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# **Fortifications and Defensive Architecture in Cyprus from the Twelfth century BCE to the Fourth century CE**

**By Claire Balandier**

## **Abstract**

The transition from the thirteenth to the twelfth century BCE is marked by the development of fortified settlements in Cyprus. But it was with the establishment of the city-kingdoms that the fortifications became the prerogative of the urban centers, the seats of power. Whether they had a defensive or prestige function, fortifications protected every kingdom's capital in the sixth century BCE. The construction techniques employed indicate ancestral architectural practices borrowed from the Mediterranean east. When the island came under Macedonian control, the fortified network became denser: in the late fourth century BCE, the ports and coasts were defended by the Antigonids while the Ptolemies do not seem to have erected fortifications before the mid-second century BCE, after losing control of Syria Phoenice and gathering their fleet at (Nea) Paphos, which had become the administrative center for the island. The construction techniques reveal new implementation methods employing advanced modular masonry. With the advent of the Pax Romana, the fortification work was limited to intermittent repairs until the fourth century CE.

**Keywords:** fortifications, city walls, defense history, Late Bronze Age, Archaic and Classical city-kingdoms, Hellenistic walls, mudbrick and stone, compartment walls, *limen kleistos*, Ptolemies, Antigonids, Roman, Late Antiquity.

**The first fortifications in Cyprus: Late Bronze Age (seventeenth to thirteenth century BCE)**

In Cyprus, fortifications appear to have always formed part of the landscape, as indicated from the Neolithic period onwards by the walls of Choirokoitia and Kalavassos-*Tenta*. However, the settlements then remained open and without defensive walls until the end of the Bronze Age. Around twenty fortresses are thus attested archaeologically from the end of the Middle Bronze Age (MC III) and the start of Late Cypriot I (LC I, seventeenth century BCE) (Fortin 1981, Bartelheim, Kizilduman, Müller, 2019, 31, fig. 1), the beginning of the first phase of fortified sites, which continued until the start of the Late Bronze Age (LC I–II). These fortresses were simple sites of refuge, such as those erected on the plateau of Agios Sozomenos to control the interior plain of the Mesaoria, contributing to the creation of new political and economic centers linked to the copper trade and characterizing Cypriot society in the late Bronze Age (LC II C: thirteenth century) (see recent excavations by D. Pilidou). Substantial defensive urban walls described as “Cyclopean” were then erected, such as those of Enkomi-*Ayios Iakovos* in the east of the island.

### **New Cypriot fortifications during the transition from the thirteenth to the twelfth century BCE**

The transition from the thirteenth to the twelfth century, a period during which the eastern Mediterranean experienced a severe crisis, had a varying impact in the different regions of the island. Some sites were abandoned abruptly (Maroni-*Vournes* and Kalavassos-*Ayios Dhimitrios* in the south, Morphou-*Toumba tou Skourou* in the north) or declined (Enkomi, Sinda), while others benefited from the disappearance of their neighbors (Kition, Palaepaphos). New fortified sites also appeared (Maa-*Palaeokastro*, Pyla-*Kokkinokremmos*, Dali-*Ambeleri*) (Georgiou 2012). Unlike neighboring regions, Cyprus was **probably** never governed by a single king; it remained divided into several political entities in a varied political and territorial organization. Another difference compared to the rest of the eastern Mediterranean is that the Cypriot socio-political structures did not collapse. Much like the

uninterrupted use of Cypro-Minoan writing or of large ashlar masonry, the fortifications indicate the continuity of settlements from LC III A: some ramparts were still in use in the twelfth century BCE while others were newly erected. At *Kourion-Bamboula*, the fortress excavated by the American mission had a substructure made of large river stones supporting an elevation in mudbrick and flanked by at least one tower and a staircase; the fortress may be the origin of the settlement that survived the crisis in the thirteenth century BCE, lasting until the Cypro-Geometric period, unlike *Alassa*, the urban center whose maritime access it protected. It was also in the twelfth century that solid defensive walls were constructed around the settlement of *Kition-Kathari*, remaining in use until Cypro-Geometric I. The substructure, with a thickness of up to six meters, consisted of two faces of large blocks of conglomerate (masonry known as “Cyclopean”) (**fig. 1**) with a rubble fill and an elevation of mudbrick (Karageorghis, Demas 1985, 86–89). The wall also possessed rectangular towers. Other fortified settlements arose in the twelfth century: at *Dali*, on the hill of *Ambelleri*, buildings and a cult complex were protected by a fortification, with a rubble base that has been revealed at the summit, and walls of ashlar blocks on the northeast slope, all on the site of the future town of *Idalion*’s administrative center.

No other fortification is attested after this until the CG period (1050–750 BCE), during which the political organization of Cyprus changed: the island was then divided into autonomous political units that continued until the late fourth century BCE. These urban centers and seats of power were gradually fortified, primarily in the CG and CA periods.

### **Fortified urban centers of the Cypro-Geometric period (eleventh to eighth century BCE)**

At the start of CG I, the fortifications at *Kition-Kathari* and *Dali-Ambelleri* were still in use; while those of the latter were restored, the mudbrick elevation of the former collapsed before the construction of floor III in the eighth century (Karageorghis, Demas 1985, 161–162).

In the same period, the fortress controlling the Kouris valley was abandoned, but the settlement of Bamboula continued and was equipped with fortifications, as was Salamis, where a rampart from the eleventh century has been identified. This new coastal settlement took over from Enkomi. These four fortified urban centers were among the largest importers of Levantine pottery and thus had the economic capacity to erect a defensive wall. Kition and Salamis were also among the sites whose **ceramic** production is most often found in the Levant, notably in CG II, CG III and CA I. But why fortify? If a threat had been imminent, Paphos and Amathus, which also benefited from this trade, would have been fortified earlier. The construction of a defensive wall at Ambelleri and Salamis was linked rather to the desire of these two centers to assert themselves as new powers with regard to the Levantine trading partners from which the Cypriot city-kingdoms may have drawn inspiration.

### **Fortifications of the city-kingdoms (eighth to late fourth century BCE)**

At the end of the eighth century, the fortification work can also be explained by the threat posed by the Assyrian reconquest in the west. In CA I (around 750–600 BCE), the fortification at Ambelleri was no longer in use, but that at Salamis was reinforced and Paphos, the site of the Sanctuary of Aphrodite and a port around which a number of urban nuclei had crystallized, was fortified for the first time. This is indicated by the rampart discovered by **the British Kouklia Expedition (1950-55) and concluded by the Germano-Swiss mission (1966-1995)** on the Marchello hill and dated to the second half of the eighth century (Maier 2004), although we do not know the extent of the protected area. It is therefore possible that only the high ground was fortified (Iacovou 2019).

Initially, only these three towns were fortified, likely because of their prosperity from copper exports. Was the choice to fortify linked to a threat (that of the Assyrian territorial reconquest) or rather a means of affirming the success of these urban centers and perhaps fulfilling a need

to defend themselves against internal rivalries? Archaeology has revealed traces of violent destruction around 700 BCE, particularly in Salamis, Idalion, and perhaps Kition.

However, during the seventh century, when the main urban centers asserted their claims over their territories and gave birth to the Cypriot kingdoms (ten of which are mentioned on the prism of the Assyrian king Esarhaddon, dated to 673–672 BCE), not all these political centers had yet been fortified. The integration of Cyprus into the Assyrian commercial sphere promoted the affirmation and development of the Cypriot kingdoms and the *Pax Assyriaca* meant that no fortifications were required. During this century, those at Kition, Episkopi-Bamboula (Phase 4), and Palaepaphos (Phase 2) fell into disrepair. The situation changed at the transition of the seventh to sixth century, with Amathus fortified for the first time in around 625–600 (Aupert, Balandier forthcoming), despite having been established in the CG.

In CA II (600–480), the phenomenon of fortification became more widespread. In the late sixth century BCE all the administrative centers of the kingdoms were fortified. This included the coastal cities (Salamis and Kition, whose walls were reconstructed; Amathus; Kourion; the hill of Bamboula at Episkopi (Phase 5); Palaepaphos (Phase 3) and those in the interior, along the mining belt of Troodos (Tamassos (Phase 1), Idalion (reconstruction of the citadel). Surprisingly, no fortified city is known in the north during CA II: Kyrenia, Lapithos, and the cities of the Karpas and Kormakiti peninsulas and the plain (Chytroi and Ledroi) appear to have remained unfortified. Of course, this region, which has been occupied by Turkey since 1974, is less well known than the southern part, where many excavations and surveys have been carried out in the last sixty years. In the south, however, Marion does not seem to have been fortified in this period either. The southern settlements may have been fortified as a result of the Saite Pharaohs' desire to conquer the island in the first half of the century. However, it is far from easy to distinguish whether a fortification dates from the early or late sixth century: the defensive walls may also have been erected in the second half of the

century, like those of Tamassos. Nevertheless, an external threat is not necessarily required to erect ramparts, and this fortification policy may also indicate the desire of these recent kingdoms to assert their sovereignty over their territory. This may explain why, like Amathus and Tamassos, Kourion and Soloi also had defensive walls. And how can we interpret the fact that already-fortified towns, such as Kition, Episkopi-*Bamboula* (Phase 5), Idalion, and Palaepaphos restored their own fortifications? Do these defensive preoccupations indicate a general disquiet in the face of an external threat in the late sixth century—that of the Achaemenid Persians, which became more acute following the destruction of Sardis in 547? As the Cypriots had chosen to submit to the Great King, this widespread phenomenon of fortification in the late sixth century seems rather the consequence of conflicts internal to the island ~~in the early fifth century~~, like those **in the early fifth century** between Onesilus, the king of Salamis, and the other kingdoms (Herodotus V, 103–105) or Idalion against the “Medes and Kitians” (according to the Idalion bronze tablet).

### **Cypriot construction techniques in fortifications of the CA**

In the CA, the fortifications are urban (we know of no fortresses elsewhere in the kingdoms). A development is attested between CA I and CA II: at the start of the period, as in the CG, the walls are constructed in mudbrick on a solid base of stone. This base consists of small limestone blocks bound with earth, and sometimes with lime mortar (e.g., in Amathus, wall III of the West terrace), whose use is of early date in Cyprus, and is sometimes compartmented (Amathus, Idalion, Salamis). Stone spurs link the two faces and the caissons thus formed are filled with clay (**fig. 2**). The complementary use of stone and mudbrick is often attested in fortifications of this period (Palaepaphos, Salamis, Idalion, and Episkopi-*Bamboula* in CA I, Amathus and Kourion in CA II) (Balandier 2001b). This addressed two concerns. First, the manufacture of bricks with wooden molds did not require specific knowledge, unlike cutting stone, and could thus be entrusted to any member of the

population; clay also resists earthquakes better than stone, but mudbricks erode easily. For this reason, a stone base was necessary, but it had the added advantage of preventing attackers from undermining the walls. **Indeed, Herodotus (V, 115) testifies to the use of mines by the Persians in Soloi.** The design of these defensive walls, with solid curtain walls and towers, is very similar to those we know to have been in use in the rest of the Mediterranean at that time, but the walls made of solid caissons recall Near Eastern construction methods, as at Tell Mubarak/Tel Mevorakh or Tell Shar/Tel Megadim (Balandier 2008, 102); 2014, 240–245). The chambered north gate at Amathus bears witness to Syro-Anatolian influences: this defensive device is similar to the chambered gates of the Levant, for example at Tell el-Qedah (Hazor) in Israel, including the fortress, long dated to the Assyrian period, and which is in fact contemporary with the first phase of the defensive walls of Amathus. Thus far, it is a unique device in Cyprus. We may also be surprised by the precocity of the Amathusians, compared to the designers of the defensive walls of other Cypriot cities, in choosing a very extensive defensive perimeter from the outset, to protect the lower town **as well as the harbor (the ramparts finished in the sea in order to include the natural mooring place)**, while in the rest of the island, in the Cypro-Archaic period, only the acropolises seem to have been fortified (Aupert, Balandier, forthcoming). This can probably be explained by the net increase in the population since the mid-eighth century BCE.

### **Cypro-Classical fortifications (480–332 BCE): more extensive defensive urban walls**

Few new towns are fortified in CC I, but north of Salamis Bay archaeological surveys have discovered an as-yet unidentified settlement protected by a defensive wall, on Cape Elia, at the place called Akrotiri on the coast at the southern root of the Karpas peninsula and dated to the fifth century by the pottery collected from the surface. The construction work was therefore mainly performed in the settlements that were already fortified. Amathus carried out limited repairs to its defenses, which had suffered during the siege of Onesilus. At Tamassos,



the defensive wall was reinforced by a thickening of its curtain walls. It can also be deduced from reading ancient authors that the ramparts of Kition and Marion (Diodorus XLI, 4) had been restored in the first half of the fifth century, much like those of Salamis, since these were strong enough to resist the siege by the Athenian Cimon in 449 BCE and were still standing at the end of the century when Evagoras took the city (Isocrates, *Evagoras* 47), but their remains have not yet been discovered.

However, the most notable change in this period concerned the morphology of the pre-existing defensive urban walls, whose defensive circuit was then considerably extended. Thus, at Idalion, the ramparts no longer protected only the east and west hills, the administrative district, but also the lower town (Balandier 2000, fig. 5). Similarly, the city of Vouni, of which only the palace had been fortified until then, added a defensive urban wall. Evagoras seems to have carried out similar work to expand the defensive perimeter of Salamis at the end of the fifth century, after he regained control of the kingdom: he “acquired much additional territory, surrounded it all with new walls” (Isocrates, *Evagoras* 9, 47). It was these walls that resisted the Persian siege in 384, but the line of the walls remains hypothetical (Balandier 2019). It is possible that the defended area was also expanded at Palaepaphos, but at the end of the CC. In the early fifth century, the rampart and gate of the Marcello hill was abandoned after being damaged by an extensive siege, probably by the Persians when they took steps to put an end to attempts at secession (Maier 2004). However, recent excavations carried out by the University of Cyprus have revealed the existence of a rampart, south of the city, on the Laona plateau, one kilometer northeast of the Sanctuary of Aphrodite, which is thought to have joined the fortified wall already identified seventy meters away, on the hill of Hadji Abdullah. The exposed walls are five meters thick and are built of mudbrick, covered with a facing of undressed stones, on a foundation of river stones; the bricks were made by

several teams working at the same time and using clay from the surrounding area. Sand was used as a degreaser and to compensate for the seasonal lack of straw (Iacovou 2019; Lorenzo, Iacovou 2019). The wall revealed by excavation was 160 meters long and protected an area of 1,740 square meters. Three staircases gave access to the walkway on the east side. The corners were constructed of ashlar blocks. This defensive wall, which dates to the beginning of the fifth century at the earliest, could have protected the grouping formed by the plateau of Laona and the height of Hadji Abdullah. Its northeast corner is preserved up to a height of six meters.

Was the decision to extend the perimeter of the defensive walls, now including the lower city, a pragmatic one made by the Cypriot kings or were they influenced by Magna Graecia and Sicily, where these “territorial walls” became widespread in the fifth and fourth centuries? These achievements show that the Persian power left the city-kingdoms free to protect themselves. In a context in which the Achaemenid kingdom first controlled the eastern Mediterranean, particularly after the capture of Egypt in 526, but where the Athenians had constantly ~~taken~~ **tried to take** control of Cyprus to deprive the Persians of its arsenals and to come to the aid of the Egyptians, it is understandable that the Great King encouraged the construction of new defensive urban walls, including territorial walls. These defensive walls with much longer perimeters were intended at once to protect the fields and orchards located in the outskirts of the city, to encompass the heights close to the city within the walls so that they could not be used by enemy siege engines, and to repel them as far as possible from the heart of the settlement. **These constructions could be also the result of internal conflicts not mentioned by Greek ancient writers.**

In the late fifth century, Persia was also preoccupied by developing its naval forces and making Transeuphratia its maritime base. While the port of Akè (Greek name of Acre) remained the largest and the majority of the Persian fleet came from Phoenicia and Cilicia, Artaxerxes II also encouraged the Cypriot kingdoms to develop their fleets to participate in the war effort (Balandier 2010, 2014, 118–125). It is probably in this context that the military arsenal of the Cypro-Phoenician kingdom of Kition was constructed, dated by the French excavations to the early fourth century BCE—in other words, the reign of Milkyaton (392–362). This is a closed, naturally protected port, without the addition of moles (Callot, Fourrier, Yon 2022). Architecturally, these trireme hangars were very similar to those in Piraeus. However, these port facilities may have served as a model for those in Salamis: Isocrates could be alluding to this work, conducted in parallel with the extension of the city walls, when he says that Evagoras “built triremes.” As Evagoras had seen the port of Piraeus and those of Phoenicia, one might think that, like at Kition, he created a military port; a closed one, according to Pseudo-Scylax (103), who describes a *limen kleistos*, without it being possible to determine whether this port was closed naturally or with the use of moles extending the ramparts (Balandier 2019). But we have seen that the natural harbor of Amathbuus was already protected by ramparts in CAII. It was on these new defensive infrastructures that Evagoras relied to try to unify the island under his authority (Balandier 2010:2014) and it was from the port of Kition that the Persians launched their counter-offensive (Diodorus XV, 4), probably from the protected harbor built under the reign of Milkyaton.

In the early fourth century (CC II), Cyprus was thus enduring the “war of Cyprus,” as indicated by the trophy, erected in 392 by Milkyaton, the king of Kition, to commemorate his victory over Salamis and the Paphians. This context must have prompted other kings to strengthen their defenses against the activities of the king of Salamis, whose ramparts were

still standing in 354 when Evagoras II besieged the city by land and sea to reclaim his throne with the help of the Persians. We have not yet found them, however. Despite the bellicose context of the start of this century, the archaeology does not attest to new fortifications until the second half of the fourth century. It was then that the defensive walls were constructed around the cities of Marion and Golgoi, and those of Palaepaphos were rebuilt (Balandier, 2000). It is possible that the defensive walls of Kyrenia and Lapithos, the siege of which by ~~Alexander's generals Seleucos, Ptolemy's ally~~, is mentioned by Diodorus, were erected in the fourth century, but in the absence of excavations this cannot be confirmed. The context of these constructions corresponds to the end of the Persian period in Cyprus and the first activities of Alexander's generals on the island after the local kings pledged allegiance to him in 332.

While the defensive design of cities and their peripheries may have evolved during the CC period, with defensive walls protecting much larger urban areas and sometimes encompassing a port, the construction techniques used to build these walls do not show any real change. Similarly, it is only the capitals that were fortified and not the whole area of each kingdom. The borders between these kingdoms do not seem to have been protected by fortified posts, but only ~~by the gods of~~ ~~marked by~~ sanctuaries ~~marking the limits of the territory~~. Nor do we know of any forts such as those erected by the Persians in the Near East for their garrisons, attested by the texts. Thus, throughout their existence, the territories of the kingdoms, which increased in number from ten to twelve in the Classical period, appear to have been without defenses, with the fortifications remaining limited to the capitals. These fortifications seem to be an element affirming sovereignty. Consequently, even secondary cities acquired walls as soon as they achieved independence, while the kings of the oldest capitals restored their defenses as needed (Balandier, 2000). Although the military port of Kition was necessary in

the bellicose context of the transition from the fifth to the fourth century, this prestigious monument was also the means for the new king of Kition to assert his legitimacy, like the trophy commemorating his victory. This seems to be confirmed by the speed with which these arsenals were rebuilt following their collapse due to structural fragility at the end of Milkyaton's reign or the beginning of that of his son Pumayyaton (362–312); new, wider boat ramps were built with longer buildings than the early ones, with buried retaining walls to consolidate the new structures (Callot, Fourrier, Yon 2022).

### **From political reaffirmation to the disappearance of the kingdoms (332–294 BCE)**

It was around the time that the kingdoms of Cyprus pledged allegiance to Alexander that a dedication was made in the Sanctuary of Aphrodite of (Palae)Paphos in honor of his king, Nicocles, for having endowed “the large city with a crown of high towers.” This inscription is still debated, some seeing it as confirmation of the birth of the defensive urban wall (and the city) of Nea Paphos, while others consider it to celebrate the completion of the restoration and extension of the defensive urban wall of the kingdom's ancestral capital. Certainly, the layout of this enlarged defensive wall is not known, but renovation work in that period is clearly attested by excavations in the sector of the East Gate (Marcello hill) (Maier, 2004), while the site of the future Nea Paphos, fifteen kilometers to the northeast, was still only occupied around the port. This may have been built at the initiative of Nicocles, but to date no remains of fortifications have been identified in Paphos that can be attributed to him (Balandier 2018, forthcoming). Like the other edilitarian work he undertook on the territory of his kingdom, the refortification of his seat of power is thought to have been a way for Nicocles to assert himself against Alexander's generals, who were disputing control of Cyprus. This included Ptolemy, before he eliminated Nicocles in 310 or 309. Other kings might have had the same attitude. For example, in Idalion, an ostrakon written in the Greek alphabet, discovered by the

American mission and dated to 300 BCE, mentions four city gates. Were these restored by the last local king or should we see this as the initiative by Alexander's successors?

In the late fourth century, Cyprus was the site of clashes between Alexander's generals, who above all sought the support of the kingdoms equipped with port infrastructure and fleets. Ptolemy was the first to try to control the island, in 321, against Perdiccas, and then in 312, against Antigonos—† Monophthalmus. His early successes may have led him to establish military colonies there. In 305, supported by Kition, Marion, Lapithos, and Kyrenia (Diodorus XIX, 18) and with the help of his son Demetrius, Antigonos succeeded in defeating Ptolemy by besieging Salamis by land and sea and gaining control of Cyprus. He then proclaimed himself king and dominated Cyprus for twelve years. Although he does not seem to have sought to suppress the kings of Cyprus, he soon began to take advantage of the naval potential of the island. Researchers have recently taken an interest in this period, though as early as 1972, Italian excavations on the Kormakiti peninsula, at a place called Palaeokastro, identified a small fortified settlement and its port; the defenses were reinforced by watchtowers dated, like the defensive wall, to the second half of the fourth century BCE (Balandier, 2001a).

The excavations carried out by the French missions at Amathus and Kition have enriched our knowledge of this period. The extensive construction work carried out on the defensive wall and in the port of Amathus has proven to be contemporary, dated to around 300 BCE (Aupert, Balandier, 2018, forthcoming; Empereur, Koželj 2018). The discovery of a coin from the reign of Demetrius in the last occupation level of the palace, before its destruction by fire, reveals that the Antigonids had made Amathus an important base, whose defensive urban wall, connected to the port, was being rebuilt when the city was stormed, probably by Ptolemy (Aupert, Balandier, 2018, forthcoming). Similarly, at Kition, excavations showed that the port had undergone extensive restoration work (state III) that transformed the southern end of the ramps, probably to adapt them for use by boats with a higher stern (Callot,

Fourrier, Yon 2022). It appears that at the same time, a curtain wall was hastily constructed south of the city, at the place known as *Mound* (Fourrier, Rabot 2020, 332–335), although we do not know whether this is the defensive urban wall or a fort at this elevated point of the city. The excavation showed that the redevelopment of the port was interrupted abruptly, probably when the city was retaken by the Ptolemies. We therefore deduce that this final fortification work was carried out by the Antigonids between 306 and 294, when they controlled Cyprus and had made it their maritime base in the eastern Mediterranean, as a complement to the ports they controlled on the Phoenician coast. This hypothesis seems to be corroborated by the recent excavation of another fortified site on a height located a dozen kilometers as the crow flies to the northeast of Kition, at Pyla-*Vigla*. The American mission that excavated there revealed a wall 1.50 to 2.80 meters thick, based on the rock, with a substructure consisting of two faces of coarse blocks and a rubble fill, supporting an elevation in mudbrick. In the north, however, topographical weakness led the builders to use ashlar masonry and plaster mortar for the substructure, and to create an advanced defense by digging an eighteen- to twenty-meter-wide ditch in the rock, to prevent the advance of siege engines (Olson et al. 2021). In Marion, the quadrangular building excavated by the Princeton mission, consisting of compartment walls in mudbrick on a stone base, with corners reinforced by ashlar blocks (**fig. 3**), dates from the late fourth century, according to the American mission. Could it have housed an Antigonid or Ptolemaic garrison? The same question applies to the large building with thick corner towers being excavated by the Department of Antiquities, at the place called Pachyammos, south of Geroskipou and six kilometers east of the port of Nea Paphos.

The distribution of fortifications and ports, at the transition from the fourth to third century, provides illumination on the strategic role of the island for Alexander's successors as it was coveted for its maritime potential; the coastal sites were clearly the primary focus of fortification work (defensive urban walls and closed ports, with fortlets on the heights

overlooking the coasts). Although it is not always easy to determine who designed them, recent archaeological data seem to show that between 306 and 294, the Antigonids quickly established a fortified network, based both on forts and fortified naval bases, perhaps drawing on constructions begun by Ptolemy during his takeover of the island between 315 and 306 or by the last Cypriot kings, although it is not yet possible to confirm this. On the other hand, when Ptolemy regained control of Cyprus in 294, he halted the work in progress in the ports of Amathus and Kition. There is no evidence of fortifications erected in the third century, during his reign or that of his successor, Ptolemy II Philadelphus, although these two kings constructed extensive fortifications in Syria Phoenice (Balandier 2014, 169–198) and many fortified remains in Cyprus date from the Hellenistic period (Balandier 2001a, 2007). But these were not erected by the first Ptolemies, who then controlled all or nearly all of the eastern Mediterranean coasts and had no fear that Cyprus could again be taken from them. When the Seleucids expelled them from the Levant, the Ptolemies were forced to reconsider the defensive organization of Cyprus, with the island regaining a major strategic role (Balandier 2011).

### **Cyprus as Egypt's rampart under the Ptolemies? Late defenses**

Thus, during the second century BCE, a number of extensive fortifications were once again constructed on Cyprus. However, this time the construction was not limited to the main urban centers. The archaeology shows that secondary settlements were also fortified and that fortlets were built on the heights of the interior as well as on the coasts, thus ensuring much denser territorial coverage. This is evidenced by the fortlets and towers erected on the Kyrenia Mountains and on the Kormakiti peninsula, the restoration of the walls of the sites of Palaeokastro, Soloi, and Idalion, and the fortification of Nea Paphos, which became the seat of the *strategos*, during the second century, but which also hosted the entire Ptolemaic fleet after it was forced to leave the Aegean Sea in 146 BCE. The work on the defensive wall of



Nea Paphos carried out by the French mission and by the Department of Antiquities has clarified the line of the wall and confirmed that it does not date, as has long been claimed, from the founding of the city, but instead to the second century BCE, and indeed rather to the second half of that century (to be confirmed, work in progress). Today there is no evidence showing that this defensive wall replaced an older fortification. But who was the initiator of this construction and of the fortified network established on the island during this period? Whether it was Ptolemy IV or his successors, with the loss of Syria Phoenice in 199 BCE, the Ptolemies needed to strengthen the defenses of Cyprus, which once again became the forward rampart of Egypt. The fortlets identified by surveys have not been described in much depth. However, we can compare the techniques used to construct the fortifications of Amathus and Nea Paphos in around 300 and 150 BCE.

The elevations of both defensive walls were built entirely of sandstone blocks. The curtain walls consisted of two faces with courses of stretchers and headers (**fig. 4**), alternating irregularly, and a fill of clay mixed with splinters of dressed stone, which was intended to make the walls less vulnerable to earthquakes. The faces were constructed with care; the blocks have dressed joint faces, allowing them to fit closely together. Similarly, on the thin bedding surfaces, a carefully incised line guided the positioning of the blocks of the upper course (**fig. 5**). These blocks were of large dimensions (max. 1.30 x 0.55 x 0.80 meters) and bound with plaster mortar. Recommended by Philo of Byzantium (A I,1&1), particularly for the foundations of fortifications, this substance surprised Theophrastus when he discovered it in Cyprus (*Peri ton lithon* 64–66) and was disseminated by Vitruvius (*De Architectura* II, 8, 7) in the form of the *emplekton* (Balandier 2001). The face has a bossage, probably for reasons of economy. These elements indicate typical Greco-Macedonian construction methods, and the Antigonids and Ptolemies therefore used a workforce trained in these construction techniques. The courses of headers in the port moles of Amathus (**Empereur,**

Koželj 2018) can also be found in the ports of Rhodes and Ptolemais (Syria Phoenice) in walls of contemporary date (Balandier 2014, Aupert, Balandier forthcoming). Perhaps specialist teams of ~~constructors~~ builders and engineers circulated through the Mediterranean region to participate in these major construction projects. It is surprising, however, not to see the use of a relatively common technique in the domain of the Ptolemies—that of compartment walls, especially since this technique was used by Cypriot architects in the Archaic period. The technique was employed only in the defensive wall of Golgoi, which was erected in the second half of the fourth century according to excavations carried out by the University of Thessaloniki. It should be noted that a compartment wall, made of modular blocks, was discovered in Kourion, northwest of the agora (Balandier 2008, fig. 5; 2011b, fig. 6), but this is not linked to the ramparts. It is difficult to study the gates or towers, which have often not been preserved, but the archaeological survey reveals an interesting difference. In Amathus the Attic foot served as the reference unit, while in Nea Paphos it was the Egyptian cubit. There is little doubt that the latter was also used in Kourion, where the West Gate has a modular masonry with stretchers and headers characteristic of the Hellenistic period (Balandier 2001b, fig. 4).

In short, the walls of Amathus, which were built at the transition of the fourth to the third century BCE, were designed according to techniques that differed significantly from those used up to that point by the Cypriots. However, the construction techniques had not changed much by the time the defensive urban walls of Nea Paphos were erected in the second century BCE, at least a century and a half later, even though the reference unit used by the workers was not always the same—the unit employed in each case probably depending on whether they came directly from Macedonia or Greece or instead from the Ptolemaic domain.

### **Few Roman fortifications**

Unlike in the west, in Cyprus few fortifications were erected between the end of the Roman Republic and the beginning of the Empire. Some of them were abandoned (Tamassos, Palaepaphos) between the first annexation of the island by Rome in 58 BCE and its cession to the Senate by Augustus in 27 BCE. In that period, Cyprus was a minor senatorial province, remote from the main sea routes, and had lost its strategic importance. The only attestation of a legion on the island dates from the reign of Trajan, when it was placed as a garrison northeast of the Mesaoria, as indicated by an altar to the *genius* of his fort (CIL III, I, 215). Most of the defensive urban walls still standing gradually fell into ruins due to a lack of maintenance.

However, the archaeology testifies to some reconstruction of ancient fortifications. For example, in Amathus, the gates were redeveloped during the High Imperial Period, with the paving in the ~~South West~~ North Gate being raised and a new retaining wall constructed to strengthen the South West Gate. Similarly, a vaulted gate (*apsis*) was erected between the lower city and the acropolis between ~~sometime in~~ the first and the early second century CE, according to a rock inscription on the eastern flank of the acropolis, which honors Kallinikos for this act of evergetism (Aupert, Balandier ~~pending forthcoming~~). These embellishments show that the wall no longer had a defensive function and instead symbolized the sumptuous urban policy encouraged by the Pax Romana. The French mission also observed this in Nea Paphos. The Hellenistic defensive wall was destroyed like the rest of the city by a violent earthquake in 15 BCE, was not rebuilt, and was even dismantled in the northeast, with the blocks being used to rebuild municipal and private constructions (Balandier, forthcoming). However, in the northwest, the Department of Antiquities has revealed towers erected above the destruction layer of the Hellenistic rampart (Balandier 2001a); they may no longer have played a defensive role, but ~~were~~ rather *moenia*, forming part of the monumentalization of the

new Roman city (Gros 1992), which was rebuilt with imperial subsidies. Similarly, in Soloi, the East Gate seems to have been part of the new town plan under the Antonines and the Severans. An inscription from the middle of the third century (*AE* 1952, no. 175) testifies to the reconstruction of the defensive wall of Lapithos at the instigation of the island's consul, Cl. Leontichus Illyrius. This act of evergetism probably again stemmed from a desire to monumentalize the city.

Nevertheless, defensive concerns were not completely neglected, as attested by the fortifications identified by surveys near Cape Greco, at Tornos, four kilometers west of Ayia Napa; in the Mesaoria at Chemistros-Dyo Potamoi, thirty kilometers west of Nicosia; and in the Kyrenia Mountains at Mazeri, near Karmi (Balandier 2003). A fort is also attested in the Kyrenia Mountains by an inscription (*CIL* III, I, 125). These forts were intended to monitor traffic in the interior of the island as well as offshore; Pompey's suppression of the Cilician pirates in 67 BCE had probably not completely eliminated this endemic scourge. However, it is difficult to date these sites accurately because they are represented by Roman material collected on the surface. They may therefore have been built later.

At the beginning of the fourth century CE, Cyprus was an unarmed province with a thriving economy. This prosperity could explain the need to defend against possible pirate raids and the construction or reoccupation of fortlets in the Kyrenia Mountains, but also on the plain, where small settlements and farms were concentrated, as has also been observed around Polis-*Chrysochous*. Unfortunately, this prosperity was abruptly interrupted by the earthquakes of 332 and 342. Salamis suffered extensive damage and was rebuilt and renamed Constantia, replacing Paphos as the capital of the island. The city does not seem to have had a defensive wall at this time. Fortifications have however been confirmed, in the fourth century, at Ledra

by Stefano Lusignan (copper coins of Constantine and Helena were found in the walls erected on the line of the earlier walls). In Paphos, a circular tower discovered on the port and dated to the fourth century indicates the restoration of the city's defenses, or at least those of the port. Between 365 and 378, various earthquakes once again irreparably destroyed the cities of the southern coast between Paphos and Kourion. At the end of the century, during the reconstructions, fortifications were no longer the focus. From this point on, the Cypriots instead entrusted their salvation to the restoration of the churches. It was not until the seventh century, when the Arab raids began, that the coastal cities again sought to protect themselves with walls.

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**Figures (all photos are by the author).**

Fig. 1. Kition-Kathari. The “Cyclopean” wall.

Fig. 2. Idalion, Ambelleri hill. The compartment wall with clay fill.

Fig. 3. Marion. Building with thick compartment walls of clay on a stone base and with ashlar block corners.

Fig. 4. Amathus. West face with stretchers and headers of the wall at the southwest corner.

Fig. 5. Nea Paphos. East rampart on the Fabrika hill: thin bedding surface and preparatory line for the positioning of the upper block and plaster mortar.