EGYPT'S SUNKEN TREASURES

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HERACLEION-THONIS: CUSTOMS STATION AND EMPORION

FROM HERACLEION-THONIS TO NAUKRATIS ... FOLLOWING THE CANOPIC CHANNEL OF THE NILE

The topographical plans and the excavations carried out by the European Institute of Underwater Archaeology confirmed allusions in classical authors concerning the two localities of Heracleion-Thonis. To the east of Canopus, and on the Mediterranean shore, the two cities were in a zone now under water, at the mouth of the Nile's western branch, known by the names 'Canopic Mouth' and 'Herakleopolitan Mouth'[1]. Diodorus Siculus (90–20 B. C. E.) wrote concerning the Thonis site: "It is at the place called Thonis, which was formerly the Egyptian *emporion*, that the river flows into the sea" (*Historical Library*, 1, 19, 4). Thonis was thus an *emporion*, a port and a site of commercial exchanges, which preceded the founding of Alexandria. This place was frequented by navigators coming from the Hellenic world many centuries before the arrival of Alexander the Great. Strabo, visiting the region of Canopus in 30 B. C. E., observed in vague terms: "It is said that, in ancient times, a city called Thonis existed there" (*Geography*, 16, 1, 16). Herodotus gave a long account of the time when Paris carried off Helen of Sparta and came to Egypt, where "the guardian of this mouth of the river was called Thonis" (*Histories*, 2, 113–119)[2]. Following this story, Herodotus refers to the *Odyssey* where Menelaus, accompanied by the recaptured Helen, was thrown off course by a storm and reached the Egyptian coast. Helen was then supposed to have received a valuable drug producing amnesia "from the wife of Thon, Polydamna of Egypt" (Homer, *Odyssey*, 4, 228). Therefore, "one can reasonably suppose that the border post and *emporion* of Thonis existed at the time when the Homeric text was established, in the 8th or early 7th century, a period which corresponds to the time when the Saite principality was being established, which gave rise to the 24th, then the 26th Dynasty."[3] In the Late Period, this site controlled access to the Canopic channel, traded with the Greek regions and supervised foreign ships in transit for Naukratis[4].

Indeed, toward the middle of the 7th century B. C. E., Greeks settled on the Canopic channel of the Nile, in the Egyptian city *Nokratj* – in Greek Naukratis – belonging to the nome of Sais, the home of the 26th Dynasty devoted to the goddess Neith. Now, "early on, the Greek establishment became an active site of commerce and industry. Several cities of Ionia, Doris and Aeolis obtained concessions whose organization and activities were regulated under Amasis (570–526 B. C. E.). The natural route for merchandise imported by the Greeks for their trading posts and factories was to enter Egyptian territory by the Canopic mouth and sail up the Canopic channel."[5] Herodotus writes concerning Naukratis: "A friend of the Greeks, Amasis gave some of them tokens of his good will; especially, to those who came to Egypt, he granted the right to live in Naukratis; to those who did not wish to live there but who came there by ship, he granted sites for their gods. The greatest, most famous, and most frequented of these shrines, called *Hellenion*, was founded in common by the following cities: the Ionian cities of Chios, Teos, Phocaea and Clazomenae; the Dorian cities of Rhodes, Cnidus, Halicarnassus, Pheselis; and a single Aeolian city, Mytilenus. Such are the cities to which this shrine belongs, those which furnish also the market prefects; all the other cities claim to participate without having any right. Independently from this shrine, the Eginetes founded separately a shrine to Zeus; the Samians, another to Hera; the Milesians, one to Apollo. Formerly, only Naukratis was an *emporion*, and there were no others in Egypt; if someone entered another mouth of the Nile, he had to swear that he had not come of his own will and, having sworn this

317 Element from an anchor
Heracleion
4th - 2nd c. B. C. E.
Bronze
L. 21 cm | W. 23.8 cm |
Th. 0.1-0.9 cm

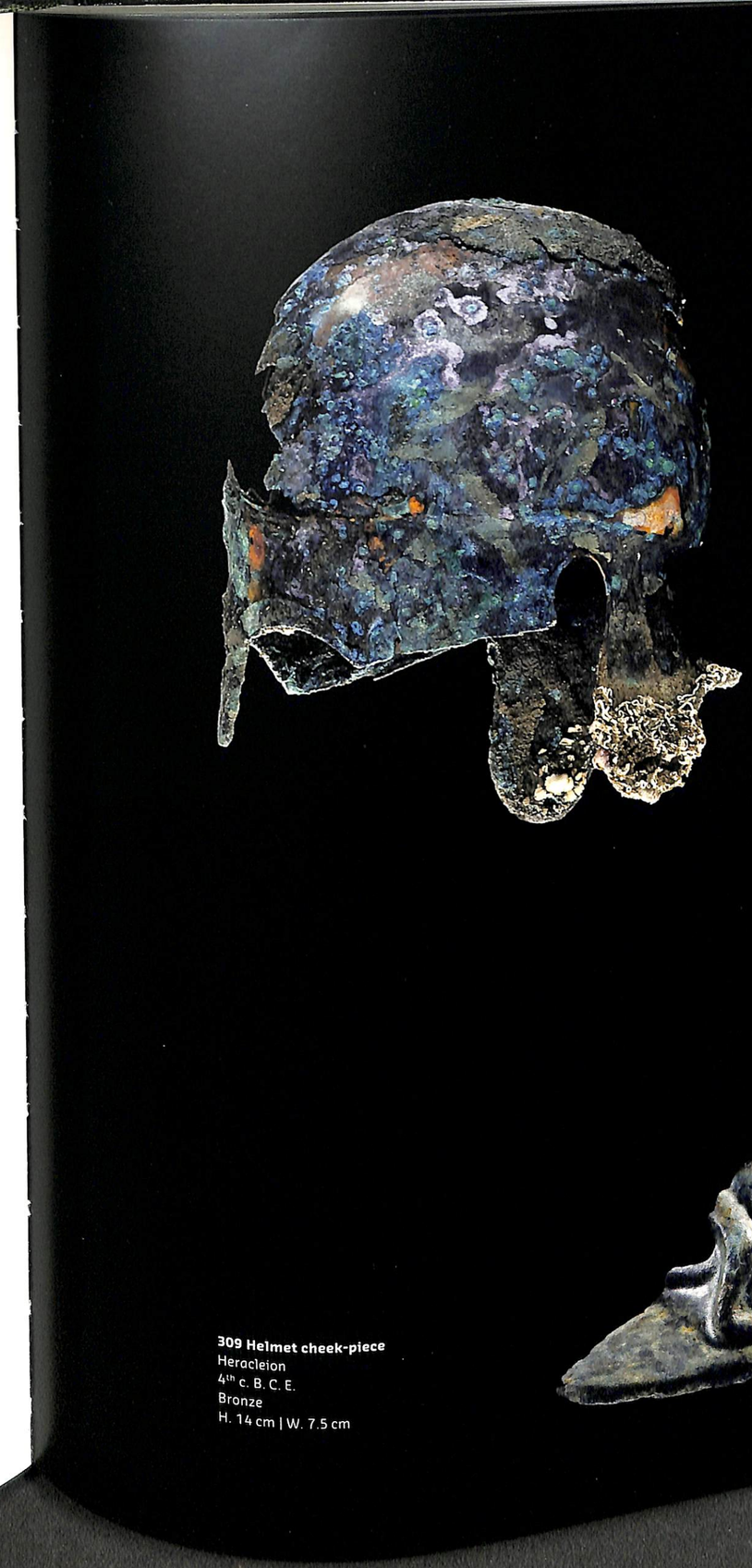
oath, sail with his ship to the Canopic mouth; or, if contrary winds made this voyage impossible, he had to transport his cargo on the country's ships by going around the Delta until he reached Naukratis. Such were the privileges of Naukratis." (*Histories*, 2, 178–179).

Archaeological evidence proves that Naukratis was founded before the reign of Amasis. Herodotus seems indeed to mention a reform concerning the city's status. Moreover, it should be specified that Naukratis was not in all respects similar to the Greek colonies in Sicily and Italy. The Pharaoh had granted a concession on the condition that the monopoly granted to 'citizens' in the Egyptian market not be contested.

While there is reason to suppose that the rebellions in the Delta against Persian power may have had some impact on the Greek colony's activity, the *Naukratis Stele* bears witness to economic revival under the last native dynasties. This stele of Nekhtnebef, *i.e.* Nectanebo I, one of the independent Pharaohs of the 4th century (the stele dates to year 1 of this Pharaoh's reign – November 378 B. C. E.), is "the only native source on the economy of the Greek *emporion*."[6] In this royal tribute, the new Pharaoh, the founder of the 30th Dynasty, states his privileged ties with the goddess Neith of Sais. To that end, the Pharaoh adopted, among other measures, the transfer to the goddess's treasury of part of the royal levies[7] concerning on the one hand the goods and products of the Greeks of Naukratis, on the other hand the imports that reached them by sea via the Canopic channel. For that purpose, Naukratis and 'a city called *Henet*' constituted the two places of taxation. J. Yoyotte's research has brought to light the etymology of Naukratis, in Egyptian *Per-meryt*, the 'house of the port'[8]. Likewise, the identification of the toponym transcribed and vocalized *Khenwe* by M. Lichtheim is due to J. Yoyotte[9]; it is the place called Thonis (= *(T-)henet*) by a number of Greek authors, named thus in Egyptian because the city was at the edge of a rather extensive coastal lake (*henet*) which, in antiquity, was at the entrance of the Canopic channel[10].

Topographical locating and soundings in the Bay of Aboukir by the team of the European Institute of Underwater Archaeology, in cooperation with that of the Department of Submarine Archaeology of the SCAE, led to the discovery of the Heracleion–Thonis site. At approximately 6,500 metres off the eastern shore of the peninsula, occupying a space of 1,000 by 1,200 metres, this site presents the shape of a city: to the south, the *temenos* of an important temple in Pharaonic style overlooked the city; to the north and east stretched the harbours of a vast port. The quays, as well as a fore-port, opened onto the Nile by a narrow channel. The whole is protected by a string of dunes. The location is ideal, sheltered both from prevailing north-west winds and from north-easterly storms. Material discovered at the time of the excavations shows that this port, composed of several large harbours and possessing a substantial infrastructure, witnessed intense activity beneficial to the city's prosperity. More than 700 ancient anchors of various forms and sixteen wrecks dating from the 6th to the 2nd centuries B. C. E., lying on the bottom, bear eloquent witness to it (see maps p. 47; see cat. 317).

Jean Yoyotte emphasizes that "the most astonishing and significant of the findings is another stele constituting a doublet, or a near-doublet to be precise, of the stele of year 1 of Nekhtnebef, which was found in Naukratis in 1890: same material, same quality of craftsmanship." And he concludes: "It happens that two versions of the same document concerning two cities at a distance from each other were by chance preserved intact at the very places where they were displayed during antiquity and, surely, just a short distance from the point where each was initially erected." In the two versions, the difference relates to the display site of the royal document. The Naukratic copy was "placed in *Nokratj*, on the bank of the *Anou* canal" (l. 13), while the Heracleion stele was erected "at the mouth of the Sea of the Greeks, in the city whose name is the *Hône* of Sais" (l. 13–14). As J. Yoyotte specifies further, we have here "the full form of the primitive name of Heracleion,



307 Helmet
Heracleion
5th–4th c. B. C. E.
Bronze
H. 34 cm | W. 23.5 cm

309 Helmet cheek-piece
Heracleion
4th c. B. C. E.
Bronze
H. 14 cm | W. 7.5 cm

310 Spear butt
Heracleion
5th– 4th c. B. C. E.
Bronze
L. 13.3 cm

312 Spear butt
Heracleion
5th– 4th c. B. C. E.
Bronze
L. 35 cm | W.2.5 cm | Diam. 2.5 cm

313 Spear head
Heracleion
6th– 4th c. B. C. E.
Bronze
L. 18 cm | W. 3 cm

315 Arrowhead
Heracleion
6th– 4th c. B. C. E.
Bronze
L. 3 cm | Diam. 1.8 cm

314 Arrowhead
Heracleion
6th– 4th c. B. C. E.
Bronze
L. 3.3 cm | W. 1.3 cm | D. 0.9 cm

305 Axe-head
Heracleion
6th– 4th c. B. C. E.
Bronze
H. 2.9 cm | W. 9.9 cm

356 Slingshot bullets
Heracleion
5th– 4th c. B. C. E. (?)
Lead
L. 3– 4 cm | W. 2– 3 cm

435 Coin
Heracleion
4th c. B. C. E.
Silver
Diam. 2.1 cm | Wt. 15.42g

436 Coin
Heracleion
4th c. B. C. E. (?)
Silver
Diam. 2.4 cm | Wt. 15.16g

367 Coin weight
Heracleion
4th c. B. C. E.
Lead
H. 2.6 cm | W. 2.6 cm | Th. 0.6 cm | Wt. 41.6g

distinguished from that of the other lower Delta *Thone* by the mention of the metropolis which Naukratis came under and which benefitted by privilege from taxes levied on Canopic trade. It is difficult not to mention in this connection a surprising bronze object found at the site of Heracleion: a crest from a Greek helmet with its long plume which must have topped a statue approximately four metres high (cat. 308, p. 227). It was easily supposed that it was the remainder of a monumental statue of Athena, who is none other than Neith – a hypothesis confirmed by the discovery not far away of a bronze statuette of the Greek goddess (cat. 189, p. 226). We finally have confirmation of the hypothesis that Thonis, on which, according to Herodotus, a temple of Herakles depended and whose name and lost location were vaguely known by Hellenistic geographers, would become Heracleion."[11]

In the *temenos*, the statuary dates for the most part from the Ptolemaic Period. Nevertheless, ritual utensils, bronze figurines and ceramic and limestone vases were discovered on the bottom by soundings. Among these bronze objects are a classical *sistrum*, the plinth of a Harpokrates and an image of Khonsu with a falcon head attributed to the Saito-Persian Period. The dates of most of these objects extend from the 6th to the 1st centuries B. C. E. A perfume burner in the form of a small Greek female sphinx dates from the 6th century (cat. 134, p. 257).

Like Naukratis, the excavations of Heracleion–Thonis, where the merchants of Naukratis and Greek travellers and mercenaries had passed, did not fail to contribute concrete information regarding economic and cultural relations between Egypt and the Greek world. Indeed, according to a tradition reported by Herodotus, Psammeticus, the first king of the 26th Dynasty, called on Greek mercenaries to drive away the Assyrians and restore the unity of Egypt to his advantage; later, he is said to have positioned them in strategic locations, particularly the eastern part of the Delta – a region open to invasions. The presence of Greek mercenaries in Egypt at that time is not a legend; some of them, usually natives of Asia Minor, inscribed their names on the legs of the colossal statues of Abu Simbel upon returning from an expedition in Nubia led by the Egyptian general under Psammeticus II (595–589 B. C. E.). The Asian Greeks were numerous enough to 'colonize' several neighbourhoods of Memphis, whose inhabitants were called 'Helleno-Memphites' and 'Caro-Memphites'. Merchants must have soon followed the soldiers. Mercenaries and Greek traders certainly occupied the city of Naukratis, but they were also present at Heracleion–Thonis, as attested by the discovery at the site of pieces of hoplite weaponry (cat. 307, 309, p. 220; 310, 312, 313, p. 222; 305, 314, 315, 356, p. 223) and of *tetradrachms* with Athenian types (cat. 435, 436, p. 224).

It happens that Athenian owl models were frequently imitated in the course of the 4th century B. C. E. by Persian despots, Anatolian or Phoenician cities and even Egyptian rulers [12]. According to Herodotus, the first ruler who issued coins in the land of the Pharaohs was Aryandes, satrap of Egypt under Cambyses and Darius I, but none of these coins has been preserved. This coinage must have been created between 500 and 492 B. C. E. Toward the end of the 5th century the counterfeit coinage of Attic *tetradrachms* began. Indeed, in 407 and 405 B. C. E., Athens could no longer issue silver coins, as the Laurion mines were closed because of the war against Sparta. Owl coins were no longer imported into Egypt. It is then that the Pharaohs of the 28th, 29th and 30th Dynasties had copies of Athenian *tetradrachmae* issued. Now, a monetary weight with an owl, on the reverse of which appears a ram's head (Amun), was discovered at Heracleion (cat. 367). The excavation mission (2006) uncovered a bronze cube, measuring three centimetres on each side, which bears on three sides different representations of the goddess Athena. It seems to correspond to the die used for silver *tetradrachms* in 4th-century Athens, the obverse of which is struck with the head of Athena turned to the right wearing a plumed Attic helmet, and the reverse with a standing owl, turned toward the right, behind which appear an olive branch and the letters ΑΘΕ (ΝΑΙΩΝ) – (Coin) of Athens. It should be noted that a die for these coins was also found in Athribis. A treasury found in the Fayum reveals that numerous specimens were issued, and a law of the Athenian nomothetes of 375–374 B. C. E. proves that these imitations were already circulating in Athens, hence elsewhere. These coins were probably put into circulation to pay the numerous Greek mercenaries who served in the Egyptian army. When Achoris concluded an alliance with Athens in the year 4 of his reign, the city furnished him, it appears, with standard dies and measures that were brought together in Egypt. The silver coins issued by Achoris showed such skill and quality that they could not be distinguished from Athenian coins. The buried treasure at Tell el-Maskhuta contained many *tetradrachms* of this type which may be of Egyptian origin. Cruder copies may have been fashioned at the time of Nectanebo I, then Nectanebo II, concurrently with Egyptian gold *staters* and little silver hybrid coins. In 343 B. C. E., Artaxerxes III Ochos, who reconquered Egypt, again issued *tetradrachmae* of Attic design, but with a Demotic inscription on the reverse meaning 'Artaxerxes the Pharaoh'. Under Darius III, the satraps Sabaces (334–333 B. C. E.) and Mazaces (333–332 B. C. E.) issued counterfeit owls with, on the reverse, their name in Aramaic letters. Toward the middle of the 4th century there appeared in Egypt small silver coins with Attic and Egyptian types [13].

While money makes the world go round, it remains nonetheless a means of exchange, and intensely active trade between Egypt and the lands of the eastern Mediterranean is revealed or confirmed by the discovery of ceramics. Imported ceramics confirm extensive contacts toward the middle of the 1st millennium (from the 6th to the 4th centuries B. C. E.). Available documentation reflects great commercial movements (cat. 378, 399, 403, p. 228; 375, p. 229; 377, 379, 387, 392, p. 230; 407, p. 231; 391, p. 253; 382). According to ceramological literature, these movements are the following: a Corinthian current, noticeable especially at the beginning of the period, an Ionian current, a Cycladic current, then an Attic current which particularly emerges starting with the Persian Period. To this list can be added a Phoenician current, the major points of which seem to have been, in addition to Phoenicia, the island of Cyprus. The latter is perceptible notably through the exportation of many 'torpedo' amphorae (cat. 376).

At the same time as the large figured vases, different products such as wine, oil, pitch, etc. were likewise imported in great quantities. Originating on the Levantine coast or in eastern Greece, amphorae for wine, oil and olives were among the most widespread products of the archaic Mediterranean. They met the needs of Greek colonists but also of the local population. Oil was essential to Greek foods[14]; wine was regularly imported for the Egyptian elite who were able to appreciate its taste[15].

These observations lead us to inquire for whom these imports were intended. Given the current state of documentation, we cannot accept the hypothesis according to which Greek trade, for example, was limited to cities founded by Greeks. C. Defernez rightly specifies: "It is probable that the first commercial transactions between Greece and the Levant took place with the aim of satisfying the needs of emigrant families. But this flood of new products, and notably of semi-luxuries, doubtless created a rapid demand on the part of the local population, as can be seen from the sometimes numerous discoveries made in lands very distant from port sites. The geographical distribution of objects, whether originating in Greece or on the edges of the Levant, attests indeed to large-scale cultural penetration during the Persian Period."[16] There were several port sites, doubtless to control the arrival of merchandise from the most outlying regions of the Mediterranean basin[17].

Generally, the relics discovered are indicative of the existence and vitality of cultural and commercial exchanges at that period and, by that very fact, allow us to raise the question of borrowings, influences and acculturation of customs and taste up to the Ptolemaic Period. Particularly by means of certain objects called 'Persian' or of 'Achaemenid' type whose artistic and technical influence was felt until the Ptolemaic Period (cat. 246, p. 172; 151, 152, p. 211; 153, p. 203; 225–228, 239–245, 247, 340, 347).

The famous Elephantine papyrus palimpsest (TAD C 3, 7) offers information on merchandise imported into Egypt. Let us recall data from the text (written in Aramaic): this *Customs Register of the Egyptian Satrapy* sums up month after month the entrance and exit from Egypt of forty-two ships during year 11 of an Achaemenid king, and records taxes levied at the time of this traffic[18]. The ships are identified according to three criteria: first, the type of ship, then, the name of the owner/captain and lastly, the ethnic origin. By the chance of administrative organization, the register of ships coming from Asia Minor and the Phoenician coast has come down to us. The products imported are not really surprising – even if one takes into account uncertainties concerning technical or regional specifications. In addition to foodstuffs – Ionian and Sidonian wine, oil – one finds materials intended for construction, industry or crafts. First, metals: iron, bronze and more unusually tin. Wool and cedar wood are also present. Regarding the latter, we again see the distinction present in the *Naukratis Stele* and the *Thonis-Heracleion Stele* between rough wood intended for construction and pieces of finely worked wood[19]. The importing into Egypt of construction wood had been known from the early periods; an Elephantine papyrus from the Achaemenid Period gives information exactly on the use of different woods in Egyptian naval construction[20]. Departing from Egypt, natron constituted the principal merchandise exported in the holds of ships. Natron, valued by the Greeks, as Pliny reports (*Natural*

This document continues on p. 232 ▷

LET IT BE RECOGNIZABLE TO ALL
ATHENA'S DECORATIVE HELMET CREST

9 Statuette of Athena
racleion
lemaic Period
onze
9.2 cm | W. 2.8 cm | D. 1.4 cm

At the top of this bronze crest of a Corinthian-type helmet, a curved band linked the crest to the helmet and supported the rectangular, curved casing into which horsehair was implanted to imitate a horse's mane. The rigid hairs are grouped into rectangular brushes that widen towards the top. The tips of the last brush bend more markedly towards the rear. The structure of the hairs is indicated with the aid of fine incisions. From the rear of the casing a long horse's tail falls fluidly, its wavy strands intermingling. The work is of an exceptional technical and artistic level. It must have belonged to a statue of over life-sized dimensions. We must ask ourselves which individual was sufficiently important to justify such a monument. While we cannot exclude a deserving general or a sovereign displaying his military qualities, such an honour better suits a divinity. Much more than Ares, the god of war, it was the armed goddess Athena who enjoyed great popularity. She was at that time depicted with a Corinthian-type helmet on her head (or in her hand). In particular, we see her wearing a helmet with a crest of this type, with a long, wavy horse's tail, on Apulian vases of the 4th century B. C. E., or on Athenian terracotta figurines of the 3rd century B. C. E. This convention also spread to Greco-Roman Egypt, as is proven by images on the Alexandrian coinage of Domitian and Hadrian.

The closest analogy is provided by the magnificent bronze statue discovered in 1959 in Piraeus. Its proportions accord perfectly with the dimensions of the crest found at Heracleion. The Piraeus statue presents a style regarded as Praxitelean, dating from the years 350–340 B. C. E. According to R. R. R. Smith, it is as characteristic of the Late Classical style as it is of the beginnings of the Hellenistic. It remains difficult to suggest a date for the statue from which this crest came, but the style and the high quality of its workmanship enable us to attribute it to a very large statue of Athena of the 4th century B. C. E., or to a very good replica.

According to the studies of Z. K.

Bibliography: Milne, 1933, no.1083; Schefold, 1971, p. 37–42; Geissen, 1983, no. 369–370; Cassimatis, 1984, p.1045, no.13; Demargne, 1984, p. 967, no. 93, pl.713, p. 980–981, p. 984, no. 322, pl.741, p.1004, no.510, pl.757; Houser, 1987; Mattusch, 1996.

Athena, in 370 B. C. E.
Museum of Archaeology, Piraeus

308 Helmet crest
Heracleion
4th c. B. C. E.
Bronze
H. 81 cm | W. 34 cm | D. 5 cm

403 Ionian Cup
Heracleion
6th c. B.C.E.
Ceramic
H. 6.3 cm | Diam. 15.7 cm |
Th. 0.4 cm

399 Squat *Lekythos*
Heracleion
Late 5th - early 4th c. B.C.E.
Ceramic
H. 9.6 cm | Diam. 5.1 cm | Th. 0.2 cm

378 Painted table amphora
Heracleion
5th c. B.C.E.
Ceramic
H. 32 cm | Diam. 22.5 cm | Diam. (opening) 8.5 cm | Th. 0.6 cm

387 *Bolsal*
Heracleion
Late 5th c. B.C.E.
Ceramic
H. 4.5 cm | Diam. (opening) 9.7 cm |
Th. 0.3 cm

392 *Kotyle*
Heracleion
Late 5th–early 4th c. B.C.E.
Ceramic
H. 10 cm | Diam. 14.4 cm | Th. 0.7 cm

379 Table amphora
Heracleion
Mid-4th c. B.C.E.
Ceramic
H. 28.5 cm | Diam. 11 cm

377 Amphora from Mende
Heracleion
5th c. B.C.E.
Ceramic
H. 65 cm | Diam. 40 cm |
Diam. (opening) 14 cm | Th. 2 cm

407 Bowl
Heracleion
Mid-4th c. B.C.E.
Ceramic
H. 4.5 cm | Diam. 13.4 cm |
Diam. (opening) 12 cm | Th. 0.5 cm

History, 31, 117), was ordered regularly. The enthusiasm for natron can be explained by the salting of foodstuffs (particularly fish) and its role in the manufacture of earthenware and glass objects; glass objects were produced in the Greek world beginning in the late 6th century B. C. E. in Rhodes and in a more widespread manner on the shores of Asia Minor[21]. Without going into the detail of exchanges, it is useful to recall that from the Saite Period to the Persian Period all sorts of products circulated and were exchanged among Asia Minor, Egypt, Cyprus, Syria-Palestine and Babylonia[22] – according to complex and varied processes and circuits[23] whose long path, which reached as far as the Nile Valley, is difficult to describe. There is, nevertheless, no doubt that all these products passed through Naukratis and also Memphis, as well as through some other port cities[24].

CUSTOMS IN THE MEDITERRANEAN

The *Stelae of Thonis-Heracleion* and *of Naukratis* constitute the most detailed sources concerning customs levied in ancient Egypt. These texts provide, in narrative form, knowledge of the exploits, decisions and achievements of the Pharaoh, in this case Nectanebo I. Primary among them is the transfer of part of the royal levies to the goddess's treasury as a divine offering to Neith, "in addition to what was given previously." His Majesty says: "Let there be given: 1/10 of the gold, silver, rough wood, finely-worked wood, of everything that comes from *Wadj-wer* of the *Haunebut*, of all goods, that is, everything that is brought into the King's house in the city called *Henet*; and 1/10 of the gold, silver, everything that arrives in *Per-meryt*, called Naukratis, on the banks of the *Anou*, which are written on the account of the King's house, in the form of a divine offering for my mother Neith."

THE SITES OF CUSTOMS LEVIES

Jean Yoyotte's research has brought to light the etymology of *Per-meryt* and Naukratis, in Egyptian 'the house of the port'[25]. He has identified the toponym *(T-)henet*, *i.e.* Thonis because that city was on the edge of a coastal lake (*henet*)[26]. Such a man-made lake, quite extensive, was adjacent in antiquity to the entry of the Canopic channel – the term *Anou* designating a canal ending in this same branch. The 'guardian' of whom Herodotus speaks (*Histories*, 2, 113–119), charged with supervising access to the Canopic channel, was 'the official assigned to the gateway of the foreign peoples of *Wadj-wer*', a title borne by the border police officers charged with supervising, at the mouth of the Nile, the comings and goings of ships from the Carpathian or Rhodian sea.

As we emphasized above, the text of the *Naukratis Stele* and the *Thonis-Heracleion Stele* sanctions a decision that Nectanebo I had taken in the year 1 of his reign in favour of the temple of Neith, the patron deity of Sais and protectress of the previous dynasties. A tenth of the taxes would henceforth be levied on the goods and products of the Naukratic Greeks, as well as on the imports that reached them from the sea by the Canopic channel. "The tithe would serve to finance a complementary offering service for the temple of Neith, in other words an in-kind resource to benefit the local clergy."[27] Two sites of taxation were planned: one was Naukratis itself where the stele had been erected, and the other, Thonis, concerning imports "of all that comes from the Sea of the Greeks."

The *Customs Register of the Egyptian Satrapy* makes it possible to imagine the process of levying customs: "First, ships pay their customs duties at the mouth of the Canopic channel, meaning, it seems, that the port of entry and place of taxation is simply Thonis, as during the Saite Period and in the 4th century – a port that the Achaemenid administration had simply preserved in its existing state.... Then, once the ships have paid customs, they are free to go up the Nile, as far as Naukratis and Memphis, where important markets (particularly Memphis during the Persian Period) allow them to sell their products (wine, oil, iron, wood, etc.) at good prices."[28] Once their goods have been sold, "the traders fill the holds of the ships with local products, particularly natron, which they can in fact load while descending the Nile, in one port or another. Then they go back to Thonis, where they pay the natron tax."[29]

Thonis thus constituted the western customs counterpart of the control stations of the eastern Delta, which, according to archaeological evidence, were probably located in the region of the Pelusiac branch, perhaps even at its mouth. During the North Sinai Survey, a very dense group of sites from the Persian Period was the target of archaeological reconnaissance at the fringe of the eastern Delta, between the Suez Canal and Romana. Historical sources bear witness to a significant increase in the number of urban sites. The majority of them – cities, garrisons, forts, commercial stops – such as Tell el-Farama, Tell el-Herr and Tell Abu Seifa, were peopled by Egyptians, Greeks, Persians, Jews, Arabs and Phoenicians[30]. In particular, "Pelusium (Tell el-Farama), the great metropolis of the eastern Delta and one of the gateways of Egypt, was probably founded at that time, at the mouth of the Nile's Pelusiac branch, a veritable lifeline for the towns of that region and a principal maritime artery for traffic linking the heart of the Delta to the Mediterranean."[31]

TYPES OF TAXES

The decree of Nectanebo refers to several types of taxes:
- on imports to Naukratis passing through Thonis;
- on Naukratic transactions;
- on "everything that arrives in *Per-meryt*"[32], an expression that could refer to a tax on all Naukratic (craft) products[33].

In addition, M. Lichtheim has shown that the text does not refer to a tax or customs duties of ten percent. The Neith temple was to receive ten percent of all royal levies[34]. These taxes must not have been different from those that were applied to the boats of Yawan in the *Customs Register of the Egyptian Satrapy*[35]. The text, which shows the revival, entirely or in large part, of the customs system such as it existed in Egypt in the Saite Period, makes it possible to identify the types of taxes levied at the gateways into Egypt. For Greek ships, the principal levy consisted in a quantity of gold or silver that varied according to the category of ship[36]. To that was added, for large Greek ships, a part of the load of oil. The complementary tax, called 'men's silver', was based on a levy of silver and in kind; it was a kind of toll, which can be compared to a port tax levied on members of the crew[37]. Upon leaving Egypt, Ionian ships, without exception, paid a tax in silver proportional to the value of the natron they took back from Egypt and nothing more.

CUSTOMS ADMINISTRATION AND CUSTOMS OFFICIALS

Nectanebo's decree, which alludes to preceding ones, suggests that such regulations do not date from the 4th century. G. Posener[38] has highlighted the fact that administrative texts control means of access to the country. In fact, we are familiar with this administration basically from a title found in numerous inscriptions: 'the official at the gateway of foreign countries'. This function dates from the Old Kingdom. The confrontation shows that the Saites unified and systematized old epithets and titles while taking into account the nomenclature of the New Kingdom, where 'the officials for the *khetemu*' at the borders can be compared to the 'officials' of the Egyptian Late Period. Let us note that these 'officials' are generally superior officers. The title often specifies the location of 'foreign' countries and thus allows one to recognize three distinct zones corresponding to the three great international flows of exchange of Saite Egypt, from the Nubian border to the edge of the Delta. Two title-holders of the Saite Period consecrated their statues in the temple of Neith at Sais. Among them was Nekhthorheb who officiated under Amasis and who prided himself on having restored offerings to the goddess. This testimony takes on particular meaning in light of the development of economic relations between Egypt and the Hellenic world during the Saite Period and the role that the Canopic channel played in this commerce.

The outlines of the system, as seen in Nekhthorheb's narrative inscription[39], agree with the data from more recent sources, and a comparison of the *Thonis-Heracleion Stele* and that of *Naukratis* shows that the essential arrangements were identical[40]. The three texts refer to the reestablishment of an institution and concern Mediterranean commerce and imports from the Aegean world. The arrangements consist in levies carried out by the royal administration at the entrance to the Delta. According to the stelae, the customs were in the city of Thonis, on the Canopic channel; according to the statue, at the 'gate' which may be situated in the same area. In both instances, the beneficiaries are the gods. In the decree, it is Neith of Sais; in Nekhthorheb's narrative, it is 'the gods' in general, but he specifies that the re-organization of the service should provide for priority in favour of Neith. According to Jean Yoyotte's studies, "these officials were responsible, at Thonis, for the customs levied on ships obliged by the Saite Pharaoh to use the Canopic mouth. These are the regulations decided by Nectanebo, who is satisfied, by way of innovation, to raise the sum of the offerings at the temple of Neith in Sais."[41] Two centuries before Nectanebo, at the time when Hellenistic expansion in Egypt took off, "a customs institution controlled maritime commerce and essentially Greek commerce, with the temples of the Egyptian gods benefiting from the taxes levied."[42]

316 Bronze plaques
Heracleion
Egyptian Late Period – Ptolemaic Period
Bronze
L. 21.5 cm | W. 15.5 cm | Th. 1 cm (A)
L. 15 cm | W. 14 cm | Th. 1 cm (B)

We cannot conclude this brief discussion of customs during the Late Pharaonic Period without recalling their evolution in Greco-Roman times. Documents that refer to the theme of state control over commercial exchanges in Greco-Roman Egypt have often become veritable 'classics'[43]. A letter to the *dioketes* Apollonius written by Demetrius relates that it is impossible to change gold into silver in the middle of the 3rd century B. C. E.[44]. The famous *Revenue Laws* of Ptolemy II Philadelphus contain, for instance, standards relative to wholesale and retail trade in oil[45]. A contract for a maritime loan stipulates a customs declaration[46]. The aim of these state regulations was at once fiscal and administrative. Concerning the destination of products, it is fitting to mention an interesting clause in the *Revenue Laws*, which signifies that individuals who imported oil for their personal use through the customs office of Alexandria or Pelusium (importing in the *chora* for commercial purposes was forbidden) were to pay a tax and declare their destination. On the other hand, "all merchants who transport foreign or Syrian oil from Pelusium to Alexandria will be excused from the tax, but will request a permit from the tax collector at Pelusium and from the *oikonomicus*, according to legal regulations."[47] Connected to this customs organization, a dam was constructed on the Canopic channel of the Nile, not far from Alexandria, in order to prevent ships from penetrating the river or leaving it without paying customs duties for their cargoes. The control post was at the end of the Alexandrian canal by which one entered Egypt[48], just like the river station from which one left toward the south by going up the Canopic channel (Schedia): "The canal that leads to Schedia is a little beyond Eleusis, to the right[49]. Four *schoenes* from Alexandria, Schedia is a neighbourhood of the city with the station of the *thalameges* from which prefects embark for Upper Egypt. There is located also the toll office for taxes on merchandise going down or up the river. That is indeed why a pontoon bridge (*schedia*) was constructed, from which the town derives its name. After having passed through the canal that leads to Schedia, one sails on the remainder of the canal as far as Canopus, parallel to the part of the coast included between Pharos and the Canopic mouth. The interval between the canal and the sea forms a narrow strip of land on which, after Nicopolis, are located Taposeiris the Little and the Zephyrion, a promontory on which there is a small temple to Arsinoe Aphrodite. It is said that in ancient times, there existed at that spot a city called Thonis, from the name of the king who offered his hospitality to Menelaus and Helen." (Strabo, *Geography*, 17, 1, 16)[50].

AN EXTRAORDINARY PAIR OF TWINS

THE STELES OF THE PHARAOH NECTANEBO I

Under the Saites, the Persians and the last three native dynasties, Thonis was the border and customs station and the *emporion* where Greek products passed on their way to Greek trading posts in Naukratis. When Alexandria was founded, Thonis lost these functions, as the new capital oversaw the passage of imports and exports as well as the levying of fees and import duties. For Alexandrians, the name of Thonis remained only a memory of epic times, while knowledge of its location became vague. Only the Greek name of the local shrine survived: Heracleion, linked to the prestigious memory of the beloved hero.

During the reign of Psammeticus I (664–610 B. C. E.), Greek soldiers had been stationed near the town that bore the Egyptian name *Nokratj* (transcribed in Greek as Naukratis). This town was located on the Canopic channel, about a hundred kilometres from the mouth of the Nile. It was included in the nome of Sais and was only about twenty kilometres from the headquarters of the 26th Dynasty trading colony and its temple of Neith, patron deity of the Saite monarchy. Early on the Greek establishment became an active site of commerce and industry. Several Ionian, Dorian and Aeolian cities obtained concessions whose organization and activities were regulated under Pharaoh Amasis (570–526 B. C. E.).

The natural route into Egypt for merchandise imported by the Greeks for their trading posts and factories was to enter by the Canopic mouth and sail up the Canopic channel. After rebellions against the Persians in western Lower Egypt disrupted trade, Naukratis resumed its prosperous activities, duly regulated by the pharaonic administration under the last native dynasties, as shown by the famous *Stele of Naukratis*, which was found *in situ* in 1899 and is preserved in the Egyptian Museum, Cairo.

This greywacke stele, 210 centimetres high, has been perfectly preserved. It bears fourteen columns of a hieroglyphic text, engraved with solemn elegance and learned composition, according to an unusual writing system that had been fashionable during the Saite Period. This text consecrates in Egyptian a decision made by the founder of the 30th Dynasty, Nekhtnebef of Sebennytos (alias Nectanebo I), in the first year of his reign (November, 378 B. C. E.), *i.e.* shortly after his accession, in favour of the temple of Neith, patron deity of Sais and protector of the previous dynasties. A tithe would henceforth be levied on the volume of taxes that were regularly collected for the benefit of the state, both on the goods and productions of the Greeks of Naukratis and on the imports arriving from overseas by the Canopic channel. The tithe would serve to finance a complementary offering service for the temple of Neith, in other words an in-kind resource to benefit the local clergy, whom the new ruler intended to win over. At the top of the stele, above the fourteen columns of text, there is an engraving of the king offering Neith a tray with food on one side and a large golden necklace on the other. The Greeks were very familiar with the Egyptian image of the goddess (whom they had long since assimilated to Athena) and the message conveyed by the picture had to be clear to these foreigners, as well as to illiterate Egyptians.

Two sites of taxation were thus planned: one was Naukratis itself where the stele had been erected, and the other, 'in a town called *Hônw*', for what is 'of all that comes from the Sea of the Greeks'. This mysterious toponym, mechanically vocalized as *Henwe* by the translators, was none other than the Thonis of the Greek texts.

The most astonishing and significant of IEASM's findings is that of the *Thonis-Heracleion Stele*, which is a double, or a near-double to be precise, of the stele of year 1 of Nekhtnebef, which was found in Naukratis in 1890: same material, same dimensions, same quality of craftsmanship, same double picture with identical details and also fourteen columns of vertical text. At the most, five variants in the writing of five words were discovered. The stone is as perfectly preserved as its sister of Naukratis. By itself, this finding, which has thrilled all historians of

Egypt and Greece, is not unexpected, because the fiscal measures expressed concerned both the customs office of Thonis and the Greek establishments of Naukratis. It is nevertheless an extremely rare event in the history of archaeology. It happens that both versions of the same document concerning two cities at a distance from each other have been preserved intact at the very places where they were displayed during antiquity and, surely, just a short distance from the point where each was initially erected. The situation seems nothing less than miraculous, especially when we think of the destruction that nature and men have inflicted on monuments at both sites and of the troubling chaos of overturned, dispersed and dismembered stones found in most of the sites of Lower Egypt and the Alexandrian area.

There is, however, a difference between the two versions. At the end of the text, we read: "His Majesty has said: Let this be established on the present stele." The *Naukratic Stele* specifies (line 13): "on the present stele placed in *Nokratj*, on the bank of the *Anu* canal." The stele of Heracleion specifies (lines 13–14): "on the present stele at the mouth of the Sea of the Greeks, in the town whose name is *Hône* of Sais." We have here the full form of the primitive name of Heracleion, distinguished from the other *Thône* of the lower Delta by the mention of the metropolis on which Naukratis depended and which benefited by privilege from the taxes levied on Canopic trade.

These twin steles are both splendid examples of the hard-stone engraving at which 4th century B. C. E. artists excelled. The way in which the workshops of Sais succeeded in producing two practically identical works is truly surprising. One detail in particular highlights a nice method of 'editorial' technique used by the writer-scribes of the temple of Neith: the bottom of column thirteen of the Heracleion copy was hemmed by a thin line of fine hatch-marks and the beginning of column fourteen was minutely dotted in order to 'select' the place where 'Thonis' would need to be substituted for 'Naukratis', which appeared

116 Stele of Thonis-Heracleion
Heracleion
30th Dynasty, year 1 of the reign of Nectanebo I, 378 B. C. E.
Granodiorite
H. 195 cm | W. 88 cm | D. 34 cm

Stele of Naukratis
Naukratis
30th Dynasty, year 1 of the reign of Nectanebo I, 378 B. C. E.
Granodiorite
H. 195 cm | W. 88 cm | D. 34 cm

on the first model. This double display is yet another illustration of the refined art of communication at which the administration of the divine Pharaohs excelled: communication between the state and its subjects, between Egypt and its foreign partners, between the human world and the divine world. By means of sacred writing, politics and economics were ideally integrated into a conception of the cosmos which we call religious.

Henceforth it is fully confirmed that Thonis, on which, according to Herodotus, a temple of Herakles depended, and whose name and lost location were vaguely known by Hellenistic geographers, was the establishment that would become Heracleion. In the second place, the topographical notations of IEASM and the satellite views of the configuration of the entire lower Delta corroborate the hypothesis that the Egyptian word *hône* designated the particular deltas formed at the mouth of the great channels of the Nile.
According to the studies of J. Y.

Excerpt of a text that appeared in *Egypte, Afrique & Orient*, 2001, p. 24–34, reproduced with the gracious permission of Thierry Bergerot. *Cf.* Yoyotte 1993–1994, p. 680–683; *id.*, in: Goddio 2006, p. 218, n. 120.

Details of cat. 116, Stele of Thonis-Heracleion
Column 13 (right) and 14 (left)

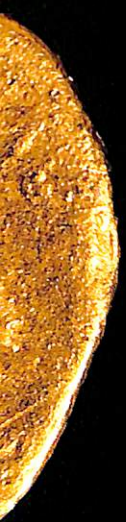
EXCURSUS: ALEXANDRIA, THE WORLD'S TRADING POST

Alexandria was turned toward the sea without being completely isolated from the Nile Valley. It was in contact with Lake Mareotis which was linked to the Nile by canals. The *chora* provided its sustenance and its prosperity. On the Canopic channel, Schedia received merchandise from all of Egypt and the Red Sea. The port infrastructures that were discovered leave no doubt that Alexandria was the primary *emporion* of the Mediterranean. The recovered objects reveal large-scale maritime trade (cat. 480, 481, p. 270; 476). Upon their arrival, the Macedonians established a new fiscal and economic structure in which Alexandria became the great trading city of the eastern Mediterranean. The founding of Alexandria, which the Macedonian conqueror wanted to make the second centre of his empire, accelerated the cosmopolitan character of this society, already active in the 6th century B. C. E. A political and commercial centre, the new capital became one of the principal intellectual centres of the Mediterranean. Caravans that moved via Gerrha, Petra or Doura-Europus linked it to India and Asia Minor. Its ports were turned as much toward the Mediterranean and the Red Sea as toward the Nile Valley and Africa. Imports and exports of the entire *oecumene* passed by Alexandria.

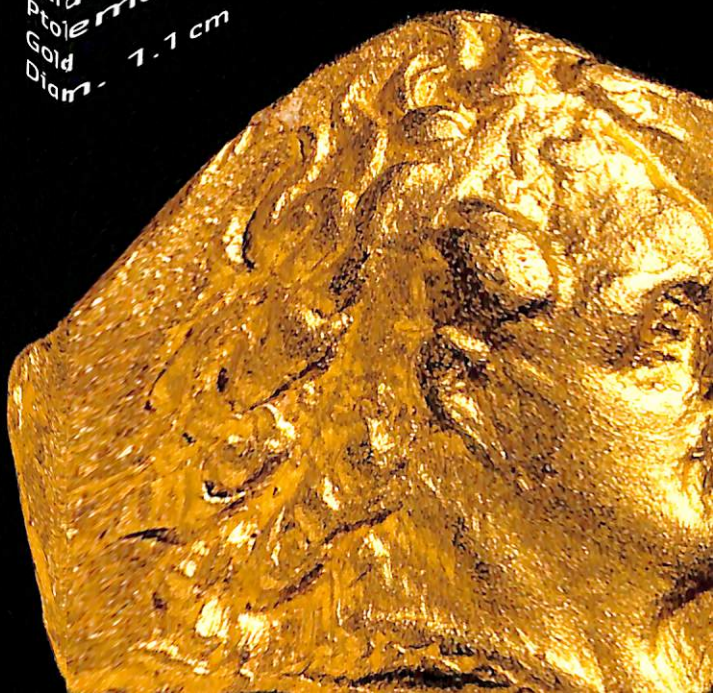
As much for foreign trade as for domestic transactions, means of payment occupied a significant place. The rise in power of international exchanges, of which Alexandria was the crossroads, led to the development of coinage and the use of coins in Egypt. In 326–325 B. C. E., a workshop was set up in Alexandria, most likely near the royal quarter of the *basileia*, in which gold and silver coins were struck in accordance with the Attic standard, particularly coins called 'Alexanders' and small bronze coins. A monetary policy was put into place as of 323 B. C. E. by Ptolemy, son of Lagos, and continued by his successors. The weight of the coins is reduced, thereby departing from the Attic standard. Monetary circulation is limited to this single coinage in Egypt and the 'Ptolemaic zone'. Moreover, according to P. Ballet, "the monetary policy put into place imposed strict oversight of exchange and the systematic conversion of foreign currency into Ptolemaic currency." In other words, non-Ptolemaic gold coins were melted upon their arrival in Egypt and, leaving Egypt, Egyptian currency could not be exchanged for foreign currency. In the field, at Alexandria as at Canopus and Heracleion, Hellenistic coins discovered are, with one exception, Ptolemaic and generally struck in the Alexandrian workshop (cat. 423, p. 241; 424, 425, p. 242; 426, 427, p. 243). Melting made it possible to strike, among other coins, silver *tetradrachm* – a metal that was rare in Egypt – issued by Ptolemy I Soter (305–282 B. C. E.) (cat. 434, 437). Their longevity is such that they constituted, in the expression of H. Caddel and G. Le Rider, the "Ptolemaic coin *par excellence*". On the obverse of the gold and silver coins appears the profile of the king, queen or the royal couple; on the reverse is featured Zeus's eagle, which had become a symbol of the Lagid Dynasty, or a simple or double horn of plenty, evoking the kingdom's prosperity. The bronze coins, of different denominations and types, constituted a typically fiduciary currency, generally used for daily trading (cat. 441–443, p. 245; 440). On the obverse the bearded head of Zeus-Amun appears most often; on the reverse, the eagle with spread or folded wings. The legend reads: *Ptolemaiou Basileios* ('of King Ptolemy'). The issue of bronze Ptolemaic coins began to decline toward the mid-2nd century B. C. E. Under the last Ptolemaic ruler, Cleopatra VII (51–30 B. C. E.), there was a kind of return to the production of bronze coins of very reduced weight. Hence they are relatively frequent in current collections and at archaeological sites (cat. 96, p. 51; 95). D. F.

Bibliography: Hazard, 1995, p. 75; Bernand, 1996; Caddel – Le Rider, 1997; Ballet, 1998, p. 89–94.

423 Coin
Heracleion
Ptolemaic Period, Ptolemy I Soter (305–283 B. C. E.)
Gold
Diam. 1.7 cm



426 Coin
Heracleion
Ptolemaic Period, Ptolemy I Soter (305 – 283 B. C. E.)
Gold
Diam. 1 cm



427 Coin
Heracleion
Ptolemaic Period, Ptolemy I Soter (305 – 283 B. C. E.)
Gold
Diam. 1.1 cm

EXCURSUS: THE COINS

Over the centuries since they were deserted by their last inhabitants, it has been the fate of many ancient city sites to be stripped of their contents and identity. Usable stone is quarried; the great buildings of the past tumble, streets fill with debris to become unrecognizable. These are the most obvious effects of decay, but the depredation occurs at much lower level too, for it is there, in amongst the debris, often beneath the original ground level of the city, that the real treasure lies. And slowly, by a process of chance discovery, illicit digging and even amateur excavation, the ground is leached of the wealth of the inhabitants of old.

Archaeologists, when invited to study the coin finds from the excavation of ancient city are often presented with a mass of poorly preserved, base-metal, low value coinage. The stuff of day-to-day transactions, to be sure, this is important material for the interpretation of the ancient economy, but it is only one half of the story. So often the precious metal finds, the silver and gold coins that formed the mainstay of another part of the economy are absent from excavated finds. In part this may be because their ancient owners took far better care of their high value coins, than the lower. It is also the result of centuries of opportunistic burrowing by poorer modern inhabitants in search of the imagined wealth of their richer predecessors.

From the coins presented in the pages that follow, it will be clear immediately how the picture offered by the Canopic sites differs from the norm. Hidden for centuries under the sea, and undisturbed by the prying hands of intruders, the cities of Canopus and Heracleion have retained the full range of the ancient coinage used and lost there. The result is a golden opportunity in more ways than one.

We find, on the one hand, the spectacular evidence for the wealth of these cities and their inhabitants in the gold coinages that circulated from the early 4th century B.C.E. to the 8th century C. E. (cat. 83–94, 421–432). These were highly valued and once prized possessions. The gold *aurei* (cat. 489, 490) from the period of the Roman Empire represented about a month's wages to the soldiers who once owned them. The silver from the 4th century B. C. E., imitations of the coins of Athens (cat. 435, 436 and p. 224), the *tetradrachms* of the great Macedonian general Alexander (cat. 434) are lower in value, perhaps a week's pay, but demonstrate how these two Egyptian cities were linked to a broader economy, where silver was the popular medium for monetary exchange. Merchants from around the Mediterranean could call at the harbours of Canopus and Heracleion, and conduct their business in silver coin, and undoubtedly did (cat. 433, 437).

Heracleion and Canopus are uncharacteristically rich in the finds of precious metal coins they have yielded, but the base metal coinages should not be forgotten. Here we are in the realm of everyday exchange. The Ptolemaic kings, who succeeded Alexander as rulers of Egypt, closed their borders to foreign coinage and stimulated the use of bronze currency (cat. 438, 440, 441, 442, 443, 445). This trend would continue for over 500 years, through to the Roman province of Egypt (cat. 97). The vast majority of finds from the two sites bear witness to the busy economic activity of this period, and offer a glittering prospect of a reconstruction of the vibrant economic life of the two cities that their appearance belies.

As a whole the coinage from Canopus and Heracleion bears witness, more clearly than any other form of evidence, to the political vicissitudes of the two cities. From their origins in the Pharaonic Period as important trading centres, through the conquest of Egypt by Alexander the Great, through the rule of the Macedonian dynasty of the Ptolemies, ending with the fall of the last of their line, the famous Queen Cleopatra, the history is laid out in the coinage (cat. 95, 96). Then came the empires of Rome and Byzantium, continuing the remarkable blend of local productivity and foreign rule that has been the fate of Egypt at so many times in her history (p. 51). A. M.

97 Coin

441 Coin
Heracleion
Ptolemaic Period, Ptolemy I Soter (305 – 283 B. C. E.)
Bronze
Diam. 2.73 cm

442 Coin
Heracleion
Ptolemaic Period, Ptolemy I Soter (305 – 283 B. C. E.)
Bronze
Diam. 2.75 cm

443 Coin
Heracleion
Ptolemaic Period, Ptolemy I Soter (305 – 283 B. C. E.)
Bronze
Diam. 2.75 cm

CATHERINE GRATALOUP, ERIC MCCANN

DAILY LIFE IN THE CANOPIC REGION

CERAMICS ARE REMNANTS OF DAILY LIFE IN THE CANOPIC REGION.

Prospecting and excavations carried out by the European Institute of Underwater Archaeology on the sites of Heracleion and Canopus, to the east of the Aboukir peninsula and in the port of Alexandria, have begun to deliver a remarkable collection of ceramic materials, both complete objects and fragments. Very often the first datable evidence of occupation, ceramics are also, by their production and their use, silent messengers from ancient times. They represent a link in the chain formed by other archaeological evidence, whether small like an earring, or large like a statue or an architectural element.

A preliminary examination of ceramics from the western zone of the Egyptian Delta makes it possible to understand objects that have long been known to researchers and those that have been studied only recently. The ceramics discovered belong to two categories: Egyptian and imported. Regardless of origin, the category of common ceramics is as well-represented as that of fine ceramics or amphorae. At this stage in the surveys of this huge site, the first chronological information contributed by this study shows a continuous occupation of the site of Heracleion from the 26th Dynasty until the Ptolemaic Period. The current ceramological evidence from East Canopus begins later, in the 4th century B.C.E., and attests to its occupation until the Byzantine Period, with a significant presence in certain excavated zones during the Ptolemaic Period. Judging by the research undertaken in the port of Alexandria, ceramics there cover a time span from the Ptolemaic Period to the Byzantine Period. While underwater archaeological excavations often present specific submerged environments that are particularly disturbed[1], samples have nevertheless revealed coherent ceramological contexts[2]. They have made it possible to understand the internal chronology of these three sites, to support existing interpretations of the function of these zones and to approach the study of the contacts that Heracleion and East Canopus established with the Mediterranean world before and after the founding of Alexandria.

Among the zones already surveyed, the north-east zone of Heracleion[3] contains ceramics of the 26th Dynasty, from the 6th and perhaps the late 7th century B.C.E. The first currently attested occupation is known through the prevalence of amphorae from Samos in particular, but also from Miletus, known for its oil, Lesbos, Chios and Clazomenae (cat. 375, p. 229), famous for oil and marinated wine[4], as well as from fine ceramics such as Ionian cups (cat. 403, p. 228)[5], or fragments from a Chiot cup[6] and those from a northern Ionian *oenochoe* in the Late Wild Goat Style (600–570 B.C.E.)[7]. This superiority in number reflects the role of eastern Greeks in the site's creation or development. Less well represented[8] but just as certainly present, Corinthian ceramics can be seen in the form of fragments from the beginning of the 6th century B.C.E., which demonstrate relations with this Peloponnesian city, which widely exported small oil and perfume vases. The end of the Saite Period also saw more specific contacts established with other bordering regions such as the Levant and Cyprus[9]. Egyptian products, produced with a Nile silt from the alluvia of the Nile[10], are represented by vases for culinary purposes: a cylindrical jar for food storage (cat. 397, p. 248) or a spherical jar for cooking[11]. Are these local ceramics the immediate traces of local settlement or do they merely indicate relations with the local population? These local domestic ceramics (basin, bowl, small dish, mortar) are more common in the western zone of the northern canal and their production is spread out between the late 6th and the early 4th centuries B.C.E., demonstrating not only the maintaining of maritime trade with the Levant but also connections with Greece. The

same is true of certain vases for liquids, such as juglets (cat. 396, p. 249) of calcareous clay.

But the area between the northern and central basins, where the remains of the port, the foundations of a monument and the great canal were excavated, specifically north of the *temenos*, demonstrates not only the richness and variety of the ceramics arriving in this harbour site of cultic importance of the Egyptian Delta, from the end of the first Persian domination and especially during the native dynasties, but also the vitality of the local workshops. Thus, amphorae from the Levant (torpedo amphora), Cyprus (basket-handled amphora[12]), north of the Aegean Sea, Thasos and Mende (cat. 377, p. 230) in Chalcidice have generally been found in the port zones. But fine ceramics, which dominate, are especially associated with cultic spaces. The black-figured Attic drinking cups are numerous: *skyphos*, *bolsal* (cat. 387, p. 230), bowl, cup-*skyphos* – ceramics considered semi-luxurious and imported for their quality or aesthetic value. These characteristics can be noted especially on the applied medallion of an *askos* (cat. 382)[13], the shape and motif of which exist in Cyprus[14]. Red-figured ceramics[15] have come to us most often through examples of squat *lekythoi*, excepting some *krater* fragments from the Classical Period (cat. 418, p. 50). They present a varied decorative repertory: reserved bands, palmette (cat. 399, p. 228), netting with white dots, and figurative decoration, such as a girl carrying a cosmetics box, or a panther (cat. 398, p. 151). The presence of these Greek imports does not overshadow relations with the eastern zone of the Mediterranean, which remain predominant. Indeed, various locations produced items such as the painted table amphorae (cat. 378, p. 228) of Heracleion, rarely identified in Egypt, but regularly found in Heracleion from the late 5th to the mid-4th century B. C. E., or the *kotyle* (cat. 392, p. 230) from the same decorative repertory, which seems to be a late production of a minor workshop.

These characteristic painted decorations are generally associated with eastern Greece, sometimes with Cyprus. While this island does not appear to have been a major import centre for Heracleion, it seems to have been at least a stop in its trade with the eastern Mediterranean. This stopping point seems nevertheless to have been the source of a table amphora (cat. 379, p. 230), which still contained nutshells when discovered. The contents are a nice snapshot of daily life, which can also be seen in a mortar or basin (cat. 400, p. 249) sometimes called a Persian Bowl, which was especially widespread in the 5th and 4th centuries B. C. E., having been identified at numerous sites of the eastern Mediterranean basin and in Egypt[16].

The presence of Cypriot ceramics in Heracleion and in other Delta sites demonstrates the regular exchanges that this island maintained with Egypt despite political circumstances. Contacts with the

415 Miniature Pot
Heracleion
4th c. B. C. E.
Ceramic
H. 7.8 cm | Diam. (opening) 5.6 cm | Th. 0.5 cm

484 Measuring vessel
Alexandria
2nd c. C. E.
Ceramic
H. 4.8 cm | Diam. (opening) 3.3 cm | Th. 0.6 cm

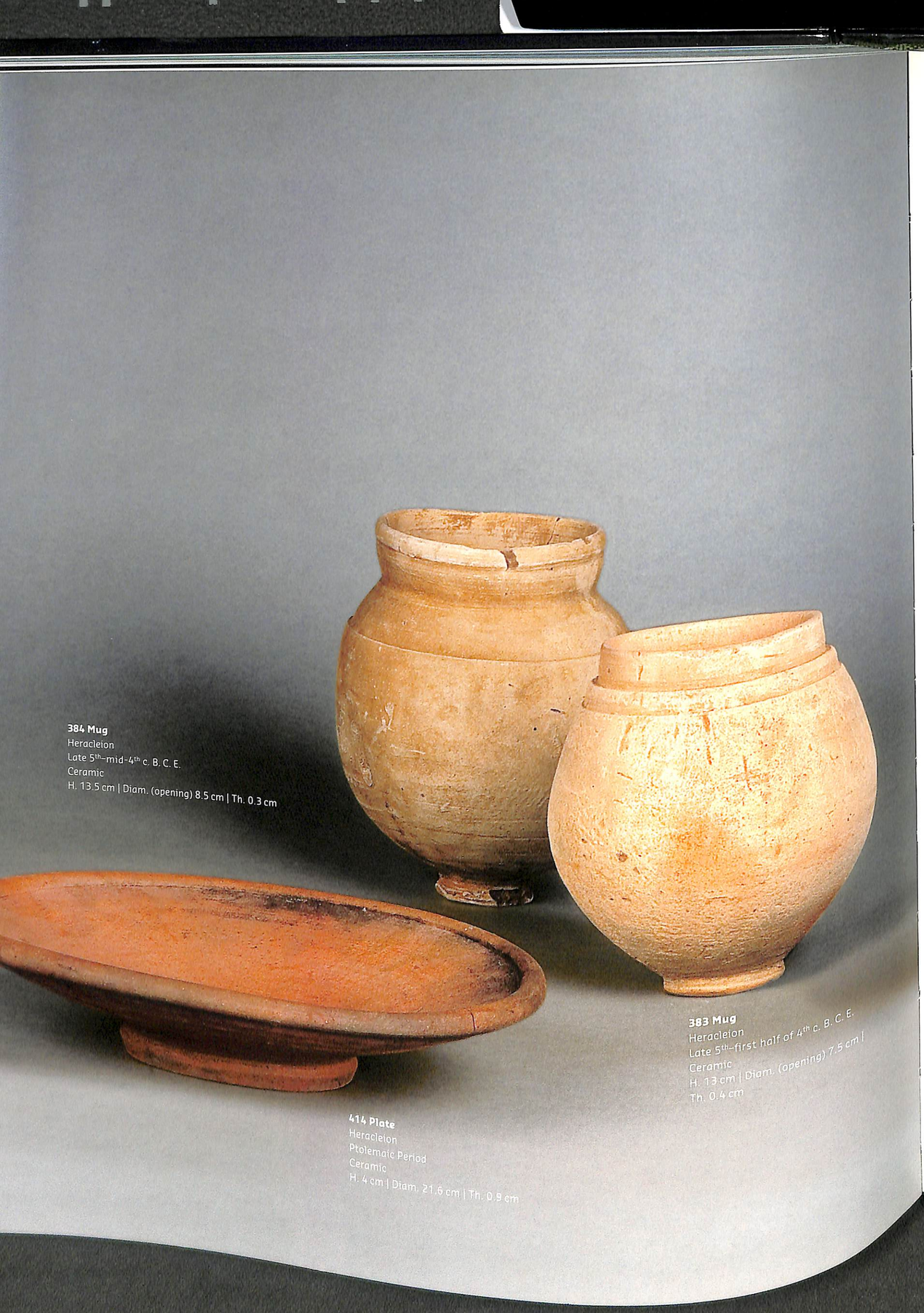
400 Mortar
Heracleion
Early 5th–early 4th c. B. C. E.
Ceramic
H. 9.8 cm | Diam. 32 cm | Diam. (opening) 30.2 cm | Th. 2.2 cm

395 Jug
Heracleion
5th c. B. C. E.
Ceramic
H. 24.5 cm | Diam. (opening) 9.2 cm | Th. 1 cm

397 Jar
Heracleion
5th–4th c. B. C. E.
Ceramic
H. 70 cm | Diam. 27 cm | Diam. (opening) 12 cm | Th. 1.2 cm

394 Juglet
Heracleion
4th c. B. C. E.
Ceramic
H. 10 cm | Diam. (opening) 1.7 cm | Th. 0.4 cm

396 Juglet
Heracleion
4th c. B. C. E.
Ceramic
H. 11.4 cm | Diam. 8.8 cm



384 Mug
Heracleion
Late 5th–mid-4th c. B. C. E.
Ceramic
H. 13.5 cm | Diam. (opening) 8.5 cm | Th. 0.3 cm

383 Mug
Heracleion
Late 5th–first half of 4th c. B. C. E.
Ceramic
H. 13 cm | Diam. (opening) 7.5 cm | Th. 0.4 cm

414 Plate
Heracleion
Ptolemaic Period
Ceramic
H. 4 cm | Diam. 21.6 cm | Th. 0.9 cm

western Mediterranean are rarer but are illustrated by the presence of a *skyphoid pyxis* produced by the Greek colony of Sicily from the mid-4th century B. C. E. (cat. 402, p. 151). The iconography of this vase surely has something to do with the importance of Dionysus in the pantheon of Heracleion (p. 146).

Between the late 27th and 30th Dynasties, the vitality of some Egyptian workshops can be seen very clearly through the frequency of productions in calcareous clay. Not only juglets (cat. 394, p. 249), but also mugs (cat. 383, 384) and bowls (cat. 404,) are frequent in these contexts. Some of these drinking bowls are fine thin-sided imitations of metallic vases in the Persian Achaemenid tradition. The presence of fragments that were damaged by fire or over-baked indicates the proximity of the workshops, which had to be linked to the cultic, economic and administrative centres. The richness of this material, both imported and local, with great cultic or even votive significance, must be understood in relation to the cultic complex of the *temenos* of the temple to Amun of the *Gereb*.

By comparison, the external zones within the limit of the Great Canal have provided much less homogeneous material. Instead of detracting from our understanding of the site, this in fact makes it possible to notice a frequentation of the eastern zone, linked to the eastern basins, and the western zone, from the 5th century B. C. E. to the beginning of the Ptolemaic Period. Among the finds are eastern imports including Levantine amphorae (cat. 376), a lamp (cat. 419), an *olpe* (cat. 401, p. 253) and a *kantharos* (cat. 391, p. 253), but also common local ceramics such as basins[17], a bread tray (cat. 413, p. 252) and a carinated bowl (cat. 406), likely indicators of nearby domestic areas, especially to the west, that were linked to household needs and depended on maritime and cultic activities.

The Ptolemaic ceramics that appear here, such as an Alexandrian lamp (cat. 420), are in fact only the northernmost traces of the occupation of the shrine whose relations with the eastern basin now occurred via the south. Starting with the Macedonian Dynasty and especially under the Ptolemaic kings, the features of the ceramics of Heracleion changed, as demonstrated by objects found along the canal and identified between Heracleion and Canopus. This is clear from the dominance of Egyptian ceramics, except for amphorae from the great Hellenistic centres of production[18]. One interesting feature of the amphorae is the stamping, which became widespread during the late 4th century B. C. E. At that time, many cities of the Aegean world were involved in export. Heracleion maintained its role as an *emporium*, as seen by amphora fragments from several workshops of south-western Asia Minor: Cnidian examples with flared lip (mushroom rim), bearing monogram stamps[19] (cat. 380) or Rhodian stamps (type: button-stamp). However, in the 2nd century B. C. E., the essential role that this area played for the Rhodian market is seen in Canopus, though attested also in Alexandria. The stamps bear the names of the producers: Hippocrates, Timaratus, Mentor, Euphranor II, or those of eponymous magistrates: Archidamus, Nicasagoras, Timourrodos. The Timourrodos vases, identified at Carthage as well as in the Black Sea[20], show the vitality of Rhodian trade in the 2nd century B. C. E.

The repertory of local ceramics, both common and fine, is inspired above all by classical Greek dishware, probably as of the end of the 4th century B. C. E. Greek influence, insignificant before Alexander, can be seen in the change in shapes and production methods. A hemispheric bowl with or without a stamped decoration of palmettes (cat. 408, 410, 411), carinated bowls (cat. 409), plates (cat. 414, p. 250), fish platters, culinary ceramics (*chytra* or *kakkabe*, cat. 388) come from workshops of the Delta, and others certainly closer to the city, as was the case with Naukratis[21]. In order to imitate the black-figured style, some shapes are fired in a reductive atmosphere (without oxygen contributing to the cooling process), imparting a black colour to the vase. Mugs, which also exist in bronze at Heracleion, have been found in one of these black versions (cat. 385, p. 254) but also in an oxidizing firing with partial slip (cat. 81, p. 254). This drinking cup, which became a specific chronological marker for the beginning of the Roman Period, in fact appears at Heracleion in Ptolemaic contexts. But from the beginning of the Ptolemaic productions[22], the application of red slip has also been observed, associating these ceramics with the trend preceding the arrival of eastern sigillated ceramics. As of 125 B. C. E., the latter represented the majority of ceramics imported into Alexandria. In this same context, the Alexandrian workshops used partial slip characteristic of the colour-coated group that appeared in several centres of the eastern Mediterranean from the early 2nd century B. C. E.[23]. Along with these ceramics marked by foreign influences, there are examples of culinary utensils (cat. 386, p. 254), which have changed little from the pre-Ptolemaic Period up to the present day.

Canopus, not Heracleion, saw the appearance of eastern sigillated pottery, with pieces currently dated from the late 2nd century B. C. E. to the Period of Augustus. The comparison of Ptolemaic ceramic material from Canopus and Heracleion attests to an occupation of the latter site until the second half of the 2nd century B. C. E. and the transfer of some activity toward Canopus and Alexandria. On the Canopus site, prospecting has not yet yielded Roman ceramics of the Imperial Period. While the *gawadis* (cat. 82, p. 254) belong to a *saqia*[24], the typological evolution of these shapes, which are still used today, is insignificant. According to some authors, "the dissemination of inventions, among them the *saqia*, did not take place before the Roman Period…. Finally, more regular use of artificial irrigation led(…) in the Byzantine Period, to extensive use of *saqias*[25]."

The most recent ceramic finds are amphorae of the Late Empire such as the wine amphora (cat. 381, p. 255) from the Gaza region, but also Byzantine amphorae produced in the eastern Mediterranean[26] between the 4th and 7th centuries.

Excavations carried out in the eastern port of Alexandria reveal ceramics that clearly bear the mark of the Imperial Period. Evidence from the late Ptolemaic Period is currently less common but nevertheless attested, especially in the area of the island of Antirhodos, while excavations of the Timonium (p. 39) have brought to light a majority of evidence from the 1st and 2nd centuries.

Contacts with the eastern Mediterranean basin are represented by, for example, fine ceramics imported from Cyprus[27] (cat. 476),

Cnidus, Asia Minor[28], and the amphorae of Rhodes (cat. 480, p. 270). The nature of these imports is not specific to Alexandria and is found on sites east of the city as well as in the northern Sinai[29].

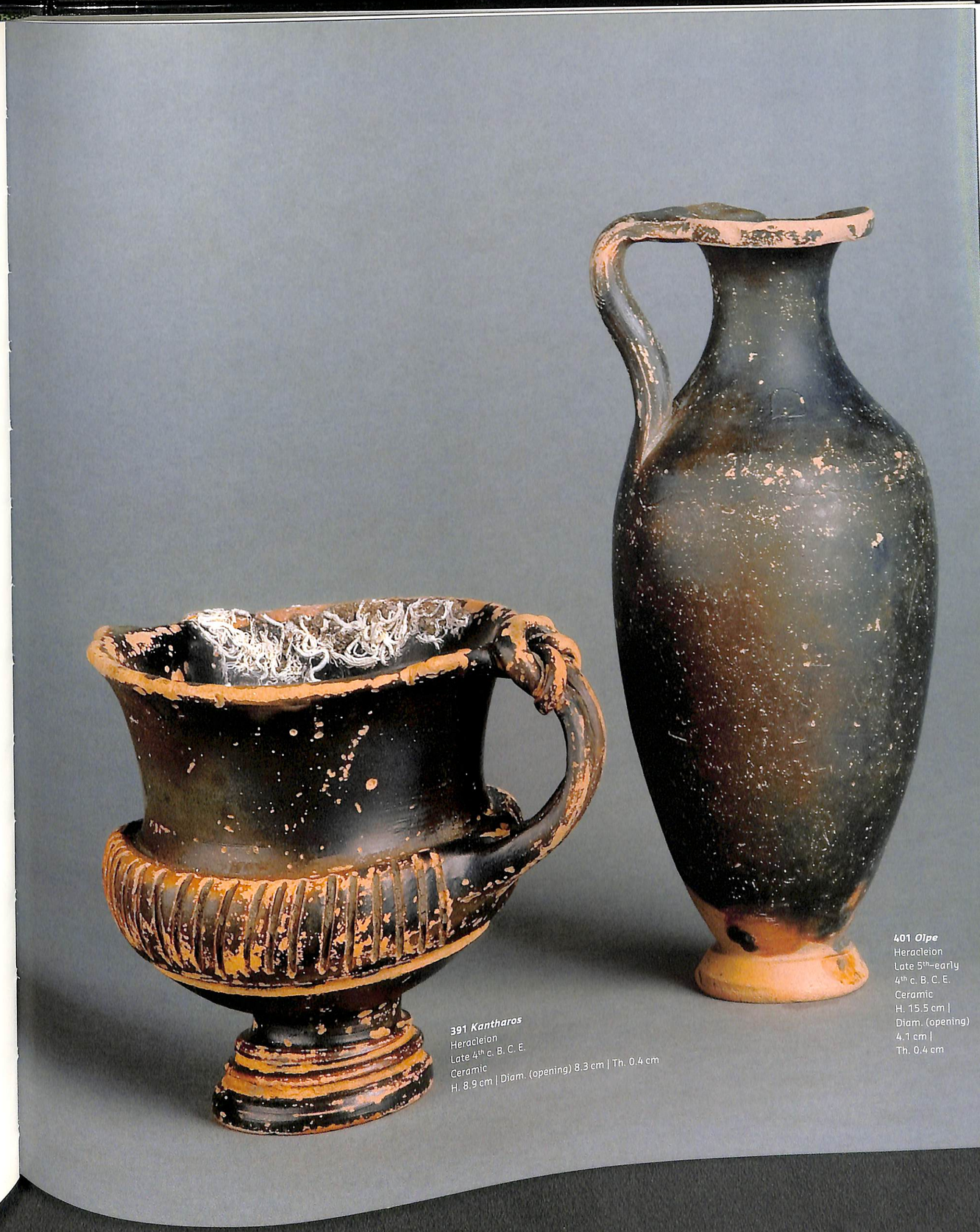
Although these connections were maintained[30], there was clearly an opening to the western part of the Roman world, related to the Roman Empire's annexation of Egypt in 30 B. C. E. and to the *Pax Romana* that reigned over the Mediterranean basin, as evidenced by wine amphorae of Crete (cat. 481, p. 270), sigillated pottery and amphorae of Gaul[31] and amphorae of Baetica, used for export from Saumur[32] and Tripolitania[33] and particularly exported between the 2nd and early 3rd centuries C. E. for the oil trade. Everyday ceramics associated with this trade have also been preserved, such as oil lamps (cat. 487, 488). In the early Principate, the majority of fine ceramics were imported, a tendency that changed, particularly toward the mid-2nd century.

Local workshops emerged to make new shapes[34], such as the biconical Egyptian amphorae[35] that may be connected to the workshops of Lake Mareotis or to probable productions of the Faiyum. In culinary ceramics, certain shapes were inspired by Hellenistic models, but with their own particular developments, as shown by pots (cat. 477, 478).

The repertory of fine ceramics immediately began to grow with the establishment of the Principate, as exemplified by a mug (cat. 482) and an oil lamp (cat. 486). A new blossoming of the trade shows both in imitations of Cypriot sigillated pottery[36] (cat. 483) – such as bowls, with or without guilloche, which appear from the first half of the 2nd century – and in vases for liquids with striated body and characteristic lengthening (cat. 485). The very sporadic presence (cat. 479) of ceramics from the death of Theodosius I into the Byzantine Period attests to the disuse of the site at that time.

The pursuit of excavations will contribute much more information about all these sites. The ceramic research, from Saite Heracleion to Roman Alexandria, retraces the evolution of relations between the Egyptian Delta and the whole of the Mediterranean basin in the light of its political and commercial evolution. C. G.

413 Bread dish



391 *Kantharos*
Heracleion
Late 4th c. B. C. E.
Ceramic
H. 8.9 cm | Diam. (opening) 8.3 cm | Th. 0.4 cm

401 *Olpe*
Heracleion
Late 5th–early 4th c. B. C. E.
Ceramic
H. 15.5 cm | Diam. (opening) 4.1 cm | Th. 0.4 cm

385 Mug
Heracleion
Ptolemaic Period
Ceramic
H. 8.7 cm | Diam. (opening) 5.1 cm |
Th. 0.4 cm

81 Mug
Canopus
2nd c. B.C.E.
Ceramic
H. 9.3 cm | Diam. (opening) 5.7 cm
Th. 0.4 cm

82 *Qadus*
Canopus
Roman-Byzantine Period
Ceramic
H. 27 cm | Diam. 14.2 cm |
Diam. (opening) 11.5 cm

386 Basin
Heracleion
5th–4th c. B.C.E.
Ceramic
H. 9 cm | Diam. (opening) 35 cm

FRANCK GODDIO AND JEAN YOYOTTE

THE PORTUS MAGNUS OF ALEXANDRIA

"Once peace had been assured by the leader and purchased by great presents, a feast celebrated the joy of such a great event, and Cleopatra displayed an ostentatious luxury, which Roman society had not yet allowed. The place was like a temple of luxury, the likes of which would be difficult to build even in a more corrupt period; the panelled vaults were laden with riches; thick strips of gold hid the wooden pieces; instead of being cut into facing for the surface, the marble was whole, and made the residence shine; there stood whole solid masses of agate and porphyry; everywhere in the palace was a profusion of onyx on which people walked; the Mareotic ebony did not cover the vast door jambs, but stood there instead of vulgar oak, serving as a support and not a decoration for the residence. Ivory covered the galleries of the atrium, and on the doors were applied the shells of Indian tortoises, coloured by hand, with circles in each of which an emerald was set. The gems sparkled on the beds, the jasper made the sideboard shimmer wildly; the rugs gleamed: most had been soaked in Tyrian purple and had gone into more than one copper tank to absorb the drug well; others shone with gold brocade, still others were dazzling scarlet, in the artistic manner of Egyptian weaving." (Lucan, *Pharsalia*, 10, 107–127)

While underwater excavations in the Alexandrian harbour did not reveal the splendour of the palaces of Alexandria, they did establish a detailed cartography of the eastern port – Megas Limen or Portus Magnus – and its immediate area. In the zone of the Royal Quarters, research identified the specific outlines of the installations and buildings that once stood near the palaces and sometimes made it possible to study their structure: the Royal Port, the Timonium, the island of Antirhodos, temples, ancient piers, etc. This research drastically changed our topographical knowledge of the port infrastructures serving the *basileia*. This complex of coastal palaces facing the sea placed government buildings and cultural establishments side by side. By welcoming scholars of the Greek world and placing them nearby, the Ptolemaic kings manifested their desire to have knowledge and power coexist, as well as their interest in acquiring Greek culture. As a place of royal residence, Alexandria benefited from the Ptolemaic rulers' taste for luxury: each successive Ptolemy added even more sumptuous edifices to the ancient palaces. Strabo, who lived in Alexandria between 27 and 20 B. C. E., described the place thus: "The city holds splendid parks and the royal buildings; they occupy a quarter, or even a third, of the total area, for each of the kings, anxious to beautify in turn the public edifices with some new ornament, was no less eager to add, at his own cost, a new residence to those existing already, so that by now the poet's line is apt: 'each is born from the previous one'. All these edifices form a continuous building, they and the port and even those that extend beyond the port." (Strabo 17, 1, 8)

It is true that it was impossible to recognize the ruins of palaces and temples from IEASM surveys and the divers' photographs. What appears is a sort of wasteland cluttered with collections, some dense, some sparse, of dismembered or partially demolished buildings, with some stray sculptures and inscribed stones dating from Pharaohs prior to Alexander. Blocks of limestone were quite rare; blocks of hard rock were abundant. In fact, having been spared modern invasions, the submerged 'Royal Quarters' of Alexandria greatly resembled the sites of the great stone temples of Lower Egypt, which were also spared by medieval or modern invasions.

The prospected zone, the Portus Magnus, can be divided into five large sectors: Cape Lochias, the ancient coast, the peninsula of the Poseidium, the island of Antirhodos and the western port installations (see the map of the ancient port, p. 38). Over the 600 hectares surveyed, archaeological excavations led to the discovery of thousands of objects, which were then cleaned of their calcareous deposit, with layers of concretions sometimes sixty centimetres thick. The remaining step was to identify them and try to imagine what role they might have played when they still stood upright. Topographical identifications made it possible to recognize sea walls, quays and basins as well as pavements, colonnades of palaces and remains of shrines in these huge groups of underwater remains (columns and capitals, blocks of granite, basalt, calcite or limestone and sculptures, amphorae and anchors).

IEASM's multiple underwater explorations confirmed the locations of submerged palaces, temples and ports. The study of the basins made it possible to determine their depth and type of sedimentation, to locate shipwrecks and to draw up a map of their quays. The identification and study of the numerous architectural elements covering the palace zone were accompanied by soundings to establish a timeline of renovations, abandonments and destructions of the sites.

The port renovations are not as expected. The layout is technically more coherent[1]. The entrance to the basins is well protected from swell and waves. The long sea wall that had been drawn for the Timonium does not correspond to any reality. In any case, such a construction could not have withstood more than one winter, had it been exposed at the entrance to the main channel, as was previously thought. The shallows thought to be the location of Antirhodos are rather the peninsula with the sea wall where the Timonium might have been located. The island includes indeed a small port, a perfect harbour. The Poseidium could be located on the peninsula. As for the 'king's private port', its position and layout are more functional and more attractive than had been previously assumed. This new topographical map, while matching ancient authors' indications, proceeded directly from actual field measurements. Such observations also allowed us to ask engineering questions about the site selected for the ancient port's establishment and architecture. The presence or absence of a trench mark sufficed to distinguish between the rocky thresholds that are level with the surface and those that protruded in antiquity.

The ruins of immense structural surfaces have been found, spared by submersion from being covered up or smashed like the ancient surfaces that remained exposed during the medieval, modern and contemporary periods. It would be difficult to date the renovations and transformations of each sector, to attribute and name the buildings that could have existed, or to determine and date the circumstances that made these places a chaotic field of rubble. One important observation was made: on the west side of Cape Lochias, the ancient coast with its peninsula and the island, the ground is still covered with limestone paving that preserved its continuity and coherence, except in limited places where it suffered marginal collapses or localized breakages. These esplanades, however, support nothing but ruins, large architectural fragments mixed with pieces of sculpture, forming large collections of stones, some greatly dispersed, some less so.

The submerged floor of the ancient shore, including its two peninsular extensions, is thus covered with an almost continuous series of deposits of mixed-up blocks: whole or broken column shafts of various types and modules, scattered capitals and bases of columns, pieces of entablature, stones from walls.... These architectural elements were cut from limestone, marble, red granite, granitoid rocks and quartzite. Here and there are found monoliths from pre-Alexandrian pharaonic temples, obviously reused in the main work of the walls and at one point, the scrap-heap of a stone-cutting workshop. Among the concentrations of stone blocks, some structures still in place can be identified. They prove to be strong limestone walls, their stones still dressed, and, in rare cases, fired brick walls. The ancient coast thus looks just like the contiguous strip of shoreline that was still part of the continent as described by members of the Egyptian Expedition and 19th-century visitors.

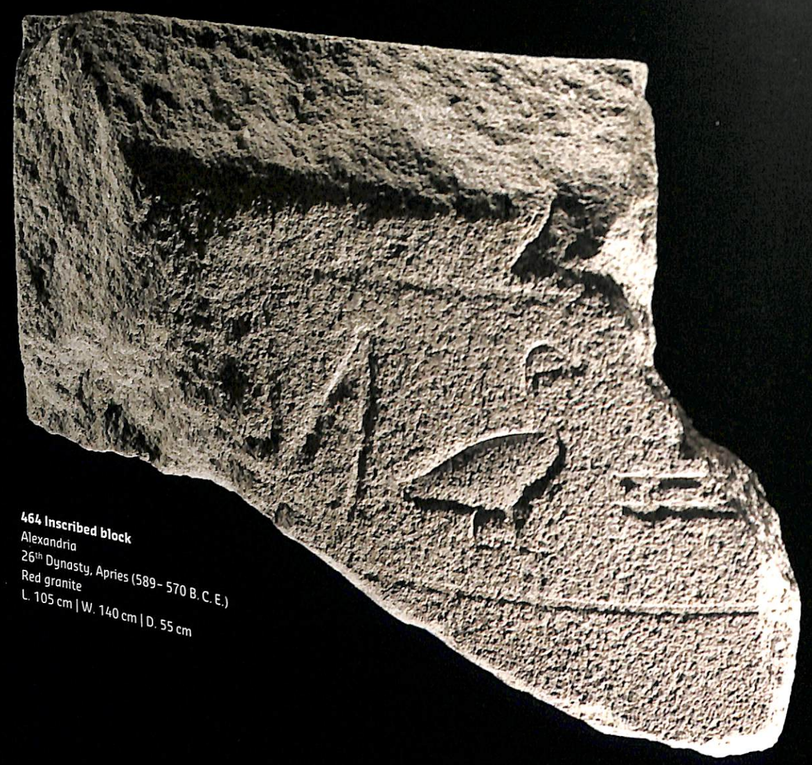
Remains of wood and mortar foundations have, however, contributed chronological information regarding the different archaeological deposits that were found and revealed important renovations to the port made during the Roman Period.

The monuments built under the Ptolemaic kings and the Caesars suffered terrible shocks starting in antiquity, the direct or indirect results of tectonic and human phenomena that periodically shook them or knocked them down:

- Stones taken from more ancient monuments were incorporated into new structures during the Ptolemaic and Roman Periods. Three fragments of an obelisk (cat. 461, p. 271), a pedestal and a statue dating from the Ramessid Period (1291–1204 B. C. E.) (cat. 451, p. 272) and several elements of a building constructed by the Saite King Apries (589–570 B. C. E.), represent remains of monuments from pre-Alexandrian dynasties that were subsequently reused (cat. 464, p. 272; 462, 463, 465, 466). These discoveries confirm that most of the works of pharaonic antiquity found in Greco-Roman Alexandria had been taken from the temples of Heliopolis, as we have known for approximately a century from several pieces gathered throughout the continental parts of the city. Despite recutting into mason's stone and other pieces, possible reuse, mutilations due to natural agents, the hazards of handling or iconoclastic assaults, etc., these *pharaonica* can nonetheless reveal the cultural relationships between the old pharaonic world and the young Hellenistic universe[2].
- After the Roman Period, columns were reused at the site, or moved for use in churches and then in mosques; large stone objects were taken away in great numbers during the Arab Period to build defensive structures, as can be seen by the reused stone incorporated into the great Tulinid wall and in Abd el-Latif's text on transport of the Sarapeum's columns for coastal defences during the time of Saladin.
- Some pieces from the same monument were dispersed to sites that were sometimes very distant from one another.

While keeping in mind the difference between what might constitute a beautiful setting in terms of cinematography and something that does not claim to be the archaeologically identified setting of a drama, one will notice that the map indicates that the palace seen by Strabo on Antirhodos three years after Cleopatra's death, and which may well have sheltered the queen before she withdrew to her mausoleum, is placed facing the Timonium, the palace that Marcus Antonius built after his defeat. The ghosts of the two lovers continue to haunt these submerged places.... The mission had very little chance of finding

472 Cap
Alexandr
ca. 250–
Red grani
H. 50 cm



464 Inscribed block
Alexandria
26th Dynasty, Apries (589– 570 B. C. E.)
Red granite
L. 105 cm | W. 140 cm | D. 55 cm

451 Inscribed Base of Statue
Alexandria
19th Dynasty, Merenptah (1213–1203 B. C. E.)
Granodiorite
H. 70 cm | L. 95 cm | W. 50 cm

Cleopatra's signature in Antirhodos and even less of finding in the Royal Port the wreck of the splendid floating palace which, in 41 B. C. E., had taken the queen to Marcus Antonius as far away as Cilicia. Nevertheless, in the small port of Antirhodos, a wreck from the 1st century B. C. E.– 1st century C. E. was discovered, the contents of which included, among others, a beautiful intaglio with a religious motif set on a gold ring (cat. 473, p. 275). Further on, there are other jewels that reveal some of their mystery (cat. 474, 475, p. 275). Indeed, remains of remarkable statuary in the Pharaonic style as well as Hellenistic and Greco-Roman styles have been discovered at various sites, such as a marble head of a woman identifiable as a Roman empress (cat. 460, p. 275).

The excavations have made it possible to establish a timeline of the occupations and activities of successive periods on the island of Antirhodos. The pier at the east point dates from the 5th to the 4th centuries B. C. E., thus before the establishment of Alexandria, a fact which may surprise historians who cling to an overly simplistic image of coastal occupation during pre-Alexandrian periods. The last indigenous dynasties maintained in fact the policing and customs control put in place by the Saite and Persian dynasties regarding Greek sailors and merchants. Some Hellenes returned to the Pharaohs' service as mercenaries. The shelter offered by the interior cove may very well have been set up with them in mind[3]. The esplanade paving was put down under the first Ptolemaic kings, for the wood formwork that helped place the stone platform dates to the 3rd century, as established by carbon-14 dating.

On the west-east channel of Antirhodos, an axial strip of paved land is covered with dense or sparse groups of smooth granite columns and some blocks of various hard rocks including ones reused from pharaonic structures. These remains seem to have been used as quarries. At three points, they contain granite bases with Greek dedications, including seven dating from the reign of Caracalla (*ca.* 213 C. E.). Without architectural elements definitely attributable to the Ptolemaic Period, we must imagine a building constructed during the Imperial Period on the site where the 'palace of Cleopatra' once stood, a building that was enriched by the addition of monuments in honour of the emperor early in the 3rd century. It was extraordinarily lucky to find eight inscriptions – dispersed, but on the same floor – from a single period, most of them complete, the unpredictable result of the complicated movements of the site; this find contributes precious information regarding the dramatic relations between Emperor Caracalla and the city (cat. 468–471). Indeed, on one of these inscriptions the name of Caracalla has been effaced. This fact implies the *damnatio memoriae* of the emperor's name, surely following the bloody suppression of the riots that took place in Alexandria during his visit of November/December 215 to March/April 216 C. E. He arrived in Alexandria curious to visit the tomb of its founder, his idol, as well as the temple dedicated to Serapis, whom he especially worshipped. It is said that the Alexandrians, known for their rebellious spirit, made fun of 'this little imitator of Achilles and Alexander', calling his mother Jocasta, identifying Caracalla with Oedipus and mocking both of them. Caracalla's revenge was commensurate with his deranged mind. After having been welcomed to Alexandria with several days of uninterrupted festivities, he ordered all the young people by edict to gather on an esplanade under the pretext of forming a Macedonian phalanx in honour of Alexander. They were massacred by the emperor's army. This event left a deathly trace: "The carnage was so great that waves of blood, crossing the esplanade, reddened the mouth of the Nile despite its great size, as well as the entire coast of Alexandria and the surrounding area." (Herodian, *History of the Roman Emperors*, 4, 9, 8)[4]

On the south-west arm of the island of Antirhodos, at the edge of the remaining pavement and a mass of fallen rocks, three very well-preserved sculptures were excavated from under small architectural debris: two sphinxes (cat. 456, p. 110; cat. 457, p. 109) and the statue of a priest (cat. 459, p. 161). Crushed under blocks of stone, ceramics dating from the 1st century B. C. E. to the 2nd century C. E. were found. The three sculptures evidently escaped Christian iconoclasm. This can be explained by the fact that the soil on which they rested sank underwater in the 4th century.

This chronological range makes it possible to date the quake that caused the collapse of the shores of Antirhodos. On a collapsed slope on the eastern side of the same south-western channel, there is a homogenous group of approximately fifty columns that broke in their fall, most likely due to the same collapse. Thus the history of the submersion of the Alexandrian shores is revealed to us, a tale of rapid and tremendous catastrophes and earthquakes accompanied by tidal waves, and a story of slow phenomena of subsidence and/or rise in sea level.

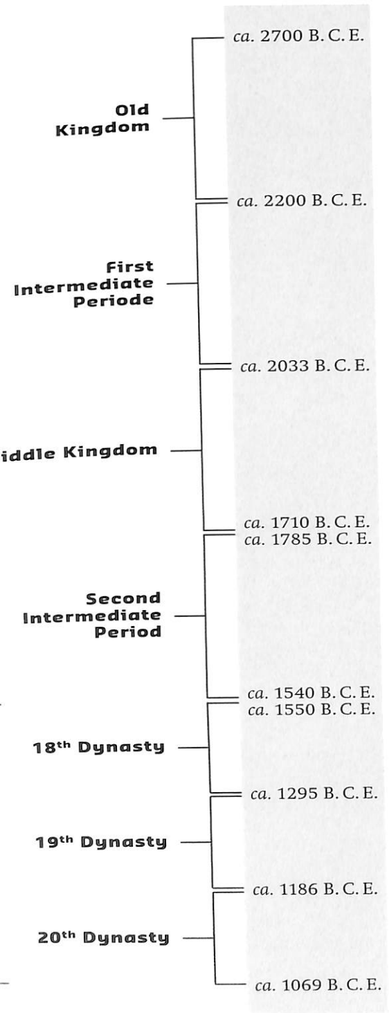
This new vision of Alexandria leads us to use other approaches to refine and nuance the models for interpreting literary sources and field data. It is especially appropriate to examine critically the 'first-hand accounts' of Greek, Latin and Arabic classical authors, ranging from a true eyewitness such as Strabo, to Pliny, who compiles information from books too succinctly, to the Romance of Alexander, which transcribes descriptions of the Alexandria of its time (2nd or 3rd centuries) and surrounds them in legends that had developed through the ages. It is better to refrain from hastily and definitively identifying and dating sites and monuments from inscription or art fragments dropped by fate into the excavator's lap. The dedication of the 'Column of Pompey', the single column of the Sarapeum to remain standing, is still visible on its base. Two of the four foundation deposits of this temple's razed Ptolemaic wall and one of the four deposits of its small shrine were found where they had been placed in the reign of Ptolemy I. Coinciding with the erection of the two 'Needles of Cleopatra' (13–12 B. C. E.), the dedication makes it possible to locate the façade of the Caesarium by means of comparison with a note by Pliny. It was preserved on only one of the pincers of the four bronze crabs that held up the single obelisk to remain standing of the pair. These are practically the only three cases of epigraphic evidence definitely found *in situ* to have appeared in Alexandria over two centuries of excavations. The hope of discovering an Egyptian foundation deposit or a dedicatory inscription engraved on the pediment of a Greek temple is almost nil; and when we dig out a scrap of inscription from the rubble, it would be more prudent, before peremptorily deducing an identification and a date, often by means of overly

elaborate reconstructions, to ensure that the object has not been moved some distance short or great by examining the context and the state of the stone. The papyriform trunk of a column discovered in a deposit of stone blocks beside the north-west shore of the eastern port belonged to a colonnade from which three columns had been found at the southern gate of the Wall of the Arabs. This is true as well for statue remains representing divinities or sovereigns.

The excavations of the port basins confirmed Alexandria's role: a city open to the sea, a trading city, the 'breadbasket of Rome,' a city with multiple ports, private, royal, military, commercial or transit.... While excavations in the eastern part of the Portus Magnus revealed the existence of three ports, the localization work performed in the western part uncovered a large port installation equipped with several basins. It seems to have served as a transit port between the eastern port and the western port, the Kibotos. Strabo, walking from east to west, after describing the royal neighbourhood and port, continued thus: "Next come the Caesarium, then the *emporium* and the warehouses which are followed by the arsenals, extending all the way to the Heptastadium" (*Geography*, 17, 50, 9), the artificial sea wall that closed the harbour to the west and served as a pathway to Pharos. An *emporium*, a wharf for arrivals and departures, a place of business.... And the same author adds: "(...) that of Alexandria is the greatest *emporium* of the inhabited earth" (*Geography*, 17, 1, 13). Further away can be found the shipyards that built the fleets that traded with the entire Mediterranean under the Ptolemaic kings and those that would feed the Romans with wheat. On the western shores of the harbour of Alexandria's port, we can hope to see Julius Caesar, trapped with the young Cleopatra between land and sea, making his way from the Royal Quarters all the way to Pharos, understand the unfolding of battles of uncertain outcome and grasp the powerful systems put in place under the Ptolemaic kings and maintained under the Caesars, arsenals and warehouses that assured the functioning of the great international traffic that made Egyptian Alexandria prosperous and glorious[5].

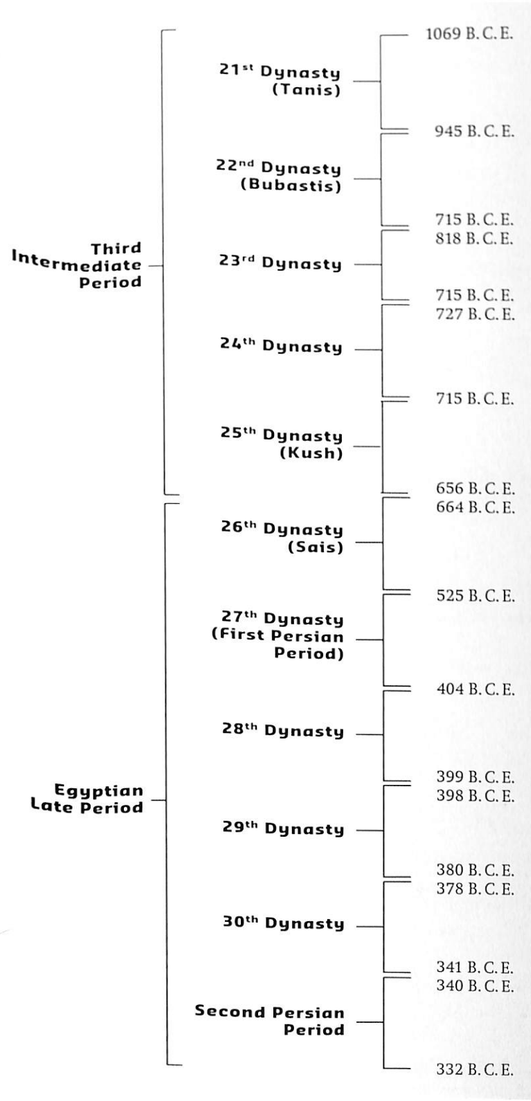
From an archaeological point of view, once the outlines of the lands and structures had been successfully defined, immense stretches were canvassed in order to determine the types of monuments at the base of the peninsula and the Poseidium and on a platform situated at the end of a sea wall, in the south-western extension of the peninsula. In the western part of the Alexandrian harbour the outlines of a port facing the Heptastadium were ascertained, probably a transit harbour, as well as immense quays and piers connected to the island of Pharos. The successive collapses and the rise in sea level led to a separation of over eight metres between the man-made land and installations and their original level. This topographical particularity, revealed by surveys, makes it possible to understand better the layout of the ancient Portus Magnus as well as the channels that led there.

LD TO NEW KINGDOM



ca. 1183 Year in which, according to tradition, the Trojan War took place. Legendary visit of Helen of Troy and Menelaus, Spartan king, guided by Canopus through the Nile Delta

FROM THIRD INTERMEDIATE PERIOD TO EGYPTIAN LATE PERIOD



Founding of Heracleion-Thonis 8th century B. C. E.

Assyrian king Asarhaddon conquers Lower Egypt 671 B. C. E.
Assyrian king Assurbanipal conquers Thebes 664 B. C. E.

Necho I 672–664 B. C. E., Psammetichus I 664–610 B. C. E., Necho II 610–595 B. C. E., Psammetichus II 595–589 B.C.E., Apries 589–570 B. C. E., Amasis 570–526 B. C. E., Psammetichus III 526–525 B. C. E.

Cambyses 525–522 B. C. E., Darius I 522–486 B. C. E., Xerxes 486–465 B. C. E., Artaxerxes I 465–424 B. C. E., Greek historian Herodotus visits Egypt *ca.* 450 B. C. E., Darius II 423–404 B. C. E.

Amyrtaeus 404–399 B. C. E.

Nepherites I 398–393 B. C. E., Psammuthes 393 B. C. E., Hakor 392–379 B. C. E., Nepherites II 378 B. C. E.

Nectanebo I 378–361 B. C. E., Teos 360–359 B. C. E., Nectanebo II 358–341 B. C. E.

Artaxerxes III Ochus 340–337 B. C. E.
Arses 337–335 B. C. E.
Darius III 335–332 B. C. E.

PTOLEMAIC PERIOD

Alexander the Great	332 B. C. E.	Founding of Alexandria 331 B. C. E.
Satrap of Egypt / Ptolemy I	323 B. C. E. – 306 B. C. E.	
Ptolemy I Soter King of Egypt	305 B. C. E.	Completion of Mouseion and Great Library
Ptolemy II Philadelphus	283 B. C. E.	Construction of Lighthouse
Ptolemy III Euergetes	246 B. C. E.	*Decree of Canopus*
Ptolemy IV Philopator	221 B. C. E.	
Ptolemy V Epiphanes	204 B. C. E.	*Decree of Memphis (Rosetta Stone)* 196 B. C. E.
Ptolemy VI Philometor	181 B. C. E.	
Ptolemy VIII Euergetes II	145 B. C. E.	Ptolemy VII Neos Philopator
Ptolemy IX Soter II	116 B. C. E.	
Ptolemy X Alexander I	107 B. C. E.	
Ptolemy XI Alexander II	88 B. C. E.	
Ptolemy XII Neo-Dionysus	80 B. C. E.	Ptolemy XI Alexander II
Ptolemy XIII	51 B. C. E.	
Cleopatra VII. / Ptolemy XIV	47 B. C. E.	
Ptolemy XV Caesar	44 B. C. E. – 30 B. C. E.	Caesar in Alexandria October 48–April 47 B. C. E., Marcus Antonius in Alexandria winter 40–41, 36–30 B. C. E., Octavian's victory at Actium 31 B. C. E., Suicide of Marcus Antonius and Cleopatra, assassination of Ptolemy XV, Egypt becomes a Roman province 30 B. C. E.

ROMAN IMPERIAL PERIOD

Julio-Claudian Dynasty	27 B. C. E. – 68 C. E.	Augustus 27 B. C. E.–14 C. E., Tiberius 14–37 C. E., Gaius Caligula 37–41 C. E., Claudius 41–54 C. E., Nero 54–68 C. E.
Flavian Period	69 C. E. – 96 C. E.	Vespasian 69–79 C. E., Visit to Alexandria, miraculous healings 69–70 C. E.
Five Good Emperors	96 C. E. – 180 C. E.	Trajan 98–117 C. E., Defeat of a Jewish rebellion in Alexandria 115–117 C. E., Hadrian 117–138 C. E., Visit to Alexandria 130 C. E., Marcus Aurelius 161–180 C. E., Visit to Alexandria 176 C. E.
Severan Dynasty	193 C. E. – 235 C. E.	Septimius Severus 193–211 C. E., Visit to Alexandria 199–200 C. E., Caracalla 211–217 C. E., Granting of citizenship to all freemen residing in the Roman Empire 212 C. E., Visit to Alexandria 215 C. E.
Aurelian	270 C. E. – 275 C. E.	

LATE ANTIQUITY

Diocletian	284 C. E.	Defeat of a rebellion in Alexandria 297–298 C. E., Beginning of the persecution of Christians 303 C. E.
Galerius	305 C. E. – 311 C. E.	Christians recognized as a religious community 311 C. E.
Constantine	306 C. E. – 337 C. E.	Dedication of Constantinople 330 C. E.
Theodosius I	378 C. E. – 395 C. E.	Pagan sacrifices and temple worship forbidden 391 C. E., Destruction of Sarapeum in Alexandria 391 C. E., All forms of pagan worship forbidden 392 C. E.
Justinian I	527 C. E. – 565 C. E.	St Cyrus' bones are brought to Menouthis 414 C. E., Murder of the pagan philosopher Hypatia 415 C. E.
Maurice I	582 C. E. – 602 C. E.	
Heraclius	610 C. E. – 641 C. E.	Persians take control of Alexandria, Arab conquest of Alexandria and Egypt 642 C. E.