2 A & B:** The monolithic tower of a pylon, discovered in the submerged area of cape Silsileh, today in Kom le Dikka open-air Museum. HIAMAS.
- **Fig. 3**: The granite staircase discovered in the submerged area of the cape of Silsileh. HIAMAS.
- **Fig. 4**: Trachyte block, possibly a grinder, discovered in the submerged area of the cape of Silsileh. HIAMAS.
- **Fig. 5**: A granite naiskos, discovered in the submerged area Silsileh. HIAMAS.
- **Fig. 6**: Bronze coin of Trajan, depicting a pylon style temple of Isis. Poole, R. S., 1892, 69.
- **Fig. 7**: Bronze coin of Marcus Aurelius, depicting a pylon style temple of Osiris-Hydreios. Dattari, G. 1901: 3568.
- Fig. 8: Hadrian and Sarapis in Sarapeion. Milne, J, G., 1933, 1379.
- **Fig. 9**: Part of the collection of Sarapeion's Pharaonica as exhibited in the site. Right, seated statue of Ramses II (Graeco-Roman Museum and 357 and 426). Left, kneeling figure of Pharoh Ramses II or IX (Graeco-Roman Museum 347)



Fig. 1



Fig. 2 A & B



Fig. 3



Fig. 4



Fig. 5

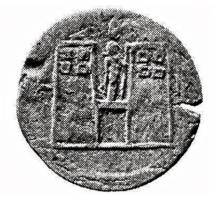


Fig. 6





Fig. 7

Fig. 8



Fig. 9