## A RE-APPRAISAL OF THE ARCHAEOLOGICAL FINDINGS AT TEL ḤASHASH: ON THE ARCHAEOLOGY OF THE YARQON ESTUARY FROM CLASSICAL TIMES TO LATE ANTIQUITY

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Tel Hashash is located within the boundaries of modern Tel Aviv. Surveys and excavations carried out in the site by the late J. Kaplan and H. Ritter-Kaplan during the 1960s and 1980s revealed remains and finds dated mainly to the Hellenistic, Roman and Byzantine periods. The present paper includes the presentation and analysis of these yet unpublished remains, and a revision of the excavators' conclusions about the function and history of the site in classical times and Late Antiquity, in light of the archaeology and history of the lower Yarqon river and the central coastal plain.

Keywords: Tel Ḥashash, Tel Aviv, Yarkon River, Hellenistic, Roman, Byzantine, Jews, Samaritans, Christians

#### I. INTRODUCTION

The subject of this paper, Tel Hashash (Giv at 'Amal Beth; Tall al-Hash-shāsh (Arabic), is located in the central coastal plain of Israel, some 0.4 km south of the Yarqon river (Nahr al-'Auja') and 2.5 km east of the Mediterranean. The mound is located within the Bably neighbourhood in the northern part of Tel Aviv's city centre, limited by HaZohar Street on the west, Herzog Street on the north, Pa'amoni Street on the east and HaNeśeevim Street on the south (Israel Grid Reference 1301/1662; Fig. 1). The site actually mounded over a kurkar (fossilised sand stone) hill (some 60,000 m<sup>2</sup> in size) (Fig. 2). The kurkar hill forms part of the second (or median) kurkar ridge that extends along the Israeli coast, between the coastal ridge (i.e. first kurkar ridge), a few kilometres to its west, and the third kurkar ridge (a few km to its east). The hill belongs to the uppermost and youngest kurkar units (Tel Aviv Kurkar Bed/Beth Yannai Kurkar), which was covered by a unit of dark grey soil (Ta arukha Hamra Bed/Nof Yam Deposit). The mound surface was covered by a few metres of migrating sand dunes and alluvial soil that were piled up over a long period of time. Thus, the mound itself appears from a distance as a hilly terrain whose summit is some 22 m above sea level. That is apparently the reason that it was not identified as an archaeological site until the beginning of the 1920s, as can be seen in British Mandatory maps of Tel Aviv where the site name appears 'Tall al-Hash-shāsh'.

The Yarqon River was the major natural stream in the site's vicinity since earlier times, a permanent water source surrounded by fertile, alluvial plains. The site is also located on the road that traversed the length of the coastal plain, linking Syria and Phoenicia with Egypt. Although historical documents prove that during various periods the main international north—south highway crossed the Aphek Pass at the sources of the Yarqon river located to the northeast, the proximity of Tel Hashash to Tell Qudadi, which controlled the

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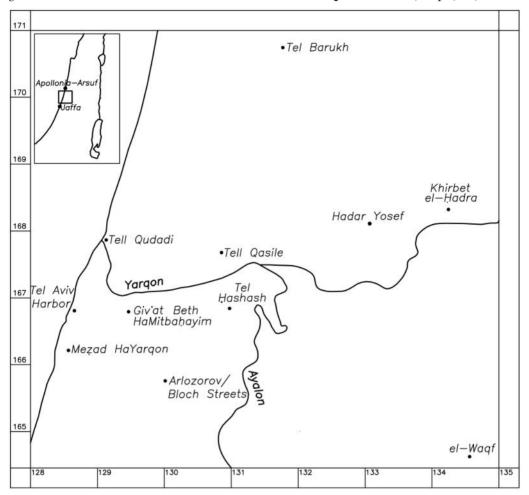


Fig. 1. Location map.

ford of the Yarqon estuary, may suggest that a north–south route passed to the west of the mound and connected Jaffa in the south with the settlements to the north of the Yarqon. The river itself was most probably also used as a transportation route. Being the widest of the country's Mediterranean coastal waterways, it both allowed sailing and offered a crossing at the ford of the Yarqon estuary.

Documentation of the archaeological surveys and excavations conducted at Tel Ḥashash (below) revealed that the site was first occupied during the Chalcolithic period or the Early Bronze Age. This assumption was made based on isolated pottery finds and flint tools.¹ During later inspections and excavations, pottery of the Middle and Late Bronze Ages was reportedly found.² Our sorting of finds from Tel Ḥashash revealed Iron Age II (9th–8th centuries BCE) and Persian-Achaemenid period (5th–4th centuries BCE) occupations.³ A more substantial phase in the site's history was during the Hellenistic period (3rd–1st centuries BCE). The site continued to be occupied during the Early Roman period, apparently until the First Jewish Revolt (66–70 CE). Late Roman occupation is also attested by pottery and



Fig. 2. General view of the site, looking east (1949).

glass finds but it seems that somewhere in the early Byzantine period the site was abandoned and re-occupied in the Late Byzantine period through the Early Islamic period (6th–8th centuries ce). Throughout its history, Tel Ḥashash was inhabited on a limited scale, and maintained the character of a small agricultural settlement. The site's hill — and mainly its southern part — was re-occupied for the last time prior to modern times probably during the 18th century by the Beduin tribe of al-Jammasin (Arabic: 'water buffalo breeders'), who migrated from the Jordan valley. This tribe established a small village on the hill, known from sources of the late Ottoman and British Mandate periods as al-Jammasin al-Gharbi. The village was abandoned in 1948 during Israel's War of Independence (Khalidi 1992, 244). Consequently, parts of the mound served as a military base of the Israel Defence Forces and later on it was partially resettled by squatters. Nowadays, the mound houses a public park and playground (Gan HaKalaniot), yet parts of it are occupied by buildings.

Intensive construction activities carried out around the site since the 1950s, as part of the expansion of the city of Tel Aviv, have damaged the ancient remains. These remains were sometimes excavated for the purpose of rescue documentation, and thus were low-scale and restricted to visible remains and their immediate surroundings (Fig. 3). The 1951 and 1966–67 excavations, conducted by the late J. Kaplan (on behalf of the Museum of Antiquities of Tel Aviv-Jaffa), unearthed the remains of a Hellenistic-period farmhouse at the western foothills of the mound, Hellenistic tombs on the northern and southwestern hill slopes and a Byzantine structure on top of the mound. The 1980 and 1983–85 excavations were conducted by the late H. Ritter-Kaplan (on behalf of the Israel Department of Antiquities and Museums) in various locations on the mound's slopes, and unearthed the remains of an Early Roman 'public' building and a Byzantine walled structure and wine press (Kaplan 1953, 159–160; 1966, 1968b; Ritter-Kaplan 1981, 1983, 1984, 1996). The wine press excavated by Ritter-Kaplan was later cleaned and conserved by the Israel Antiquities Authority (Levy 1991).

#### 2. THE HELLENISTIC PERIOD

Hellenistic remains at the site are confined to the mound and to remains excavated some 100 m to the northwest of it.

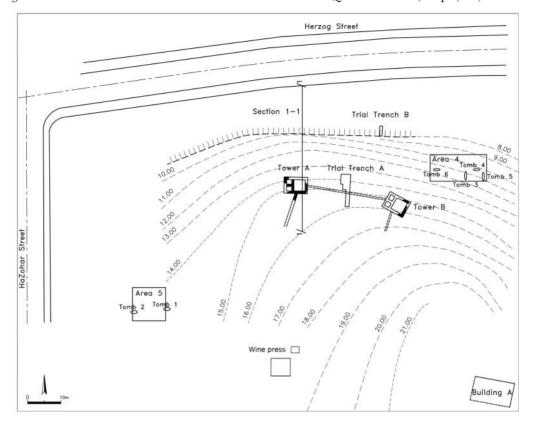


Fig. 3. General site-plan (modified after archival site-plans).

#### Hellenistic tombs on the slopes of Tel Hashash

Excavation file A102/1966 relates to several trial and rescue excavations; the first entry describes a trial excavation of several weeks in the summer of 1966 and winter of 1967 (12 June—31 August 1966 and 1—12 January 1967) aimed at identifying potential areas for future excavations. During this trial excavation individual tombs of the Hellenistic period were discovered, together with later (Roman and Byzantine period) remains. The excavated tombs, two on the southwestern slope and five on the northern slope, numbered seven in total. All shared a somewhat similar plan — a rock-cut cist tomb that was perpendicularly carved against the slope of the mound, as if forming a *loculus* (square-shaped vertical niche the size of a human body) that was blocked by field stones on its narrower side, which served as its entrance (Fig. 4; Tomb 7 is not illustrated). The report goes as follows:

Tomb I (2 August 1966): 2×1.3 m; adult human skeleton in an east (head)—west supine position, holding his hands together upon his pelvis. No finds.

Tomb 2 (I August 1966): I.8 × I.1 m; adult human skeleton in an east (head)—west supine position, holding his hands together upon his pelvis.

Finds: Pottery: open lamp (c. 0.2 m above body feet) [Fig. 5: 5]; Metal: bronze spatula and bronze pin (both found on tomb's floor) [Fig. 6], six bronze nails (scattered around the skeleton on tomb's floor), bronze plaque (on tomb's floor); beads (6; 3 made of carnelian and 3 made of glass).

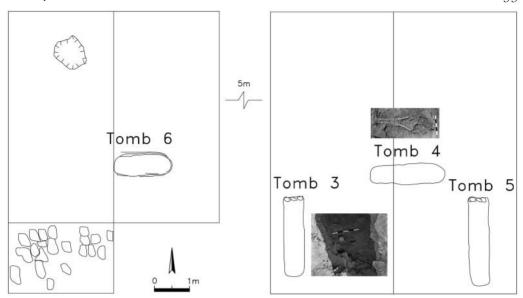


Fig. 4. Plan of Hellenistic tombs in Area 4.

'An anthropological-physical examination of the skeleton by a Dr Hass suggests an African female of 20 years of age.'

Tomb 3 (5 August 1966): 2 × 0.9 m; oriented south–north; disturbed (human bones); with courtyard on north.

Finds: Pottery: juglet (found on tomb's floor) [Fig. 5: 3], upper body of storage jar (found on court-yard's floor) [Fig. 5: 4]; Metal: iron sickle (deteriorated) and iron hoop (both found while dismantling the tomb's blocking).

Tomb 4 (28 August 1966): 2 × 1 m (suggestive); oriented east—west; disturbed (human tooth). Finds: Pottery: unguentarium (found on tomb's floor) [Fig. 5: 2] (Kuperman, Appendix II, No. 1).

Tomb 5 (30 August 1966): 2 × 0.9 m; adult human skeletons in a south (head)—north supine position. No finds (Kuperman, Appendix II, No. 2).

Tomb 6 (10 January 1967): 2 × 1 m (suggestive); adult human skeleton in a west (head)—east supine position. No finds. No stone blocking. May be modern (Late Ottoman/Mandate).

Tomb 7 (12 January 1967): 2 × 1 m (suggestive); oriented east (head)—west supine position.

Finds: Pottery: amphoriskos (found on tomb's floor next to skull) [Fig. 5: 1] (Kuperman, Appendix II, No. 3).

Given the fact that finds were retrieved from Tombs 2, 3, 4 and 7, it is difficult to establish the tombs' relative chronology. Tomb 2 was the richest in finds. The nails discovered in it may well attest the use of a wooden coffin. Based on the folded Late Hellenistic (Hasmonean) wheel-made lamp, it may be dated to the late 2nd/early 1st century BCE. The distribution of such lamps is more than often ethnically connected with Jews (see Barag and Hershkowitz 1994, 11–13). The grey slipped unguentarium found in Tomb 4 may attest to a similar date. The juglet and storage jar found in Tomb 3 and the amphoriskos found in Tomb 7 can also be dated similarly but, in the case of the latter two, we cannot exclude the possibility of an earlier date within the Hellenistic period. The other finds discovered in these tombs have a wider chronological range.

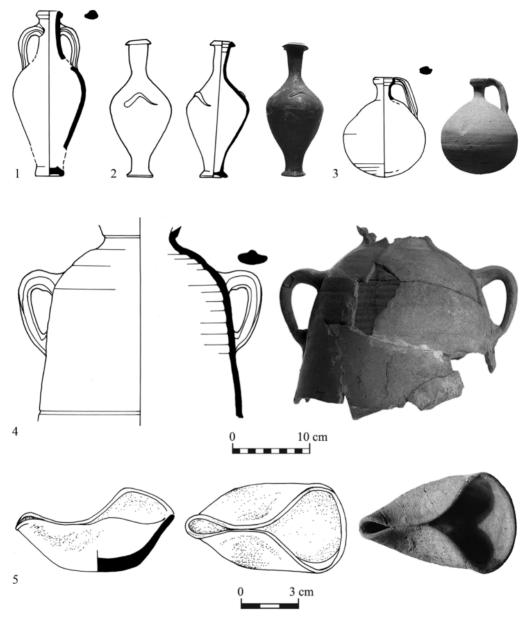


Fig. 5. Hellenistic pottery discovered in tombs at Tel Ḥashash: 1. Tomb 7 ('next to skeleton'); 2. Tomb 4/basket 13; 3. Tomb 3/basket 8; 4. Tomb 3/basket 11; 5. Tomb 2/basket 4.

Hellenistic farmstead of Yehuda HaMakabbi Street (556 Street/Admot Weiss)

Excavation file &-19/1951 relates to a two-week trial excavation (4–19 April 1951) some 100 m to the northwest of Tel Ḥashash, at today's coastal highway junction of Yehuda HaMakabbi Street–Herzog Street and Derekh Namir. The site is mentioned in few

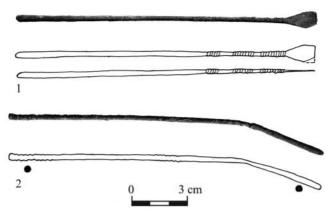


Fig. 6. Bronze spatula and bronze pin discovered in Tomb 2/basket 4 (IAA 09-320).

publications (e.g. Kaplan 1953, 159-160; Kaplan and Ritter-Kaplan 1993, 1454), and the excavator, the late J. Kaplan, suggested it served a farmstead of the Hellenistic period. The file kept in the archive of the IAA contains several photographs and a list of abridged descriptions of the pottery fragments found on the site's surface, next to its excavated walls, in a pit (silo?) and upon a floor (Fig. 7). According to the list, 164 pottery fragments were recorded and an additional 140 are mentioned; most of them belong to the Hellenistic period but a few are from the Late Bronze Age ('Hyksos') and fewer from the Persian-Achaemenid and later 'Arabic' periods. There is also a recording of 14 flint tools. Most of these fragments were apparently not kept by the excavator but for those shown in Fig. 8, which, based on their registration numbers came from the surface, occupation layers and a pit of Hellenistic date. Based on the recording and the pottery shown, Hellenistic pottery fragments are representative of table, cooking and storage vessels, and lamps. They are familiar types which are well represented at nearby archaeological sites (e.g. 'Abd el-Nabi/ Mezad HaYarqon (Fantalkin and Tal 2003, 112–115, Fig. 8), Ramat Aviv (Gorzalczany 2003), Tel Michal (Fischer 1989), Apollonia-Arsuf (Fischer and Tal 1999, 223-251 passim) and other coastal sites (e.g. Dor (Guz-Zilberstein 1995) in assemblages of the 3rd and 2nd centuries BCE). Although the assemblage is very small, the lack of mould-made pottery vessels and lamps may point to an earlier occupation (3rd century BCE); the two coins of Ptolemy II that came from the 1951 excavations may strengthen this argument (Ariel, Appendix I, Nos. 2, 5).

#### Summary of the Hellenistic remains

In fact, tombs are the only architectural remnants of Hellenistic date found on the mound. The different excavations at the site unearthed Hellenistic pottery finds (Figs. 5 and 8) and nine coins of the Ptolemaic and Seleucid periods, which represents more than half the number discovered during the excavations (Ariel, Appendix I, Nos. 1–9). Still, it is difficult to establish whether the site was actually inhabited during these periods. It would be logical to assume that the tombs discovered on the slopes of the mound served some of the occupants of the farmstead excavated northwest of the mound. The finds at hand prevent us from illuminating the site's establishment and abandonment during the Hellenistic period. The ruralisation of the region during the Hellenistic period finds support in other nearby sites. For example, some 4 km to the south of Tel Hashash the late J. Kaplan documented



Fig. 7. Yehuda HaMakabbi Street. An overview on the excavation ( $\mathit{left}$ ) and a close-up on the pit ( $\mathit{silo?}$ ) ( $\mathit{right}$ ) ( $\mathit{1951}$ ).

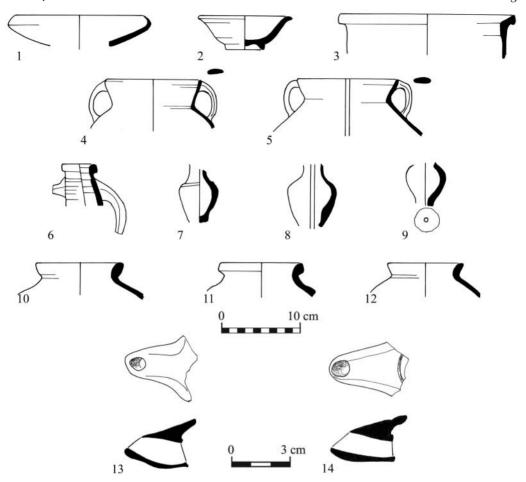


Fig. 8. Pottery from Yehuda HaMakabbi Street: 1. Unregistered; 2. A1/49 (surface/occupation layer); 3. A1/109 (occupation layer); 4. A1/148 (pit); 5. A1/149 (pit); 6. A1/144 (pit); 7. Unregistered; 8. A1/155 (surface); 9. A1/100 (unclear); 10. A1/89 (occupation layer next to northern wall); 11. A1/116 (pit); 12. A1/157 (surface); 13. A1/141 (surface); 14. Unregistered.

additional remains of a farmstead which were also found in recent excavations at the site (see e.g. Finkielsztejn 2006; Sussman 2006; Avisar 2007). Other remains of farmsteads were also excavated to the southwest of Tel Ḥashash. Although Kaplan saw the site he excavated in the area of the Hilton Hotel ('Abd el-Nabi), as a fort, part of the fortification line of Alexander Janaeus (the Yannai Line) in 86/85 BC against Antiochus XII (Jos., *War* 1.99–100; *Ant* 13.390–91), re-examination of the plans of the site and its findings allows us to identify a farmhouse of the late Persian and Hellenistic periods (Fantalkin and Tal 2003, 112–115). Other remains at the junction of Bloch and Arlozorov Streets, interpreted by Kaplan as a military tower of the same alignment, may well have belonged to yet another farmstead (ibid., 110–112). It seems, then, that the entire area of the city of Tel Aviv was occupied by farmsteads that dominated agricultural terrains of several square kilometres (for an overview of these remains, cf. Tal and Fantalkin 2009, 93–102).

#### 3. THE EARLY ROMAN PERIOD

The next phase in the site's existence is dated to the Early Roman period (c. 1st century BCE—1st century CE). The only excavated architectural feature which belongs to this phase is a building ('Building A'), which was identified as a Samaritan synagogue, discovered in the upper eastern slope of the site. Pottery of the Early Roman period has been found throughout other excavated areas, though in mixed fills and without any relation to architectural features. 'Building A' was almost entirely demolished by construction activities, which were followed by a limited salvage excavation aimed at the documentation of the surviving remains (Fig. 9). These included two sections in the building's northern wall and excavations in foundation trenches of eight additional (poor) walls. Consequently, almost no remains of floors or doorways were preserved. The external (and internal?) walls (1–1.2 m thick), founded on a mixture of small fieldstones and reddish-brown soil, were built of two faces of *kurkar* ashlars laid as headers, with a fill of packed soil, small fieldstones and stone grits in-between (Ritter-Kaplan 1996, 516, Figs. 2–5).

The excavator reconstructed the building's plan as a rectangular structure ( $16.5 \times 9.7 \,\mathrm{m}$ ) oriented north-west–south-east. The building was thought to include three parallel spaces (chambers?) and a broad staircase in front of its eastern facade. The eastern and central spaces had somewhat similar internal dimensions ( $7.2 \times 5.5/4.8 \,\mathrm{m}$ ); and the area of the western space was totally destroyed. No floor remains have been found, but their approximate reconstructed elevations show that there were height differences between the three spaces, with the lowest in the east and the highest in the west. According to the excavator, these height differences derived from local topography and building functions. In front of the building's east facade a mosaic-paved platform was laid ( $2.4 \times 9.7 \,\mathrm{m}$ ), the foundations and floor being partially preserved *in situ*. It is a black and white mosaic, which included a vegetal pattern of four-petal rosettes with small cross-like motifs in-between (Fig. 10). Flanking the east facade were two large rectangular pilasters which continued the line of the building's east wall. A broad staircase ( $6.5 \,\mathrm{m}$  wide) was documented east of the mosaic-paved

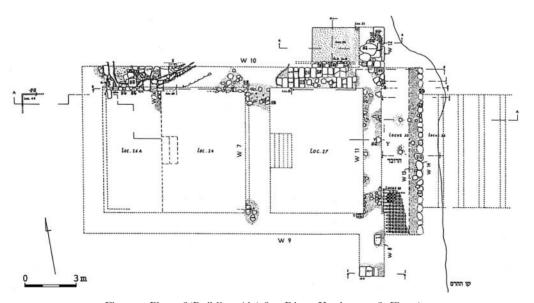


Fig. 9. Plan of 'Building A' (after Ritter-Kaplan 1996, Fig. 3).

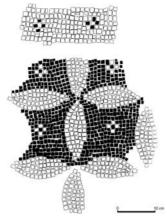


Fig. 10. Mosaic floor of 'Building A' (after Ritter-Kaplan 1996, Fig. 8).

platform, from which only the upper stair had survived the modern destruction. It was built of plastered fieldstones and hard-packed soil, foundations of which were rock-cut. The excavator assumed that the staircase originally led down the east slope to the foot of the hill (Ritter-Kaplan 1996, 518–520, Figs. 2, 3, 8–11).

According to the excavator, the above-mentioned mosaic floor was found covered by a large amount of what she identified as roof tile fragments, and accordingly she reconstructed the building with a gabled roof. A fragment of a small column base with an oval cross-section was associated with the building's roofing system (found in a disturbed fill outside the building) (Fig. 11) (Ritter-Kaplan 1996, 518–520, Figs. 9, 13; excavation file A-1392/1985). Additional, unpublished information is mentioned in the excavation diaries. According to those, many fragments of ceramic pipes were found together with the 'roof tiles'. The discovery of a plastered pool north of the building and fragments of a clay 'oven' attached to the inner face of the building's northern wall in the western space are also mentioned. As will be shown below, all these finds (i.e. the 'roof tiles', pipes, small column and fragments of an 'oven') are crucial to our interpretation of what we believe is the actual function of 'Building A'.

The excavation of 'Building A', as well as the bulldozed remains of the building, yielded a significant amount of pottery and stone vessels, dated to the Late Hellenistic (Hasmonean) and Early Roman periods. Noteworthy is a group of Early Roman (mostly ist century CE) vessels and fragments, which were found close to the northwest corner of the building (Locus 23; Fig. 12). This assemblage yielded also a chalk-carved (Jewish) stone vessel (Fig. 14: 2). A complete pottery jug (Fig. 12: 6), dated to the 1st century BCE, was found under the foundations of Building A', in the northwestern corner underneath the external pilaster. According to the excavator, this jug represents a datum-point of the building's construction (Ritter-Kaplan 1996, 520), though it seems more plausible that the jug served as a foundation offering. Either way, this vessel provides a terminus post quem of the (late) 1st century BCE for the building's construction. Additional Early Roman pottery (Fig. 13) and chalk-carved stone vessels (Fig. 14: 1, 3-6) were also found in other parts of the site, in the 1966–67 excavations at the northwestern slopes of the mound. The Early Roman pottery assemblage is typical of domestic contexts, composed of various table, cooking and storage vessels, and lamps (for well-dated similar pottery assemblages of the time, cf. e.g. Fischer and Tal 2000; Bar-Nathan 2006; for the Jewish chalk-carved vessels, see Magen 2002b). The majority of types are locally-produced, i.e. originated in Judaea and/or the coastal plain,

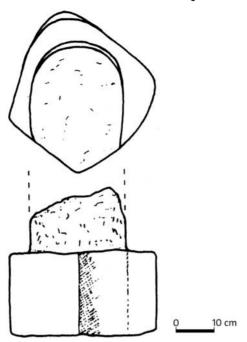


Fig. 11. Column base and shaft found in relation to 'Building A' (after Ritter-Kaplan 1996, Fig. 13).

with the exception of an ETS bowl (Fig. 13: 1) dated to the first half of the 1st century CE (cf. Hayes 1985, 34, form 45).

Based on the ceramic evidence and the architectural characteristics of the building, construction of 'Building A' was dated to the time of Herod the Great (late 1st century BCE). The building's destruction was attributed by the excavator to one of the historicallydocumented earthquakes of the first half of the 1st century ce, based on the diagonallyslanted stones of the building's north wall (Ritter-Kaplan 1996, 520, 523). As previously stated, Ritter-Kaplan identified the building as a synagogue, possibly a Jewish one. Nevertheless, she rightly emphasised the differences between the Tel Ḥashash 'synagogue' and the other late Second Temple synagogues, namely Masada, Herodium and Gam[a]la, which were known at the time. Ritter-Kaplan suggested that the 'synagogue' of Tel Hashash was designed to imitate the Second Temple of Jerusalem. Since Ritter-Kaplan doubted the possibility that a Temple-like synagogue would have been built by Jews, she claimed that the 'synagogue' of Tel Hashash was built by Samaritans. In order to support her suggestion, she mentioned Josephus' description of the Samaritan temple on Mount Gerizim, being an imitation of the Jewish Second Temple in Jerusalem (Jos., War 1.63; Ant 13.225–26). She further assumed that the Samaritan expansion to the area of Jaffa began as early as the Hasmonean period, after the destruction of the Samaritan centres in Samaria and Mount Gerizim by John Hyrcanus; and that construction may have been financed by King Herod, as an act of harassment towards the Jews of Jaffa. This synagogue, claimed the excavator, probably became a religious centre for the neighbouring settlements, including that of Tell Qasile (Ritter-Kaplan 1996, 523–524).

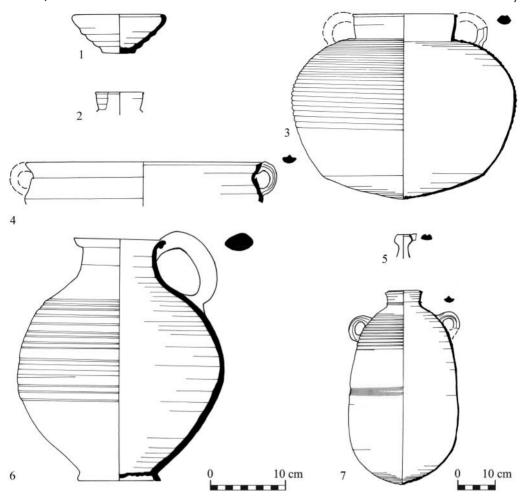


Fig. 12. Pottery found in relation to 'Building A' (modified after Ritter-Kaplan 1996, Fig. 14).

The above-mentioned interpretation of the building's religious affiliation, chronology and architectural purpose is problematic and cannot be fully accepted. First, there is no reason to believe that the Early Roman settlement at Tel Ḥashash belonged to Samaritans. The chalk-carved vessels found at the site clearly point to the Jewish identity of the settlement's inhabitants, and fit the characteristics of what Berlin called 'household Judaism' of the late Second Temple period (Berlin 2005). The Samaritans did not accept the Jewish purity laws related to chalk-carved vessels, as indicated by the almost total absence of these vessels from the Samaritans' heartland in the Samaria hills (Magen 2002b, 160, Map 5). Furthermore, according to the literary sources and the archaeological evidence during the Early Roman period, the central coastal plain, including the area of Jaffa, was densely populated by Jews; Jaffa itself was predominantly Jewish at that time (Kaplan 1959, 90–91; Schürer 1973, 82; Roll and Ayalon 1989, 135–136). The Samaritan expansion to the coastal plain began — as commonly accepted — between the end of the Second Jewish Revolt in

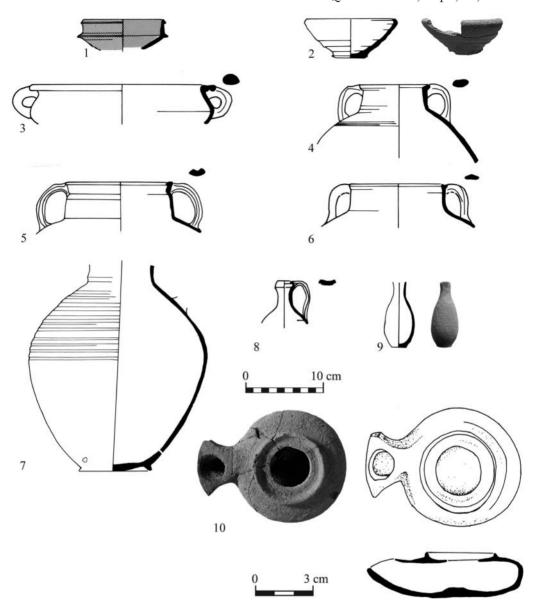


Fig. 13. Early Roman pottery discovered at Tel Ḥashash: 1.–2. Basket 17; 3. Basket 104; 4. Basket 68; 5. Unregistered; 6. Basket 106; 7. Basket 73; 8. Basket 23; 9. Basket 22; 10. Basket 17(?) (IAA 09–319).

135 CE and the late 2nd century (Roll and Ayalon 1989, 141; Magen 2002a, 251–253). Even nearby Tell Qasile was most probably inhabited by Jews, as indicated by chalk-carved vessels and Jewish coins (Mazar 1986, 15; Kindler 1994, 44–45, Nos. 8–11). Ritter-Kaplan's dating of the construction of the building to the time of Herod seems reasonable based on the ceramic evidence. Nevertheless, we believe that the building's destruction occurred later than

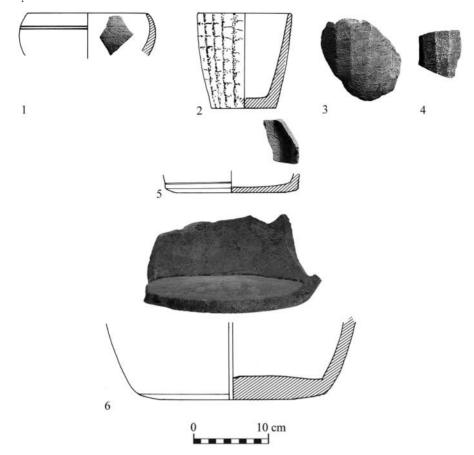


Fig. 14. Early Roman chalk-carved (Jewish) stone vessels discovered at Tel Ḥashash. 1. Basket 17; 2. Locus 23; 3. Basket 21; 4.–5. Basket 22; 6. Next to W4.

the first half of the 1st century CE, and that the destruction should be related to the First Jewish Revolt rather than to an earthquake. According to Josephus, during the early stages of the revolt (apparently in 66 CE), Jaffa was conquered by Vespasian, who established a camp of cavalry and some infantry in the town. The cavalry's mission, said Josephus, was to 'ravage the neighbourhood and destroy the villages and small towns around Jaffa. In obedience to these orders, they daily scoured the country, pillaging and reducing it to an utter desert' (Jos., War 3.429–31). It is thus most likely that the settlement at Tel Ḥashash also fell victim to these actions. The chronological frame reflected by certain pottery types found in the excavations clearly points to a continuous Early Roman occupation of the site into the second half of the 1st century CE.

The most intriguing issue regarding 'Building A', which has implications for the nature of the settlement, is the building's function. Since the excavator's opinion that Tel Ḥashash was a Samaritan settlement is no longer valid, it is also less likely that 'Building A' functioned as a synagogue whose unique plan was a small replica of the Second Temple. None of the late Hasmonean and Early Roman synagogues and similar Jewish public buildings discovered so far in Palestine — at Masada, Herodium, Gam[a]la, Jericho, Qiryat Sefer, Khirbet

Umm el-'Umdan and Ḥorvat 'Ethri (see Netzer 2003; 2004, with references) — can be compared to 'Building A'. All of these edifices share several architectural characteristics, which cannot be found in 'Building A'. In addition, almost all of them were found in village sites (with the exception of the Jericho synagogue), and none belonged to a private estate/farm (below). Strange emphasises the standard plan of the Second Temple synagogues in Israel, and claims that these edifices 'were first and foremost appropriate for hearing declamation of Torah' (2003, 39–40, 57; cf. Levine 2004, 91–92). These architectural and functional characteristics do not fit the assumed Temple-like building at Tel Ḥashash, whose narrow, apparently three-chambered plan, could not allow any comfortable convergence for religious or communal needs.

If not a synagogue, what, then, was the purpose of 'Building A' at Tel Hashash? The answer to this question is provided by certain finds discovered in relation to the building, as well as by its plan and preserved remains. As previously stated, Ritter-Kaplan mentioned many 'roof tiles' and pipe fragments in front of the building. It seems that none of these finds were kept after the excavations, but a close look at the published drawing (Fig. 15) and diaries reveal that these are not roof tiles at all. Some of these objects, interpreted by Ritter-Kaplan as upper tiles, have an elongated convex cross-section with an opening at their narrow face which bears remains of mortar. The rest of the 'roof tiles' interpreted by Ritter-Kaplan as lower tiles, seem to be rather flat, with thickened edges, and differ from the known roof tiles of the period. It can thus be determined with a high degree of certainty that the 'roof tiles' are actually sections of a bathhouse's hypocaust wall tubes (tubul). Convex and rectangular tubuli are known from several Early Roman bathhouses in Palestine, such as those excavated at Masada (Netzer 1991, 92, Ills. 152) and Ramat HaNadiy (Horvat Eleq; Hirschfeld 2000, 206–200, 322–323). The discovery of these objects, together with pipe fragments, reinforces their identification as tubuli. Some of the flattened 'roof tiles' mentioned by Ritter-Kaplan could be either additional tubuli fragments or hypocaust roofing tiles (see, for example, Hirschfeld 2000, 320-321, Figs. 202-203.). The location of these finds — in front of the building's facade — can be explained by the destruction caused to the building during modern times and/or antiquity. The small stone column found near 'Building A' (Fig. 11) is similar in its shape and dimensions to hypocaust pillars, such as those found in the Early Roman bathhouses at Masada (Netzer 1991, 90-91, Ills. 191), Jericho (Netzer 2001, 213–214, Ills. 307) and Ramat HaNadiv (Horvat 'Eleq; Hirschfeld 2000, 320, Figs. 200, 202). The 'oven' fragments, described by Ritter-Kaplan as attached to the wall of the western space of 'Building A', may represent either hypocaust/caldarium tiles or the remains of a bathhouse furnace (praefurnium). Black and white mosaic pavements, such as the one found

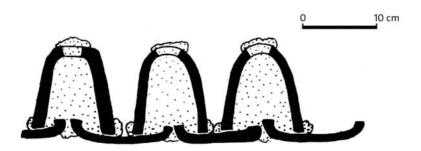


Fig. 15. 'Roof tiles' found in relation to 'Building A' (after Ritter-Kaplan 1996, Fig. 9).

in front of the building, is an additional element known from some Early Roman bathhouses, like one of those at Masada (Netzer 1991, 78–80, Ills. 128–129; see also Hoss 2005, 47). Finally, the plastered pool found outside the building can be easily related to a bathhouse, and most probably belonged to its water supply system. All these finds and remains may well indicate that 'Building A' was in fact a bathhouse rather than a synagogue. Its plan, composed of longitudinal parallel spaces, resembles that of bathhouses of the row type, which was one of the commonest bathhouse types in Early Roman Palestine (Hoss 2005, 30, 46). 'Building A' seems to be a freestanding bathhouse rather than integrated into a larger complex. It can be reconstructed as having three or four parallel spaces, which represent all or most of the units known from Roman bathhouses — a mosaic-paved entrance chamber (apodyterium), a frigidarium/tepidarium, a caldarium and a praefurnium. A close parallel to such a plan can be found at Ramat HaNadiv (Hirschfeld 2000, 311, 313, Figs. 179–180).

#### Summary of the Early Roman remains

'Building A' at Tel Hashash can thus be added to the relatively small group of about 20 secure late Second Temple-period bathhouses found so far in Roman Palestine. Nearly all of these bathhouses were private ones, and belonged either to palaces or rural estates. The latter group is the smallest one, and best represented by the bathhouses at Ramat HaNadiv and Khirbet el-Muraq (summarised in Hoss 2005, 45-46, with references; see also Damati 2008; Hirschfeld 2000, 704). The Tel Hashash bathhouse most probably belonged to a private estate; the rest of its parts — none of which has yet been discovered — located either elsewhere on the mound or at its foot. As indicated by the relatively small quantity of Early Roman finds unearthed in the site, this estate was rather small. However, the bathhouse, or at least one of its units, was paved with a black and white mosaic, pointing to the affluence of the estate's owner. 9 The existence of a bathhouse in a very small rural settlement (i.e. an estate) is much more plausible and attested archaeologically than the existence of a synagogue. Nevertheless, the Jewish identity of the site's inhabitants is indicated by its material culture. This settlement was probably founded in the (late?) 1st century BCE and destroyed/abandoned perhaps in 66 cE in the context of the First Jewish Revolt. At nearby Tell Oasile, the foundations of a well-built structure of considerable size were reported alongside pits containing sherds of that period (Stratum IV). Other than that, reports of isolated tombs of the Early Roman period found at some distance from Tel Hashash are recorded. Given the limited archaeological evidence on the Yarqon estuary in Early Roman times, we find it difficult to characterise the nature of the region's settlement. It may be that it preserved the agriculturally-oriented character of the period preceding it on a reduced scale, but the lack of evidence for such continuity may cast doubt on such an assumption (for an overview of these remains, cf. Tal and Fantalkin 2009, 103–104).

#### 4. THE BYZANTINE PERIOD

Excluding a few Late Roman (2nd–4th centuries cE) pottery sherds and glass fragments retrieved from mixed fills throughout the site (Figs. 16 and 17: 1–6), no evidence for a true occupation phase at Tel Ḥashash between the Early Roman and the Byzantine periods has been found. Byzantine-period architectural remains and finds were found in all excavation seasons. In the 1966–67 season, poor remains of a rectangular structure were unearthed in Area 4 (at the northern slope of the mound). It measures  $6.5 \times 4.5$  m, oriented on an east–west axis. Tombs 3 and 5 of the Hellenistic period (above) were actually found beneath

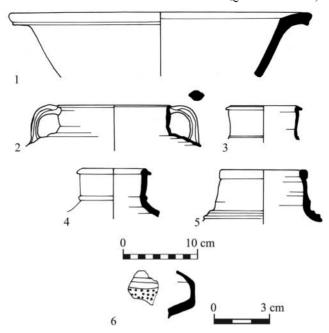


Fig. 16. Late Roman pottery discovered at Tel Ḥashash: 1. Basket 20; 2.–4. Basket 17; 5. Basket 37; 6. Basket 19.

it. The structure included three walls, built of fieldstones and coarsely-dressed stones, and a floor built of irregular stone slabs (Fig. 18). The excavator, J. Kaplan, dated these remains to the 4th century CE (Kaplan 1966), though the ceramic finds (including a coin; Ariel, Appendix I, No. 11), found in relation to the remains (Fig. 19), possibly date the structure's construction to the 5th or 6th century CE. Noteworthy is a fragment of a round ceramic mirror plaque (Fig. 20: 1) — a magical, apotropaic object known from many other 5th—7th century CE assemblages in Palestine (see, for example, Fischer and Saar 2007, with references). Another Byzantine-period find discovered in relation to this structure is a decorated bronze buckle (Fig. 20: 2).

Additional Byzantine remains were found in the 1980 and 1983 seasons of excavations about 15 m west of the above-mentioned structure, at the upper, moderate part of the northern slope. These remains belong to two small structures (identified by the excavator as towers) 28 m apart (Fig. 3). The western structure ('Tower A'; 5 × 7 m; oriented in an east—west axis) was composed of a large square room (paved with irregular stone slabs) and two smaller, rectangular chambers (apparently with a bedrock floor) to its west (Fig. 21). The collapse of ashlars found on the floor of the large room was interpreted by the excavator as the remains of a staircase which was probably built in one of the adjacent small chambers. The remains of a wall which was abutted to the structure's southern wall were found. About 2 m east of the structure, the lower part of a round clay oven (tabun; 0.7 m in diametre) was documented. It was filled with ash and contained a few burnt fragmentary metapodia bones of cattle. From the eastern structure ('Tower B'; oriented in a south-east—north-west axis) only poor remains were discovered, but according to the excavator's reconstruction its dimensions and plan were similar to 'Tower A'. Based on the abutting wall of 'Tower A',

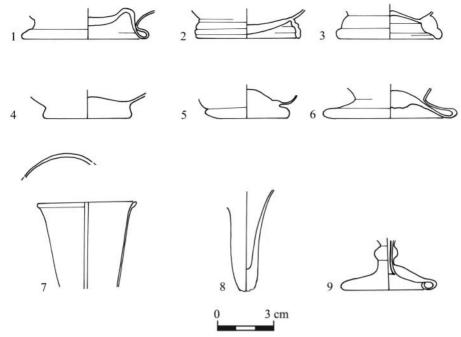


Fig. 17. Glass fragments discovered at Tel Ḥashash: 1. High tubular base-ring (bowl)/basket 25; 2. Trailed-base (bowl)/Unregistered; 3. Trailed-base (bowl)/basket 34; 4. Solid base (beaker)/basket 34; 5. Solid base (beaker)/basket 36; 6. Tubular base-ring (jug)/basket 31; 7. Flaring rim, conical neck (bottle)/basket 6; 8. Hollow stem base (stemmed lamp-bowl)/basket 3; 9. Tubular base, beaded foot (wineglass)/basket 10.

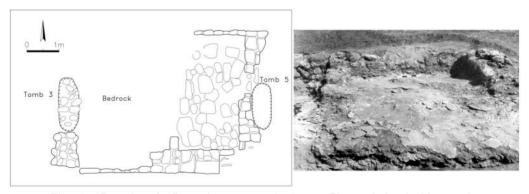


Fig. 18. Remains of a Byzantine structure in Area 4. Plan and view looking north.

Ritter-Kaplan suggested that 'Tower A' and 'Tower B' were connected, despite its absence in the trial trench excavated between the 'towers' (Trial Trench A; Fig. 22). This trench yielded the remains of two parallel, wide ditches at the lower part of the slope. The area between the upper ditch and the assumed wall built between the 'towers' was found covered

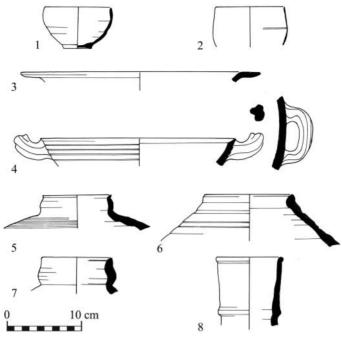


Fig. 19. Byzantine and Umayyad pottery found in relation to the structure in Area 4: 1. Basket 1 (IAA 09–321); 2. Basket 17; 3. Basket 17; 4.–6. Basket 39; 7. Basket 17; 8. Basket 5.

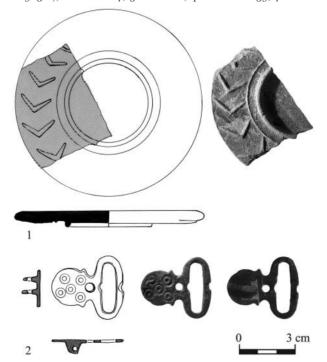


Fig. 20. Byzantine mirror plaque and bronze buckle: 1. Basket 14; 2. Basket 1.

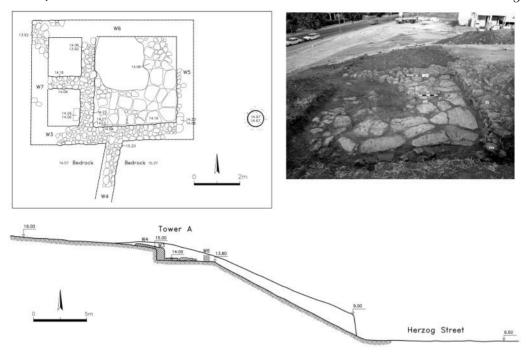


Fig. 21. 'Tower A': Plan, section and view looking west.

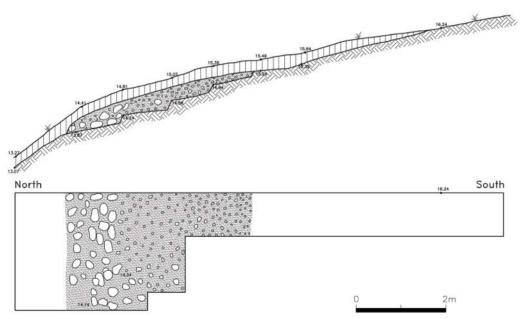


Fig. 22. Trial Trench A: Plan and section.

by a layer of beaten earth and fieldstones over rock-cut steps (Ritter-Kaplan 1981, 1984; excavation files A-974/1989, A-1262/1983).

The remains of a wine press were excavated in 1983, some 50 m to the south of the 'towers'. It is composed of a square treading floor  $(6 \times 6 \text{ m})$ , paved with coarse white mosaic stones, and a rectangular collecting vat  $(2 \times 3.3 \text{ m})$  with a similar mosaic pavement and a rounded settling pit. At the centre of the treading floor was a round, hard limestone press-bed, with a central square mortice for a wooden screw used for secondary grape pressing (Fig. 23) (Ritter-Kaplan 1983; excavation file A-1262/1983). This wine press belongs

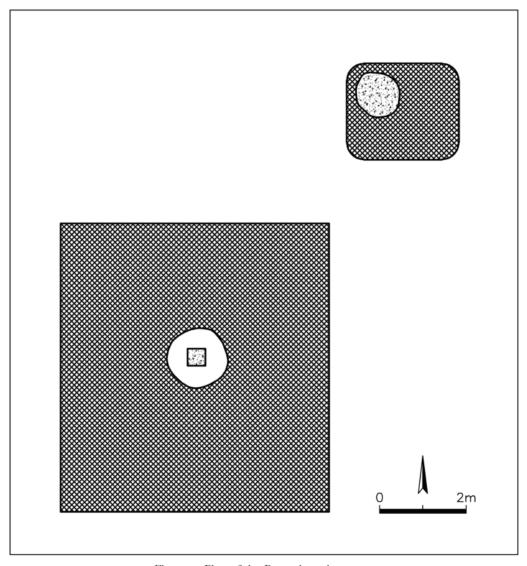


Fig. 23. Plan of the Byzantine wine press.

to the 'four-rectangle plan' or the 'composite plan' wine press type; both variants were common during the Byzantine period (Frankel 1999, 149–152; for the screw press-bed type of this wine press, see ibid., 141–142, Map 35).

Additional scattered remains of the Byzantine period, such as a clay oven and small sections of walls and pavements, were excavated also in other parts of the mound during the 1983 and 1984-85 seasons, though no plans or photos of these features are available (excavation file A-1392/1985). In relation to all of the above-mentioned remains excavated by Ritter-Kaplan, and especially in the context of the 'towers' and ditches at the northern part of the mound, a large amount of pottery of the Byzantine period (5th and mainly 6th and 7th centuries CE) was found (Fig. 24), together with fragments of roof tiles and glass vessels (Fig. 17: 7-9), and two coins of early 7th century ce date (Ariel, Appendix I, Nos. 13-14). The ceramic assemblage is represented mainly by table, cooking and storage vessels, water-wheel jars (which may indicate the existence of a well at the foot of the mound) and lamps, most of which are local types characteristic of the central and southern coastal plain (for similar pottery assemblages of the time, cf., for example, Johnson 2008). Among the inland types are some Fine Byzantine Ware bowls (Fig. 19: 1-3; Magness 1993, 193-195 (Form 1B), 198–201 (Form 2D). The imported pottery fragments include PRS, CRS and ERS ware bowls (Fig. 24: 1-6) (see Hayes 1972, 329-338 (PRS Form 3), 343-346 (PRS Form 10), 372-373 (CRS Form 1), 379-383 (CRS Form 9), 389-392 (ERS 'A'); idem, 1980, lix-lxi, lxiv-lxy). Noteworthy are a few Egyptian coarse ware bowls and a bag-shaped jar (Figs. 19: 7; 24: 8). The latter Egyptian types, as well as some of the local and imported types, continued to be produced until the 8th century cE (and sometimes even later), and thus indicate the continuous existence of the settlement at Tel Ḥashash into the Early Islamic (Umayyad) period.

Based on the remains surveyed thus far, Ritter-Kaplan suggested that a square, four-towered fortress (approximate area of 400 m²) occupied Tel Ḥashash in the Byzantine period. 'Tower A' and 'Tower B' were identified as the fortress' northwestern and northeastern towers, respectively. The remains of the parallel ditches and hard-packed layer down the northern slope were identified as two moats and a glacis which fortified the mound and surrounded the fortress at least from three sides. Ritter-Kaplan dated the pottery found in relation to these features to the 7th century CE, and thus claimed that the 'fortress' was built in the early days of Heraclius' reign as part of the Byzantine fortification system designed to hinder the Persian-Sasanian invasion of Palestine in 614 CE. The excavator assumed that, once the Persian army crossed the Yarqon River, it destroyed the 'fortress' of Tel Ḥashash and marched to the southwest towards Jerusalem (Ritter-Kaplan 1981, 19; excavation file A-974/1980).

These conclusions, nevertheless, are difficult to accept. First, as previously stated, the Byzantine phase of the site started, according to the pottery, in the 5th century CE, and it seems that the site settled continuously until the late 7th or 8th century CE. Second, the assumed architectural and functional characteristics of the site during the Byzantine period are based only on scattered, poorly-preserved remains. No evidence for a physical connection (i.e. a wall) between the two 'towers' was actually found, nor can we fully accept the identification and reconstruction of these structures as towers (especially the poorly-preserved 'Tower B'). In addition, no evidence for the continuation of the two 'moats' and 'glacis' to other parts of the mound's slopes were found. Even if these structures were indeed small towers connected by peripheral walls, their asymmetrical planning and building technique (i.e. relatively thin walls built of fieldstones at most) rule out their identification as part of a fortified military building. The great majority of four-towered fortresses (quadriburgia) in the southern Levant were built in frontier areas (fringe zones), such as in the southern and

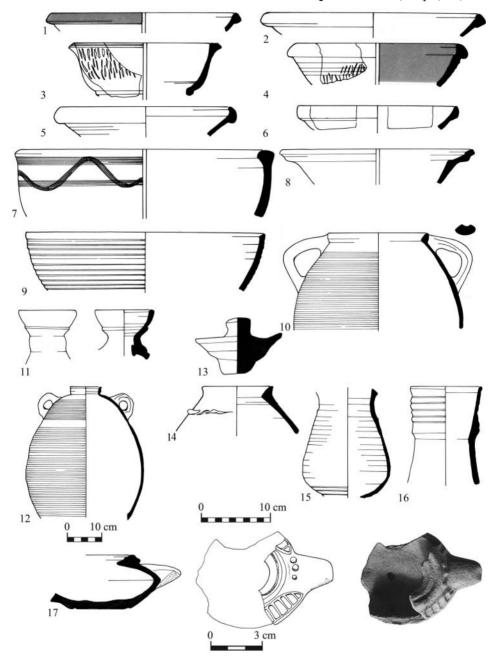


Fig. 24. Byzantine and Umayyad pottery found at Tel Hashash: 1. Basket 22 (wine press area); 2. Unregistered; 3. Basket 87 (section south of 'Tower A'); 4. Basket 48; 5. Basket 60; 6. Basket 48; 7. Basket 25 (wine press area); 8. Basket 22 (tabun in eastern slope); 9. Basket 13 (tabun in eastern slope); 10. Basket 18 (tabun in eastern slope); 11. Basket 57; 12. Basket 43 ('upper ditch'); 13. Basket 218 (wine press area); 14. Basket 34 (surface); 15.–16. Basket 18 (tabun in eastern slope); 17. Basket 45.

eastern parts of the provinces of *Palaestina Tertia* and *Arabia*, none of which was built later than the 6th century ce. All of these fortresses were relatively small complexes, characterised by very thick ashlar-built peripheral walls and rooms built adjacent to their inner face (Parker 1995, 252–253; cf., for example, the thick-walled *quadriburgium* of En Boqeq at the Dead Sea shore: Gichon 1993, 53–54).

The historical event attributed to the assumed construction date of the Tel Hashash 'fortress' — the Persian-Sasanian conquest of Palestine in the early 7th century ce — also seems irrelevant for our case. The account of Strategius, one of the major historical sources dealing with the Persian conquest, mentions that the Persian army, after surrendering Caesarea, conquered the port city of Apollonia-Arsuf/Sozousa (Strategius, 3.1–4 (Couret 1897). Since Jaffa is not mentioned in this or any other relevant source, it seems that the Persian army continued from Apollonia-Arsuf to the southeast, toward Lod (Lydda-Diospolis), on its way to Jerusalem, and did not cross the Yarqon River to conquer Jaffa and its area (Avi-Yonah 1976, 283, map on p. 284; Roll and Ayalon 1988, 158). As noted by Schick, 'the Sasanian army advanced quickly and did not take the time to conquer places not along their direct line of march. These places, as a consequence, would not have suffered any ill effects from the invasion' (1995, 23). Indeed, most of the (relatively little, one should admit) archaeological evidence which can be attributed with confidence to the violent events of the Persian-Sasanian conquest originated in regions and places known from the sources and included in this military campaign (see, for example, Schick 1995, 24-26, 34-36; Russel 2001, 43-51, with references).

The re-occupation of Tel Hashash in the Byzantine period should be seen, in our opinion, in the context of the Samaritan expansion to the central coastal plain during the Late Roman and Byzantine periods. As previously stated, this process probably started sometime after the Second Jewish Revolt and, given the archaeological evidence, accelerated during the 3rd and 4th centuries CE, when many Jewish settlements which were abandoned in either the late 1st or early 2nd century ce were re-occupied by Samaritans in the forms of villages and farms. There were however some Samaritan settlements which were not previously occupied by Jews. All these Samaritan settlements continued to exist well into the Early Islamic period (see Kaplan 1968a; Roll and Ayalon 1989, 137–183, 231). Archaeologically, this religious/ethnic shift is especially prominent in the region between Apollonia-Arsuf and Jaffa, where several sites, such as el-Jalil (Reich 1994), Khirbet el- Hadra (Kaplan 1967), Tel Barukh (Kaplan 1975) and Tell Qasile, yielded clear evidence for both an Early Roman Jewish presence and Late Roman and Byzantine Samaritan re-occupation. The best published example in the region is Tell Qasile (situated some o.8 km north of Tel Hashash, on the north bank of the Yarqon River), where large-scale excavations unearthed the remains of an Early Roman Jewish settlement (see, for example, Mazar 1986, 15) and a prosperous Late Roman and Byzantine-period Samaritan village, which had a synagogue in the Late Byzantine period (see Ayalon and Harpazi-Ofer 2007, 34-35, with references).

A possible piece of evidence for the Samaritan identity of the inhabitants of Byzantine Tel Ḥashash is a Late Roman/Byzantine lamp of the so-called 'Samaritan' type found in the site (Fig. 24: 17) (see Hadad 2002, 61, 64, Type 24 (dated to the 5th–6th centuries ce); Sussman 1983, 73–74, 85, Type 2 (dated to the late 3rd/4–5th centuries ce). Although these lamps were not used exclusively by Samaritans (for a recent discussion on that issue, see Tal and Taxel 2009, 212–213, with references), the lack of clear evidence of a Christian presence in the rural hinterlands between Jaffa and Apollonia-Arsuf, and the abundant evidence of a Samaritan presence in that region, bring us, nonetheless, to identify Tel Ḥashash as a Samaritan site.<sup>11</sup>

Summary of the Byzantine remains

Based on the historical account and the archaeological evidence of the Byzantine occupation at Tel Hashash — including the existence of a complex wine press and the numerous storage vessels found — we tend to identify these remains as part of a farmstead rather than a fortress. The exact plan of this complex is unknown, but it could have had a single tower (maybe even Ritter-Kaplan's 'Tower A') and additional rooms (such as 'Tower B' and the structure excavated in the 1966-67 season) sparsely set or partially connected by peripheral walls. The existence of outdoor installations, such as the wine press and ovens, is also typical of rural settlements (for farmhouses with similar characteristics, see Hirschfeld 1997; on the similarities and differences between farmhouses and small fortresses, see Watson 2006, 178-179). The so-called 'moats' and 'glacis' at the north slope can be identified as evidence for protection against erosion and/or agricultural terraces, During the Byzantine period, the Yarqon River probably served as the border of the administrative territories of Jaffa and Apollonia-Arsuf, and the border of private lands of rural settlements on both sides of the river. It was suggested that, during that period, Tell Qasile functioned as a religious and economic centre for smaller rural settlements of Samaritan inhabitants in the western basin of the Yarqon River (as can also be evident from the synagogue discovered therein; Chidiosan et al. 1990, 35, n. 33). According to Roll and Ayalon, the area which was subordinated to Tell Oasile spread over a radius of about 5 km, mainly to the north of the Yarqon River (1989, 237, Fig. 142), so theoretically it did not include Tel Hashash. Nevertheless, based on the short distance between the two sites and the fact that no other large settlement existed in the close vicinity of Tel Hashash (the closest large site is el-Waqf, located about 2.5 km to the east of Tel Hashash (nowadays in the western fringes of the city of Bene Berag), it seems likely that the immediate economic (and religious?) relationships of the latter site were with Tell Qasile. The chronicle of Abū L-Fath mentions many Samaritan villages, most of which are identified with places in the northern and central Samaria hills, though a few others — at least some of which were also Samaritan settlements — are yet unidentified (Levy-Rubin 2002, 183-186, Geographical Appendix). Unfortunately, it is impossible to identify with certainty any of the known Samaritan settlements in the area of the lower Yarqon basin as Abū L-Fath's villages (on this point, see also Kaplan 1968a). Nevertheless, from a historical-geographical perspective important untapped information might be preserved in the chronicle of Abū L-Fath, and it should be hoped that future archaeological and historical studies will help to identify some of the settlements he mentions. The typical rural nature of the areas on both sides of the Yarqon River was maintained during the Late Roman and Byzantine periods and at the beginning of the Early Islamic period (roughly during the 3rd-8th centuries CE). The local settlement pattern, as reflected in the better-known excavated and/or surveyed sites in the region, composed of small- to medium-sized villages and farms (such as Khirbet el-'Aura/Tel Barukh, Tell Qasile, Khirbet es-Sualimiyeh, Khirbet el-Hadra, Hadar Yosef and el-Wagf; on these sites, see, for example, Gophna and Ayalon 1996, 39; Taxel 2009). The end of the small rural-type settlement at and around Tel Hashash during the 8th century ce could have also been connected to the history of nearby Tell Oasile. The latter existed in its 'Byzantine' form until the 8th century CE, when a gradual decline in its size and population meant a near total abandonment of that site in the early oth century ce (when only a khan (caravanserai) building was built on the mound's summit). This change can be related to the increased insecurity and sharp deterioration in the economic conditions in the region, which started with the Abbasid period, in the second half of the 8th century ce. The official Muslim prohibition on wine drinking is one of the factors which seems to have impacted negatively on the economy of many settlements, such as Tell Qasile and Tel Hashash, whose viticulture was one of their main sources of livelihood.12

#### APPENDIX I: COINS FROM EXCAVATIONS AT TEL HASHASH (1951, 1966, 1983 AND 1985 SEASONS)

#### Donald T. Ariel

Fourteen coins from the 1951, 1966, 1983 and 1985 excavation seasons at Tel Hashash are published here.

#### Catalogue

1. Reg. No. D61, IAA 17454 [Fig. 25: 1]. Seleucus I, Antioch, ca. 300-281 BCE. Obv. Laureate head of Apollo r.  $\textit{Rev.}~[B] A \Sigma [I \Lambda E \Omega \Sigma / \Sigma E] \dot{\Lambda} E \dot{Y} [KOY]$  Athena Promachos r.  $E, \rightarrow$ , 6.41 g, 19 mm. Houghton and Lorber 2002: 20, No. 17.3. 2. Reg. No. MHY.07/001, IAA 47346 [Fig. 25: 2].

Ptolemy II (285–246 BCE), Alexandria. *Obv.* Head of Zeus Amon r. Rev. BASIAE $\Omega\Sigma$ -IITOAEMAIOY Eagle l. on thunderbolt; in l:  $\Sigma$  above shield; between legs: A.

Æ, ↑, 18.30 g, 28 mm. Kromann and Mørkholm 1977: Pl. IV, 119.

3.–4. Reg. Nos. D67a-67b, IAA 17455–17456 [Figs. 25: 3–4]. Ptolemy II (285–246 BcE), Tyre.  $\it Obv.$  Head of Zeus Amon r.

Rev. ΒΑΣΙΛΕΩΣ-ΠΤΟΛΕΜΑΙΟΥ Eagle l. on thunderbolt; in l. field, club.

3. Æ,  $\uparrow$ , 38.91 g, 35 mm. Hole-centred. 4. Æ,  $\uparrow$ , 34.85 g, 35 mm. Hole-centred. Kromann and Mørkholm 1977: Pl. XVII, 494. Noted in Ritter-Kaplan (1984, 28).



Fig. 25. Selection of coins.

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5. Reg. No. MHY.07/002, IAA 47347.
Ptolemy II (285–246 BCE), Tyre. Obv. Head of Zeus Amon r.
Rev. BA\Sigma I\Lambda E[\Omega\Sigma]-IITO\Lambda EMAIOY Eagle l. on thunderbolt; in l. field, club.
Æ, ↑, 5.00 g, 18 mm.
Kromann and Mørkholm 1977: Pl. XVII, 496.
6.–9. Reg. Nos. D67c, IAA 17457(6) [Fig. 25: 5]. Reg. No. D7o, IAA 17458 (7). Reg. No. D91, near L5, IAA 17459 (8).
Reg. No. D40, IAA 17453 (9).
Antiochus III, Akko-Ptolemais, 198–187 BCE.
Obv. Laureate head of Apollo r.
Rev. [- - -] Apollo stg. l.
6. Æ, <sup>\ \</sup>, 1.59 g, 9 mm.
7. Æ, ↑, 2.03 g, 10 mm.
8. Æ, ↑, 1.41 g, 10 mm.
9. Æ, 1.05 g, 9 mm. Rev. unclear. Identification is uncertain.
Houghton and Lorber 2002: 416, No. 1096.
10. Reg. No. 3, IAA 17460.
408–423 CE.

Obv. [- - -] Pearl-diademed, draped bust r.; behind head, star.

Rev. [- - -] Two emperors.
Æ, ↓, 0.97 g, 15 mm.
Cf. Carson and Kent 1965: 90, No. 2223.
11. Reg. No. N/102/66/002, IAA 48176.
498–538 ce. Obv. [- - -] Diademed, cuirassed bust r., with paludamentum.
Rev. K To l., cross.
Æ Half follis, \downarrow, 1.65 g, 18 mm. Cf. Hahn 2000: 87, No. 31.
12. Reg. No. N/102/66/002, IAA 48175.
Phocas, Nicomedia, 603/4 CE.

Obv. dM FO[CA PP AVC] Facing bust.

Rev. XX To r.: II.; beneath: NIKO[·]
Æ Half follis, \downarrow, 3.78 g, 23 mm.
Grierson 1968: 179, No. 63.
13. Reg. No. 21, L11, IAA 17461.
Heraclius I, Constantinople, 629/30 ce.
Obv. Heraclius and Heraclius Constantine stg.
Rev. M To l.: [A/]N/N[/O]; to r.: X/X
Æ Follis, \leftarrow, 8.52 g, 29 mm.
Grierson 1968: 295, No. 105a.
14. Reg. No. 21, L11, IAA 17462.
Heraclius I, Constantinople, 629/30 CE.
Obv. Heraclius and Heraclius Constantine stg.
Rev. K To l.: [A/]N/N[/O]
Æ Half follis, ↑, 5.22 ġ, 24 mm.
Grierson 1968: 302, No. 118.
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# appendix II: Human skeletal remains from the Hellenistic tombs at tel $\mu$ ashash (1966/67 season)

### Tali Kuperman

(I) Tomb 4:

The right deciduous upper first molar (M1) of the mandible was found on the floor of the tomb [Fig. 26: 1]. The age determination based on tooth crown and root development relates to 18 months.

(2) *Tomb 5* (two skeletons):

i. The bones are fragmentary and their state of preservation is extremely poor. The bones found included fragments of the right and left scapula and second rib. In addition, fragments of the right humerus, the proximal epiphyses of the left and right femur were partially recovered, and also a few bones of the right foot.

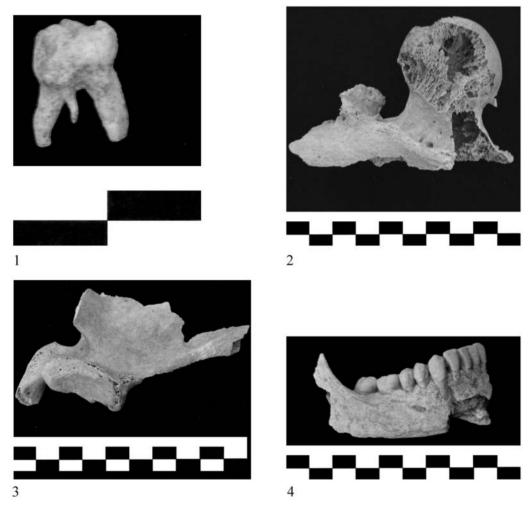


Fig. 26. I. The right first molar; 2. Intertrochanteric fracture on the proximal head femur; 3. Ostearthric changes of the glenoid surface; 4. The mandible.

Main characteristics of the skeleton: Age: over 70 years old; sex: female; cause of death: unknown. The lower limb bones show osteoporosis; on the proximal epiphysis of the right femur one type of fracture was noticed: an interthrochanteric fracture [Fig. 26: 2]. The fracture line passes between the two trochanters. The shoulder girdle has glenoid scapula surface and shows signs of osteoarthric changes [Fig. 26: 3]. No special osseous changes were noticed in the upper limb bones.

ii. The bones are fragmentary and their state of preservation is extremely poor. The bones found include some fragments of the skull, fragments of the right humerus and a fragment of the right ulna. In addition, fragments of the right femur, tibia and fibula and some of the left and right feet were found.

Main characteristics of the skeleton: Age: over 70 years old; sex: male; cause of death: unknown. The upper and lower limb bones show osteoporosis and advanced arthritis.

(3) Tomb 7: The bones found include fragments of a skull and mandible, together with a fragment of the right fibula. In addition, some isolated teeth were recovered.

Main characteristics of the skeleton: Age: 12-14 years old; sex: female; cause of death: unknown. Th teeth are well-preserved. The third molars had not erupted [Fig. 26: 4].

<sup>1</sup> Archaeological surveying of Tel Hashash was first conducted in the late 1940s and early 1950s. See Avitsur (1957, 68–69) and Kaplan (1953, 160).

Excavation archival files, Israel Antiquities Authority (IAA), Rockefeller Museum, Jerusalem. Unfortunately, these archival files lack orderly documentation and registration of the different excavations carried out at the site, thus information on the exact provenance of finds retrieved from the different areas of excavation in the site (coins included; see Appendix I below) is in many cases partial or even unavailable and can only be speculated on.

<sup>3</sup> Surprisingly, Iron Age II pottery was never mentioned in the excavation archival files. In addition, 8th century BCE pottery was attested in several places in Tel Aviv, such as Hill's Square (Giv at Beth ha-Mitbahayim), and in areas bordering Yehoshua Ben Nun and Yoḥanan Hyrcanus Streets. According to Kaplan and Ritter-Kaplan, they may represent the military camps that were established on the eve of Sennacherib's campaign (cf. Kaplan and Ritter-Kaplan 1993, 1454). Tel Hashash Iron Age II occupation, as well as the above-mentioned sites, should better be interpreted as belonging to Jaffa's agricultural hinterland rather than to military encampments. The chronological gap at Tell Qasile and Tel Gerisa during that period of time is most probably connected to the establishment of the fortress at Tell Qudadi (cf. Fantalkin and Tal 2009).

<sup>4</sup> The dark brown ('egg-shell'), grey slipped unguentarium is of special interest (Fig. 5: 2). It is comparable in ware, slip and shape to a yet unpublished unguentarium found in a late Hellenistic tomb at nearby Tell Qasile (cf. Tal 2006, 228-229), and the form of the vessel suggests a mid-2nd to mid-1st century BCE type. The two withered handles that attached to its upper body rarely appear on clay unguentaria, and are mostly known from Group II's Mediterranean Coreformed glass bottles and unguentaria, which are dated to the 3rd century BCE (cf. Grose 1989, 165-167). For the juglet (Fig. 5: 3), cf. Bar-Nathan (2002, 52-55, Nos. 85-86); for the storage jars and amphoriskos,

cf. Guz-Zilberstein (1995, 308, 311–312).

The results from the excavation and their interpretation were published in Hebrew by the excavator fairly recently (Ritter-Kaplan 1996). This study, despite its importance, has thus far been ignored by scholars who deal with the subject of public buildings in Early Roman Palestine and especially synagogues.

The excavator mentioned in her diaries the discovery of Byzantine pottery sherds, as well as an undated pit grave (though still from post-Early Roman times) in the fills which covered the preserved remains of

'Building A'.

Stone pillars were the commonest type of hypocaust pillars in the bathhouses of Early Roman Palestine. See

Hoss (2005, 46).

The geometric pattern decorating the preserved section of the mosaic is typical of the mosaic art of the late Second Temple/Herodian period. The rosette motif depicted on the Tel Ḥashash mosaic is the commonest composition known from contemporary mosaics. See Talgam and Peleg (2008, 377-383).

Mosaics, especially black and white and multicoloured ones, are very rare in Early Roman rural settlements in Palestine. Examples are known from farmhouses and estates at Ramat HaNadiv (Horvat Agav and Horvat 'Eleq) (Hirschfeld 2000, 18, 218–221), Khirbet el-Muraq (Damati 2008, 1962) and Horvat Zikhrin (unpublished)

10 For the historical background on the later part of the Early Islamic period in that region, we have Abū L-Faths' account; see Levy-Rubin (2002, 69-70) on

Apollonia-Arsuf and its vicinity.

For the region's population in the Late Roman to Early Islamic periods, see Roll and Ayalon (1989, 231). The possibility that Tel Hashash was inhabited by Jews should not be ruled out. According to Roll and Ayalon, Iewish refugees may have also resettled the region after the Second Jewish Revolt.

12 For the crises of the early Abbasid period, see Levy-

Rubin (2002, 29-31), and Schur (2002). For the decline of wine production, see Ayalon (1997, 160, 164–166).

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