# A MIDDLE BRONZE AGE TOMB AT 'ATLIT

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#### INTRODUCTION

In late December 1990, during construction work at a military facility near the Frankish castle of 'Atlit, a tractor fell into the collapsed ceiling of a chamber tomb. The tractor damaged two chamber tombs on the western slope of the ridge; one of them was decimated and no finds were discerned that could be associated with it or testify it was ever in use. The other, 10 m to the south, had only its upper section destroyed, preserving the mortuary assemblage intact for the most part.<sup>1</sup>

On December 24–27, Eilat Mazar mounted a rescue excavation in the southern tomb on behalf of the Israel Antiquities Authority. Prior to excavation, the tomb was partially looted by construction workers. When apprised of the importance of a complete assemblage, the workers returned many, perhaps nearly all of the plundered objects, including scarabs. The tomb is located approximately 100 m southeast of the castle's outer wall (map ref. NIG 1935/7335; OIG 1435/1935), in the second of the three north–south *kurkar* ridges of the Carmel coast that run parallel to the seashore (Fig. 1).

#### THE EXCAVATION

### Excavation Strategy

The first step in the excavation was to remove the collapsed debris of the ceiling down to what appeared to be the original accumulation in the tomb. This accumulation was of different depths in various parts of the tomb, up to a maximum of 0.8 m. A fixed elevation was determined relative to the ceiling remains on the southeastern corner and a level plane was

interpolated from that point (see Fig. 4). At this fixed elevation, 1.44 m below the ceiling, a grid was laid out in 1 sq m squares. Most objects were plotted with reference to this grid. The soil was sieved. Eilat Mazar and one volunteer

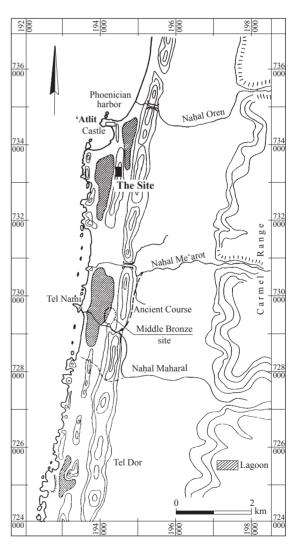


Fig. 1. Location map.



Fig. 2. The tomb in its *kurkar* ridge setting, surrounded by debris created by heavy machinery, looking east.

carried out most of the work. Due to time and manpower constraints excavation proceeded rapidly. While it would have been desirable to leave all finds *in situ* and then illustrate and photograph their positions, the excavators were forced to make do with coordinate plotting and removal of the individual finds.

# Description of the Tomb

The tomb comprises one square chamber  $(3.74 \times 3.74 \text{ m})$ . The eastern margins of the thin *kurkar* ceiling were preserved (Figs. 2–4), allowing us to reconstruct a height of 1.75 m. The eastern wall was completely preserved while the northern and southern



Fig. 3. The tomb prior to excavation of the lower level of collapse, looking east.



Fig. 4. The tomb after excavation down to the floor, looking east.

walls were partially cut away by the heavy machinery, sloping downward to the west. The western wall was completely destroyed by heavy machinery. The tomb opening was not preserved. Contemporaneous tomb structures (e.g., at Megiddo, Barqa'i and Kafr 'Ara) suggest that the entry would have been either a horizontal or sloping dromos, or a vertical shaft cut down into the western slope (Loud 1948; Gophna and Sussman 1969; Gadot et al., in press). The floor of the tomb is fairly level, approximately 10 cm lower on the northern and western sides. This slight slope may correspond to the northwestern strike of the *kurkar* layers.

## Distribution of Finds

Large quantities of bones and bone fragments were found in a very friable condition that would have made analysis almost impossible. Aside from those retrieved from the dumps brought up by the tractor, most of the powdery, fragmentary skeletal remains were found in each corner of the tomb, all indicating the existence of at least several burials. Larger concentrations of artifacts were discerned in the tomb's southwestern and northeastern corners. and a smaller concentration in the southeastern corner. This is a common phenomenon in Middle Bronze Age tombs where successive burial agents shoved the remains of previous burials up against tomb walls and into tomb corners (cf. Kenyon 1960:263; Ilan 1996:249; Maeir 1997:298; Kempinski 2002:52).

#### **FINDS**

### **Pottery**

The pottery of the 'Atlit tomb is entirely dated to the Middle Bronze Age. As far as we can tell, the deposit showed no stratification; no diachronic evolution of morphological characteristics can be discerned. We are therefore forced to rely on analogy to parallel assemblages from stratified contexts to place the tomb and its types in chronological context

(see Table 4). For a summary of the vessel count for the whole assemblage, see Table 2 below.

### Local Pottery (Table 1)

Platter Bowls (MNI = 90; Fig. 5).— The platter bowls of the 'Atlit tomb comprise the most frequent vessel type, and the assemblage contains little that is out of the ordinary. The average diameter is 27 cm; apparently, there are no bowls with diameters greater than 40 cm.

The inturned, rounded rim is, by far, the dominant rim type (Table 1), as is characteristic of MB IIB (e.g., Albright 1933: Pl. 10:8; Ilan 1996:213-216; Kempinski, Gershuny and Scheftelowitz 2002:109; Maeir 2007: Pl. 23:1). The next highest rim frequency is the simple rim, which occurs in both the later and earlier Middle Bronze phases, and is therefore not chronologically indicative. Squared-off or cut rims are a feature of MB IIA and MB IIB, but not of MB IIC.2 The everted rim is rare in Canaan in MB IIA, but it comes into its own in MB IIB and continues to be common in MB IIC (Albright 1933: Pl. 13:14; Yadin et al. 1958: Pl. CXIX:12; Ben-Tor and Bonfil 2003: Figs. 78:1; 86:1; Livneh 2005: Figs. II.14:6; II.23:14; Maeir 2007: Pls. 13:21; 34:11).3 While different degrees of rim thickening occur amongst the different rim types, this feature does not seem to be very diagnostic. The upright rim exemplified by Fig. 5:7 is the least frequent form; only 4 out of 90 rims registered are of this type. The rouletted pattern on the rim of Fig. 5:8 is highly unusual. No parallels were found, though incised patterns are known from other vessels in MB IIB-C.

**Table 1. Platter Bowl Rim Types and Their Frequency** (see Fig. 5)

Rim Type	MNI	%	Fig. 5
Inturned and rounded	47	52.3	3, 5
Simple	24	26.7	1, 4, 6
Cut or squared off	8	8.9	2, 8
Everted	7	7.7	9, 10, 11
Upright	4	4.4	7
Total	90	100.0	

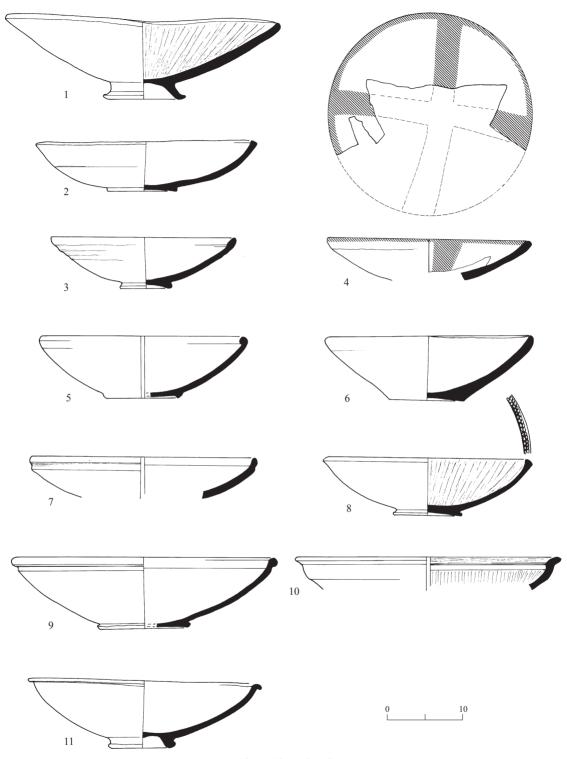


Fig. 5. Platter bowls.

Approximately 70% of the platter bowls had ring bases, though some of these could also be termed concave disc bases. Only four items showed high ring bases (e.g., Fig. 5:1, 11). There are very few simple flat bases (we counted only 9, approximately 10%, e.g., Fig. 5:6); these appear to be associated with simple and squared rims. The rest, approximately 20%,

**♦** Fig. 5

No.	Rim Type	Reg. No.
1	Simple	138
2	Squared	123
3	Inturned and rounded	169/15
4	Simple	003
5	Inturned and rounded	240
6	Simple	004
7	Upright	006
8	Squared	164/2
9	Everted	83/3
10	Everted	005
11	Everted	165

are disc bases, either flat or concave. No bases showed any kind of profiling (a characteristic of the MB IIC platter bowls). In short, the base features all point to a MB IIB horizon.

Slip and burnish is, as usual, difficult to gauge; this is particularly true in the damp coastal environment. At least three of the illustrated examples (Fig. 5:2, 3, 10) are slipped and three, highly burnished (Fig. 5:1, 8, 10). This is fairly indicative of the assemblage as a whole, though the proportions represent minimum numbers—slipped surfaces are notorious for flaking off. Figure 5:4 is a platter bowl with a painted cross in the interior, a feature of late MB IIA and MB IIB (Kempinski, Gershuny and Scheftelowitz 2002: Fig. 5.24:7; Ben-Tor and Bonfil 2003: Fig. II:21:5).

Two loop handles were found that appear to belong to open bowls (with thickened, simple rims).

Deep Rounded Bowl (MNI = 1; Fig. 6:1).— This single example, with an everted rim and a double lug handle, is an anomalous form. The MB IIA

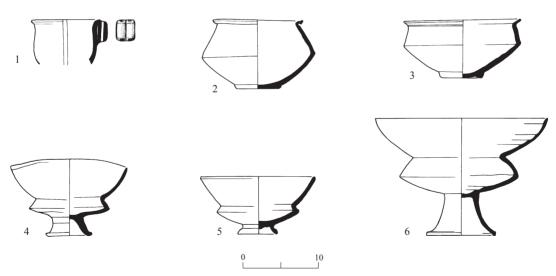


Fig. 6. Deep and carinated bowls.

No.	Description	Reg. No.
1	Bowl, deep rounded	002
2	Bowl, closed carinated	008
3	Bowl, closed carinated	126

No.	Description	Reg. No.
4	Bowl, flaring rim	92/2
5	Bowl, flaring rim	90
6	Bowl, flaring rim on trumpet base	139

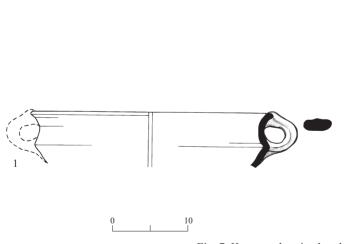
globular bowls are generally more closed and the hemispherical bowls always have simple inturned rims (cf. Ilan and Marcus, forthcoming: Figs. 7.5, 7.6 and, for now, cf. Artzy 1995: Fig. 2.4 and Beck 2000: Fig. 10.10:4). Thus, it is sort of a hybrid of the two. This item would also fit into Bonfil's deep rounded bowl category (e.g., Bonfil, forthcoming: Fig. 8.4:9 = Maeir 2007: Pl. 32:8), though it is smaller than any of Bonfil's examples.

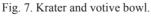
Carinated Bowls (MNI=3; Fig. 6:2, 3).—These are surprisingly few. Both complete examples are illustrated and both are slipped red (as is the only other rim sherd of this type). Both have the more pronounced, everted rim, without the gutter, that is more characteristic of MB IIB than MB IIA (compare Bonfil, forthcoming: Fig. 8.6 to Ilan and Marcus, forthcoming: Fig. 7.7). Figure 6:2 has a disc base and Fig 6:3 has a ring base.

Flaring Rim Bowls (MNI = 32; Fig. 6:4–6).— This is the third most common type, after platter bowls and juglets. They are called "open carinated bowls" by Bonfil (forthcoming: Figs. 8.6:11–14 = Yadin et al. 1958: Pls. CXIV:17; CXIX:15; Kenyon and Holland 1982: Figs. 186:9; 191:13; Ben-Tor and Bonfil 2003: Fig. 91:2; Maeir 2007: Pls. 14:26; 23:11; 26:1). Two basic variations occur: one with a more open carination and a higher ring base (Fig. 6:4), the other with a shorter carination and lower ring base (Fig. 6:5). Two wares can be distinguished: one exhibiting a yellowish brown clay and the other a reddish pink clay. One flaring rim bowl (fragmentary, not illustrated) has an omphalos in the interior.

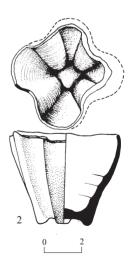
Six flaring rim bowls were of the type with a high trumpet base (Fig. 6:6), sometimes called "chalices" (e.g., Amiran 1969: Pl. 28:10, 11).

*Krater* (MNI = 1; Fig. 7:1).— The dearth of kraters is somewhat surprising. The only identified example is the shallow, two-handled, carinated type characteristic of MB IIB (cf. Bunimovitz and Finkelstein 1993: Fig. 6.13:10; Maeir 2007: Pl. 31:2). It is essentially a flaring





No.	Description	Reg. No.
1	Krater, shallow ( = carinated bowl with handles)	007
2	Votive bowl	75



rim carinated bowl with handles and a simple rim.

Votive(?) Bowl (MNI = 1; Fig. 7:2).— This small open vessel is placed in the "votive" category following a typological tradition (cf. Yadin et al. 1958: Pl. CXIX:26, 27; Bunimovitz and Finkelstein 1993: Figs. 6.13:4, 8; 6.22:4; 6.23:7; Ben-Tor and Bonfil 2003: Fig. 94:2; Maeir 2007: Pls. 32:17, 18; 34:9; Bonfil, forthcoming: Fig. 8.5), though perhaps the less committal term would be "miniature" bowl (cf. Ilan and Marcus, forthcoming Fig. 7.24:15, 16, 18 = Loud 1948: Pls. 19:14; 21:5; Ilan 1992: Fig. 10:2). There is also a quatrefoil element here that is reminiscent of the larger bowls of the period (cf. Yadin et al. 1958: Pl. CXIV:18). The anomalous shape of these bowls may be a botanical motif.

Jugs (MNI = 2; Fig. 8:1, 2).— The small number of jugs is unusual for a cave tomb with this many interred burial goods. One jug, Fig. 8:1, seems to be of local manufacture, having the standard globular form which first appeared in MB IIA (Kempinski, Gershuny and Scheftelowitz 2002: Fig. 5.58:5) and continued unchanged into the early Iron Age (and see Kenyon and Holland 1983: Figs. 186:9; 191:13 for the MB IIB–C examples). The base is somewhat flattened and the rim spouted.

The other jug, Fig. 8:2, is a small shoulder-handled jug with a ring base and a double handle. Its shape is somewhat more biconical than either globular or piriform. This type occurs throughout MB IIB–C (Bonfil, forthcoming: Fig. 8.26:6 = Loud 1948: Pl. 31:6).

Dipper Juglets (MNI = 17; Fig. 8:3–7).—Ubiquitous as they are in Middle Bronze Age assemblages, dipper juglets are of limited typological utility. Most of the seventeen examples recovered are MB IIB–C types, i.e., larger, lentoid and with a converging base (Fig. 8:3–5). These are characteristic of Tell el-Dab'a Strata E/3 to D/3 (Kopetzky 2002). Only two are of the earlier, smaller and squatter

variety (Figs. 8:6, 7); these are comparable to examples from Tell el-Dab'a Strata G/1-3 and F (Kopetzky 2002). None have the slightly flattened base that is found only in MB IIA. On the other hand, at least four showed signs of red slip, common in MB IIA, fairly frequent in MB IIB, but rare in MB IIC.

Piriform Juglets (MNI = 57; Figs. 8:8-15; 9:1-5; 10:1).— The simple everted rim type is most frequent (Fig. 8:8-12). In some cases the rim becomes a down-turned lip (Fig. 8:13, 14). These rim types are found throughout the Middle Bronze Age, but are almost the only rim type in MB IIB and MB IIC (Yadin et al. 1958: Pl. CXXI:4-6, 10, 12, 13, 15, 16, 19, 20; Ben-Tor and Bonfil 2003: Figs. 83:11: 90:20: 91:3; Livneh 2005: Figs. II.31:2; II.32:5; Maeir 2007:276). It is noteworthy that the "stepped rim" examples are mostly fragmentary (e.g., Figs. 9:3, 4), except for Fig. 9:1, 2. Since these are more indicative of the late MB IIA-early MB IIB (Epstein 1974:13–14), they probably represent the tomb's initial period of use, and a

Fig. 8 ▶

No.	Description	Reg. No.
1	Jug, globular	161
2	Jug	1/6
3	Juglet, dipper	22
4	Juglet, dipper	92/3
5	Juglet, dipper	209
6	Juglet, dipper	207
7	Juglet, dipper	52
8	Juglet, piriform	136
9	Juglet, piriform	235
10	Juglet, piriform	153
11	Juglet, piriform	208
12	Juglet, piriform	50/10
13	Juglet, piriform	53
14	Juglet, piriform	142
15	Juglet, piriform	12

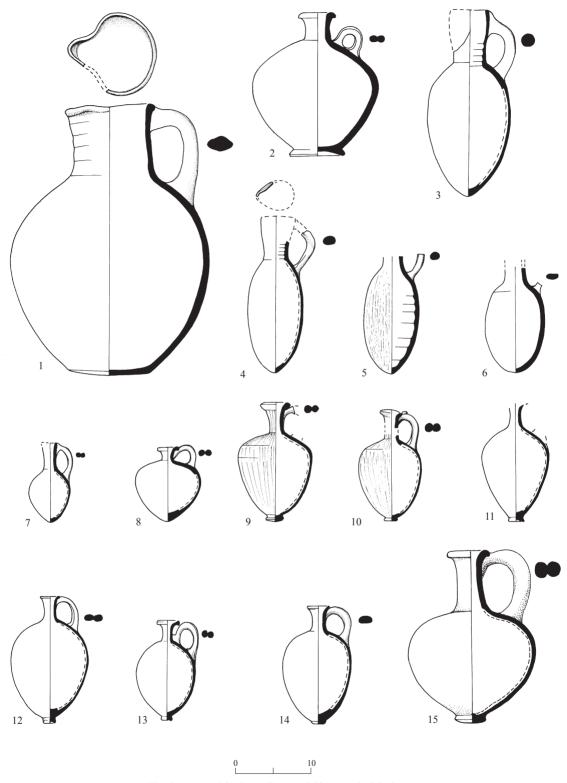


Fig. 8. Jugs and juglets (dipper, piriform and globular).

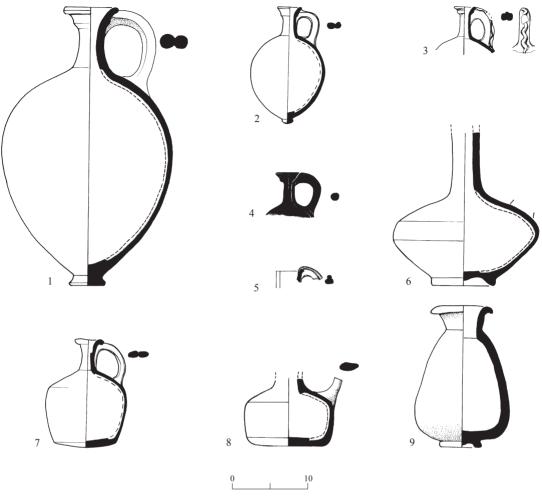


Fig. 9. Juglets (stepped rim, cylindrical, biconical) and a bottle.

No.	Description	Reg. No.
1	Juglet, piriform	20
2	Juglet, piriform	120
3	Juglet, piriform	73/4
4	Juglet, piriform	90
5	Juglet	009

No.	Description	Reg. No.
6	Juglet, biconical	124
7	Juglet, cylindrical	167
8	Juglet, cylindrical	168/14
9	Bottle (alabastron)	222

correspondingly greater degree of breakage due to subsequent deposition.

Piriform juglet bases are mostly button bases, though some are ring bases (Fig. 8:11) or a combination of the two (Fig. 8:12). Double handles are the rule, with some single strand exceptions (Figs. 8:15; 9:4). There is only one triple handle (Fig. 9:5), generally

indicative of MB IIA. The snake handle motif in Fig. 9:3 is paralleled in many assemblages dating throughout the Middle Bronze Age (for examples and a possible meaning, see Ziffer 1990:86\*).

As for body treatment, a number are red slipped and burnished (Fig. 8:9–11, 13, 14); one (Fig. 9:4) is of the black burnished "metallic"

ware class that is held to be more at home in the Syrian interior (Nigro 2003:351–353). The painted juglet (Fig. 10:1) is in the MB IIA Monochrome Painted Cream Ware tradition discussed by Ilan (1991).

Biconical or Squat Juglet (MNI=1; Fig. 9:6).— The biconical juglet (rim missing) belongs to the MB IIA tradition (cf. Ilan and Marcus, forthcoming: Fig. 7.22:23 [a still unpublished example from Megadim]) that continues into MB IIB—C (cf. an example from Ḥazor—Yadin et al. 1958: Pl. CXXI:19). The ring base enabled this vessel either to stand on its own or to serve as a lid for a jug or a jar. This type is conspicuous at Afeq in the Postpalace phase (Beck 2000: Fig. 10:31) and at Kabri in Tombs 984 and 498, i.e., in that site's MB IIB horizon (e.g., Kempinski, Gershuny and Scheftelowitz 2002: Pls. 5:23, 26, 27).

Cylindrical Juglets (MNI = 10; Fig. 9:7, 8).— Eight cylindrical juglets were of the larger, more barrel-shaped type (Fig. 9:7) and only two were clearly of the more squat variety (Fig. 9:8). The ware tends to be gray with carbonate inclusions. Rims are always simple and everted and the bases, where recognized, are somewhat convex, i.e., rounded, rather than flat. Two handles are double stranded (e.g., Fig. 9:7), but most fragments are single stranded.

None of the small, waisted cylindrical juglets of MB IIA (e.g., Beck 2000: Fig. 10.6:2) have been noted in this assemblage.

Bottle or Alabastron (MNI = 1; Fig. 9:9).— Bottles are closed, handleless vessels (MB IIA: Ilan and Marcus, forthcoming: Fig. 7.24:9-13 = Illife 1936:125:74, Pl. LXVII; Loud 1948: Pl. 13:8; Dever 1975: Fig. 3:5; Covello-Paran 1996: Fig. 4:9; Beck 2000: Fig. 10.23:1; MB IIB: Kenyon and Holland 1983: Fig. 195:1; Ben-Tor and Bonfil 2003: Fig. 91:5; Maeir 2007: Pls. 16:10; 17:4). This particular example belongs to the miniature vessel category and can be construed as an Egyptian inspiration (Beck 2000:216 and reference therein); it has a ring base and a simple, everted rim. The MB IIA repertoire (examples cited above) exhibits the more analogous examples, though nothing quite like the one here.

## Cypriot Pottery

White Painted V "Eye" Juglets (MNI = 11; Fig. 10:2, 3; 11:1, 2).— These juglets are characterized by a white-to-buff fabric and a black-to-reddish black matte-painted decoration, a short "trumpet" base, a pinched mouth and a single-strand handle with a painted line along its spine from shoulder to rim. The decoration takes the form mainly of vertical and horizontal lines that sometimes contain

Fig. 10 ▶

No.	Type	Reg. No.	Description
1	Juglet, piriform	115	Monochrome Painted Cream Ware
2	Juglet, piriform	169/20	Cypriot White Painted V, "eye juglet"
3	Juglet, piriform	010	Cypriot White Painted V, "eye juglet"
4	Jug, globular	216	Cypriot White Painted III-IV, Pendent Line Style
5	Juglet, globular	230	Cypriot White Painted III-IV, Pendent Line Style
6	Juglet, globular	56	Cypriot White Painted III-VI, Cross Line Style
7	Jug, globular	011	Cypriot White Painted III-VI, Cross Line Style
8	Juglet, biconical	149	Tell el-Yahudiya Ware
9	Juglet, cylindrical	91	Tell el-Yahudiya Ware
10	Juglet, piriform	241	Tell el-Yahudiya Ware (Piriform 2)

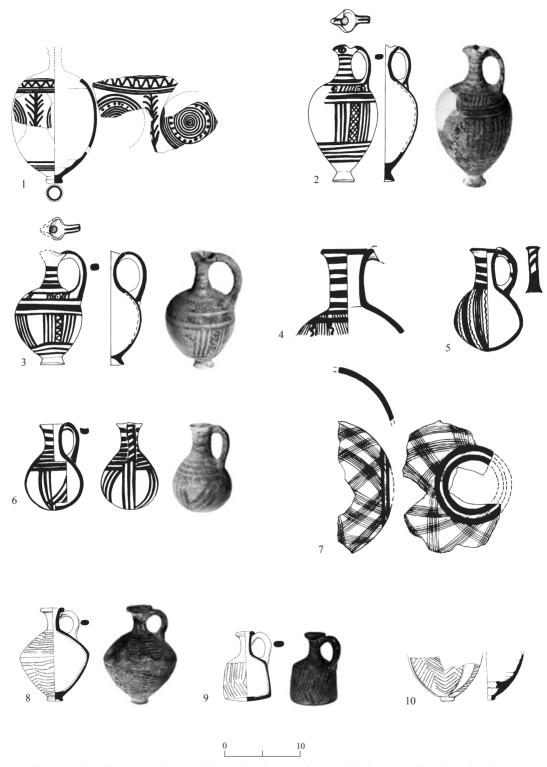


Fig. 10. Painted juglet (1), Cypriot White Painted wares (2–7), and Tell el-Yahudiya Ware (8–10).

caduceus, lattice or thicker band motifs. Two concentric circles form the "eye" next to the pinched spout. Parallels come from Kabri Tomb 304 (Kempinski, Gershuny and Scheftelowitz 2002: Fig. 5.20:14, dated to MB IIB); Megiddo Tombs 3046 and 5050 (Loud 1948: Pls. 34:16; 41:30). The latter tomb has been ascribed by Kenyon (1969:31) to her Pottery Group D, a group that is characterized in general by Middle Cypriot vessels. Pottery Group D corresponds to her rather nebulous architectural Phases N and O, which contain elements of old Strata XII and XI. The Levantine parallels as of 1957 were discussed in detail by Aström (1972:219-221). White Painted V vessels occur only in Stratum E/1-a/2 to Stratum D/2-a/2 at Tell el-Dab'a, i.e., in the Second Intermediate period corresponding to late MB IIB and MB IIC (Bietak 2002: Fig. 7). It is a style that occurs later on in Cyprus as well (Middle Cypriot III and Late Cypriot IA), especially in the eastern part of the island (Maguire 1992:116-118).

White Painted III-IV, Pendent Line Style (PLS) Jugs and Juglets (MNI = 4; Fig. 10:4, 5).— Made of light brown or buff clay, these vessels have the typical rounded, gourd-shaped body and display a brown to black painted line decoration, which takes the form of horizontal bands around the neck and vertical lines, straight and wavy from the neck to the base. The White Painted III-IV Pendent Line Style first occurs at Tell el-Dab'a in Stratum G (Bietak 2002: Fig. 15). Merrilees (2002) has shown that the White Painted Pendent Line Style is most characteristic of the Middle Cypriot III-Late Cypriot IA period, which corresponds to the MB IIB-C period in the southern Levant. However, based on the finds from Tell el-Dab'a, the Pendent Line Style does not cross over into Dynasty XVIII—its terminus ad quo must be c. 1550 BCE (Merrilees 2002:6).

White Painted III–VI, Cross-line Style (CLS) Jug and Juglet (MNI = 6; Fig. 10:6, 7).— These vessels tend to have a greenish-white fabric and a darker, greenish-black painted decoration.

As the name of the class indicates, the body decoration is characterized by criss-crossing groups of multiple parallel lines. The forms and the bands around the neck appear to be the same as the White Painted Pendant Line Style class. Figure 10:7 is the central body section of a jug decorated with two painted concentric circles from which further bands of lines emanate. It seems to presage later motifs. We have found no parallels for this item—the closest example appears to be some body fragments from Tel Mevorakh Stratum XIII (Salz 1984:59, Pl. 44:5).

Cross-Line Style first appears at Tell el-Dab'a in Stratum G1-3 or Dynasty XIII (Maguire 1992:117) and at Ashqelon in Gate 1 of Stratum 14, which Stager (2002:357) would place even earlier in MB IIA, parallel to Tell el-Dab'a Stratum G4 or even Stratum H. It also occurs in MB IIA contexts at Tel Nami and Tel 'Akko (Dothan 1976: Fig. 8:1–10; Artzy and Marcus 1992). It has been suggested that this style does not continue into MB IIC (Johnson 1982:62).

Some General Remarks on the Cypriot Pottery.— At nearby Tel Mevorakh, Middle Cypriot pottery was gleaned from two levels: Stratum XIII (MB IIB) and Stratum XII (MB IIC). It is worth noting that the whole and partially restorable items all come from Stratum XIII; the pieces originating in Stratum XII are all single sherds (Salz 1984), i.e., there is always the chance that they originated in the earlier stratum.

The best parallels for the Cypriot wares in the 'Atlit tomb are to be found at Tel Megiddo. White Painted Pendant Line Style items are much more frequent in late MB IIA (Gerstenblith 1983: Phase 4), through Kenyon's (1969) Pottery Group B, with only one fragment being later (Item N6 in Johnson's [1982] catalogue). On the other hand, the majority of Cypriot pottery at Megiddo, primarily White Painted Crossing Line Style and White Painted V, originates in Kenyon's Pottery Group D, firmly in MB IIB. Very few items, all fragmentary,

come from MB IIC levels (Johnson's [1982] N6, N18, N19, N20, the later three all White Painted V). For a summary of the stratigraphic distribution of White Painted Wares at Tell el-Dab'a, see Bietak 2002: Fig. 15.

Overall, the White Painted II-IV PLS class seems to begin in late MB IIA, reaches a peak in MB IIB, and survives as a vestige-or heirloom-type—in MB IIC and not beyond. The White Painted III-VI Crossing Line Style class appears to make a slightly earlier appearance in MB IIA and to reach the end of MB IIB, but probably not much beyond that. The White Painted V class (the eye-juglets in the case of 'Atlit) makes its appearance in MB IIB and continues into MB IIC. From the perspective of the Cypriot pottery, and its stratigraphic context in other Levantine sites, this assemblage would best be dated to MB IIB. In Cyprus itself, all these wares are most at home in the eastern part of the island (Åström 1972:11).

Tell el-Yahudiya Ware (MNI = 8; Fig. 10:8–10) For an assemblage of this size the Tell el-Yahudiya component is varied and unusual. One Tell el-Yahudiya juglet is biconical (Fig. 10:8), two are cylindrical (e.g., Fig. 10:9) and five are of the Piriform 2 type (e.g., Fig. 10:10), all according to the Bietak/Aston typology (Aston 2002; Bietak 2002). Apparently, there are no Tell el-Yahudiya juglets of the earliest, ovoid variety (cf. Zevulun 1990) and none of the Piriform 1 class (see Bietak 2002: Fig. 10 for a good graphic aid in placing the Tell el-Yahudiya vessels from 'Atlit).

The 'Atlit tomb Tell el-Yahudiya group, as a whole, would fit somewhere between the Strata E3 (b2) and D3 horizon at Tell el-Dab'a, i.e., MB IIB and MB IIC, circa 1690–1530 BCE. Interestingly, the Tell el-Yahudiya ware of 'Atlit appears more Egyptian in style than Canaanite (Aston 2002:51–53; cf. Bietak 2002:37–41).

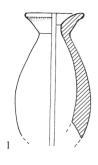
Figure 10:8 is quite similar to an example from Kabri Tomb 498 (Kempinski, Gershuny and Scheftelowitz 2002: Figs. 5.13; 5.40:7).

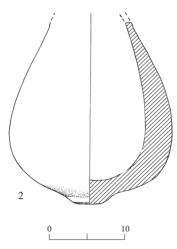
Summary of the Pottery Assemblage (Table 2) A minimum of 243 ceramic vessels were recovered from the 'Atlit tomb. The date of the assemblage ranges from late MB IIA to early MB IIC. While a number of forms begin in MB IIA, few if any, are solely MB IIA types (the exception may be Fig. 5:6); these few may originate in one or two burials from this period. The assemblage contains very little that is definitely MB IIC (see Table 4).

Significantly, no globular bowls were found. These are a feature of inland Syria and northern Canaan and more characteristic of MB IIA (Ilan and Marcus, forthcoming: Fig. 7.6 = Smith 1962: Pl. XVI:23; Epstein 1974: Fig. 7:13; Falconer and Magness-Gardiner 1984: Fig. 15:2; Beck 1985: Fig. 2:3–5; Garfinkel and Bonfil 1990: Fig. 3:8; Covello-Paran 1996: Fig. 4:7, 8; Paley and Porath 1997: Fig. 13.2:2, 3; Beck 2000: Fig. 10.8:5; Gonen 2001: Fig. 23:4; Kempinski, Gershuny and Scheftelowitz 2002: Fig. 5.22:9).

**Table 2. Pottery Counts (Approximate)** 

Туре	MNI	% of assemblage
Platter bowls	90	37.0
Hemisperical bowls	1	0.4
Carinated bowls	3	1.3
Flaring-rim bowls	32	13.1
Minature bowls	1	0.4
Kraters	1	0.4
Jugs	2	0.8
Dipper juglets	17	7.1
Piriform juglets	57	23.5
Biconical juglets	1	0.4
Cylindrical juglets	10	4.1
Bottles	1	0.4
WP V "eyelet" juglets	11	4.5
WP PLS	4	1.6
WP CLS	4	1.6
TeY juglets	8	3.4
Total	243	100.0





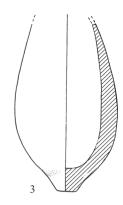


Fig. 11. Alabaster bottles.

No.	Туре	Reg. No.
1	Ovoid flask	214
2	Ovoid flask	210
3	Ovoid flask	209

No cooking pots were found in the 'Atlit tomb assemblage; this is commonly the case in Middle Bronze Age burial assemblages. Less usual is the absence of oil lamps and the small numbers of jugs, kraters and smaller bowls. This lack opens questions as to whether excavation retrieval was entirely comprehensive, and whether the construction workers who initially looted the tomb really did return all finds. In any case, one would not expect kraters and jugs to be the artifacts of choice for looters.

#### Stone Vessels

Fragments from eight alabaster vessels were found in the 'Atlit tomb (Fig. 11). All of them appear to be of true calcite alabaster whose most likely source is Egypt (e.g., Hester and Heizer 1981). They are all best attributed to Ben-Dor's (1945) Ovoid Flask category, though only Fig. 11:1 is manifest in his typology (Type D3).<sup>4</sup> Figure 11:1 is known in other Middle Bronze Age contexts, for example at Alalakh (Woolley 1955: Pl. 80). Figure 11:2, 3 are broadest closer to the base rather that at the shoulder. This lowers the center of gravity, which may have

some significance regarding the way they were used (heavy stone objects with higher centers of gravity are inherently unstable). Figure 11:3 is inversely piriform and as such, might be considered part of Ben-Dor's Baggy-shaped category, though it lacks the sharp angle between the side and the base typical of Ben-Dor's form. While somewhat baggy-shaped, Fig. 11:2 may embody the dipper juglet form (Ben-Dor's Type A—Juglets). This vessel is apparently a local Canaanite type manufactured of gypsum sulfate, probably in the Bet She'an region (Ben-Dor 1945:99-101). The two items with base intact (Fig. 11:2, 3) show a button base, which is typical of the ceramic juglets of this assemblage and of this period as a whole, but rare in alabaster vessels. The dipper juglet with a button base is particularly a feature of the MB IIB assemblage at Megiddo (Ilan, Hallote and Cline 2000:202).

## Metal Objects

The 17 metal objects were submitted for cleaning to the IAA laboratory some weeks after the excavation and were misplaced prior to photography. We can only give the inventory,



Fig. 12. Beads.

without details: an axe (MNI = 1); projectiles, most likely spearheads (MNI = 4); toggle pins (MNI = 6); and unidentified fragments (MNI = 10).

#### Reads

These 41 beads may well be only a portion of what was a much larger assemblage prior to disturbance. They too, have gone missing and the following analysis is based on a color photograph (Fig. 12).

Materials and Shapes.— Five beads are amethyst; four of these are scaraboids and a fifth is a standard circular bead (Beck's 1928 Type I.C.1.a). Eleven beads are carnelian; these are all short barrel or oblate forms (Beck's I.B.1.a and b). The majority of the beads comprises a glazed composition ("frit" or "faience") or glazed steatite (23 beads). Eighteen of these are barrel discs (Beck's I.A.1.b), three are oblate discs (Beck's I.B.1.a), one is a short convex cone (Beck's I.B.1.c) and one is a scaraboid. Two beads are of quartz or "rock crystal"; these are both scaraboids.

## Scarabs (Table 3)

The scarabs (MNI = 20) from this tomb were published by Keel (1997:770–777). Most of

them are steatite and most are thought to be of local manufacture, a few may be imported.

Scarab-dating criteria have led Keel to date the group to Dynasties XIII–XV (1759–1522 BCE), with eight scarabs belonging to a more narrow date range of mid-Dynasty XIII to mid-Dynasty XV (c. 1700–1600 BCE). At the time of Keel's examination of the scarabs, the other finds from the tomb had not yet been processed, and the excavator informed Keel that the assemblage probably dated to the late Middle Bronze Age–early Late Bronze Age horizon (Keel 1997:770). In fact, Keel's dating corroborates the authors' present assessment that the tomb should be dated to late MB IIA–late MB IIC.

#### SUMMARY AND CONCLUSIONS

There is nothing in the 'Atlit tomb that calls for a MB IIA date, though it is possible that its first use dates to the end of this period. Most of the artifacts suggest a MB IIB date, as shown by (1) the large proportion of inwardly rolled rims on platter bowls; (2) the fairly large proportion of red slipped and fine burnished vessels; (3) the large number of piriform juglets juxtaposed with the small number of cylindrical juglets; (4) the large proportion of double handles rather than triple (= more MB IIA) or strap (= more MB IIC); and

Table 3. The Scarabs from 'Atlit: A Summary (Based on Keel 1997:770–7'
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No.i	Reg. No., IAA No.	Keel (1997) Date	Local/ Import	Material
30	1760-16, 96-1970	Dyn. XIII–XV (1759–1522 BCE)	?	Steatite, glazed
31	1760-18, 96-1969	Dyn. XIII–XV (1759–1522 BCE)	Local?	Steatite, brownish
32	1760-19, 96-1965	Dyn. mid-XIII–XV (1700–1522 BCE)	Local	Steatite, gray
33	1760-24, 96-1963	Dyn. XIII-mid-XV (1700-1600 BCE)	Local	Steatite, brown-beige
34	1760-25, 96-1959	Dyn. mid-XIII-mid-XV (1759–1575 BCE)	Local	Steatite, beige-yellow
35	1760-26, 96-1971	?	Local	Stone, dark gray
36	1760-31, 96-1964	Dyn. mid-XIII–XV (1700–1522 BCE)	Local	Steatite, brownish
37	1760-35, 96-1957	Dyn. mid-XIII-mid-XV (1700-1575 BCE)	Local	Stone, dark gray to black
38	1760-37, 96-1955	Dyn. mid-XIII-mid-XV (1700–1575 BCE)	Local	Steatite, blue-green glaze
39	1760-38, 96-1968	Dyn. XIII–XV (1759–1522 BCE)	Uncertain	Steatite
40	1760-42, 96-1962	Dyn. XIII (1759–1630 BCE)	Imported?	Composite material?
41	1760-55, 96-1953	Dyn. XIII–XV (1759–1522 BCE)	Uncertain	Steatite, beige
42	1760-60, 96-1966	Dyn. mid-XIII-mid-XV (1700-1575 BCE)	Local	Steatite, brownish
43	1760-65, 96-1972	Dyn. mid-XIII-mid-XV (1700-1575 BCE)	Local	Stone, dark gray to black
44	1760-67, 96-1960	Dyn. XIII (1759–1630 BCE)	Local?	?
45	1760-69, 96-1954	Dyn. mid-XIII-mid-XV (1700-1600 BCE)	Local	Steatite
46	1760-80, 96-1961	Dyn. XIII-mid-XV (1759–1575 BCE)	Local?	Steatite, brownish, remains of glaze
47	1760-81, 96-1967	Dyn. XIII–XV (1759–1522 BCE)	Local	Steatite
48	1760-82, 96-1956	Dyn. XV (1630–1522 BCE)	Local	Steatite, gray-beige
49	1760-200, 96-1958	Dyn. XV (1630–1522 BCE)	Local	Steatite, red-brown int.

i After Keel 1997.

Table 4. Assemblages Synchronous to the 'Atlit Tomb

A f (D1- 2000)	D 4 D - 1 D1		
Afeq (Beck 2000)	Post Palace Phase		
Barqai (Gophna and Sussman 1969)	2nd Burial Phase		
Dan (Ilan 1996)	Strata XI–X		
Gezer (Dever et al. 1986: Pls. 1–3)	Strata XXI–XXII		
Ginosar (Epstein 1974)	T. 2/3		
Hazor (Yadin et al. 1960; 1961; Ben-Tor et al. 1997)	Pre Stratum XVII–Stratum XVII/Lower City Stratum 4		
Jericho (Kenyon and Holland 1982:268–454)	Tomb Groups II–IV (Kenyon 1960; 1965) and equivalent levels on tel (see Kenyon and Holland 1983:xlvii, Chart X)		
Kabri (Kempinski 2002)	T.498, T.984, T.304		
Lakhish (Singer-Avitz 2004a; 2004b)	P4–5 and Post P6–Pre P5 burial phase		
Megiddo	Gerstenblith's (1983) MBI (IIA) Phase 4, Kenyon's (1969) Groups A–D		
Tel Mevorakh (Kempinski 1984; Salz 1984)	Strata XII–XIII		
Shekhem (Cole 1984)	XIX–XVIII		
Tel Qashish (Bonfil 2003)	Strata IXA-C		
Yoqne'am (Livneh 2005)	Strata XXIIIA-XXI		

(5) the painted cross motif on a platter bowl. In addition, the Cypriot pottery, is, on the whole, more common in MB IIB than it is in either MB IIA or MB IIC. Finally, this dating is supported by several of the scarabs (Nos. 33, 34, 36–38, 40, 42–46), while the others do not negate it (Table 3).

Conversely, several characteristics suggest a later date, perhaps early—mid-MB IIC. For one thing, a comparison of the Tell el-Yahudiya juglet group from the 'Atlit tomb with the sequence and development of this type at Tell el-Dab'a suggests a somewhat later date than does the rest of the assemblage. Secondly, many of the scarabs can be given a Dynasty XV date, some even late in that phase.

Parallel assemblages from neighboring sites also suggest that the bulk of the material in the 'Atlit tomb should be dated to MB IIB, with some items having MB IIC affinities (Table 4). Considering the number of burial goods and the range of typological parallels, the tomb should be understood as having a fairly long period of use, perhaps more than 100 years.

Dates of 1700–1600 BCE might be considered reasonable.

As intimated above, this 'Atlit tomb is part of a very large Middle Bronze Age cemetery that has been little explored and is, by now, partly decimated (Johns 1934:145–151; Raban 1996:491 and Fig. 4). The cemetery belongs to a substantial Middle Bronze Age settlement, most likely including an anchorage of sorts, that appears to occupy the tell underlying part of the Frankish castle (Chateau Pellerin) and settlement (Johns 1934). This anchorage may have supplanted the MB IIA anchorage at Tel Nami a few kilometers to the south (e.g., Artzy 1995). Perhaps future surveys and excavations will clarify this matter. In any event, a number of artifacts seem to originate abroad: Egypt (alabaster, amethyst beads, at least some of the Tell el-Yahudiya Ware and at least one scarab), inland Syria (black burnished juglet), Cyprus (White Painted Ware), and probably other regions as well. Clearly, this assemblage reflects a society with wide-ranging trade connections and a maritime orientation.

#### NOTES

<sup>1</sup> We would like to thank Col. Pini Dagan, chief engineering officer of the nearby military base, who initiated contact with Eilat Mazar and provided logistical assistance to the excavator. Uzi Binyamin of Tirat Ha-Carmel volunteered to excavate the tomb together with Eilat Mazar. The excavation used a three-dimensional grid for relative heights, but the location of the tomb inside the army base precluded the use of surveying equipment and the establishment of absolute elevations. Michal Ben-Gal restored the ceramics; Michael Miles and Noga Ze'evi were responsible for the object illustrations. Field photography was carried out by Eilat Mazar and object photography, by Tsila Sagiv and Clara Amit. Conservation work on the metals was done by Ella Altmark. We are also grateful to Ruhama Bonfil for going over the manuscript and commenting on the ceramic study. Thanks, too, to the anonymous reviewers whose comments improved markedly the final product.

- <sup>2</sup> We have adopted the tripartite MB IIA-MB IIB-MB IIC (= MBI-MB II-MB III) terminology used by Seger (1975), Cole (1984), Dever (1987), Ilan (1995) and others. For the present authors this division is not based on any sharp differences in material culture, for indeed, continuity is the rule (cf. Kempinski 1983 and Bienkowski 1989). Rather, it is a matter of convenience, acknowledging subtle differences in material culture that vary from site to site. This subdivision will prove useful, in social, political and historical terms as research progresses.
- <sup>3</sup> At Shekhem, Cole (1984:42) has discerned that everted rims are only characteristic of MB IIC. While this may be so for that site, Bonfil's (forthcoming) more recent study shows that they are common in MB IIB at several other sites.
- <sup>4</sup> For stone vessels found in Canaan, Ben-Dor's 1945 typology still appears to be the most useful. Items such as Fig. 11:2, 3, for example, do not occur in the synthetic treatments of Aston (1994) or Lilyquist (1995).

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