A Villa of the Early Roman Period at Apollonia-Arsuf*

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APOLLONIA-ARSUF is located on a *kurkar* (fossilised dune sandstone) cliff overlooking the Mediterranean shore in the north-west part of the modern city of Herzliya, approximately 17 km. north of Jaffa and 34 km. south of Caesarea. It is situated at an almost equal distance of *c*. 10 km. from the river mouths of the Yarqon to the south and the Poleg to the north, that is, in the middle of the west coast of the southern Sharon Plain. In the western part of the site, the ground reaches a height of *c*. 35 m. above sea-level, gently sloping down towards the east to *c*. 20 m. above sea-level. The architectural remains of the Roman period are built at an elevation of approximately 26 m. above sea-level, within the geological unit of the Tel Aviv *Kurkar* Bed, constituting the coastal ridge. This layer represents the uppermost and youngest *kurkar* unit. It forms the top of the coastal ridge and is composed of large, semi- to fully-cemented calcareous grains and fossilised terrestrial snails. The building materials used by the inhabitants of Roman Apollonia are mainly quarried from the Tel Aviv *Kurkar* Bed and were most probably taken from the site itself or from its immediate surroundings.

The southern coast of the Sharon Plain is characterised by a shortage of natural anchorage. The anchorage of Persian, Hellenistic and Roman times at Apollonia-Arsuf was naturally formed by a series of calcareous sandstone outcroppings at the foot of the southern and central parts of the site; their position prevented the advancement of sea currents into the area they enclose. The calm water in the area

^{*} This article presents a preliminary analysis of the stratigraphy, architecture and finds retrieved from a peristyle building dated to the Early Roman period discovered in Area E of the site. The authors are currently preparing a complete study to be published as the second final report of the excavations. This study is made possible through a generous research grant on behalf of the Fritz Thyssen Stiftung, to whom we are much indebted. Because of editorial preferences we limit ourselves here to basic aspects of 'instrumental' archaeology. I. Roll has been conducting excavations at the site since 1977, at first on behalf of the Israel Department of Antiquities and later on behalf of the Institute of Archaeology of Tel Aviv University. The last, eighteenth, season of excavations at Apollonia-Arsuf (2006) was an overlapping season, during which the directorship and responsibility over the future excavations at Apollonia-Arsuf were transferred from I. Roll to O. Tal. For the history of the site, its research and excavations, see Roll 1999.

delimited by these beach rocks is still evidenced today by the modern fishing boats, which anchor there.¹

Excavations at Apollonia-Arsuf unearthed sporadic occupation layers of the Chalcolithic period and the Iron Age II, but the site has a continuous history, beginning as a coastal settlement and developing into a maritime urban centre, covering a period of approximately eighteen centuries from the late sixth century BCE through the mid-thirteenth century CE. Throughout this time span, Apollonia-Arsuf was secondary to Joppa and Caesarea, which served for long periods as seats for rulers, governors and church leaders. This lesser status may explain the relative scarcity of written sources concerned with the early history of the site. From the Late Hellenistic period onward, Apollonia-Arsuf became the chief commercial and industrial centre of the southern Sharon Plain.²

It is in Roman times, however, that the site makes its appearance in the written sources, first mentioned in the writings of Josephus. In his list of cities ($\pi \delta \lambda \epsilon \iota \varsigma$), which belonged to the Jews under Alexander Jannaeus, he refers to Apollonia located between Straton's Tower (which became Caesarea under Herod the Great) and Joppa (*Ant*. XIII.15.4 [395]). This list includes the names of Hellenistic cities that previously belonged to Syria, Idumaea and Phoenicia and were later integrated into the Hasmonaean kingdom. The source implies, then, that Apollonia was already considered an urban centre in pre-Hasmonaean times, that is, during the Early Hellenistic period.³ In another passage by Josephus, however, it is mentioned that King Herod built the large port of Caesarea because '…between

- 1 The subject of natural anchorage at the site of Apollonia-Arsuf has thus far been examined from an archaeological perspective only. An underwater archaeological survey has been conducted there on behalf of the Israel Antiquities Authority from 1970 onwards, see Galili, Dahari and Sharvit 1992. A specific survey was conducted by Eva Grossmann in 1989 as part of her Ph.D. research project on behalf of Macquarie University, Sydney, Australia (Grossmann 2001). A systematic geological survey of the natural anchorage and the built harbour has not yet been conducted.
- ² The pre-Roman occupational remains and finds were fully published in the first final report of the excavations, see Roll and Tal 1999. To these we may add a unique fourthcentury BCE marble relief of the *Totenmahl* type, discovered during the current preparations for the second volume of the final report. It was discovered among the finds of Area E and was published by Fischer and Tal (2003).
- ³ Avi-Yonah's suggestion (1979: 63) to attribute the conquest of Apollonia to John Hyrcanus is conjectural and is not accepted by other scholars. Cf. Jones (1971: 255), Schürer (1979: 114) and Tal (1999b: 251–253, table 5.3), who, based on the Hellenistic finds at the site, tend to attribute the Hasmonaean conquest of the southern Sharon Plain to Alexander Jannaeus. As for the so-called foundation of Hellenistic Apollonia (Roll 1999: 6, n. 4), surveys and excavations at the site have demonstrated that the Persian period settlement was as significant as the Hellenistic settlement that managed to maintain its boundaries. Thus, if a formal foundation indeed took place that is, if the site was considered a *polis* by the local royal administration it was strictly administrative and did not involve physical reconstruction (Roll and Tal 1999: 83–261, *passim*).

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Dora and Joppa, midway between which the city (of Caesarea now) lies, the coast was without a harbour ($\tau \eta v \pi \alpha \rho \dot{\alpha} \lambda i \mu \epsilon v o v$), so that vessels sailing along the Phoenician coast to Egypt had to ride at anchor in the open sea, when menaced by the southwest wind' (*War* I.21.5 [409]). This statement may indicate that the natural anchorage of Apollonia in the Hellenistic period was not regarded as a reliable all-season harbour. Josephus mentions Apollonia once more in one of the two lists of cities, in which Gabinius, the proconsul of Syria from 57–55 BCE, restored order soon after the imposition of Roman rule in the region. In *War* I.8.4 (166), Apollonia is among the cities that were inhabited anew under Gabinius ($\sigma \nu \epsilon \pi o \lambda i \sigma \theta \eta \sigma \alpha \nu$). In an additional list, in *Ant*. XIV.5.3 (88), which lists cities that were reconstructed ($\dot{\alpha} \nu \epsilon \tau i \sigma \theta \eta \sigma \alpha \nu$) under Gabinius, Apollonia is not mentioned. Josephus states, however, that there were '...not a few other (cities)' which were rebuilt on this occasion, and it is possible that Apollonia was one of them.⁴ Thus far, neither of the two statements made by Josephus is supported by the archaeological finds uncovered at Apollonia (see below).

In written sources of the Roman period, Apollonia appears among the coastal cities of Iudaea/Palaestina, and between Joppa and Caesarea, in Pliny (*Nat. His.* V.13.69) and in Ptolemy (*Geo.* V.15.2). The depiction of Apollonia on the *Tabula Peutingeriana*, on the coastal highway between Joppa and Caesarea and at the distance of 22 miles from the latter, is of great importance, indicating that it served as an official leg on the country's imperial road network. Moreover, the figure of 22 miles corresponds to the actual distance between the two ancient sites of Caesarea and Arsuf, thus providing proof for the identification of Apollonia with Arsuf.

Surprisingly, Apollonia is not mentioned in the New Testament, the Mishnah, or the Talmud. There is no clear evidence for the existence of Jewish or Christian communities in Roman Apollonia. However, since large communities of both faiths were present in Roman Caesarea and Joppa and even closer, in the southern Sharon hinterland, we may assume their presence in Apollonia as well. The fact that no coins were minted at Apollonia indicates that the Roman authorities did not consider it to be a main urban centre of the province, but rather a medium-sized coastal town, like Jamnia and Azotus. The impressive Roman style *villa maritima* uncovered recently in Area E, however, provides tangible proof for the cultural presence of Rome at the site.⁵

THE VILLA

Excavations in Area E, the southernmost excavated area (fig. 1), began during the second and third seasons, in 1980 and 1981, outside and beneath a medieval city

⁴ See, in this regard, Isaac 1992: 336–340, who considers these inhabitations in administrative terms, rather than the physical rebuilding of urban centres.

⁵ For further discussion on the points raised above, see Roll 1999: 1-8, esp. nn. 5-10.



Fig. 1. Site plan

wall. In late 1980, after enlarging a local track that stretched along the slope below the city wall and extended downward to the shore, pottery from the Roman occupation was unearthed. As this period was not attested in any of the previous excavations, a trial square was opened close to the track; its contents showed clear evidence of concentrated Roman presence. In mid-1981, the excavated area was enlarged to the south, and a trial trench was opened closer to the city wall. In the lower squares, two rooms connected by a doorway (Loci 1928 and 1937; see fig. 2) were exposed; they belonged to a larger structure that extended to the south. During excavation it became evident that the rooms, which were partly underground, were cut into the kurkar bedrock and were partly built of kurkar ashlars set in grey cement. In the western room (Locus 1928), two superimposed plastered floors were found (Strata Roman 2A and 2B) — both containing finds from the late first to the early second centuries CE. Apparently, the rooms collapsed as the result of an earthquake. The excavation in the trial trench revealed that the area had been levelled and a wine-press built in Byzantine times. In the subsequent, Early Islamic, period, a thick layer of accumulated (either naturally or artificially) sand served as bedding for the new city wall.



Fig. 2. Roman villa maritima: building plan

Excavations in Area E resumed a decade later, in four seasons of excavations from 1990 to 1993. During this time, our knowledge about the occupational periods at the site was substantially enriched. Three additional rooms belonging to the Roman building (Loci 1342, 1313 and 1768), extending southward from the two previously unearthed structures (Loci 1928 and 1937), were fully excavated. A corridor (Locus 1859), leading to a room (Locus 1937) and providing access to all the other rooms of the villa, was also uncovered. In each of the newly exposed rooms, only one plaster floor, resting directly upon the bedrock, was found. As the structure had two phases (Strata Roman 2A and 2B), it became evident that the original floor was in continuous use and that the finds discovered on it belonged mainly to the second phase of occupation. Fallen ashlars, caused by an earthquake, were found in one room (Locus 1342) and, to a lesser extent, in another (Locus 1313).⁶ Above them, a thick layer of brown fill accumulated (Stratum Roman 1), containing large quantities of local storage jars and cooking pots, as well as fine pieces of imported wares. The fill also included a substantial number of round (discus) Roman lamps of the type characteristic of the late first to third centuries CE, from which the usual pagan and erotic figurative scenes were intentionally broken away (Wexler and Gilboa 1996).7 This conduct, known from previous seasons, seemed to be the work of monotheistic believers of either the Samaritan or Jewish faith.

Excavations in Area E resumed half a decade later, in 1998, with the assistance of a group of scholars and students from Brazil, headed by F. Marshall from Porto Alegre. Work focused on the complete exposure of the Roman period building. After the removal of the Byzantine remains, a central peristyle courtyard (Locus 1844) was uncovered, as well as several other preserved rooms around it. This permitted clear identification of the structure as a typical dwelling of the peristyle type, dated on the basis of the finds to the Early Roman period. A great many of the preserved components of the building were excavated, permitting a better understanding of its plan, the method of its initial construction, the structural changes that occurred at a later stage, and the cause of its final destruction and abandonment.

We are aware that not all peristyle-type buildings are domestic in nature, as their function is varied (*horrea*, *macella*, etc.) (in this respect, see Patrich 1996; 1999: 75–81). The variety of finds, however (table ware, cooking ware, storage jars and lamps), attests to the domestic nature of our building at least in its second phase (Stratum Roman 2B), where these finds most probably originated.

⁶ We are left here with the explanation that the rest of the building's walls were robbed by the inhabitants of Stratum Roman 1, for later constructions yet to be discovered.

⁷ The lamps' provenance in post-Roman villa fills and their chronological contexts remained unclear. Following this analysis, many more lamps and lamp fragments were discovered in Stratum Roman 1 during the 1998 excavation season.

Moreover, the inner plan of the building, with almost every room approachable via two doorways in the first phase (Stratum Roman 2A), gives further corroboration. Furthermore, as the western façade of the dwelling faces the sea, it seems clear that this was a *villa maritima* (fig. 3).

The first piece of evidence is its location, almost at the top of the seashore slope and above a small ravine that probably served as the main descent to the harbour. To construct the building, the slope's natural sandstone rock was hewn to a depth of more than 3 m. on the eastern side, and then levelled horizontally towards the west (fig. 2). Thus, a flat, rocky surface was obtained, with a maximum distance of 21.50 m. from north to south and *c*. 24 m. from east to west. The surface of the floors was at an average height of 26.20 m. above sea-level. The



Fig. 3. Roman villa maritima: a) view to the north-west; b) view to the west

outlines of the villa are irregular. The line of its eastern wall steps slightly inward three times, from south to north. The southern wall extends one step outward, south of Locus 1831. The northern wall of the villa turns at a slight northward angle when approaching Locus 1928. The levelled surface as a whole, however, permitted the erection of a full peristyle villa, aligned with the four cardinal points. On the whole, the structure was built according to the standard of the Latin foot (*pes*; 0.2957 cm.). The thickness of the inner walls, with the exception of the walls of the peristyle, ranges between 0.40 and 0.45 m. on average, corresponding to one *cubitus* (0.44335 cm.). The central courtyard, with interior dimensions of *c*. 6.45×3.85 m., corresponds to 22×13 *pedes*; the corridors, measuring 2.40 m. on average, correspond to eight *pedes*. Overall, interior dimensions of the rooms seem to correspond to the standard of the Latin foot as well.

The centre of the building consists of a peristyle courtyard (Locus 1844) surrounded by square piers supported by a stylobate built entirely of headers (fig. 4). Of the original ten piers that surrounded the courtyard, only the lower parts of four are preserved. They are built alternately of headers and stretchers with parallel square cavities — likely for the insertion of horizontal wooden beams. If so, the passage from the courtyard to the surrounding corridors could have been blocked when necessary. The building stones of the piers and stylobate are on average 0.29–0.30 m. in width, 0.43–0.44 m. in height, and 0.59–0.60 m. in length. These measurements seem to reflect the same modular unit of the Latin



Fig. 4. Peristyle courtyard (view to the west)

foot, which served as the basic unit of measurement in Roman imperial architecture. The same can be said of the 0.44 m. and 0.59 m. units as *cubitus* and two *pedes* respectively (Adam 1999: 40–43). The maximum width, 21.50 m., can correspond to 72 feet (*pedes*); we may assume that the maximum length of the building was 26.20 m., and could correspond to 88 feet (*pedes*); we can thus further suggest that the width/length ratio according to these measurements was 8:10. A built water channel that stretches from the courtyard and under the stylobate towards the west indicates that the courtyard was open to the sky.

To the south of the courtyard there is a long corridor (Loci 1851/1768) that crosses the entire building from west to east (fig. 5a). The entry to the villa was most likely located at the western end of this corridor, but has not been preserved. In the upper part of two of the walls at the corridor's eastern end (Locus 1768), there are two plastered niches facing its north-east corner, at a height of c. 2.35 m. (eight *pedes*) above the floor. The niches are recessed and arcaded; their shape and location recalls a type common in lararia of Roman dwellings in central and southern Italy (Boyce 1937: 10-12; Orr 1978: 1575-1587; Bakker 1994: 8-20) (fig. 5b). Three shorter corridors surround the courtyard on its other sides (Loci 1859, 1902 and 1761). From the four corridors, which were certainly roofed, all the surrounding rooms could be accessed without difficulty. The entries to the rooms have no stone thresholds, and their average width is 1.35 m., that is, three cubiti. The walls of the villa were remarkably built, with large kurkar ashlars laid as stretchers and set into grey cement typical of the Roman period. Their dimensions are not always uniform, but the average size is similar to the size of the stones of the stylobate and piers discussed above, that is, 0.30/0.44/0.60 m. The lower sections of the eastern and southern walls were cut into the bedrock and plastered. Their upper sections overlay the bedrock and were solidly built of headers of c. 0.60 m. (two pedes). The structural solidity and the preserved height of the walls in the east and in the south seem to imply the existence of a second storey, at least in these parts of the building. However, in the west of the villa, the walls are completely missing due to their collapse into the nearby ravine.

The rooms that surround the peristyle courtyard differ in shape and size, as a result of the irregular outlines of the villa. Little can be said about the nature and function of the rooms, because no furniture of any kind was discovered. However, the niches at the eastern end of the long corridor indicate that the room served as a *lararium* (see above), and a clay oven built into the bedrock in the south-east corner of Locus 1937 indicates that the room served as a *culina* (see below). Any identification of the other rooms during this preliminary stage of investigation would be speculative. Generally speaking, the rooms located to the south of the long corridor (Loci 1777, 1817, 1830 and 1831) are better planned, better built and more carefully plastered than the other rooms. Therefore, we may surmise that the southern group of rooms served the owner of the villa, his family and guests, while the northern units were primarily used as service rooms (for recent



Fig. 5. Roman *villa maritima*; a) long corridor (Loci 1851/1768); b) plastered arcaded niches in its eastern end

discussion on various aspects of this subject, see Zanker 1998: 9–25; Ellis 2000: 166–187; Allison 2001).

At first glance, the long corridor (Locus 1851) is reminiscent of the *pastas* of Hellenistic dwellings, which usually bisected the building and had an entry or a window on each side (cf. Graham 1966; Krause 1977). At Apollonia, however, the eastern end of the corridor is not only without an opening but also takes the form of a *lararium*. This shows that the structure is of a Roman type, which suggests a Western origin (cf., e.g., the recent discussions of Ackerman 1990: 35–61; Gros 2001: 263–313; Wallace-Hadrill 1994: 65–90). Such a peristyle villa could belong to a rich foreign merchant⁸ or to a local magnate who embraced Romanisation. A comparison of the villa from Apollonia with other peristyle dwellings of Roman and Byzantine Palestine shows that our structure is the earliest documented example of its kind uncovered along the coast.⁹

Only a few finds can be connected with the initial phase of the villa, i.e., Stratum Roman 2A. These finds were retrieved from loci located right above the bedrock (Loci 1313, 1342, 1761, 1844, 1928). Their fragmentary condition, their variety and their infrequent appearance suggest that they were most probably embedded in foundation fills placed beneath the second phase floor (i.e., Stratum Roman 2B). They most likely belong to occupation fills dated to the period of the villa's first phase, thus supplying a *terminus ante quem* for the dating of Stratum Roman 2A. Since floors of the second phase, however, were mostly made of packed earth, many of the fragments retrieved may be intrusive. This explains the presence of the one coin found upon the bedrock — a municipal Neapolis issue dated to 159/60 CE.

A detailed analysis of the pottery finds is beyond the scope of this article. It can be said, however, that the finds consist of fragments of bowls, casseroles, cooking pots, jugs, juglets, storage jars, amphorae and lamps, and point toward a late firstcentury CE date (fig. 6). Since some of the finds found upon the second phase floor are complete versions of fragments found upon the bedrock and share similar dating, we are inclined to believe that Stratum Roman 2A represented a period of brief occupation.

During the second phase (Stratum Roman 2B), the building's internal plan underwent significant alterations. The entries to several rooms were rather

⁸ A documented example of a Roman merchant who arrived in the region from the West is attested in a Latin inscription discovered at Ashkelon (Eck and Zissu 2001).

⁹ Roman peristyle buildings are quite rare in Palestine, especially on the coast (Hirschfeld 1995: 85–97, 101, table 4). Little can be said on the preliminary publication of the Roman *villa maritima* discovered at Gaza, but for its dating to the first century CE (Humbert 2000: 117–119). However, a recent discovery of a peristyle building in Nahal ^cIron, identified as a *mansio* alongside the Caesarea-Legio road, shows a striking resemblance to the Apollonia-Arsuf villa in building design, chronology and finds (Glick 2006; see also Milson 2006; Winter 2006).



Fig. 6. Selected pottery finds from Stratum Roman 2a (Locus 1844)

carelessly but intentionally blocked; thus, several rooms were converted into independent units. The building plan suggests several inhabitation periods, presumably by different owners. Several adjacent rooms, initially linked to one another, were turned into independent units, with floors made of packed earth embedded with sherds and crushed rubble laid upon a thin layer of packed brown soil. Most of the finds from the villa were discovered on these floors; they consist of table vessels, such as bowls (including Roman Terra Sigillata A), jugs and juglets; cooking vessels, such as casseroles (one with its original lid, which were manufactured jointly) and cooking pots; storage vessels, such as local jars of the Palestinian ridge neck type and early 'Gaza' type and imported amphorae from production centres in the Mediterranean and Aegaean; and local and imported lamps. Smaller quantities of stone and glass vessels, bone objects and human and animal figurines were also discovered. In Room 1937, only cooking vessels (mostly casseroles and cooking pots, with the exception of one juglet) were found, as well as a fire place (a *tabun*), suggesting that it functioned (at least in this phase) as a *culina* (fig. 7).¹⁰ The two coins retrieved in Stratum Roman 2B are dated to the reign of Emperor Vespasian - 71 and 79 CE. The coins were discovered at floor level in Room 1937 and Room 1777.

Following a devastating earthquake, the entire complex suffered sudden and violent destruction. Ashlars fallen from the surrounding walls were found in practically all the rooms. In the northern corridor (Loci 1902 and 1761), the northern



Fig. 7. Selected pottery finds from Stratum Roman 2b (Locus 1937) (culina)

¹⁰ Comparable material for our pottery assemblage is beyond the scope of this article; general references can be found in Herr (1996: 201–208, *passim*).



Fig. 8. Earthquake collapse of walls; a) Locus 1777 (view to the south); b) Locus 1761 (view to the west)

wall collapsed in its entirety towards the south; almost all of its ashlars are still preserved in their fallen position, one course lying next to the other (fig. 8). In the eastern rooms (Loci 1313, 1342 and 1777), as well as in two of the side rooms (Loci 1928 and 1830), the collapse was particularly severe, as is evident from the large number of fallen stones, as well as from numerous crushed vessels found beneath them. This pottery dates in the main to the late first and early second centuries CE. In this period, one major earthquake was recorded; it occurred in 113/114 CE, according to Russell (1985: 40-41), or in 126/127 CE, according to Guidoboni (1994: 234). This earthquake had a disastrous impact on the entire Sharon Plain from Caesarea to Nicopolis. Moreover, the early second-century CE destruction of the Caesarea harbour seems to have been caused by a tsunami, which may have been the result of this very earthquake (Reinhardt et al. 2006), although the dating of the tsunami has been set to December 115 CE. It is logical to assume, then, that the destruction of the Roman villa at Apollonia was the result of this cataclysmic event. Afterwards, the structure was not rebuilt, and because it was partially underground and at a lower level than the surrounding area, the ruined site became a garbage dump. Discarded refuse included huge quantities of pottery, which seem to come from surrounding buildings that still await excavation. The few Roman coins found in the refuse of Stratum Roman 1 corroborate the suggested dating. These are municipal and imperial coins, which post-date the second and the third decade of the second century CE.11

CONCLUSIONS

The *villa maritima* of Apollonia-Arsuf is one of the earliest examples of a peristyle-type building documented along the coast of Palestine. Unlike typical classical houses of this type in the Greek and Roman architectural tradition that may be defined as individual units, immediately adjacent to a street with an interior invisible from outside, sharing walls with adjacent houses; the *villa maritima* is structured as a closed isolated unit. This permits us to define our structure as a villa and not as a *domus*. This definition is tentative, however, as excavations in the east did not reach the depth of the foundation level of the structure. On the other hand, the very concept of an unfortified and rather isolated open dwelling, with an impressive view over the Mediterranean, was previously unknown in

¹¹ In contrast to Judaea, the Palestinian coast lacks fine published examples of well-stratified pottery assemblages of the late first and early second centuries CE. Stratum Roman 2b assemblage is therefore unique. Despite the fact that most vessels and fragments belong to known coastal, Palestinian, Mediterranean and Aegaean pottery types, their presence in a unified assemblage enriches our knowledge of the coastal material culture at the time. The revision of known dates for given pottery types and the correlation of the coastal and hill country ceramics are two issues remaining under scrutiny.

Judaea. Its character — a private structure built according to criteria emphasising leisure, privacy and tranquility, as well as social status and economic wealth — clearly reflects an aspect of the Romanisation process of the Coastal Plain of Judaea as early as the late first century CE. In sum, the villa is the only sizeable architectural remnant of Roman date discovered at the site in the course of its excavations from 1950 until the present.

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