

Appendix A: Contents, contexts and chronology of silver hoards from the Southern Levant

Hoards are presented in the order presented in Table 1 in the main text

Nahariya (Table 1, nos. 1–3)

A rectangular building and its surroundings located 800 m north of Tel Nahariya were excavated in 1947 by the Mandatory Department of Antiquities, under the direction of I. Ben-Dor, and published in a preliminary report (Ben-Dor 1951). The building and area to the south were excavated by Israel Department of Antiquities, in 1954–1955 directed by M. Dothan. The excavation and finds were described in a few articles (Dothan 1956; 1957; 1981; 1993), lacking a clear attribution of the finds to their findspots. Dr. Sharon Zuckerman of the Institute of Archaeology of The Hebrew University, Jerusalem, was working on a renewed publication of the excavations of Nahariya, which would have shed light on the stratigraphy of the complex, yet unfortunately passed away and did not complete this.

Based on the available publications, the excavations revealed two separate buildings, one rectangular and the other square, containing several MB IA–B phases. The buildings were identified as a cult place, comprising of a rectangular temple and a *bamah* (a high place) built in the vicinity of a local spring (Ben-Dor 1951; Dothan 1956; 1993: 1090–1092). The *bamah*, located south of the rectangular building, was the earliest construction on the site, and includes three phases: a square building with an attached platform composed of pebbles and rubble (Phase A), an enlarged platform which covered the earlier building (Phase B) and a new structure built upon the platform (Phase C), which was eventually covered again by a pile of stones (Dothan 1993: 1091). While the northern temple itself did not contain many finds, The *bamah* and the surroundings of the northern temple (Locus B) both contained ashes, many cultic objects including miniature offering vessels, offering cups with seven bowls, metal (mostly silver) and clay figurines, fragments of cylindrical incense burners (Locus B only), and beads (Ben-Dor 1951; Dothan 1956; 1993). A stone figurine mold made of stone was found on the Phase B floor of the *bamah* (Dothan 1956: 21). It has been suggested that the so-called northern temple, which was founded later than the southern building (Dothan 1993) was not a cultic place, but rather a metal workshop. This is based on the lack of ex-votos, a podium or cult niche in the building; on the quantity of finished and scrap metal items in the *bamah*; the considerable ash on the site; and the presence of a casting mold (Marcus 1998: 133–135). Several tools were observed at the Israel Antiquities Authority (IAA), found together with the silver and copper scrap, strengthening this assumption (personal observation).

According to the published literature, three pottery vessels containing silver were unearthed by Dothan. One bichrome band-painted (Levantine Painted Ware) handleless jar, was found in the square building of Phase A, on a poorly preserved floor, embedded in the kurkar bedrock (Dothan 1981: 74–75, fig. 1). The mouth of the jar appears to be broken off and it contained silver and bronze scrap (Dothan 1981: 74–75, fig. 1). Two additional handleless and crudely made vessels contained metal figurines. One (cat. number 4650; unpublished) was assigned to Phase A, in the 'square temple', Locus

23 and contained four solid-cast silver and bronze figurines (Dothan 1957; Negbi 1976: 130; 177–178). The second vessel (cat. number 858) was ascribed to Phase B, unearthened near the ‘Alter’, and contained one solid-cast figurine and several silver sheet figurines (Dothan 1957; Negbi 1976: 130). Some of the sheet figurines are on exhibition in the Israel Museum, Jerusalem. The remaining finds are stored in the storerooms of the IAA in Beth Shemesh (

Figure A.1a-b).

The construction phases (A-B) of the *bamah*, and therefore all three silver assemblages, date to the mid-to-late MB I (mid-19th–18th centuries BCE; Dothan 1981:74–81; Cohen 2002: 88; Gerstenblith 1983: 38; Greenberg 2019; Marcus 1998: 134; Negbi 1976: 130).



Figure A.1: (a) a small selection of tools from Nahariyah, IAA (photo: T. Eshel). (b) silver scrap from Nahariyah, IAA (photo: T. Eshel).

Gezer (Table 1, nos. 4–10)

Seven silver hoards were unearthened at Gezer. Six hoards were excavated by Robert Alexander Stuart Macalister (published in Gezer I-III, Macalister 1912), and a seventh hoard was unearthened in 2016 by a joint excavation (headed by Dr. Tzvika Tzuk) of the Israel Nature and Parks Authority and New Orleans Baptist Theological Seminary at Tel Gezer (unpublished). As the Macalister hoards lack basic registration data, they will be generally named Gezer 1–6, and are described according to their mentioned order in Macalister’s excavation report. Hoard 7 is the recently excavated hoard.

Gezer 1 (Table 1, no. 4)

This hoard was found in Trench 3 and attributed by Macalister to a house of the Fourth Semitic period. The hoard is not illustrated and is described only as “Similar to the fragments in Pl. cxxxvi” (Macalister 1912: 99). The hoard contained six silver bracelets corroded together. Fragments of another bracelet are described as found in the same location, together with an assortment of objects, including a twisted and headless silver toggle pin, ten bone inlays, a jug with a pointed base, a plain scarab and stone vessels (Macalister 1912: 99). These objects suggest the accompanying hoard can be dated to the MB II.¹ A “cylindrical Jug, resembling fig. 322”, found along with the hoard is in fact a juglet, typical of the MB IIC–LB I (Bonfil 2019: 87–88, pl. 1.3.29:4; Maeir 2007: 278; Mullins and

¹ Twisted and headless silver toggle pins are known from MB II B–LB contexts of Tell el-‘Ajjul (Henschel-Simon 1938: type IL7; Maxwell-Hyslop 1971: 113, pl. 74), and two such pins were found in Tell el-‘Ajjul with a scarab of Shesi (15th dynasty ‘Hyksos’ ruler, ~1674, Petrie 1934, pl. XXXIII, 478a; Maxwell-Hyslop 1971: 113). Bone inlays with geometric incisions are typical of the MB II (Liebowitz 1977: 90).

Yannai 2019: 165, pl. 3.39:1–2). As Gezer was sparsely populated in the LB I (Dever 1992; Ortiz and Wolff 2018; Wolff, personal communication), the hoard is dated to the MB IIC.

Gezer 2 (Table 1, no. 5)

Gezer 2 is a surface find from Trench 17. Fragments of 18 silver bracelets (Macalister 1912: 99, Fig. 285), accompanied by various objects, mainly stone vessels and a ‘twist-pattern’ silver toggle pin, generally date this hoard to the MB–LB.

Gezer 3 (Table 1, no. 6)

Gezer 3 included four silver bracelets corroded together with a silver fragment. It was found in Trench 4, attributed by Macalister to the Second Semitic Period. One bracelet was made of fine looped wire, and the three others were thick bars ornamented with lines cut at the edges (Macalister 1912: 99–100, fig. 286). The fragment was identified as a buckle, which has a bronze parallel in plate CXXXIV, fig. 42, from Trench 20, dating to the Third Semitic Period. The thick rod-bracelets have parallels in Tell el-‘Ajjul hoards 1312, 1299 dating to the MB/LB transition (see below). As the hoard lacks additional data it is generally dated to the MB–LB.

Gezer 4 (Table 1, no. 7)

Gezer 4 is a silver hoard, found in Locus 10 on Plan IV, inside a pointed base jug, combed on the lower part of the base. The jug contained three scarabs, two of them set in a silver ring, two twisted and headless toggle pins, 25 silver beads corroded into a solid mass, four small rings, two silver crescent pendants, one with stringing holes, and the other with a plain, tubular attachment, six bangles, a few silver sheets and additional silver scrap (Macalister 1912: 102–103). Combed ceramics, toggle pins and crescent pendants are all common in the MB II.² One scarab is a local MB II scarab (Keel 2013: 174–175, Geser no. 20; Macalister 1912: Fig. 288, 2; for parallels see Ben-Tor 2007: pl. 62:3–8; pl. 93:15–30), and the other Egyptian (Keel 2013: 175–176, Geser no. 22; Macalister 1912: Fig. 288, 17), carrying the birth name of a Hyksos king of the 15th Dynasty (Sheshi; ~1630–1570 BCE). The third scarab (Keel 2013: 175–176, Geser nos. 21; Macalister 1912 Fig. 288 :3) is an earlier local form, and may be an heirloom (Ben-Tor personal communication). Based on the dating of the scarabs, the hoard has been attributed to the period of the 15th dynasty in Egypt, which is paralleled in the Southern Levant to a later phase within the MB IIB. According to recent ¹⁴C studies, which suggest that the transition to the MB IIC occurred in the days of the 15th dynasty in Egypt (several papers in Höflmayer 2017; 2019; Warburton 2009), the hoard is attributed in this study to the MB IIC.

Gezer 5 (Table 1, no. 8)

² Combed ceramics are known in the MB II (Pruss 2007: 484). A pointed-combed base dipper juglet is known from Lachish (Area P-5, Lachish level VIII; Singer-Avitz 2004: 921, fig. 16.11: 10). Twisted and headless toggle pins were common in the MB IIB–LB (Henschel-Simon 1938, Type II.7; Maxwell-Hyslop 1971: 113, pl. 74). Crescent pendants with a tubular stringing attachment are common throughout the MB II–LB (Golani, 2013: 157–159; Maxwell-Hyslop 1971: 79–80; McGovern 1985: 68–70, type VI.B.1). An exact parallel is found in LB Tell el-Ajjul (Hoard 1312, Petrie 1934: pls. 19:154, 20:154). An MB II silver crescent pendant with stringing holes was found in Megiddo (Loud and Crowfoot 1948: pl. 207: 12).

Gezer 5 is a collection of silver objects, including “a pin of uncommon shape, a crescent pendant, and a dress-fastening of some kind, all rusted together” (Macalister 1912: 263, Pl. CXXXVI:8). The crescent pendant, with an attached hollow tube is typical of the Middle and Late Bronze Ages (Golani 2013: 159, fig. 22:16–23, type 1.4b; McGovern 1985: 68–70; type VI.B.1). An exact parallel was unearthed at Tell el-‘Ajjul, dating to the Late Bronze Age (Ilan 2014: fig 4.1; Negbi 1970: 44, 155–156; Petrie 1934: Pls. XIX, XX, 128–129, section 20; see more below). Therefore, this hoard can be generally dated as MB–LB.

Gezer 6 (Table 1, no. 9)

Gezer 6 is a hoard of silver sheets and wires found in a ceramic vessel (Macalister 1912: 263, fig. 408). The vessel is not described or illustrated, and the findspot of the hoard is not mentioned in the text, therefore the hoard could not be dated.

Gezer 7 (Table 1, no. 10)

Gezer 7 was unearthed in 2016 and is currently stored in the storerooms of the Israel Antiquities Authority and will be published in the near future (Warner et al. forthcoming). The hoard was found under the foundations of a room near the city gate, dated to the MB III. The room, along with the city gate and surrounding buildings, was destroyed and burnt down at the end final stages of the MB II, often denoted MB III (Warner et al. forthcoming). The hoard, which weighed 34.1 g, was found inside a covered ceramic vessel, wrapped in a cloth bundle (Eshel et al. 2018). The bundle contained a disk and pendant (see below), a Canaanite Hyksos scarab held in a gold ring (for parallels see Ben-Tor 2007: pl. 61:21–22, pl. 92: 11, 12–15) and additional unidentified silver scrap, which remain unseparated due to the poor preservation of the silver.

The round silver disk bears an eight-point star, a popular form in the Southern Levant and all-over Western Asia in the 2nd millennium BCE, though usually made of gold (Maxwell-Hyslop 1971: 140–143; McGovern 1985: 76–77, Type VI.G.2). The form probably originated in Mesopotamia in the 3rd millennium BCE and is related, in the 2nd millennium, to the goddess Ishtar of the Hurrian pantheon (Maxwell-Hyslop 1971: 140–143). The disk was adhered to a silver crescent pendant with an attached hollow tube, typical of the Middle and Late Bronze Ages (Golani 2013: 159, fig. 22: 16-23, type 1.4b; McGovern 1985: 68–70; type VI.B.1). The star disk pendants are considered different than ray-disk pendants, named Cappadocian stars, which are of Anatolian origin (Maxwell-Hyslop 1971: 140–143), and appear, e.g., on the Uluburun shipwreck (Yalçın, Pulak and Slotta 2005: 596; ca. no. 105–108; see footnote 4 below).

The representation of an eight-point star alongside a crescent can be found on stele throughout the Near East in the 2nd and early 1st millennia BCE, representing the sun god Shamash and moon god Sin (Maxwell-Hyslop 1971: 139–140; Muscarella 1974: cat. no. 129). An exceptional combination of the crescent of Sin with the five-pointed star of Ishtar, in which the star is placed inside the crescent, is engraved on a boundary stone of Nebuchadnezzar I in Nippur (12th century BCE; Hinke 1907: 120f, object nr. 29-20-1). The combination of a crescent-shaped pendant with a plain disk made of faience is

known in the LBA (Hamilton 1935: 47, 62, pl. 18: 1–2; McGovern 1985: 70), however the combination with a star disk does not have parallels in the jewelry of the Southern Levant. The star disk pendants are considered different than ray-disk pendants, named Cappadocian stars, which are of Anatolian origin (Maxwell-Hyslop 1971: 140–143; see more below), however star disk pendants are known in Anatolia as well (Muscarella 1974: cat. no. 129, and refs. within).

Gold crescent pendants alongside star-disk pendants are found in LB I hoards from Tell el-‘Ajjul (see below), the LB I Fosse Temple of Lachish (Tufnell, Inge and Harding 1940: pl. XXVI) and a Late Bronze Age hoard from Ugarit (Maxwell-Hyslop 1971: 141, pl. 109d, 110c; Schaeffer-Forrer 1932: pl. XVI, 2).

Based on all the above, the crescent and star disk pendant are Assyrian/Anatolian motives, known in the Levant from the MB III (in silver) and the Late Bronze Age (in gold).

Shiloh (Table 1, no. 11)

Silver items wrapped in several textile bundles (the original number of bundles and total weight has not been recorded) and four bronze weapons were found in one concentration on the floor in the northwest corner of Room 1527, in Area F, L. 1713, Stratum VII. This occupation is dated to the Middle Bronze Age IIC at Shiloh (also denoted MB III; Finkelstein and Brandl 1985).³ Area F contained a series of storage rooms, rich in finds, within the northern city wall and adjacent to it, blocked from the interior by stone and earth fills (Brandl 1993: 243–245; Bunimovitz and Finkelstein 1993: 91–92, 96; Finkelstein and Brandl 1985: 17–20; Finkelstein, Bunimovitz and Lederman 1993: 61–62). Additional finds in Room 1527, and in the surrounding rooms include many storage jars, three toggle pins, two ‘Hyksos’ scarabs, a sealing with a scarab impression and a zoomorphic vessel (Brandl 1993: 206–208; Finkelstein and Ledermann 1993: 62).

The bronze weapons in the assemblage include a shaft-hole axe, two flat axes, and a spear or lance butt with parallels in Anatolia and Syria (Brandl 1993: 238–242, figs. 9.10: 1–4, 9.11: 1–4; Finkelstein and Brandl 1985: 21–23).⁴ The hoarded silver consists of four bundles (or partial bundles) which were left unseparated. The cleaned silver artifacts include folded sheets, cut ingots, square and spiral rods and broken jewelry items including crescent and disk pendants. Of the silver assemblage, three items were published: a crescent pendant, a disk pendant and a pin (Brandl 1993: 243–245, fig. 9: 12; Finkelstein and Brandl 1985: 23–24). The disk pendant has four straight and four wavy thin horns, a disk in the center, and small circles between each wavy and straight horn, known as the Cappadocian star (Wainwright 1956) or ‘sun-disk with rays’ (Maxwell-Hyslop 1971: 144–149). This is the only

³ The excavations of Shiloh were conducted in 1981–1984 by the department for the land of Israel studies at the Bar-Ilan university and directed by I. Finkelstein. Shiloh was first settled in the MB II, and during the MB III a large fortification system was built around the settlement, including a solid wall and earth glacis.

⁴ The shaft hole axe has exact parallels in northeastern Syria/upper Mesopotamia —at Chagar Bazar, dated to the MB II (~1750 BCE) and at Nimrud (~1500 BCE) (Brandl 1993: 238–241; Curtis 1983: 73–74; Finkelstein and Brandl 1985: 21–23; Miron 1992: 89–90). The flat axes are common in the Southern Levant (Miron 1992: 17; pl. 7:112–113), although they are relatively large, with parallels of the same dimensions in LB II Ugarit (refs. in Brandl 1993: 241). The spear butt has contemporary parallels at Tell el-‘Ajjul (Brandl 1993: 238–242; Finkelstein and Brandl 1985: 21–23).

example known of this symbol on a silver pendant. The disk-pendant was folded, its tubular loop was detached (Brandl 1993: 243–244, fig. 9: 12.1,2), and the pin was bent (Brandl 1993:245), indicating that the items were re-used for their silver value. Finkelstein and Brandl (1985) suggest an Anatolian origin for the jewellery within the hoard.

Silver items which were re-examined in this study include:

1. The Cappadocian star (or star-disk pendant, see above). This is a Hittite royal symbol, widespread on ceramics and seals in Anatolia during the 19th–18th centuries BCE (refs. in Brandl 1993: 243; see also from Kültepe-Kaniš: Özgüç 1999: Pl. 67: 1b, Pl. 104: 3b, Fig. E. 1-11: 11; 2006: 317, Kt. n/k 2052, Pl. 85, CS 832; Özgüç and Tunca 2001: 189, Kt. 73/k 26, pl. 19, St 49). It is also known in Syria and Mesopotamia in the Middle and Late Bronze Ages.⁵ In Egypt the sun-disc motif is found on a mold at Tell el Amarna, used for producing faience (Petrie 1894: Pl. 18, nos. 439–440). The use of the Cappadocian star or royal sign motif on metals, and even more specifically on silver/gold pendants is unknown in Anatolia (Barnett and Davis 1957: 230, note 1; Maxwell Hyslop 1971: 145), suggesting that this was a Syrian/Babylonian development, which post-dates the Anatolian use of this motif.⁶ As Brandl (1993: 243) concludes: “After the period of the Hittite Empire this motif disappeared in Anatolia but continued to appear in Canaan and Syria”.
2. The crescent pendant. This type of pendant has many parallels throughout the Middle and Late Bronze Ages in the Levant (Golani 2013: 159, fig. 22:22, type 1.4b; Maxwell-Hyslop 1971: 149–151; McGovern, 1985: 68-70; type VI.B.1; Pl. 19:1). However, the combination with a ray-disk pendant (Cappadocian star) is rare. Parallels are known in gold from the Dilbat hoard from ~17th century Babylonia (Lilyquist 1994) and the Uluburun ship, 14th century BCE (Bass 1986: 290; Cluzan 2008: 350–352).
3. The unperforated pin. This pin has a flat head, which is round and thickened below. Two electrum pins from the 18th century BCE Palace of Mari, serve as accurate parallels (Parrot 1958: 94–95, fig. 69; Margueron 2004: 538, pl. 72). Brandl mentions parallels in Byblos and Greece, and even more so in Anatolia (Brandl 1993: 245). However, the Anatolian examples differ typologically from the Shiloh pin (and in some cases also chronologically), as they are thickened above the pin rather than below (e.g., Garstang 1953: Figs. 158: 6–7, Pl. 31b; Kâmil 1982: Figs. 88: 332–333; Von der-Osten, Schmidt and Newell 1937: 253, figs. 279–281).

⁵ E.g., parallels are found on a bronze standard (Schaeffer 1931: 2., Pl. 13:4) and an ivory from Ugarit (Schaeffer 1954: pl. VIII), an ivory disk from Alalakh (~16th century BCE; Barnett and Davis, 1957: 230, Fig. 91; Woolley 1955: 290; pl. LXXVII: AT/8/79) and as part of a seal impression from Tel Brak (Oates, Oates and McDonald 1997: 160–161, Fig. 180: 25).

⁶ The earliest gold pendants of this design are known from the Dilbat hoard in Babylonia, ~17th century BCE (Lilyquist 1994). A silver pendant is known from Tell Munbaqa, in Mitanni, Syria in the 15th–14th centuries BCE (Helft 2010: 246). Additional parallels are known from the Late Bronze Age at Shechem (Maxwell-Hyslop 1971: 144, pl. 115; Sellin 1926: 30), the Uluburun shipwreck (Yalçın, et al. 2005: 596; ca. no. 105–108; see below), an Early Iron Age gold pendant and a stone mold found out of context, both from Megiddo (Guy and Engberg 1938: 162–163, fig. 169, pl. 166: 8; Lamon and Shipton 1939: Pl. 105:6). Four pendants were found on the Uluburun ship, two of which are close parallels to the pendant from Shiloh (Bass et al. 1989: 4–5, fig. 4; Yalçın et al. 2005: 596; ca. no. 106, 107). The Uluburun pendants are often described as Canaanite (Pulak 2001: 24; Yalçın et al. 2005: 21), possibly because the use of this symbol on jewelry is more commonly found in Levantine sites, as we demonstrated.

To conclude, I agree with Brandl (1993) that the hoard has a northern origin, the style of the jewellery pointing to Syria or Anatolia. Ten items were sampled from this hoard, which is on exhibition in the Israel Museum.

Megiddo 5034 (Table 1, no. 12)

A bundle of silver fragments was unearthed in the excavations of the University of Chicago (1935–1939) and published by Loud and Crowfoot (1948: pl. 228). The hoard is stored in the Rockefeller Museum, under the supervision of the Israel Antiquities Authority. The bundle, weighing 135 g, was placed inside a small juglet/tankard, in Locus 5034, Area BB, Square N12, Stratum XIIIa, and was dated accordingly to the MB IIA. It contains 44 silver items, including 22 ingots and cut ingots of different weights (~12–0.5 g). Four cut ingots are bent in the form of a ring, and two others are flattened as tokens. The hoard also contains 16 small cut sheets, 2 rods, 3 wires and 1 small token (Figure A.2).



Figure A.2: Contents of the Megiddo 5034 hoard (Photo: T. Eshel).

Locus 5034 belongs to a room in the center of a two-wing complex building (Kempinski 1989: 122–123, figs. 40, 6, plan 2; Loud and Crowfoot 1948: 84, 87; pl. 228; fig. 397). The floor of the room was covered with a “pavement” and an oven was unearthed in the southern part of the room (Kempinski 1989: 123). The jug has a sack-shaped body, and everted upright rim, both common attributes in MB II jugs (Ilan, Hallote and Cline 2000: 199; Ilan and Marcus 2019: pl. 1.2.22: 6–7; 1.2.24: 7), however this specific form and combination of ceramic attributes is unknown in the Middle Bronze Age in the Southern Levant (E. Marcus, personal communication). It is the only ceramic find registered from this room.

Directly above room 5034 (Stratum XIII) lay room 5001a (Stratum XII) of a large building, excavated in the early 20th century by Gottlieb Schumacher (1908: Taf. II, XII, XVI). The building is known as the Nordburg, and 45 cm separate its two strata.⁷ The Nordburg, which was previously assigned to

⁷ Kempinski (1989: 156, fig. 42: 3) believed 5001a was an open court, while Nigro (1994) suggested it was an inner room, compared it to the innermost audience halls of Syro-Palestinian palaces, and denoted it “the most important room of the palace” (Nigro 1994: 23–24).

Stratum XII and dated to the MB II A-B,⁸ was partly re-excavated (Areas M, and J). The southern part in area M was re-dated by the Tel Aviv University expedition to the LB II-III, Chicago's Strata VIII–VII (Finkelstein 2103a: 232; 2013b: 1333–1334; Finkelstein, Ussishkin and Deutsch 2006: 76; Franklin 2013: 187, 209; cf. Adams and Bos 2013). The building came to an end in Stratum VIIA, LB III, ~1130 BCE (Finkelstein 2103a: 232–234; 2009: 114–115; Finkelstein, Ussishkin and Deutsch 2006; Franklin 2013: 189), possibly in a violent destruction (Finkelstein, 2013a: 234, *contra*. Franklin 2013: 189). Dating the Nordburg to the LB II-III implies that some of the Nordburg's walls were inserted directly into Middle Bronze Age II remains (Finkelstein 2013a: 232). The walls around room 5001a were poorly preserved, though the floor was lime-plastered, and there were no indicative finds in the room (Loud and Crowfoot 1948: 92; fig. 208; Nigro 1994). The hoard was found just to the right of the plastered floor, in what might be a disturbance in the structure, suggesting that the hoard might be associated with a later phase of the Nordburg, perhaps some time in the LB III, or even in the Iron Age I, yet due to the confusion in Schummacher's description it is not possible to separate the different sub-strata (N. Franklin, personal communication).

Hoards are often cached below floors, a detail which was sometimes overlooked in old excavations, possibly since the use of silver as a means of exchange was not well established (Eshel 2014; Eshel et al. 2018). The hoard was possibly cached below the 5001a room of the Nordburg, yet the stratigraphy and ceramics are not indicative enough for a definitive conclusion. I therefore generally date the hoard to the MB–LB.

Tell el-'Ajjul (Table 1, nos. 13–17)

Tell el-'Ajjul was one of the most important and richest archaeological sites in the Near East during the Middle and early Late Bronze Age. It lies in a crucial position between Egypt and the Levant and has a convenient ancient anchorage (Fischer and Sadeq 2000). During the Second Intermediate Period, Tell el-'Ajjul had a special role in Egyptian-Canaanite relations, as evident by the large number of Egyptian royal-name scarabs found at the site, alongside local, Canaanite architecture and ceramics (Ben-Tor 2009: 4). This led some to identify it as the 16th century Hyksos city of Sharuhēn, which was eventually conquered by Pharaoh Ahmose, after a three-year siege (Ben Tor 2009: 4, n. 57; Bietak 1994: 58; Fischer et al. 2002; Fischer and Sadeq 2000; Kempinski 1974).

Tell el-'Ajjul was excavated in 1930–1934 by Sir William Matthew Flinders Petrie, who identified the site with ancient Gaza. Petrie published his finds in five volumes (Petrie 1932; 1933; 1934; Petrie et al. 1931; 1952). Petrie's stratigraphical division of Tell el-'Ajjul's Cities I–III and Palaces/Fortresses I–V were problematic, and previous attempts to clarify the stratigraphy of Tell el-'Ajjul have not been successful. In 1999 and 2000 the excavations were renewed by Peter M. Fischer and

⁸ Watzinger (1929: 24) dated the earliest parts of the Mittelburg and the Nordburg to ca. 1600 BCE. The building was reexcavated by the Chicago Expedition (Loud and Crowfoot 1948: fig. 415) and redrawn by Kempinski, who integrated Schumacher and Chicago's excavations (Kempinski 1989: 156, fig. 42: 3, plan 3). The building was assigned by Loud to Stratum XII and interpreted as a palace with two phases, dated to the MB II A–B (Loud and Crowfoot 1948: 84–92, figs. 398, 399, 415). This was accepted by Kempinski (Kempinski 1989: 46, 47, 142; 156; Fig. 42:3; plan 3), Ussishkin (1992: 70) and Nigro (1994).

Moain Sadeq, and their preliminary results contribute to the understanding of the site and the stratigraphical associations of the hoards (Fischer and Sadeq 2000; Fischer et al. 2002). Comparing the excavations of Petrie and Fischer, a tentative correlation between the new and the old excavations was suggested (Fischer 2021; see more below).

Five silver-containing hoards were unearthed at Tell el-‘Ajjul, all excavated by Petrie.

Tell el-‘Ajjul 1504 (Table 1, no. 13)

A burnt deposit was unearthed in a pit on the plain west of the city (Petrie 1932: 6–7, L. 1504; pl. III: A-H; “Achan” deposit). As far as we could tell, this pit is not marked on any plan, yet it may have been located in the vicinity of Tombs 1501-3, marked on the northwest part of the “XVIII Dynasty cemetery” (pl. LII). The deposit contained gold, silver and copper scrap, including fragments of sheet gold, gold plated studs and nails, a broken earring, a broken scarab hoop, a few silver beads, a silver ring and silver and gold lumps (the lumps are visible on an online database at the Institute of Archaeology of UCL (<http://archcat.museums.ucl.ac.uk/>)). In addition to the scrap, the pit contained two basalt tripod standing bowls and an Egyptian slate dish, all broken in situ (Sparks 2017: cat. 19, cat. 1642–3), a fragment of Chocolate-on-White Ware II vessel, many horse teeth, burnt bones and black ash (Petrie 1932: 6–7). The content of the pit was dated to the MB III–LB IA (Sparks 2017: 205–207). The Chocolate-on-White Ware II pottery was dated by Fischer (1999; 2003) to the LB IA.

Tell el-‘Ajjul 1299 (Table 1, no. 14)

Hoard ‘Ajjul 1299 (Petrie 1934: 5–7, pl. XII–XIV) contained gold, electrum and silver jewellery. The hoard was found outside area EAA (Petrie 1934: plan LXII), however the findspot is not described, therefore the hoard cannot be dated based on its context (Stewart 1974: 30). Petrie mentions that the hoard was found in a broken “pot”, and his end-of-season object list (in the archives of the Israel Antiquities Authority) indicates that it was a goblet of Type 31V4 (R. Sparks, personal communication). The same type of goblet was found in Tomb 268 (Petrie et al. 1931: pl. XLII). This form has parallels in Gezer Stratum XVIII A (Seger 2014: pl 39:2) and is dated to the MB III (Bonfil 2019: 81, pl. 1.3.9: 1–2). A black limestone vase which does not appear in the published tomb register, yet is described as accompanying this hoard, has parallels in LB I and LB II contexts (Sparks 2017: cat. 41; personal communication), therefore the hoard is dated to the MB III/LB IA transition.

The gold assemblage includes sheet figurines, six toggle pins and many jewellery items which can be only generally dated to the Late Bronze Age, some of which have close parallels in hoards ‘Ajjul 1312 and ‘Ajjul 277 (see below).⁹ The silver finds included armlets, silver rings, three crescents, two of

⁹ The sheet-figurines have parallels in the Levant throughout the Late Bronze Age (Benzel 2013; Maxwell-Hyslop 1971: 138–140; McGovern 1985: 30–33; Negbi 1976: 95–103; Seger 1976), in Tell el-‘Ajjul hoards 277 and 1312 and on the LB IIB Uluburun shipwreck (Bass et al. 1989: 5, fig. 6; Yalçın et al. 2005: 595; ca. no. 104). Six geometric-form pendants (McGovern 1985: 67, type VI.A; Petrie 1934: pl. XIV: 26–31) are unique for Tell el- ‘Ajjul and have parallels in hoards 277 and 1312. Four horn-shaped crescent pendants have parallels in hoard 1312 (McGovern 1985: 67, type VI.A; Petrie 1934: pl. XIV: 11–12, pl. XII, pl. XII:4), and on the Uluburun shipwreck (Bass et al. 1989: 4–5, fig. 4; Yalçın et al. 2005: 597; ca. no. 111). Three star-disk pendants (McGovern 1985: 75–76, type VI.G2b; Petrie 1934: pl. XIV: 13–15) have parallels in hoard 277. The twisted earrings have parallels in gold in Tell el- ‘Ajjul hoard 277 and in silver in the LB II B, from the Abel Beth Maacah and Amarna hoards (Yahalom Mack et al. 2019). The toggle pins are ribbed, one without a head (Type II.6a in

them with loops, and additional scrap silver (Petrie 1934: plate XII). The armlets are not decorated, one of them is exceptionally large, and some of them are fused together in a lump (**Figure A.3**). Therefore, they might have been rod ingots rather than jewellery.

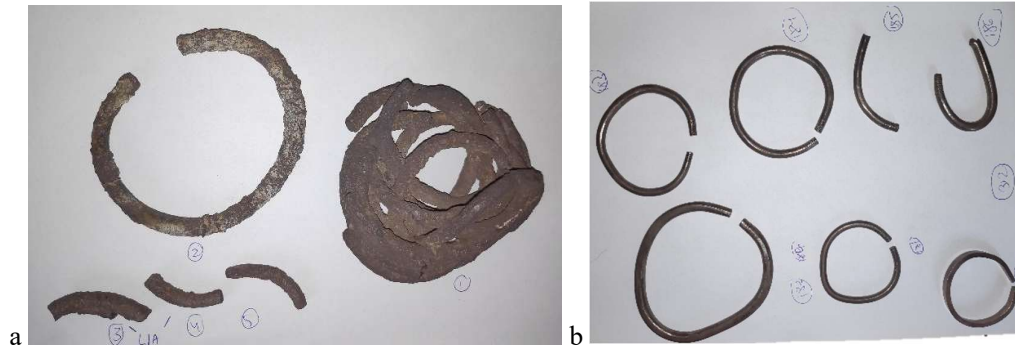


Figure A.3: (a) surface-corroded and (b) clean silver rods from Hoard Tell el-'Ajjul 1299 (photographs: T. Eshel).

The various objects from this hoard are split between the Rockefeller Museum in Jerusalem, the Nicholson Museum in Sydney University and the British Museum (Maxwell-Hyslop 1971: 112; Sparks, personal communication). As mentioned above, the hoard is dated to the MB III/LB IA transition.

Tell el-'Ajjul 1312 (Table 1, no. 15)

Hoard 'Ajjul 1312 (Petrie 1934: 8; pl. XIX–XX) was found folded in lumps above a broken wall in room TV (Petrie 1934: plan LXII), and contains gold and silver jewellery, and cut silver rods and sheets (**Figure A.4**). The hoard is shown in the plan as having been found overlaying an 'Ajjul "City II" wall (Petrie 1934: plan LXII), however Stewart (1974: 30) mentions that the hoard was found in a ceramic vessel (not recorded in the excavation report) of unknown precise context.

Some of the forms of the goldwork in this hoard have parallels in the 1299 and 277 hoards.¹⁰ Two gold sheet figurines and a pendant (Petrie 1934: pl. XX, 144) were found bent, that is, not used as artefacts, but collected for their metal value. The hoard also contained a large assortment of silver rods, wires, sheets and tokens and broken jewelry, including a large crescent pendant, twisted wires, and a silver bracelet fragment (**Figure A.4**). The silver rods are decorated at their edges (**Figure A.4**, Nos. 2–6). Significantly, two silver bracelet fragments (**Figure A.4**, No. 68, 175) and pin head (**Figure A.4**, No. 174) have parallels in Hittite Anatolia (~1400–1200 BCE; Muscarella 1974: cat. no. 126, 127 with refs. within).

Henschel-Simon 1938), and three others with an attached bead (Type II.9c in Henschel-Simon 1938). Three earrings were found in the hoard, one of them with a Drop- or oval-shaped attachment decorated with incised and hatched lines (Type II.1b in Golani 2013: 105–106).¹⁰ One sheet figurine (Petrie 1934: pl. XX, 134) has parallels in hoard 1299, and two geometric pendants have parallels in hoards 1299 and 277 (see above and below). One pendant in the form of a lotus palmette, has parallels in the LB II (McGovern 1985: 47, type IV.F.4; Petrie 1934: pl. XX, 141). Another pendant, in the form of two leaves, has a parallel in hoard 277, and is common in the LB IIB (McGovern 1985: 50–52, type IV.H.3b; Petrie 1934: pl. XX, 144). Four horn-shaped crescent pendants have parallels in hoard 1299 (Petrie 1934: pl. XX, 128, 154, see above).



Figure A.4: Silver scrap and rods from hoard Tel el-'Ajjul 1312 (photo: T. Eshel).

Tell el-'Ajjul 1938 (Table 1, no. 16)

Hoard 'Ajjul 1938 (Petrie et al. 1952: 12) contained five silver items described as “hand-lumps”. The hoard lacks context and date and is therefore generally dated here to the MB–LB.

Tell el-'Ajjul 277 (Table 1, no. 17)

A hoard of silver and gold artifacts was unearthed near room GDS of “Town II” (Petrie et al. 1952: plan III Square 1/3 B; 28, pl. VI–VII). The hoard was cached under a floor, probably in a bundle, yet the structure above the hoard did not remain (Petrie et al. 1952: 8–11, 28), and therefore this hoard, too, could not be dated based on its context (Negbi 1970: 12). The hoard contained pendants, (glass) beads, gold sheet figurine pendants, twisted earrings, and more. Three pendants are in the image of falcons, and do not have parallels (McGovern 1985: 36–37, type III.A), while other gold jewelry items have parallels in the 1299 and 1312 hoards.¹¹

Dating the Tell el-'Ajjul hoards

¹¹ A pendant of two attached leaves has a parallel in hoard 1312, the gold sheet figurine has parallels in the 'Ajjul 1299 hoard, two geometric pendants have parallels in hoards 1299 and 1312 and three star-disk pendants have parallels in hoard 277 (see refs. above).

The dating of the Tell el-'Ajjul hoards is based on the typology of associated ceramics and jewelry, stratigraphy and radiocarbon dating.

As for ceramics, the goblet of hoard 'Ajjul 1299 suggests a date within the MB III–LB I for these hoards, while the typology of the jewelry is inconclusive and spans the entire Late Bronze Age. Based on typology of the gold jewelry within the hoards, Negbi (1970: 12-21) and McGovern (1985: 35, footnote 19) suggested to date the hoards to the LB IA, while Stewart (1974) and Tufnell (1975: 57–59) suggested the MB III.¹²

Three hoards (1299, 1312 and 277) contain sheet figurines, pendants and other jewelry items which are similar to each other, some of which are unique for Tell el -'Ajjul, yet could not be securely attributed to a specific stratum. In previous publications, the jewelry found in hoards 1312, 1299 and 277 was indeed accepted as indicating that the hoards were contemporaneous. However, while Petrie et al. (1952, section 22) and Negbi (1970: 11–13) assigned the hoards to Town II, Tufnell (1975) attributed them to the destruction of Town III, prior to the rebuilding of Town II.

Based on the renewed excavations of the site, it was suggested in two preliminary reports that the transition between the late MB and the early LB at Tell el-'Ajjul was gradual and a long MB III/LB I transitional phase was defined on the Tell (Horizon 5; Fischer et al. 2002; Fischer 2009: 249; Fischer and Sadeq 2000). According to the Fischer (2021: Table 3), Petrie's Town II is equivalent to Fischer's Horizons 2–4, the LB I in the Levant, while Petrie's earlier phase of Town III is equivalent to Fischer's Horizon 5, namely the MB/LB transition in the Levant. Importantly according to both options, the hoards postdate the MB III in the Levant.

Regarding absolute chronology, the four radiocarbon dates from Horizon 5A at Tell el-'Ajjul (which came after Horizon 5B) fall in the second half of the 16th century BCE (Fischer 2009: Figure 4). Horizon 5 yielded the first Cypriot forms on the tell, namely Base Ring I and White Slip I wares, which first appear in the rest of the Southern Levant during the LB IA (Artzy 2019; Bánai 2020). It is also the first and main horizon with pumice from the Thera eruption, which has been recently dated to the 16th century BCE (Pearson et al. 2018; 2020). In addition, recent radiocarbon studies suggest that the transition to the Late Bronze Age I in the Levant was or started earlier than previously assumed, ~1600 BCE (Höflmayer 2017), and that Tell el-'Ajjul was destroyed only ~25–50 later, after the expulsion of the Hyksos (~1550 BCE; Höflmayer 2019; Eshel et al. 2023), which is the reason for the unique transitional phase at this site (Horizon 5).

¹² However, the pendants of Tell el-'Ajjul have several parallels to objects found on the Uluburun shipwreck (LB IIB; Yalçin et al. 2005: 595–597). This may suggest that the timespan required for dating the jewelry is longer than earlier studies have presumed, and, moreover, that the Tell el -'Ajjul hoards should not be, necessarily, dated together. Nonetheless, given the problematic nature of Petrie's Tell el-'Ajjul publications, and the latest chronology suggested for Tel el-'Ajjul Area H, which does not have any finds postdating the LB I (Fischer 2021; personal communication), we currently accept that the hoards should be dated to the same time span.

Based on all the above, the Tell el-‘Ajjul hoards postdate the MB III in the Levant. They should be dated to an MB/LB transitional period in the Levant, the 16th century BCE, if attributed to Petrie’s Town III, or to the LB IA, the 15th century BCE, if attributed to Petrie’s Town II.

Tel Abel Beth-Maacah (Table 1, no. 18)

A fused clump of silver items was found inside a local imitation of a small Cypriot Base-Ring jug, leaning against one of the stones of the fortification wall of the settlement, on a floor of a room in Area F (Locus 1355). Area F, currently the only area on the Tell with Late Bronze Age strata, consists of three Late Bronze Age strata, and the hoard was unearthed in the latest of the three, Stratum F3, dated to the Late Bronze Age IIB (Panitz-Cohen, Mullins and Bonfil 2015). The hoard contained 12 items, weighing 59 g, including five complete earrings, all with an open round-section hoop that closes on top, and an identical conical pendant hanging at the bottom. Three earrings are well preserved, while the other two are bent and folded over at the edges. The remaining items are a crescent pendant without an attachment, one cut jewelry fragment, one ingot, a cut ingot fragment, a fragment of a rod, a fragment of a folded sheet and a twisted earring (Figure 2 in main text). The typology of the jewelry reinforces the idea that the hoard is contemporary to the stratum in which it was unearthed (Yahalom-Mack et al. 2019). The twisted earring has gold parallels at LBA Tell el-‘Ajjul and Enkomi, Cyprus (Maxwell-Hyslop 1971: 130–131, pl. 96–98). Seven items were sampled and analyzed for chemical and isotopic analysis (Yahalom-Mack et al. 2019).

Beth Shean 88866 (Table 1, no. 19)

Beth Shean was one of the major Egyptian administrative centers in Canaan. Three bundles were found in Building SD, Locus 88866, Stratum S-4, on top of a basalt-slab floor coated with white lime. Stratum S-4 of the Hebrew University (HU) excavations is securely dated to the first half of the 12th century (Level Lower VI of the University Museum Expedition, University of Pennsylvania [UME]); Panitz-Cohen and Mazar 2009: 13, 129; Thompson 2009). In terms of the relative chronology employed in this dissertation, this hoard dates to the LB III. The bundles were left on the floor and buried under the collapse of the abandoned building (Panitz-Cohen and Mazar 2009: 123–124).¹³

The three bundles weighed 56.2, 34.8, and 66.3 g each, and contained broken jewelry, rods, sheets and cut ingots, a slightly flaring mushroom-head net-pattern toggle pin, and a signet ring inscribed with imitations of hieroglyphic script (Figure 2 in main text; Golani, 2009; Thompson, 2009). Mushroom-head pins are common in Anatolia (Egeli 1995), and appear in the Southern Levant during several periods (Henschel-Simon 1938; Ilan 1992). The ring has parallels from late 13th century contexts at Tel Nami, Tell el-Farah South and Megiddo that bear Hittite names and originate from either Syria or Anatolia (Singer 1993; 2007). The ring from Beth Shean, however, is illegible (Thompson 2009: 607), and according to Golani (2009: 631, note 8) might be a local/Phoenician imitation.

¹³ Thompson (2009) claimed this room was a silversmith workshop, yet presented no evidence for this assertion.

One of the hacked ingots was identified as having a silver-enriched surface and a copper-rich core.¹⁴ This has been explained as a deliberate deception, produced by intentional slow cooling of the alloy, creating silver enrichment on the surface (Thompson 2009).

Beth Shean 1095 (Table 1, no. 20)

The hoard, excavated by the University of Pennsylvania Museum in the 1920's, was wrapped in cloth, and weighed ~1.3 kg (Rowe 1940: 19). The hoard contained ingots, sheets, rods, broken jewelry, a gold armlet and a grey ~43 g sandstone weight (Figure 2 in main text; Rowe 1940: 19). It was found under the south wall of Room 1095, an inner room in Building 1093-99, directly north of the so-called Temple of Seti I (Rowe 1940: 19; Pl. V). The location of the hoard under an internal wall of the structure suggested that the wall might have been a later addition to the structure, perhaps intended to conceal the hoard (Eshel et al. 2018; Vargyas 2007). The hoard should therefore be dated to the later phases of the usage of the building.

Room 1095 and Structure 1093-99 were attributed by Rowe to the late level of the Temple of Seti I, and associated by him with the town's Late Level VI, immediately postdating the Egyptian 20th Dynasty presence at the site (Rowe 1940: 19; Pl. IV-V). Frances James, who re-published and reinterpreted the UME excavations, was indecisive as to the association of Structure 1093-99, debating between the two phases of Level VI and Lower Level V (see below and James 1966: 21–22, 27, figs. 74, 76.2, 77). She noted that the level of the building was 1–3 m higher than other structures related to Level VI, yet commented that this might be due to its location near the summit of the tell. James defined the ceramic assemblage from the building as mixed, containing types typical both of Level VI and Lower Level V (James 1966: 27, Fig. 2). Finally, in the town plan, James assigned the building to Late Level VI (the latest phase of Level VI, James, 1966: Fig. 77), in agreement with Rowe.

The stratigraphy was revisited by Amihai Mazar, who suggested that the building might be a continuation of Building SL of the Hebrew University excavations, thus assigning it to Lower Level VI, i.e., to the last phase of Egyptian presence at Beth Shean (1st half of the 12th century BCE, Mazar 1993: 208, Fig. 4; Panitz-Cohen and Mazar 2009: 7, Fig. 1.5; 152). Panitz-Cohen and Mazar, being aware of the significant difference in levels, described the building as “enigmatic” (Panitz-Cohen and Mazar 2009: 152).

The only indicative ceramics from the building are: a rounded bowl (James 1966: Fig. 2.8) typical of the LB IIB–III (Mullins and Yannai 2019: 154), although such a simple shape could also be later; a cooking pot (James 1966: Fig. 2.2) typical of the Iron Age I (Mazar 2015: 12–13, pl. 1.1.10–11); and a jug with a strainer spout and purple-painted decorations (James 1966: Fig. 2.4) typical of the 11th century, Late Iron Age I (Mazar 2015: 16; pl. 1.1.22: 1–6). The ceramics are the best indicators for the date of the building, or at least its final use, suggesting a date within the Iron Age I.

¹⁴ Three additional cut ingots of Ag-Cu alloy with a copper-rich core were identified in this research (see Eshel et al. 2021 and main text).

In addition, structure 1093-99 was, in fact, found immediately below the so-called Northern Temple of Rameses the III, constructed according to James in Level Lower V, and therefore must have preceded it (on the dating of the Northern Temple see more below, regarding the Beth Shean hoards 1029a and 1029 b). I thus conclude that the level of the structure, its stratigraphic position and its pottery, all imply that both the structure and hoard should be dated post-Level Lower VI (the latest Egyptian presence), yet earlier than Lower Level V. Stratigraphically, this corresponds to Late Level VI and in terms of the relative chronology I employ here, the hoard dates either to the Early or Late Iron I, or Iron Age IB in the terminology employed at Beth Shean, ~1150–950 BCE (Eshel et al. 2021).

Megiddo Area H (Table 1, no. 21)

Megiddo was one of the most important Canaanite cities located in the Jezreel Valley. The Megiddo hoard, excavated by the Tel Aviv University expedition, consisted of a single bundle, originally wrapped in textile, found alongside an assemblage of electrum, carnelian and silver beads that formed a necklace, additional electrum jewelry, including unique earrings and a signet ring. The 98-g bundle contained mainly silver-copper alloy cut rods and hacked ingots (Figure 2 in main text; Arie et al. 2019).

The hoard was placed inside a ceramic strainer spout jug within a bowl and was covered by another bowl. It was found on a paved floor, in the northeastern corner of a rather small, inner courtyard in Area H, Level H-11. Area H is located near the Canaanite Palace 2041 associated with Stratum VIIA (Arie et al. 2019). Level H-11 was originally assigned by the Tel Aviv University excavators to the University of Chicago's Stratum VIB, yet based on its proximity to Palace 2041 and a large conflagration which destroyed both H-11 and the palace, it was reassigned to Chicago's Stratum VIIA and associated with the palace (Finkelstein et al. 2017). The end of Stratum VIIA, initially dated by the Tel Aviv University expedition to the 12th century BCE, was re-dated by them to the first half of the 11th century BCE (Early Iron Age I in relative chronology), post-dating the Egyptian presence in Megiddo. This was based on ceramics, including Philistine Bichrome vessels, and on extensive radiometric dating of Level H-11 (Finkelstein et al. 2017; Toffolo et al. 2014). Therefore, the destruction of Level H-11 and the nearby Palace 2041 were dated ~1070 BCE, and the hoard was connected by the excavators to this event (Arie et al. 2019; Finkelstein 2009).

Here I follow the latest stratigraphic reconstruction and chronology suggested by the excavators. I also accept their suggestion that some of the objects in the hoard, designed in unique Egyptian styles and compositions, may have been heirlooms that "echo the days of Egyptian rule in Megiddo" (Arie et al. 2019: 98). I further claim that this is true for the entire hoard, as evident by the lamp-and-bowl style hoarding (although in this case a strainer spout jug was used instead of an oil lamp), which also has an Egyptian origin (Bunimovitz and Zimhoni 1993; Hall 2016). Most significantly, the textile in which the bundle was wrapped produced ¹⁴C dates that are older than the rest of the stratum (calibrated dates: 1446–1296 BCE (68.2%) ±1σ; 1513–1209 BCE (95.0%), ±2σ; Toffolo et al. 2014: 228). This is a rare case in which the date of the hoard can be distinguished from its final deposition, which is post-

Egyptian (see above). Therefore, I attribute the formation of the hoard to the days of local level H-12, Chicago's Stratum VIIA, the late 12th and very early 11th centuries BCE (Finkelstein et al. 2017); it may in fact be even earlier.

Megiddo Area AA, Room 2012 (Table 1, no. 22)

A hoard of *hacksilver* consisting of three bundles was found in Area AA excavated by the University of Chicago (Harrison 2004: 17, 78, fig. 125, pl. 29: 9–11; Loud and Crowfoot 1948: Pl. 229: 7–9). The bundles were not deposited inside a vessel. The total weight of the hoard is 425 g (Heymans 2018: 291), and consists of an assortment of silver ingots, wire, foil decorated with rosettes or cross-hatching, as well as whole and broken jewelry (Loud and Crowfoot 1948: Pl. 229: 7–9). The exact find-spot of the hoard is not described in the publication. It was generally associated by the excavators with Room 2012 (Squares K7/K8 in Loud and Crowfoot 1948: fig. 386), located in a domestic area immediately to the west of Building 2072 (Loud and Crowfoot 1948: Pl. 229: 7–9, fig. 386). The latter is generally considered the palace of the Stratum VIA city. According to Loud's 1935–6 diary, page 25, the hoard was deposited beneath the Stratum VIA floor (Heymans 2018), dated to the Late Iron Age I of Canaanite Megiddo. The stratum was destroyed by a heavy conflagration (the agent of which is debated; e.g., Finkelstein 2009). After the bundles were opened and cleaned, their contents were combined and distributed between the Oriental Institute of the University of Chicago and Jerusalem's Rockefeller Museum (Heymans 2018).

Megiddo 5213 (Table 1, no. 23)

A hoard from Megiddo L 5213, Area DD, Stratum VIA (Late Iron Age I; Loud and Crowfoot 1948: 187, Pl. 228: 6). The hoard consisted of one bundle. It is described as “bronze and silver fragments with traces of cloth”. In the same locus were unearthed a flint implement, a stone whorl, a sacred eye amulet, carnelian, gold and bronze beads, silver fragments and gold beads (Loud and Crowfoot 1948: 187, Pl. 228: 4–5). All the items were found in the vicinity of a Stratum VIA stone wall (Square L/11 in fig. 413) and may have been part of one hoard (Hall 2016: 79–81). The hoarding of carnelian and metallic beads, which probably comprised a necklace, alongside a silver-copper bundle is similar to the Megiddo H hoard (see above). The bundle was never opened and is stored in the Oriental Institute in Chicago (Heymans 2018). From the above description, it is possible that the hoard contained silver alloyed with copper.

Ashkelon (Table 1, no. 24)

Philistine Ashkelon is situated on the southern coast of the Southern Levant. The hoard consists of two bundles, weighing 44.79 and 55.05 g before cleaning. They contain a variety of cut and broken objects, including ingots and ornamental items of different types (Gitler and Tal 2019: Fig. 1; Thompson 2003). It was discovered on a stone pavement in Room 595, Building 735 just south of a typical Philistine keyhole-shaped hearth (Aja 2020: 94–97; Figure 3.59). The bundles were found on a flagstone pavement (Thompson 2020), under a deposit of striated grey ash, thought to be the result of

the use of the hearth over time (D. Master, personal communication). Based on this description I can exclude the suggestion that the hoard was cached beneath a later floor (contra. Heymans 2018) and it can be safely attributed to Phase 18A of Grid 38 (Aja 2020: 94–97; Figure 3.59; Stager, Schloen and Master 2008: 270, Fig. 15.42; Thompson 2020). Phase 18 is the second phase yielding Philistine Bichrome ware. It was originally assigned by the excavators to Ashkelon’s Period XV (“late Bichrome”/Iron I), the last of three sub-phases of the Iron Age I at the site (Stager, Schloen and Master 2008: 217). In the recent excavation report Phase 18 was assigned by the excavators to the middle of three sub-phases of the Iron Age I, named the Iron 1b (Master et al. 2020: 186, table 6.1). In the terminology I employ here, it can be assigned to Early Iron Age I.

Tell Keisan (Table 1, no. 25)

The Phoenician site of Tell Keisan is situated not far from the northern coast of the Southern Levant, on the ‘Akko Plain (Briend and Humbert 1980). The hoard, found inside a Phoenician Bichrome jug, was excavated by the R. de Vaux, J. Pringnaud, J. Briend, and J.-B. Humbert of the *École Biblique et Archéologique Française* in Jerusalem. It contained 354 g of silver, wrapped in four or more bundles, originally stamped by bullae. The jug was found in the courtyard of a domestic complex, in Stratum 9a, Area B, L635, under or inside a collapsed wall (Briend and Humbert 1980: 198–99). This stratum dates in relative terms to the Late Iron Age I (Phoenician Ir1b horizon; Gilboa and Sharon 2003: 55, table 21), and attributed by the excavators to the second half of the 11th century BCE. A similar date was proposed by Othmar Keel (1995: 177) for the bullae found with the hoard. In contrast, Baruch Brandl (2012: 384) argued that the bullae and the hoard belong to an undetected intrusion and should be dated to Iron Age IIB (9th–8th centuries BCE) according to the traditional chronology embraced by him.

In the site report it is unclear what the relation of the hoard to the Phase 9a beaten-earth living horizons might have been. The hoard is said to have been found inside a neckless Phoenician Bichrome jug in L635 within a brick wall, between Silo 6115 and the concentration of jars in L610 (Briend and Humbert 1980: fig. 51; Nodet 1980: 325). It seems, however, that the author was uncertain about the find spot, writing that minimally it can be stated with confidence that it was covered by the mud-brick collapse of Stratum 9a. Jacques Briend and Jean-Baptiste Humbert (1980: 200) refer to the illustration of this jug (pl. 62:4), stating that it was covered by a bowl (pl. 64:2). In contrast, in the text accompanying plate 62:4, the jug is attributed to L606a (of the same stratum), and nothing is said about a wall. The latter locus number is the one recorded for the hoard itself.

Results of the radiocarbon dating of the textile indicate that whether considering the dates as individual determinations or, alternatively, considering the average, the 2 σ distribution mostly “covers” the late 11th to late 10th centuries BCE (Eshel et al. 2018: Fig. 8; Table 2), corresponding with the excavator’s original dating of the context and with the typology of the Phoenician Bichrome vessel (Briend 1980: 209; For the typology, see Gilboa, Sharon, and Boaretto 2008: 162–163) and Keel’s most recent dating of the bullae (see above). There is, therefore, no reason to doubt the

association of the hoard with Stratum 9a of the Late Iron Age I, irrespective of one's stance in the debate regarding the absolute chronology of the Levant in the Iron Age. It does not date to the 9th–8th centuries and is not associated with an undetected intrusion, as argued in Brandl 2012. In absolute terms – ~1050–950 BCE (detailed discussion with textile radiocarbon results in Eshel et al. 2018).

Wadi el-Makkuk (Table 1, no. 26)

The hoard was discovered in a cave in Wadi el-Makkuk, in the Judean Desert (Sass 2002). The hoard was found in an inner chamber or niche in the bedrock (L2) of cave II/3, ca. 0.4 m under the surface, using a metal detector (Hirschfeld and Riklin 2002: 6–7). The hoard consists of 69 objects, including four complete gold or electrum earrings, 47 silver objects, six bronze implements and one fragment of a bronze earring, and eleven non-metal objects (beads and a spindle whorl). The silver objects consist of (cut and/or broken) earrings and pieces of folded sheet, as well as several cut ingots. Excluding the non-metal objects and the six bronze implements, the weight of the metal is 147.92 gram, of which 3.98 g are gold/electrum and 140.18 g silver (Sass 2002). In his exemplary publication of the hoard, Sass notes that although some objects could be intrusive (i.e. a bronze buckle, no. 57), the bulk of the finds is chronologically homogenous, and can be dated to the transition of the Iron I–II (Sass 2002: 21, 29, 32).

Beth Shean 1029 a+b (Table 1, nos. 27–28)

Two hoards were found in the so-called Southern Temple of Rameses III, which is one of two public structures of Level Lower V (known as the Northern and Southern Temples), excavated by the University of Pennsylvania Museum expedition in the early 20th century. Both hoards were large, each containing approximately 2 kg of silver, gold, and a few ingots of undetermined metal coated by gold foil (Rowe 1940: 26, pls. XXIX, LXVIA:12, 13, 32–34; Vargyas 2007), and were customarily associated with the Iron Age I period (e.g., Eshel et al. 2018; Heymans 2018; Mazar 1993: 221–223; 2006: 34–35; Panitz-Cohen and Mazar 2009: 10–11, 27–28).

The hoards were placed to the east of the two middle columns of the central aisles of the Southern Temple, one in the northern and the other in the southern isle (James 1966: Fig. 73). The hoards were described as “foundation deposits” (Rowe 1940: 26). This interpretation was contested by Peter Vargyas (2007), who claimed the hoards were carefully positioned near the column bases for easy retrieval, an explanation that stands in line with the general phenomenon of hoarding, in which floors were laid purposely above hoards to conceal them (Eshel et al. 2018: 215).

James accepted Rowe's observation that the Southern and Northern Temples of Level V are contemporary and comprise a single complex (James 1966: Fig. 73–75). She, nevertheless, divided

Rowe's Level V into two sub-phases and attributed the establishment of the temples to Lower Level V, namely Iron Age IIA (James 1966: 33–34, 59–60).¹⁵

The northern rooms of the Southern Temple underwent reconstruction throughout the Iron Age, and two phases were distinguished. The later phase was assigned by Rowe to Level IV and reassigned by James to Upper Level V (Iron Age IIB, James 1966: 141–143, 146–147; Rowe 1940: pl. III, X). The extent of the rebuilding is not fully known (James, 1966: 141–143). It has been claimed that the pillars were not part of the original building, but added later (Mullins 2012: 145), although Rowe (1940: 25) and James (1966: 142) claim the opposite. A third scenario by Mazar proposed that the temples were initially constructed in Late Level VI (Iron IB in Beth Shean, 11th century BCE according to Mazar, see above), based on the presence of numerous cultic objects in the Southern Temple. Mazar dated a second reconstruction phase of the building to Lower Level V (Iron IIA, Mazar 1993: 221–223; 2006: 34–35; Panitz-Cohen and Mazar 2009: 10–11, 27–28).

I revisited the ceramic assemblage of the Southern Temple. It is, in fact, mixed and includes ceramics datable to both the Late Bronze and Early Iron Ages, as well as one Cypriot Black-on-Red sherd specifically datable to the Late Iron Age IIA (James 1966: Fig. 6: 14). The earlier ceramics might be explained by the fact that in some areas, the excavators sometimes dug below the floors (see James 1966: 141–143). Regardless, since the Northern Temple was built over the debris of Late Level VI, the temple complex must post-date this level, i.e. post-date the Late Iron Age I. As to Mazar's claim regarding the "early" cultic vessels—meaning that they indicate an earlier, 11th century BCE date for the establishment of the Northern and Southern Temples—the reuse of old relics of symbolic significance is known at the Beth Shean temple complex, best represented by the positioning of monuments from earlier levels in front of the Northern Temple: a statue of Ramesses III and stelae of Seti I and Ramesses II (Panitz-Cohen and Mazar 2009: 10). Therefore, the cultic stands may also have been used secondarily, and do not necessarily rule out James's chronology for the temples. Moreover, continuity of ceramics and cultic Canaanite practices and paraphernalia into Iron Age IIA was noted as a hallmark at nearby Tel Rehov (Mazar 2015) and Tell el-Hammah (Cahill 2006) and seems to have been a characteristic of the Beth Shean Valley. It is therefore possible that the Iron I cultic stands were re-used or produced during the Iron Age IIA. Based on the single Black-on-Red sherd, I cannot exclude the Late Iron IIA as a possible dating for this hoard. Therefore, the establishment of the temple complex, and the terminus post quem for the hoards should be generally attributed the Iron IIA (~950–800 BCE).

Dor (Table 1, No. 29)

Dor was a major Phoenician city between the 12th and the mid-9th centuries BCE. It had an active anchorage on the Mediterranean shore and was extremely prosperous and cosmopolitan. Dor also had

¹⁵ This was based on the ceramics between two floors of the Northern Temple, which have parallels in other areas of Lower Level V (James 1966: Fig. 3).

tight commercial connections with Egypt, a fact that distinguished it from the Northern Phoenician city-states (e.g., Tyre). Excavations at Dor have revealed that, around the mid-9th century BCE, the Phoenician town was transformed into an administrative center, probably under the control of the Israelite Kingdom (Gilboa, Sharon and Bloch-Smith 2015).

The Dor hoard was inserted into one simple, undecorated ceramic jug covered by a bowl (Eshel et al. 2018; 204, Fig. 5a, b; Stern 1998; 2001; Figure 2 in main text). It was unearthed in Area D2 and is related to Phase 8c, the Ir1|2 horizon at Dor (and Phoenicia in general), which equals the horizon currently termed in Israel and Judah Early Iron Age IIA (Eshel et al. 2018; 2019). The hoard was reported to have been situated above a large brick building of Phase 9a of the Ir1b and below a thick, two level “platform” related to Phase 8, which spans the Phoenician Ir1|2 and Ir2a horizons or Early and Late Iron Age IIA in the more common terminology (Eshel et al. 2018; 204, Fig. 5b, c).

A re-examination of the stratigraphic record of Area D2 (see Eshel et al. 2018: Fig. 5b, c) revealed that the mouth of the jug was not situated directly under the above-mentioned pisé platforms but about 10 cm below a thick floor accumulation under them (F17257, upper surface F15409), which is the earliest floor relating to Phase 8c (dubbed in the excavations records “the white/yellow floor”). The hoard indeed cannot be related to the Stratum 9 brick building since it was found in the fill that leveled it when or after it was put out of use, and it can only be related to the floor sealing it. No pit was discernible in the floor, and the hoard was invisible to people operating on the “white/yellow floor.” The accumulation of the above-mentioned floor yielded an important assemblage of what appear to be Cypro-Geometric IB–II vessels in primary deposition, some nearly complete, typical of the Phoenician Ir1|2 horizon or Early Iron Age IIA (Gilboa and Sharon 2003; Gilboa et al. 2008: 161–62). It seems, therefore, that the floor under which the jug was buried was from a short-term habitation episode in the early part of the Ir1|2 horizon (or very late within the Ir1b = Iron Age IB).

The silver in the jug was divided into bundles, wrapped in textiles. At least some of the bundles were sealed by clay bullae, which were stamped by a single scarab of spiral design in an MB II style (Keel 1995: 262–63; Stern 2001: 23). Two of the bundles weighed 490.5 g (Stern 1998; 2001) and 420.6 g (Eshel et al. 2018: 211). The total weight of all the silver in the vessel was ca. 8.5 kg, and the vessel was estimated to contain 17 bundles (Stern 1998; 2001). The contents of only one bundle were cleaned and available for analysis. It contained only cut ingots in a variety of sizes, with numerous very small pieces of silver (<0.5 g; Eshel et al. 2018). The hoard is currently on display in The Israel Museum.

‘Akko (Table 1, No. 30)

Still unpublished, this hoard consists of a small juglet discovered in Area A, Layer 7, Locus 762, initially dated by the excavators to the Iron Age II or 9th century (Dothan 1992: 52; Eshel et al. 2018: Fig. 7; Thompson 2003: 41; Figure 2 in main text). Area A is described as living quarters with a few industrial installations, including a metal industry. A later stratum above the hoard was destroyed by fire, with evidence of a double destruction related by the excavators to Sennacherib and Assurbanipal

(8th/7th centuries BCE). There is no available data regarding the ceramic assemblage found in the area other than a general statement that the layer contained Cypriot and Phoenician ceramics (Dothan 1992: 52; A. Killebrew personal communication, 2019). The location of the hoard is described in the excavation logbook from August 7, 1978, as “either on a lower floor or in a fill, set in and covered over, latter is more likely”. The silver in the juglet weighed 257.6 g (Thompson 2003: 41). The hoard contained one square rod alongside cut ingots in a variety of sizes, with numerous very small pieces of silver (<0.5 g; Eshel et al. 2018).

After having examined the Tel ‘Akko excavation logs, I noticed that not far from the juglet containing the hoard and under the same floor, another similar yet empty juglet was found. Since the necks of both juglets were broken off, it appears that the empty juglet may have also once contained silver. In the logbook from August 7, 1978, the breakage was explained as having occurred due to “damage during excavation.” However, comparing this hoard to the other hoards, we have reason to believe that the necks were purposely broken in antiquity (see, e.g., ‘Ein hofez below). In the logbook, the excavator dated the juglets to the Iron Age II, yet he also commented “[t]he pottery should be earlier!” The juglets were placed on two different sides of the same room (see Fig. 7b, c), possibly to minimize theft. Based on this limited data, the hoard is generally dated to the Iron Age IIA (Eshel et al. 2018).

‘Ein Hofez (Table 1, No. 31)

This hoard was found in an interior room of the northernmost house of the small settlement—a domestic unit (Eshel et al. 2018: Fig. 6; Figure 2 in main text). The hoard was placed in three identical dipper juglets, the necks of which were carefully broken off to enable the insertion of the silver items (Alexandre 2013; Eshel et al. 2018: Fig. 6a–c). The juglets were leaning against an internal wall of the house (Wall 279) (Eshel et al. 2018: Fig. 6d), and they were situated between two floors (F/L269 above and F/L277 below), 15 cm apart, which abutted the walls of the room and were most probably intentionally hidden under the upper floor by the owners (Alexandre 2013; Eshel et al. 2018).

The total weight of the silver is about 1.2 Kg (Thompson 2003: 99), consisting of several solid lunate electrum earrings, some plain and others with a single large hemispherical attachment, ingots and cut ingots made of silver (Alexandre 2013; Eshel 2014, Eshel et al. 2018). This hoard too contained numerous very small pieces of silver (<0.5 g), however the average weight of the items was larger, and the edges of the cut ingots were crude (Eshel et al. 2018).

Since the site was abandoned gradually (Yardenna Alexandre; pers. comm., 2017), each house should be dated independently. I therefore examined the ceramics found on the later floors of the house in which the hoard was found. It includes a cooking pot with a triangular rim (Locus 146) and a chalice (Locus 255), typical of the Late Iron Age IIA. In absolute terms, this period may begin in the late 10th century at the earliest but spans most of the 9th century BCE in any chronology (Gilboa, Sharon, and

Bloch-Smith 2015: 68–70 with references). The ceramic assemblage of the house, and the hoard were therefore dated to the Late Iron Age IIA, 9th century BCE (Eshel et al. 2018).

Eshtemoa (Table 1, No. 32)

This is the largest hoard unearthed in the Southern Levant (and in the Near East). It contains over 23 kgs of silver, in five ceramic jugs, two of which bear the Hebrew inscription “חמש”, literally meaning five (Yeivin 1990: Fig. 3). The hoard was unearthed in the 3rd–4th centuries CE Synagogue of Eshtemoa during an excavation undertaken by Z. Yeivin. It was found in a depression in the bedrock under the floor of a room which abuts the synagogue (Yeivin 1990). The hoard was initially dated to the 10th century BCE, based on the ceramics and epigraphy of the inscriptions (Yeivin 1990).

However, accumulating research suggests that the hoard should be dated to the 8th century BCE based on the ceramics (Kletter and Brand 1998), jewelry (Sass 1997:243; 2002: 32, n.11) and inscriptions (Cross 2003; Finkelstein and Sass 2013). Here I re-examine the data and the different opinions:

1. The ceramics are discussed by Yeivin (1990), Ofer (1993) and Kletter and Brand (1998). The latter suggest that the jugs should be dated to the 8th century BCE and I agree. Here I add a few parallels from Beersheba and Lachish, published recently:
 - a. Yeivin 1990: fig. 2: 5: parallels are found in Beersheba, Strata III-II of the 8th century BCE (type J-2, Singer-Avitz 2016: 625), and in Lachish level III also of the 8th century BCE (Zimhoni 2004: Fig. 26.21:2).
 - b. Yeivin 1990: fig. 2:1: A parallel from Beersheba was mentioned as reg. no. 8880/4, from Stratum II, Locus 855 (Kletter and Brand 1998: fig 1.4), yet in the excavation report, this parallel is reconstructed with a long, ridged neck (Singer-Avitz 2016: 835, Fig. 12.118: 5). A photo of this vessel confirms this reconstruction (**Figure A.5**). A better parallel is found in Lachish, level III, the 8th century BCE (Zimhoni 2004: Fig. 26.31: 9).

Therefore, although one of these jugs is common in the 10th and 8th centuries BCE in the northern Israel (Ben-Tor and Zarzecki-Peleg 2015: 143, pl. 2.2.16: 3), in Judah and the Negev these ceramic types are attributed to the 8th century BCE, Iron IIB.



Figure A.5: A jug from Beersheba reg no. 8880/4, which was suggested as a parallel to one of the jugs of the Eshtemoa hoard, courtesy of Dr. Lily Singer-Avitz.

2. Jewelry: The Eshtemoa hoard contains a large number and types of jewelry items. Generally, the jewelry can be dated to the Iron Age II, when silver jewelry replaces similar forms of gold, and earrings are commonly open from the side rather than the top (Golani 2013: 109). Of the items that were published, some of the noticeable types of jewelry indicate a more specific chronology:
 - a. A solid lunate earring with a single large lenticular attachment (Yeivin 1990: figs. 16: 3,4,6). Several 9th century parallels in gold are known from Tell Halaf in Syria (Maxwell-Hyslop 1971: 240, fig. 133; Oppenheim 1939: 243–244, pl. XXXIX b). In the Southern Levant, parallels are known from Hazor Stratum Xb, Building 9151 (9th century BCE; Spaer 2012: fig. 9.8: 11; chronology after Finkelstein 1999; Shochat and Gilboa 2018), from the Phoenician Tomb n. 1 in Achziv, Phase 3 (9th–7th centuries BCE; Mazar 2004: fig. 24: 20), both made of silver, with a side opening (rather than on top as in Tell Halaf).¹⁶ The attachment may have been an early form which developed into the Phoenician-Assyrian mushroom-shape attachment in the 7th century BCE (Maxwell-Hyslop 1971: 240, fig. 127; Quillard 1979: 48–49).
 - b. A solid lunate earring with a single large hemispherical attachment (Yeivin 1990: fig. 19). Parallels are known locally from the 9th–8th centuries BCE, in gold, from Tell el- Far'ah South (Maxwell-Hyslop 1971: 226, pl. 201; Petrie 1930: pl. 37, 42, 310), Tawilan (Ogden 1995: fig. 8: 24, 8th–7th centuries BCE) and Tell Jemmeh (Petrie 1928: 10, pl. 1:4).¹⁷ A silver parallel is known from the 9th century BCE hoard of 'Ein Hofez (Alexandre 2013; Eshel 2014, Eshel et al. 2018).
 - c. A solid lunate earring with an attached row of granules (Yeivin 1990: fig. 16:11). Parallels from the Southern Levant are known from Lachish (silver, an 8th century BCE burial cave, Tufnell, 1953: pl. 57: 10), and from a gold hoard from Tell Jemmeh (Petrie 1928: pl. 1: 10-11) and Tawilan (8th–7th centuries BCE; Ogden 1995: 8.20, 21; see note above). This form of earring is depicted on several statutes dating to the 8th–7th centuries BCE from Jordan (Khirbet el-Hajjar, Tell Jawa, and the Aman citadel; refs. in Golani 2013: 113).
 - d. Two earrings with an elongated hoop decorated with a braided wire (Yeivin 1990: fig. 16:12–13). Six similar golden earrings are known from a gold hoard from Tell Jemmeh, some with a small ring attached on the side (dated to the 20th dynasty according to the excavator, Petrie 1928: pl. 1: 7-9, 12-13; Sass 1997: 243).
 - e. Two plain hollow lunate earrings (Yeivin 1990: fig. 17 :1–2). Six parallels are found in the 9th century hoard of 'Ein Hofez (Alexandre 2013; Eshel 2014, Eshel et al. 2018), Other parallels date from the 7th century BCE and continue into the Persian period (Golani 2013: 123).

¹⁶Another silver parallel was found in topsoil at Tel Jemmeh (Golani 2014: 891, fig. 22.1g),

¹⁷ Ogden (1995) suggested that the gold jewelry hoard from Tawilan, Jordan (unearthed in Area II Phase V), is an heirloom and dated it to the 10th century BCE. This is based on the early date previously suggested for the Eshtemoa hoard and was taken as evidence for an early settlement on the site, which predates ceramic evidence. Since the Eshtemoa hoard is now dated to the 8th century, the Tawilan hoard should not be dated before the earliest stratum there, namely the 8th–7th centuries BCE (Bennet and Bienkowski 1995: 102).

- f. A small ring decorated with braided wire (Yeivin 1990: fig. 17: 6). In the Southern Levant, a few rings were found decorated with plain or twisted wires (Golani 2013: 138, type III.7). A *braided*-wire decoration is known on one gold ring from Tomb T.C.4 in the the Phoenician cemetery of Achziv, dating to the Late Iron Age IIA, the 9th century BCE (Mazar 2001: Tomb T.C.4, fig. 18: 3; dating after Gilboa 2012: n.13).
- g. A two-cylinder flat spacer bead with granular decoration of chevrons (Yeivin 1990: fig. 17: 7, 22,23). Two- and four-cylinder beads with granular decoration are known from a 10th–9th century tomb in Marlik, Iran, and in an ~8th century BCE tomb at Altintepe, Anatolia (Maxwell- Hyslop 1971: 194, 200–202, pl. 154). There are no parallels known from the Southern Levant (Golani 2013: 193).

Considering these examples together, it becomes evident that many of the jewelry items in the Eshtemoa hoard are local types, sometimes derived from local gold jewelry of the Late Bronze Age. In some cases, parallels suggest a Phoenician influence. Chronologically, many of the items can be firmly associated with the 9th–8th centuries BCE. Significantly, as previously observed by Sass (1997; 2002: n.11), the absence of Assyrian influence on the jewelry suggests the hoard predates the Assyrian domination of Judah. Considering the above, the jewellery in the hoard indicates a date c. ~900–730 BCE, implying a long accumulation period (see more below).

3. The inscriptions on the Jugs

- a. The *mem* in the inscription has a final stroke in an unusual, horizontal position (Yeivin 1990: Fig. 3). It was first compared to early forms of *mem* which are horizontal, as in the Gezer calendar, but do not have a final long stroke (Yeivin 1990: 47). Parallels with a final horizontal stroke include: an inscription from Tel Rehov Stratum V, dated to the late Iron Age IIA, 9th century BCE, possibly starting in the late 10th century (Ahituv and Mazar 2014; Mazar and Streit 2020); an 8th–7th century BCE wine decanter from Khirbet 'EI-Qôm (Dever 1969-1970: 170); an unpublished jug from the City of David dated to the 8th–7th centuries BCE; and an unpublished ostrakon from Tel Haror dated to the 8th–7th centuries BCE (Cross 2003: 155, n.10). Therefore, although Cross initially suggested that the horizontal-final-stroke *mem* in Iron Age II contexts was archaic, he later suggested that this is an 8th–7th century BCE phenomenon (Cross 2003). Horizontal *mems* are also found in several ostraca from 'Arad, Strata IX–VIII (2nd half of the 8th century BCE; Aharoni 1981; Na'aman 1994: 220, n. 6; dating after Herzog 2002).

It is also possible that the horizontal-final-stroke *mem* is not a chronological marker, but a result of the angle in which the scribe was holding the vessel (B. Sass, personal communication, 2019).

- b. The *het* has only two horizontal lines (Yeivin 1990: Fig. 3). Yeivin suggested that this is so because of the difficulty to draw three lines with thick ink. The *het* has parallels in the 'Arad

ostraca of various strata (Aharoni 1981), and on the decanter from 'El-Qôm mentioned above (Yeivin 1990).

To conclude, the inscriptions, although unusual, have parallels in Judah in the late 8th–7th centuries BCE.

4. Further ceramics from the Eshtemoa excavations

As mentioned, the Eshtemoa hoard was unearthed in unclear context. Beyond the five jugs containing the hoards, the excavation revealed a significant amount of Iron Age pottery, which was generally dated by Yeivin to the 10th–6th centuries BCE (Yeivin 2004: Fig. 34). Here we reexamined some of the Iron Age pottery from the excavation, to narrow down the possible dates of the hoard. We therefore re-examined the pottery in association with the hoard from four loci (4, 5, 5a, 9; Yeivin 2004: Fig. 34). Some of the Iron Age pottery that was not published by Yeivin is presented here (**Figure A.6**):

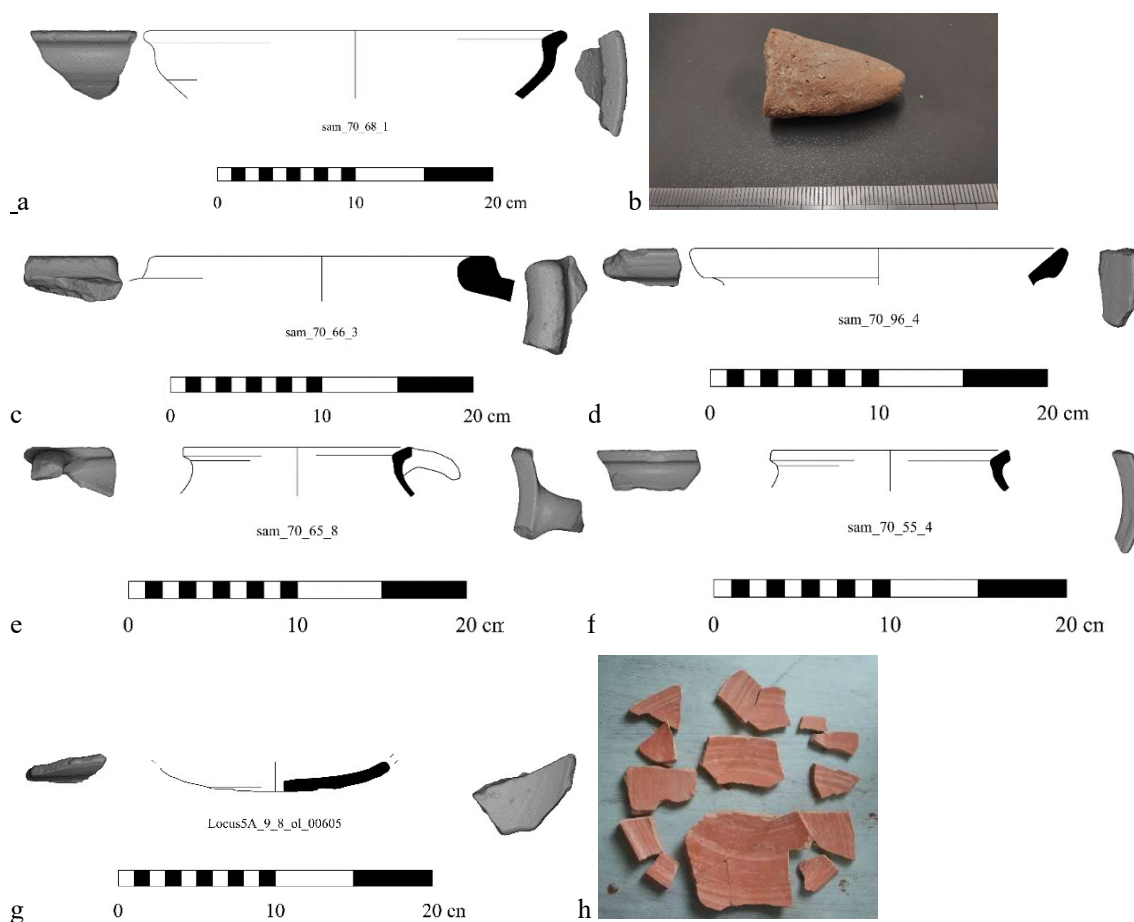


Figure A.6: Drawings and 3-d images of additional Iron Age pottery from Eshtemoa (by Ortal Harush, the Hebrew University of Jerusalem): (a) A carinated bowl with an everted rim (Reg. no. 68/1, also in Yeivin 2004: Fig. 34:6). (b) A leg of an animal clay figurine (Reg. no. 58/12; photo by T. Eshel). (c) A rim of a neckless pithos (Reg. no. 66/3). (d) A mortarium (Reg. no. 96/4). (e) Sherd and handle of 'Ein Gedi' type cooking pot (Reg. no. 65/8). (f) Additional sherd of 'Ein Gedi' cooking pot

(Reg. no. 55/4). (g) Fine Ware ('Samaria') bowl (Reg. no. 48/6). (h) Photo of Samaritan bowl sherds (photo by T. Eshel).

A round-sided bowl with an everted rim, red slipped on the inside (Locus 4. Reg. no. 28/2. Yeivin 2004: Fig. 34: 1). This type is common in limited numbers during the Iron IIC BCE in Judah (Gitin 2015: 346–347, pl. 3.3.1:15). Parallels are found e.g., in the City of David Area E, spanning the Late Iron Age IIB and IIC (Strata 12A–10, Type B4b in De Groot and Bernick-Greenberg 2012: Fig. 4.1: 9, 99; and Stratum 10, Iron Age IIC; Type B5 in Yezerski and Mazar 2015: 246), in 'Ein Gedi, Iron Age IIC (Stratum V, Type B8 in Yezerski 2007: 87).

- a. A carinated bowl with an everted rim, red slipped on the interior (Locus 5a. Reg. no. 68/1. Yeivin 2004: Fig. 34: 6; Figure A.2a). This bowl is a subtype of the bowl described above, common throughout the Iron Age II B–C in Judah (Herzog and Singer-Avitz 2015: 219, pl. 2.4.9: 10–11; Gitin 2015: 346–347, pl. 3.3.1: 16). Parallels are found e.g., in the City of David Area E, spanning from the Late Iron Age IIB into IIC (Str. 12A–10, Type B4b in De Groot and Bernick-Greenberg 2012: Fig. 4.1: 8, 99), in 'Ein Gedi, Iron Age IIC (Stratum V, Type B8 in Yezerski 2007: 87), and in Lachish, level III (Tufnell 1953: pl. 99: 599, 602).
- b. A leg of an animal clay figurine (Reg. no. 58/12; Figure A.2b). Clay figurines are common in many sites throughout Judah, during the 8th and 7th centuries BCE (Kletter 1995: 111–116; 1996: 40–42; 1999: 29; Yezerski and Geva 2003).
- c. A rim of a neckless Pithos (Reg. no. 66/3; Figure A.2c), known in Masos Stratum II (Iron Age IB –Iron Age IIA; Mazar 2015: plate 1.1.15: 6).
- d. A mortaria with a thin sidewall and rim (Locus 9. Reg. no. 96/4; Figure A.2d). This is a prominent form in the Iron Age IIC (late 8th and 7th centuries BCE) in the Levant. Mortaria are widespread along the Levantine coast, reaching Cilicia (Gilboa 2015: 304; Pl. 3.1.2: 3). They are also found in the same period at Naukratis, and East Greek 'colony' in Egypt (Villing and Schlotzhauer 2006). Distribution and petrographic analysis of Mortaria suggest that they originate from Cyprus (Zukerman and Ben-Shlomo 2011).
- e. Two cooking pots. Both have a wide mouth, two loop handles and an everted grooved and rounded rim ('Ein Gedi cooking pot, Locus 5. Reg. no. 55/4, 65/8; Figure A.2e–f). The ceramics are of metallic ware, well-fired, thin-walled and red-burnished. This type appears in the late 7th century and early 6th centuries BCE throughout Judah and the Negev (Aharoni 1964: 30–31, fig. 18: 7, 9–12, pl. 32:2; Freud 2007: 80; Gitin 2015: 347–348, pl. 3.3.3: 6–8; Yezerski 2007: 92, pl. 5: 1–15, 17–18).
- f. A shallow Fine Ware (thin-walled metallic ware, so-called Samaritan) bowl (Reg. no. 48/6, Locus 5a; Figure A.2g–h), red burnished in the interior, with a thickened, flat cut rim. This type is common in the northern coastal plain of Israel in the Iron Age IIB (Lehmann 2015: 117–188, pl. 2.1.5.1).

Additional pottery examined by Yeivin, dating to the 8th century BCE (refs. in Yeivin 2004: 85–86) includes three bowls (Yeivin 2004: Fig. 34: 4, 10, 11), one krater (Yeivin 2004: Fig. 34: 13), a hole-mouth jar (Yeivin 2004: Fig. 34: 20), and a lamp (Yeivin 2004: Fig. 34: 26). Other than the overwhelmingly late Iron Age pottery there are a few earlier types (Middle Bronze Age cooking pots (Loci 9 and 5a. Reg. no: 51/5, 78/1, 87/1, 87/2, 97/3, 100/1, Three of the sherds appear in Yeivin 2004: Fig. 34: 17–19), and a few pottery sherds were identified by Yeivin as Iron Age, but probably are later (a krater -Locus 9. Reg. no: 96/2. Yeivin 2004: Fig. 34:16, and a neck of a bottle identified by Yeivin it as Cypro-Phoenician, but it is probably Hellenistic - Locus 9. Reg. no: 87/40. Yeivin 2004: Fig. 34: 24, see Berlin 2015: pl. 6.1.18).

To conclude, Yeivin presented 26 ceramic finds dating to the Iron Age (Yeivin 2004: Fig. 34). Of these, three finds are Middle Bronze Age cooking pots, and two date later than the Iron Age (see above). Of the remaining 21 items listed, eight items can be specifically dated to the 8th century BCE (see above). Here I reexamined eight additional items (two already published by Yeivin, and six unpublished items), all but one dating to the 8th–7th centuries BCE. Therefore, after reexamining the pottery, it becomes evident that Iron Age ceramics from Eshtemoa date mostly to the 8th and 7th centuries BCE, suggesting these are the main periods of settlement activity at Eshtemoa in the Iron Age.

Combining the context, ceramics and the inscription associated with the hoard, an 8th century date of the Eshtemoa hoard can be substantiated. This is because the ceramics date to the 8th century, while the jewelry has parallels in the 9th and 8th centuries BCE, and Assyrian influence on the jewelry, which is expected from the mid-8th century onwards, is not evident (as opposed, e.g., in the Tel Mique hoards, see below). Because the hoard weighs 23 kg, it is possible that the hoard contains an accumulation of silver over several decades, before it was finally cached ca. the first half of the 8th century BCE (c. ~900–730 BCE).

The ‘Arad Fortress (Table 1, No. 33)

A silver hoard weighing ~200 g was unearthed in the Judahite fortress of ‘Arad, which served both as a major military fortress at the border of the kingdom of Judah and as a stronghold that protected the state caravan trade that passed through the Beersheba valley (Herzog 2002). The hoard was found inside a small cooking pot and consisted of two textile bundles which contain some broken jewelry but mainly cut ingots in various sizes (Aharoni 1980; Figure 2 in the main text; **Figure A.7**). A hematite dome-shaped weight of a shekel (11.37 grams) was found in the same locus as the hoard (Hertzog 2002: 33, 80; Singer-Avitz 2002: 161). The fortress mound was excavated mainly by Aharoni on behalf of the Institute of Archaeology of the Hebrew University of Jerusalem. The hoard was unearthed in Locus 979, in a building south of the ‘Arad temple, attributed by Aharoni to Stratum XI and dated by him to the 10th century BCE, according to the chronology accepted in those days (Aharoni 1980; 1981).

The stratigraphy and chronology of the hoard, however, is far from being straightforward. The entire stratigraphical and ceramic sequence of the 'Arad fortress were revisited by Herzog and Singer-Avitz. They suggested that the hoard should be attributed to Stratum X (Herzog 2002). This was based on the type of the cooking pot of the hoard itself, and another cooking pot of the same type (CP-11), which were both unearthed in Locus 979, at the exact same height/level, while a third cooking pot from the same locus, of type CP-8 was registered 15cm higher (Singer-Avitz 2002: 169; 199, Fig. 29: 16–18). CP-11 is considered a diagnostic fossil of Stratum X in the 'Arad Fortress, where it constitutes 50% of all cooking pots and is not attested in earlier or later strata (Herzog and Singer-Avitz 2015: 220; Singer-Avitz 2002: 141, 160). Therefore, all three cooking pots were attributed to stratum X, and the two lower cooking pots were suggested to be sunk in a low depression, which was mistakenly attributed by Aharoni to Stratum XI (Herzog 2002: 33). Stratum X is suggested to be the earliest of three 8th century BCE strata on the site (Herzog 2002; Singer-Avitz 2002), and was probably inhabited in the early 8th century BCE (De-Groot 2012: 156).

There are a few difficulties in the above interpretation: The definition of CP-11 as a diagnostic fossil of Stratum X is currently based on six complete vessels only, two of which are the ones unearthed from the hoard's locus itself (979) (Table 2, p. 126). The third vessel-type assigned to this locus, CP-8 (Singer-Avitz 2002: Fig. 29: 18), is indeed typical throughout the 8th century BCE in Judah,¹⁸ yet it was actually found 15 cm above the “locus depression” in which the hoard was found (Singer-Avitz 2002: 169, 199); Therefore, it may belong to a later stratum.

The radiometric date of the textile supports a deposition of the hoard in the early 8th century BCE (see Eshel et al. 2022).

The hoard consists of 179 silver items, most of which are cut ingots of various weights, ranging between 0.01g – 40g. The hoard also contained several silver jewelry items which are mostly unique for the Southern Levant (**Figure A.7**):

¹⁸ Parallels are known from Jerusalem (De-Groot and Bernick-Greenberg 2012: Fig. 4.3:11–12; Photo 4.27–29; pp. 68–70; 154–160), Lachish Level III (Zimhoni 2004: 1794, Fig. 26.4, type CP1), and Beth Shemesh, where this type continues into the 7th century BCE (Bunmovitz and Lederman 2016: Fig. 5.72).



Figure A.7: Silver Jewelry from the 'Arad hoard. (a) Two sides of a solid lunate earring with a bell-shaped-flower-petal tassel/hollow attachment. (b) A small ring, with granulation and missing attachment/stone. (c) A solid lunate earring with a short hoop, decorated with two wound wires. (d) A small ring, with flattened oval-shaped bezel, engraved with a bull.

1. A solid lunate earring with a bell-shaped-flower-petal tassel/hollow attachment, and a small round attachment connecting between the earring and the larger tassel attachment (**Figure A.7a**).

This earring is similar to the solid lunate earring with flower-bud attachments which were known in the Southern Levant throughout the Late Bronze and Early Iron Ages (Golani 2013: Type II.9, 113–114; Maxwell-Hyslop 1971: Fig. 198: a–c, 200; Sass 2007; Verduci 2018: Type III.d, 88–89).¹⁹ The attachment of the 'Arad earring, however, is not a bud, but rather a blooming flower, and does not have parallels in the Southern Levant.

2. A small ring, with granulation and missing attachment/stone (**Figure A.7b**).

This seems to be a small ring but might also be an earring. There are no parallels for this type in the Southern Levant (Golani 2013), Greece (Verduci 2018), Western Asia (Maxwell-Hyslop 1971), or Phoenician/Punic contexts in the West Mediterranean (Almagro-Gorbea 1986; Quillard 1979). Several earrings in the Early Iron Age have attachments of granules in a row along the earring, yet the body of

¹⁹ The latter probably derive from the 13th century flower-bud pendants which were attached with a hoop (Verduci 2014; 2018: Type III.a, 92–93), and are considered the prototype of the granulated-tassel attachments, which developed in the Iron Age I–IIA (Golani 2013: 115; Sass 2002; Verduci 2014).

the earrings is thin, and does not contain an attachment (Golani 2013: 113–114, type II.8a). The granulation technique was widely used by the Phoenicians in the Iron Age (e.g., Pisano 1987).

3. A solid lunate earring with a short hoop, decorated with two wound wires, one around the center of the lunate, and another on the upper part of the hoop (**Figure A.7c**).

This earring has three parallels, one dating to the Iron IIB, made of silver, from Tell Jemmeh (Golani 2014: 890, fig. 22.1.d) and the two others date to Late Bronze Age, and are made of gold, one from Dor (with three wound wires, Area G, Stratum 12 /11, Late Bronze Age IIB; Ben-Basat 2018: Fig. 26.1.18) and the other from Megiddo (Stratum VIIA; Loud and Crowfoot 1948: pl. 225: 18). The transition from gold in the Late Bronze Age to silver in the Iron Age is often observed in jewellery in the region (Golani 2013). Therefore, this is probably a local type, although several gold examples with three wound wires were found in graves of the Neo-Assyrian period in Assur (8th–7th centuries BCE), and are also engraved on a stela from Nimrud, as worn by Ashurnasirpal II (~850 BCE; Maxwell-Hyslop 1971: 238, fig. 127: 1).

4. A small ring, with flattened oval-shaped bezel, engraved with a bull (**Figure A.7d**)

Flattened oval and leaf-shaped bezel finger rings are common in the Southern Levant from the Late Bronze Age to the Persian period, made of silver, gold, bronze and iron, and are occasionally engraved (Golani 2013: 139–140, type III.8a). Three similar silver rings date to the Iron Age II. Two blank rings from Tomb 106 in Lachish (Tufnell 1953: pl. 54: 13, 14) and one from Phase 3 in the Phoenician Tomb no. 1 in Achziv, which bears a depiction of the Horus eye and wavy lines (9th–7th centuries BCE; Mazar 2004: fig. 25: 17). The engraving of a bull on this type of ring is not known in the Southern Levant but has two parallels in Cyprus dating to the Late Bronze and Early Iron Ages, made of gold. In the Cypriot parallels, however, the bull is given in a hatched border (Boardman 1970: 6; Karageorghis 1964: 349, fig. 85). Oval-shaped bezels were common on finger rings in 7th century BCE Phoenician contexts in the West (e.g., Tharros, Ibiza and Cadiz; Almagro-Gorbea 1986: pl. LXXX:254— found out of context; Boardman 1967: 5, n. 9; 1970: 7; Pisano 1987: pl. 40: a, b).

To conclude, the 'Arad hoard, contains unique jewelry items. Out of the four examined items, three do not have precise parallels, yet have Phoenician stylistic attributes, and Canaanite or Cypriot Late Bronze and Early Iron Age stylistic origins, including for the earring which is Neo-Assyrian in style (Figure A.3c). We suggest, therefore, that these are unique, yet local jewelry items, without clear Assyrian affinities. The hoard was originally assigned to Stratum IX, namely the 9th century BCE, and re-assigned to Stratum X, in the 8th century BCE. The latest textile provides a terminus *post-quem* ca. 800. and the others date to the 9th century BCE, yet were probably old and re-used (Grömer 2017; Shamir and Baginski, n.a.). Therefore, the most probable date for this hoard would be in the early 8th century BCE.

Tel Miqne/Ekron (Table 1, Nos. 34–39)

Tel Miqne, which is identified as Philistine Ekron, was excavated for 14 seasons between 1981 and 1996 under the direction of Trude Dothan of the Hebrew University of Jerusalem, and Seymour Gitin of the Albright Institute of Archaeological Research. Six hoards were unearthed at Tel Miqne and will be fully published in the excavation report (Golani forthcoming). A large portion of the jewelry in the hoards, and the context and chronology have already been widely discussed (Gitin and Brandl 2018; Gitin and Golani 2001; Golani 2013; Golani and Sass 1998). The hoards are therefore only briefly described here. The different chronologies suggested for the relevant strata are presented, and various cultural influences on the published jewelry are discussed. Selected items from the hoards are reproduced in Figure 2 in the main text.

Tel Miqne 1 (Table 1, No. 34)

The hoard was unearthed in 1985. It was contained in a jug hidden under a floor in the elite zone of Tel Miqne, Field IV, Stratum IB (for its chronology see below). It contains 256 small beads and 74 silver objects. The hoard contains jewelry, some of it cut or broken, alongside silver fragments. The silver in the hoard weighs 24.5 g.

Tel Miqne 2 (Table 1, No. 35)

Hoard Tel Miqne 2 was unearthed in 1988, found in a pile on a floor in the same building complex as Hoard Tel Miqne 1, in the elite zone of Tel Miqne, Field IV, Stratum IB. The hoard consists of 64 items, including cut, broken and damaged jewelry, cut silver pieces, and a rolled silver ingot. The silver in the hoard weighs 259.4 g.

Tel Miqne 3 (Table 1, No. 36)

Hoard Tel Miqne 3 was unearthed in 1992. It was found in a small jug located within a larger jug buried beneath a floor in the elite zone, Field IV, Stratum IB. It contained 89 items, mostly cut silver, rolled silver ingots, and fragments. The one non-silver piece was identified as a gold droplet. The total weight of the silver is 954 g.

Tel Miqne 4 (Table 1, No. 37)

Hoard Tel Miqne_4 was unearthed in 1992, in the upper city (Field I), Stratum IB, hidden in the hole of a reused perforated olive oil press stone weight. The stone, which may have fallen from an adjacent wall, could have served as a primitive wall safe. The hoard contains mostly non-silver jewelry (27 pieces), alongside cut silver and silver scrap, weighing 89.7 g.

Tel Migne 5 (Table 1, No. 38)

The Tel Migne 5 hoard was unearthed in 1993, in the southwest corner of a fill, over which a stone socle was constructed, in the olive oil industrial zone in Field III, Stratum IC at Tel Migne. It is the only hoard attributed to this stratum, and is considered a foundation deposit, rather than a currency hoard (Gitin and Brandl 2018). The hoard contains 14 miniature scarabs set in silver mounts, with Phoenician inscriptions, four earrings with attachments of pyramids of granules, a small silver ring with spiral decoration and missing stone, an open-ended silver ring, with a bulbous at the edge and elongated beads with silver composites (**Figure A.8**; Gitin and Brandl 2018; Golani 2013; personal observation). The hoard was found in a Phoenician-type red-slipped and burnished jug, the neck of which had been broken off (Gitin and Brandl 2018: 294, fig. 3).



Figure A.8: Hoard Tel Migne_5 and earrings from hoard Tel Migne 6. Photo courtesy of Amir Golani.

Tel Migne 6 (Table 1, No. 39)

Hoard Tel Migne 6 was found in 1995, covered by an overturned broken bowl on the threshold of one of the side rooms of the Field IV Temple Complex 650. It contains 11 silver lunate earrings with a total weight of 19 g and another non-silver item (undescribed). It was assumed that the bowl with its contents fell from a shelf when the building was destroyed.

Chronology

The absolute chronology of late Iron Age Tel Migne is currently under some debate. Stratum IC was dated by Gitin to the first half of the 7th century under Neo-Assyrian control, and Stratum IB to the second part of the 7th century Egyptian/Post-Assyrian period, prior to the takeover by the Babylonians in 604 BCE (Gitin 1989: 48-49; 1997: 86-91; Gitin and Golani 2001: n.2). Alternatively, Stratum IC was attributed to the 2nd half of the 8th century BCE, and Stratum IB was attributed to the entire 7th century BCE (Na'aman 2003; Ussishkin 2005). However, Na'aman agreed that “most of the artifacts unearthed at Stratum IB should be assigned to the period in which Ekron was a vassal of Egypt”

(Na'aman 2003: 88). Both Gitin and Golani (2001) and Gitin and Brandl (2018) attributed hoards Tel Mique 1–4, and 6 to Stratum IB (7th century Egyptian/Post-Assyrian period), based on stratigraphical considerations. Hoard Tel Mique 5 differed, as it was deposited beneath a wall in Field III, which was constructed in Stratum IC (Gitin and Brandl 2018; Gitin and Golani 2001). Although Gitin and Golani (2001) suggested to associate the Mique hoards to Assyrian silver trade, clearly most of the hoards date to the period when Ekron was under Egyptian influence, post-dating the Assyrian dominance over the region, as was previously pointed out (Na'aman 2003).

I therefore suggest the following chronology for the hoards, considering the different options:

Tel Mique 5 (Stratum IC): Iron Age IIB (2nd half of the 8th century BCE)/ early Iron Age IIC, Assyrian occupation (~701–mid 7th century BCE).

Tel Mique 1, Tel Mique 2, Tel Mique 3, Tel Mique 4, Tel Mique 6 (Stratum IB): late Iron Age IIC, under Egyptian control (after mid-7th century, terminating in 604 BCE).

Jewelry

Neo-Assyrian: Two jewelry items were described as “Neo-Assyrianizing” (Golani and Sass 1998: 74). They are: 1) a small decorated lunate earring from hoard Tel Mique 2 (Golani 2013: 99–100, fig. 8.17, Earring type I.3a; Golani and Sass 1998: fig. 10: 3), and b) a sheet medallion from hoard Tel Mique 4 (Golani 2013: 155–156; fig. 22:7, Pendant type I.2a; Golani and Sass 1998: 70, fig. 14:2). The lunate earring is decorated with wire bands and triangles of granules on the body. Similar examples with band decorations are found in gold in Late Assyrian tombs in Assur (Maxwell-Hyslop 1971: figs. 129–130), but also in Ephesos, in Ionia (East Greece), dating to the 8th century BCE (Marshall 1907, pl. 9: 943, 944, 1065) to the second half of the 7th or the first half of the 6th century BCE (Bammer and Muss 1996; Hogarth 1908). The second “Assyrian” item is a sheet-metal medallion with a crudely incised scene of a man with a long garment, hand raised, (probably a worshipper) facing a goddess identified as Ištar who stands on a lion, under signs of the Pleiades, a crescent moon, and a winged sun. The medallion has close parallels, of finer quality, in the 7th century in Syria and Anatolia (Zinjirli and Urartu; see refs. in Golani and Sass 1998: 70). They are inspired by Assyrian iconography (Kellner 1991: 166–167; Merhav 1991: 174–175). Ornan (2001: 245–249) suggested that the crude rendition of the cultic scene, and the addition of Phoenician iconographic elements suggest that this was a product of a local craftsman, while the resemblance to the Zinjirli examples suggests a Northern Syria origin of the depicted theme (Ornan 2001: 245–249). We agree and would add to this that an Anatolian origin (Urartu) is possible as well.

Phoenician: Phoenician jewelry is defined here as jewelry which has contemporary parallels in Phoenician homeland sites (namely in the Levant) or clear Phoenician motifs. Some of the jewelry items are also known from Phoenician colonies in the West Mediterranean, suggesting a Phoenician origin and spreading of the style:

- 14 miniature non-Egyptian scarabs from hoard Tel Mique 5, which have several regular-size parallels in Phoenicia and bear Phoenician inscriptions (Gitin and Brandl 2018).
- A composite rock crystal bead from hoard Tel Mique 5 with circular silver caps (Golani 2013: 216, fig. 35: 9, Bead type VII). This bead has braided parallels in Phase 1 in the Phoenician Tomb n. 1 in the Achziv cemetery, dated to the late 10th - 9th century BCE (Mazar 2004: fig. 22: 10–12, 25). Similar elongated pendants are found in several Phoenician colonies in the West Mediterranean (e.g., Almagro-Gorbea 1986; Culican 1973; Sardinia: Pisano 1987; Iberia: Nicolini 1990: pl. 102–103).
- A cubical attachment of an earring, coated with folded silver sheets, from hoard Tel Mique 2. A possible parallel of this attachment was found at the necropolis of Achziv, Tomb ZR XXIX, dated to the 9th-7th c. BCE (Dayagi-Mendels 2002: fig. 4.21: 61; Golani and Sass 1998: fig. 10.7; Golani 2013: 108, n. 141, Fig. 10:15; Earring type II.3). Similar examples of pendants, topped by pyramid attachments rather than cubical ones, are known throughout the Phoenician settlements both in the Eastern and Western Mediterranean from the 7th century BCE onwards (e.g., Carthage, Villaricos in Spain and the necropolis of Tharros, Sardinia, Pisano 1987: pls. 43: i, 47: f, and see additional refs. in Golani 2013: 108).
- Six solid lunate earrings with basket pendants from hoard Tel Mique 4 (Golani 2013: 117–120, fig. 12: 2–3, Earring type III.2; Golani and Sass 1998: 63, 67–68, fig. 11: 2–3).

The basket pendant became popular in the late Iron Age II throughout the 7th–5th centuries BCE at Phoenician settlement sites throughout the Eastern and Western Mediterranean (Golani 2010; Quillard 1979: 50–54; Pisano 1987: 79). It has several parallels in the Phoenician homeland of northern Israel and the Lebanese coastal plain, dating mostly from the late 8th to the early 7th century BCE. Examples include Sarafand, Tomb 20 (Culican 1978: 138, fig. 5) and silver and copper alloy pendants from the Achziv necropolis, Tombs ZR XXI; ZR XII; ZR IV (Dayagi-Mendels 2002: figs. 4.4.16: 1; 4.10: 17; Mazar 2013: fig. 88). Therefore, Golani (2010) suggested, that although the basket pendent is often considered as a characteristic of the Phoenician culture (Culican 1958: 79), it has a local, South Levantine origin (Golani 2010; 2013: 120–121). Based on the parallels from Achziv, this earring can be dated to the 8th–7th centuries BCE.

- A small, multi-stranded ring with a knot from hoard Tel Mique 4 (Golani 2013: 138, fig. 16: 5, Ring type III.7a; Golani and Sass 1998: 68, 70, fig. 13:6). Local parallels are known from Phase 3 in the Phoenician Tomb n. 1 at Achziv (9th–7th centuries BCE; Mazar 2004: fig. 25: 12), and the Phoenician necropolis at Atlit (not clearly dated), suggesting a Phoenician style, perhaps adopted from earlier local stranding techniques (Golani and Sass 1998: 68, 70). This ring has parallels in the West Mediterranean, from the 7th century BCE onwards (refs. in Golani 2013: 138).

- Six small, solid, spherical pendants with a collared tube from hoard Tel Migne 1 (Golani 2013: 154–155, fig. 22: 1, Pendant type I.1a; Golani and Sass 1998: 70, fig. 14.1). The pendant has larger parallels in all phases of Phoenician Tomb n. 1 in the Achziv cemetery (Mazar 2004: fig. 23: 1–5, 18, 19), in Tyre (7th–6th centuries BCE, Seeden 1991: fig. 53: a–b) and in the ‘Jordanian’ hoard, dated to the 5th century BCE. (of no specific origin; Kraay and Moorey 1968: pl. 23: 151). The use of collared tubes is considered a Phoenician trait throughout the Mediterranean (Golani 2013: 154–155; Golani and Sass 1998: 70).
- Round medallion pendant, with a stone set in a mound and two tubular attachments decorated with wires on both ends, from hoard Tel Migne 2 (Golani 2013: 162–163, fig. 22: 36, Pendant type I.14; Golani and Sass 1998: 73, fig. 14: 7). It has several parallels at the Tel Achziv cemeteries, from Phases 1–2 in Phoenician Tomb n. 1 (Mazar 2004: fig. 23: 7–10, 20), with one tubular attachment, and from shaft Tomb ZR LV with two tubular attachments (Dayagi-Mendels 2002: fig. 4.34: 2). Parallels in Phoenician colonies in the West Mediterranean are known from the 7th century BCE onwards (Golani 2013: 162; Golani and Sass 1998: 73).

Phoenician with Egyptian motifs: Several jewelry items have parallels in the Phoenician colonies in the West Mediterranean, from the 7th century BCE onwards, however they also contain clear Egyptian motifs:

- A hollow lotus pendant, made of two identical impressed silver sheets, with a suspension ring on the top, from Tel Migne 1 (Golani 2013: 117, fig. 12: 1, Pendant type III.1a). This specimen is unique in the Southern Levant, but four identical parallels are known from the necropolis of Amathus, Cyprus, Tomb 159, dated to the 7th–6th centuries BCE (Laffineur 1992: pl.9: T.159/56). The lotus motif originated in Egypt, but was widely employed throughout the Ancient Near East, Phoenicia, and the Phoenician West. Parallels to this lotus pendant in silver are found primarily at Phoenician sites of the 7th and 6th centuries BCE (refs. in Golani 2013: 117; see also Nicolini 1990: fig. 208).
- A composite earring, from Tel Migne 4 (Golani 2013: 121, fig. 13: 7, Earring type IV; Golani and Sass 1998: 67–68, fig. 11: 4) consists of a solid lunate earring, soldered to a hollow sheet silver lotus flower, with an Egyptian-style human face at the base of the petals and two basket pendants hanging from two suspension rings, at the base of the lotus. This earring does not have parallels in the Southern Levant, yet the merging of several elements with basket pendants is common in Phoenician colonies in the West Mediterranean (refs. in Golani 2013).
- Two small rings with a cartouche shaped bezel (Golani 2013: 134–135, fig. 15: 17, Ring type III.4; Golani and Sass 1998: 68, 70, fig. 13: 4). One ring from hoard Tel Migne 2 is blank and the other from hoard Tel Migne 4 is engraved with Egyptian style unreadable hieroglyphs. This ring form has one parallel from the Southern Levant, found in topsoil at Tel Harashim, and several parallels from the 7th–6th centuries BCE in Sidon. It is known in Phoenician colonies across the

Mediterranean, but also in Etruria and Greece, during the 7th–6th centuries. It was thought to be spread to the West by the Phoenicians (refs. in Golani 2013: 134–135).

- A pair of impressed sheet silver Horus eyes from hoard Tel Mique 1 (Golani and Sass 1998: 73, fig. 14: 8). Although this motif is known in the Southern Levant during the Late Bronze Age and Iron Age I (Golani and Sass 1998: 73; McGovern 1985: 102), from the 7th century BCE onward it spread through the Levant and the Phoenician world (Fletcher 2004; Golani and Sass 1998: 73).

Phoenician with Southern Levantine motifs: Several earrings in the Tel Mique hoards have parallels in the Phoenician colonies in the West Mediterranean, from the 7th century BCE onwards, however they also contain local motifs:

- Four thin and elongated solid lunate earrings with hollow drop-shaped attachments (Golani 2013: 103–104, fig. 9: 11–12, 15–16, Earring type II.1a). Of these, two earrings are from the Tel Mique 5 hoard (Golani 2013: fig. 9: 11–12). Their attachment is composed of an upper widening hemispherical shape coated with silver wire, and the lower part is decorated with granules with a droplet at the edge. The elongated thin earring is decorated with two wire bands. Two additional earrings are from the Tel Mique 4 hoard (Gitin and Golani 1998: fig. 10: 5; Golani 2013: fig. 9: 15), and Tel Mique 2 hoard (Gitin and Golani 1998: fig. 10: 6; Golani 2013: fig. 9: 16). These earrings differ in their acorn-shape attachment, which is not coated with wire at the upper part. A chronological development is evident: The use of hollow drop-shaped forms with tightly wound wire for the construction of cones and decoration of the hoop, evident in the jewelry of Tel Mique 5 hoard, appears locally in the Southern Levant throughout the Iron Age (Gitin and Golani 1998), while the use of an acorn motif evident in the Tel Mique 4 and Tel Mique 2 hoards is known only from the 7th century BCE, at Tel Mique and in Phoenician colonies in the West (Golani 2013: 103–104, n. 158).

A thin and elongated solid lunate earring with an unusual pillar-shaped attachment, from Tel Mique 5 (Golani 2013: 108–109, fig. 10: 17, Earring type II.4). The earring is decorated on both sides by tightly wound wire, and the pillar is decorated with an elongated X-shaped engraved design on both its long wide sides. Beneath the pillar were attached one or two inverted pyramids of granules, each capped by a single large granule. The earring has larger parallels in the 5th century BCE ‘Jordanian’ hoard (Kraay and Moorey 1968), and similar parallels in Tell el-Mazar in Jordan (Golani 2013: 108–109), and does not have parallels in Phoenician colonies in the West Mediterranean (e.g., Thasos: Perdignes-Moreno, Muñoz-Vicente and Pisano 1990; Pisano 1987. Iberia: Almagro-Gorbea 1986; Nicolini 1990).

- A thin and elongated solid lunate earring with a hollow, fan-shaped attachment and pyramid of granules, from Tel Mique 5 (Golani 2013: 109, fig. 10: 21, Earring type II.5). The only known possible parallel in the Southern Levant is from the 7th century BCE in Achziv, and production techniques are considered local (Golani 2013: 109).

Considering all the above, a strong Egyptian influence vs. a very minor Neo-Assyrian contribution is evident in the jewellery, suggesting, as mentioned above, that the hoards post-date the Assyrian occupation period in the Levant. For the purpose of this paper another important observation is that Tel Mique 5 differs from the later Tel Mique/Ekron hoards. It is earlier chronologically, dating to the Assyrian period in Tel Mique/Ekron, is the only foundation deposit, and the only hoard unearthed in the industrial zone (while the remaining hoards were unearthed in elite zones), in a ceramic jug of Phoenician style. Typologically, hoard Mique 5 jewelry is primarily influenced by Phoenician styles, and local styles from the Southern Levant, rather than Egyptian styles which are evident in the other, later hoards (Tel Mique 1, 2, 4). Although hoard Tel Mique/Ekron 5 contains scarabs, they are clearly non-Egyptian in style (Gitin and Brandl 2018).²⁰

Finally, a chronological development is evident in several specific earring type (the solid lunate earring with hollow drop-shaped attachments; and the basket pendant; see above), demonstrating how local styles developed into Phoenician jewelry which were spread to the West Mediterranean. Based on this and other examples (see above), it is evident, as previously observed (Golani and Sass 1998), that the Tel Mique hoards form a link between jewellery of Phoenician, Egyptian, Cypriot and local Canaanite styles, and later Phoenician jewelry which spread across the West Mediterranean at least from the 7th century BCE onward.

To conclude the chronological debate, hoard Tel Mique 5 dates to the 8th–early 7th centuries BCE, while hoards Tel Mique 1–4, 6 date to the 7th century BCE, under Egyptian occupation.

‘Ein Gedi (Table 1, No. 40)

The hoard was found in a late 7th–early 6th century BCE cooking pot, covered by a contemporary lamp, at the oasis of ‘Ein Gedi, which in this period belonged to the Kingdom of Judah. The pot was hidden under the floor of an inner room, near an inner wall (Stratum V, Area D, building 207, Locus 208, Wall 157), which was part of a row of buildings found on the terraces of the northern slope of the site; Stern and Matskevich 2007: 73). In the room above the hoard were found bronze scale pans and Judahite stone weights, which may suggest that the building was used for commercial activities (Stern 2007a: 174–175). The building contained round pottery vats, which were used for some industrial process, possibly for the production of perfume (Stern 2007b: 361), or beer (Hadas 2004). The stratum V structures were destroyed in the late 7th/early 6th century BCE, probably during the Babylonian conquest of Judah (Stern 2007b: 362). The hoard contains 67 cut silver ingots in different weights, ranging between 0.38–44.15 g. The weight of 62 of the 67 total registered cut-silver items is 1.1 Kg (Kletter and De Groot 2007).

Horvat ‘Uza (Table 1, No. 41)

²⁰ Hoard 3 did not contain jewelry and consisted only of cut and rolled ingots, and hoard 6 contained solid lunate earrings, which were common throughout the Iron Age in the Southern Levant (Gitin and Golani 2001: pl. 2.6, 2.10).

The Iron Age Fortress of Horvat 'Uza was founded in the mid-7th century BCE. It was part of the Judahite defense system which was built in the form of a chain of fortresses along its eastern and southern borders, the earliest one being Tel Arad Stratum XI (9th century BCE; Herzog 2002: 26). The 'Uza fortress has one Iron Age stratum which ended in the early 6th century BCE. It contained mainly Judahite ceramics and Edomite cooking pots (Freud 2007:120). Three silver ingots were found in three different locations in the fortress. These include a large flat ingot (64.62 g), a folded ingot (40.05 g), and a cut ingot (6.92 g; Freud 2007:264). The large flat ingot was found in Locus 344, a mixed debris locus in the eastern sector of the fortress, which does not appear on the Iron Age plan (Beit-Arieh and Cresson 2007: fig. 2.3). The folded ingot was found in Locus 381, a street in the center of the fortress (Beit-Arieh and Cresson 2007: fig. 2.3). The cut ingot was found in Locus 1315, a room in the eastern sector of the fortress, not far from the large flat ingot (Beit-Arieh and Cresson 2007: fig. 2.3). This is a rare case where silver, used as a form of currency, was not found in the context of a hoard, although it is possible that the ingots originally belonged to one hoard. The folded ingot from Locus 381 was sampled for this study.

Mras ed-Din (Table 1, No. 42)

During the 2019 excavation season, a silver hoard was unearthed at Mras ed-Din, a site dated to the late 7th century BCE. The hoard was found in a small complete juglet retrieved from the collapse of wall W212 (L301 in Fig. 2b) in the southern room of the main structure of a large domestic house, probably a farm. The hoard contained six cut-silver ingots. Four are tabular, one is a rolled ingot and another is amorphous (Eshel et al. in press).

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