CHANGE AND CONTINUITY IN THE CERAMIC ASSEMBLAGES AT LATE BRONZE AGE TEL BATASH

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INTRODUCTION

Typological ceramic analysis in association with a stratigraphic sequence has always been among the foremost methods of determining a chronological framework and, in many cases, despite the development of other means to determine temporal horizons, often the sole method employed (FRANKFORT 1924:1–3; MATSON 1965: 215–216; MCCLELLAN 1975: 6–13; JONES 1979:1–3; RICE 1984a: 248–249; 1987: 282–283, 287–288; LONDON 1983:1,8; 2000: 102; VAN AS 1984:134; ARNOLD 1985:1; FRANKEN 1995: 81–83; CHILTON 1999: 45; DESSEL and JOFFE 2000: 33–34). The assumption that ceramic types directly reflect macro-processes and historical events, such as conquest, migration, ethnicity, trade, and economics, led to the conclusion that changes in any of these parameters will express themselves in the ceramic record in some shape or form. Thus, identification of such changes can be used to 'date' contexts in which the ceramic type is found, or in the least, to relate them to known historical circumstances. Once such a date is 'established', it can be transferred from one context to another if that particular pottery type is found there as well. The result is that we often conceive of vessels as coming with a date tag on them and engage in circular reasoning in using them to determine chronology (FRANKEN 1995: 86, 89–91).

This notion of ceramics as a reliable seismograph for external events is refuted by numerous studies stressing just the opposite, namely, the continuity of pottery production techniques, shapes and decoration in the face of major social, political, ethnic and economic changes (RICE 1984b: 234–235,251; ARNOLD 1985:1–2; MCGOVERN 1989a: 3; FRANKEN and LONDON 1995: 220; KALENTZIDOU 2000: 73). The reasons behind ceramic change (and continuity) are infinitely complex and thus, any attempt to use pottery typology (problematic in and of itself) to pinpoint a date, is simplistic and ineffective (PLOG 1980: 4–5; RICE 1984b:233; van der Leeuw 1991; FRANKEN 1995: 100; CHILTON 1999:44).

There is a complex, multi-dimensional relationship between external macro-processes and events and the ceramic types found at a given site in a given context, especially during transitional periods (FRANKEN and LONDON 1995: 221). Change and/or continuity in ceramic types express a multitude of variables, including environment, production technology, skill and organization, distribution and marketing, population characteristics, culinary habits, belief systems, trade relations, political complexity and regionality, among others (NICKLIN 1971; RICE 1984b: 250–252; 1987: 449–468; ARNOLD 1985:220–224; FRANKEN and LONDON 1995; STARK 1999: 29–30; LONDON 2000). Careful scrutiny, as well as quantification, of these multiple variables over time, analysed together with historical records, "would allow more precise determinations of the correlations of ceramic change with sociopolitical or socio-economic events" (RICE 1987: 273; also HODDER 1986:77–102; 1987; CHILTON 1999:2).

It is this assumption that the following paper attempts to address, by way of presenting a summary of the preliminary analysis of the ceramic assemblages uncovered in five Late Bronze Age strata at Tel Batash, spanning the 16th to 13th centuries BCE. The quantitative-based ceramic horizon identified in each of the strata at Tel Batash during the Late Bronze Age serves as a base-line to explore

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these complex relationships, both intra-site and on a broader regional level.[1] The definition and quantification of the ceramic types themselves are only the beginning and the jumping board for attempts to identify the spatial, temporal and cultural variables involved, against the background of the prevalent socio-historic conditions of the time.

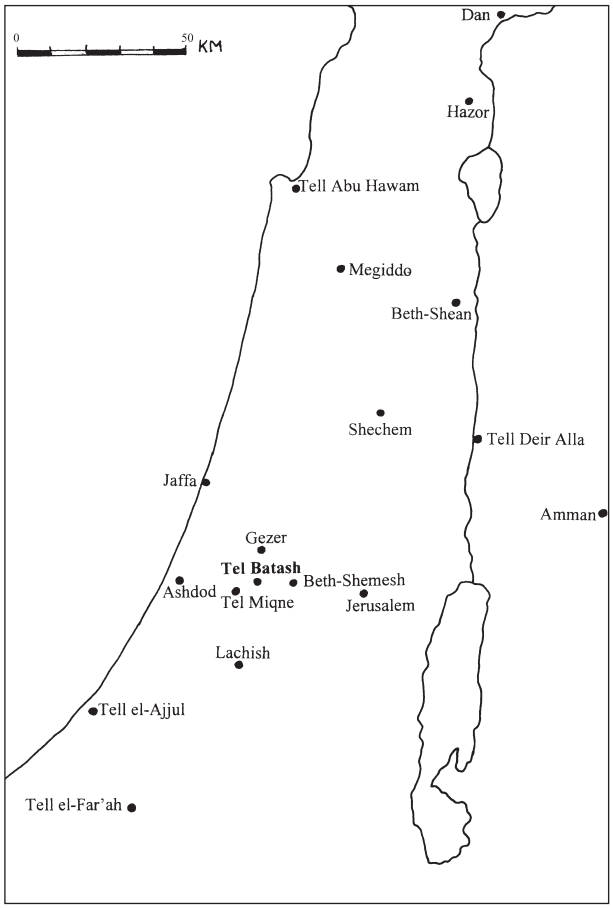

Fig. 1 Location of Tel Batash

The Site, Excavations and Stratigraphic Framework

The site of Tel Batash, identified as Biblical Timnah, is located in the lower Shephelah region in Israel, in the wide alluvial plain adjoining the Sorek Brook. Beth Shemesh lies 7 km to the east, Gezer, 8 km to the north and Tel Miqne-Ekron, 5 km to the southwest; Ashdod is some 25 km due west on the coast (Fig. 1). Excavations were conducted at the site for 12 seasons between 1977 and 1989.[2] A total of 13 strata were uncovered, several of which are divided into sub-phases, spanning the Middle Bronze Age IIB to the Persian Period (Mazar 1997). The excavations at Tel Batash have revealed a continuous sequence of occupation spanning the period from the end of the Middle Bronze Age until the end of the Late Bronze Age, and, with a slight interruption, continuing into Iron Age I and II. This substantial occupational continuity, accompanied by frequent destructions which yielded rich restorable assemblages, have made Tel Batash a key site for an in-depth study of continuity versus change in the ceramic record during the second millennium BCE.[3] In fact, Tel Batash is virtually unique among the Late Bronze Age sites in Israel, with its contiguous stratigraphic sequence and well-stratified assemblages (Fig. 2).[4] The proposed relative and absolute chronology of the Late Bronze Age strata is based on a combination of considerations, including ceramic sequences of both local and imported materials in conjunction with glyptic finds and several C^{14} dates, along with inter-site analogies. These strata were revealed primarily in Area B on the northeastern side of the tel (Mazar 1997: fig. 2).

The site was given its distinctive square shape, measuring 200 by 200 meters and covering 10

[1] For the methodology of quantitative typological analysis employed here, see Mazar and Panitz-Cohen 2001: 10–14. In addition to this research method, we may add the dimensions of petrographic analysis and comparative study of other sites which will enable us to add the critical regional dimension to the study of continuity and change in the ceramic assemblages at our site (Feinman, Kowalewski and Blanton 1984:297–298). These latter two aspects will not be discussed in the present article but will be published in full in Panitz-Cohen in press a.

[2] The expedition director was G.L. Kelm of the Southwestern Baptist Theological Seminary, Fort Worth, Texas. The field director was A. Mazar of the Institute of Archaeology of the Hebrew University, Jerusalem.

[3] The study of this assemblage constitutes the basis of doctoral research being conducted by the author under the direction of Prof. A. Mazar of the Institute of Archaeology of the Hebrew University of Jerusalem. The work is currently in progress and the information presented in the present article is to be considered preliminary.

[4] The site has also afforded us with a rare opportunity to reconstruct the full contents of houses during this period as well, though the results of this distribution analysis will be discussed by me elsewhere (Panitz-Cohen in press b).

Stratum	Period	Date
XII–XI	MBIIB	Mid 18th–17th century BCE
X	Transitional MB–LB	16th century BCE
IX	LBIA	1st half of 15th century BCE
VIII	LBIB	2nd half of 15th century BCE
VII	LBIIA	14th century BCE
VI	LBIIB	13th century BCE

Fig. 2 Stratigraphic table

acres, as a result of the ramparts built in the Middle Bronze Age IIB, during Strata XII–XI. Two phases of part of a large building with massive mudbrick walls were exposed on the edge of the tel (Mazar 1997: 39–41). The pottery associated with the two phases is typical MBIIB, including several sherds of Tell el-Yehudiyyah juglets. On top of this so-called 'citadel', which apparently met a violent end, a succession of patrician houses was established, beginning with Stratum X and ending with Stratum VII. The first two strata, X and IX, were less well preserved and were excavated on a smaller scale, but Strata VIII and VII provide us with extremely fine examples of grand scale Late Bronze Age domestic architecture in a rural area. The plan of each house is unique and the vitality of the architectural design is quite extraordinary (Oren 1992: 115–117;[5] Mazar 1997: 252–254). The inhabitants of these buildings had the means, the ability and the impetus to innovate and maintain a high standard of living. This is evident especially in the rich ceramic repertoire in each house, as well as numerous other finds.[6] It seems that during this entire period there were no fortifications, but rather the outer walls of the houses formed a protective belt around the perimeter of the tel. The final stratum ascribed to the Late Bronze Age (Stratum VI) saw the termination of this sequence of houses and is characterized by a more meager settlement and more fragmentary finds (Mazar 1997: 72–75). This terminal Late Bronze Age stratum did not end in destruction and the subsequent Iron Age I settlement, containing Philistine Bichrome pottery, apparently began following a short gap.[7]

Stratum X

The earliest and least well-preserved building – Stratum X Building 720 (Mazar 1997: 41–45) – is considered to have been a transitional phase straddling the Middle Bronze to the Late Bronze Age since its ceramic assemblage contained elements that echo the Middle Bronze Age, alongside shapes that subsequently became the hallmark of the Late Bronze Age.[8] The methodology that dictates such a conclusion is based on processes and models of ceramic change over time, which document the continuation of known types and technology, together with the introduction of innovations, due to a myriad of complex and multi-variate reasons. Changes can take place in some aspects of society but not in others, thus resulting in simultaneous change and continuity of pottery types, or of variable ceramic attributes (both stylistic and technological) (Rice 1984b: 251–255; Arnold 1985: 15–19; Knapp, Duerden, Wright and Grave 1988: 87–102; Wood 1990: 84–88; Franken 1995: 99–100; van As, Jacobs and Nieuwenhuyse 1996/1997: 41–43; Killebrew 1998b; Chilton 1999; Greenberg 2000; Dessel 2001). Quantitative analysis shows that these two components of the Stratum X assemblage – Middle Bronze and Late Bronze traditions – are more or less equal, with a slight advantage for the more distinctly LB types.[9] This indicates that the introduction and adaption of new types was apparently a gradual process and not an abrupt 'revolutionary' change in either production or consumption; this suits the view that the transitional period between MB and LB was prolonged

[5] Though Ben-Dov (1992: 103) classifies the Stratum VII house at Tel Batash as a simple domestic dwelling, it answers more to the description and criteria posed by Oren (1992) for a patrician house.

[6] Though it may be argued that the analytic value of the assemblages of each stratum is limited since they represent only one household each time and not a cross-site sample, the quantities and good preservation compensate for a great part of this limitation. Of course, our conclusions must be kept in mind in light of the nature of the sample under discussion.

[7] The continued occupation and ceramic sequence of Iron Age II, which terminated in the early 6th century BCE, are discussed in depth in Mazar and Panitz-Cohen 2001.

[8] Our assignation of the Stratum X assemblage to a transitional phase differs from Oren (2001:132), who claimed that the pottery is "characteristically LB IA, not MB II–LB I, and should indeed date to the end of the 16th century BCE".

[9] Detailed quantitative data will be presented in graphic and table form in Panitz-Cohen in press a. The total assemblages employed in the data base are: Strata X– 255; Str. IX– 284; Str. VIII – 408; Str. VII –597; Str. VI– 195.

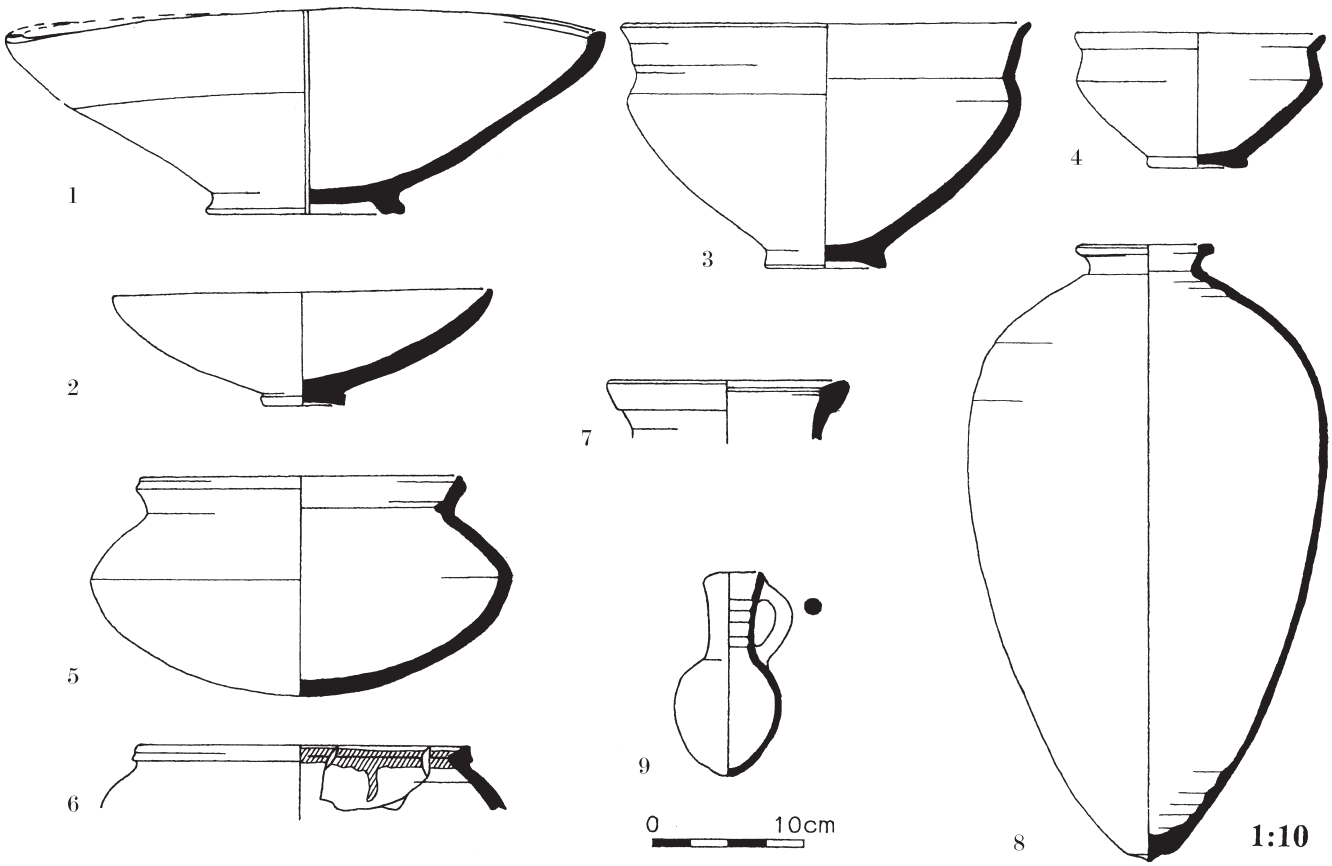

Fig. 3 Middle Bronze Age pottery types in Stratum X

(Bietak 2002: 37–38). The assemblage of Stratum X of course reflects the final use at the time of the building's destruction and it is difficult to pinpoint if and how the types were equally distributed over the assumed temporal continuum or whether the assemblage reflects mainly the culmination of this process.

The Middle Bronze Age types that continue from Strata XII–XI include large platter bowls, well-shaped carinated bowls with high ring bases, cooking pots with molded rims or plain everted rims, molded-rim storage jars and large handleless pithoi with tapering bases (Fig. 3). The Late Bronze Age types that appear in this stratum are open bowls with thickened inner rims, carinated hammer-head rim kraters with two handles, everted triangular rim cooking pots, piriform jugs with rim handles and squat juglets with rounded bases (Fig. 4). Biconical vessels begin to appear, though represented by only a few sherds; this is the beginning of a long tradition that lasted the entire Late Bronze Age with little change. The storage jars have everted necks with slightly thickened rim exteriors, alongside jars with straight necks and short rounded thickened rims, making them a transitional type that leads us to the longer and thicker rims of the Canaanite jars that become common in the subsequent LB strata (Fig. 4: 5). Stratum X also sees the initial appearance of red and black painted storage jars in small amounts, a type that becomes a prominent feature of LBI and LBIIA at our site. While painted storage jars (like other painted vessels) are legacies of the Middle Bronze Age, the red and black decoration becomes considerably more common in the Late Bronze Age. Thus, we may view this element more as a harbinger of the Late Bronze Age than a vestige of the Levantine Middle Bronze Age tradition, a time when bichrome decoration, though certainly well known, remained a minority style (Ilan 1996: 165).

All the vessels in Stratum X are wheel made and apparently locally produced.[10] Visual magni-

[10] Results of the petrographic analysis by A. Cohen-Weinberger will be published in Panitz-Cohen in press a.

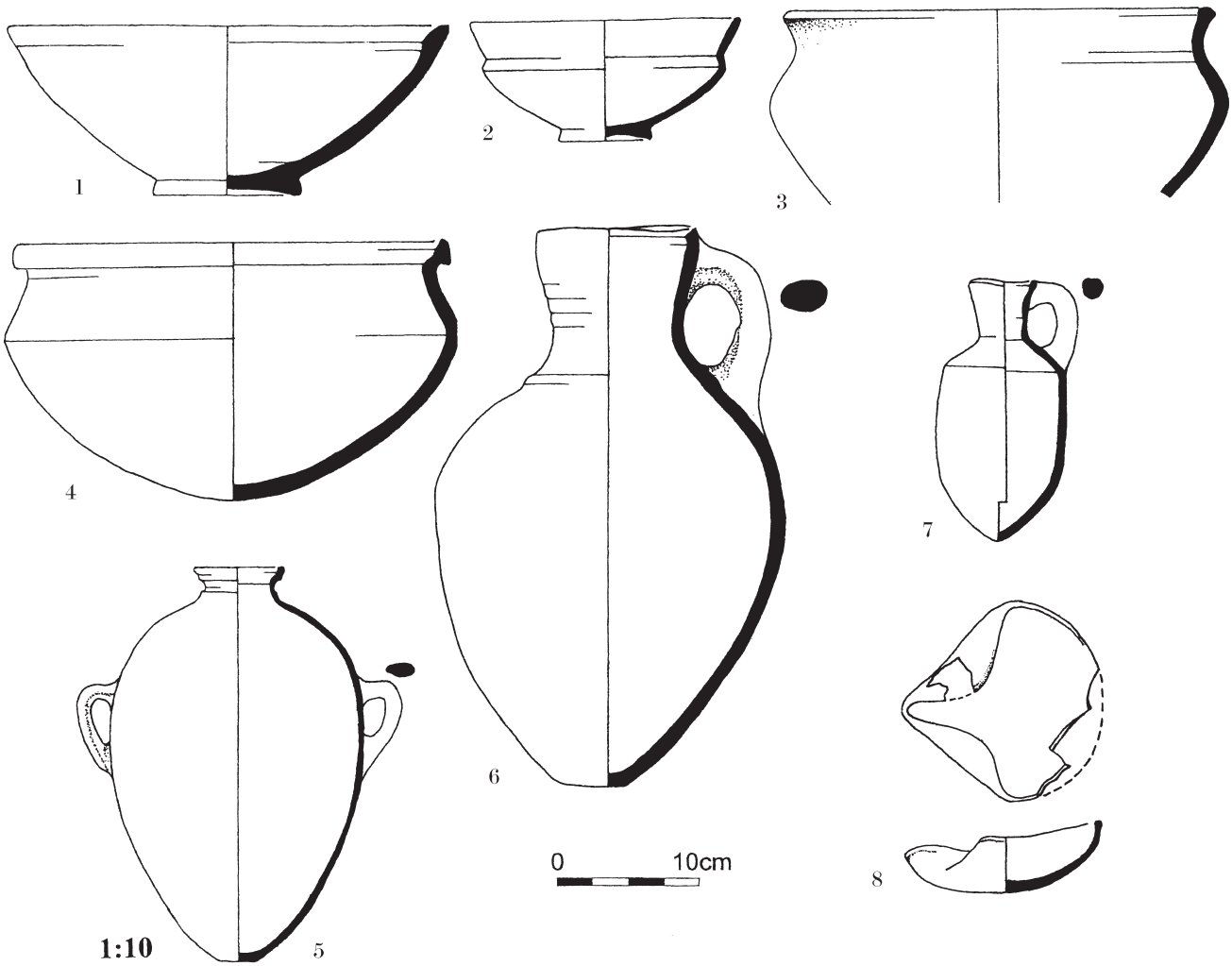

Fig. 4 Late Bronze Age pottery types in Stratum X

fied examination, classification and quantification of the fabrics showed that some of the Middle Bronze Age types, especially the molded rim storage jars and pithoi, are similar to those found in the MBIIB Strata XII–XI, while other Middle Bronze type vessels, such as sharply carinated bowls and large platter bowls with slightly molded rims, were also made of fabrics that become common in the Late Bronze Age strata.[11] Alongside the 'mix' of MB and LB types, this 'mix' of fabrics is a notable feature of this transitional phase, suggesting at least a partial continuity in clay procurement and preparation, alongside an innovation in processing (paste and temper) and possibly firing (color and core). Thus, the innovation is complex: new shapes are made with the 'old' fabric formula, while existing forms are created with the 'new' paste. This suggests that the transition was gradual, moderate and interactive. Clay procurement and preparation are features of ceramic production that are known for their relative conservatism, dependent on ecological and economic factors (Rice 1984b: 241; 1987: 115–119; Arnold 1985: 32–57; McGovern 1989a:3; Aronson, Skibo and Stark 1994: 88–89; Kramer 1997: 53). While the continued use of the

[11] The typical fabric of the Middle Bronze Age vessels is dark reddish-yellow or light reddish-brown (i.e. Munsell 5YR 6/6, 6/8, 7/8; 2.5YR 6/4, 6/6, 5/8), with many small, medium and few large white, grey and black angular inclusions that form a gravelly texture; occasional mudballs; little organic material; usually a grey core. The fabrics of the Late Bronze Age have fewer inclusions and have a lighter color range (i.e. Munsell 5YR 7/6, 7/8; 7.5YR 7/6, 7/8); some organic material and fewer inclusions; about half have a grey core. See Glock 1975: 17–19; Mazar and Panitz-Cohen 2001:15 and detailed chapter in Panitz-Cohen in press a.

previous clay mixture and firing technology most likely represents the uninterrupted(?) work of the pottery production center that served Tel Batash in Strata XII–XI, the portent of the new clay mixtures and firing techniques that are introduced in Stratum X is more complex and reflects potential changes in numerous factors, such as ecological circumstances, access to natural resources, different technology, population shifts, fluctuations in demand and market strategy, change in culinary habits, ethnic diversity, political upheaval and more (ARNOLD 1985: 157; RICE 1984b; MOSSMAN and SELSOR 1989; ARONSON, SKIBO and STARK 1994:83–85; KRAMER 1997: 55–56). The question may be posed as to the potential relationship of this phenomenon noted at Tel Batash and the growing Egyptian interests in Canaan following the expulsion of the Hyksos, the establishment of the 18th Dynasty, and the accompanying settlement and population changes. The effects of such events as they diffused down to the cities and rural towns of the Shephelah and its local ceramic industry, need to be further explored (AHITUV 1978; WEINSTEIN 1981; KNAPP, DUERDEN, WRIGHT, and GRAVE 1988: 100–102; MAZAR 1989; MAZAR 1990: 239–241; GONEN 1992: 36–38; ILAN 1995: 314–315; DEVER 1998:106–112).

Though Stratum X yielded only 25 sherds of Cypriot imports and no complete vessels, they were found in a secure context and provide sufficient evidence that such imports already reached this rural inland Shephelah town at the time of the transition from the Middle to the Late Bronze Age. This implies an organized trade network and an inland population that was willing and able to consume such goods already at this early time, when Cypriot imports were still relatively rare in inland regions (YANNAI 2000: 62; OREN 2001: 142). The imports include sherds of two White Slip I bowls, as well as Monochrome and Base Ring wares (Fig. 5).[12] While Monochrome is usually found in the Levant together with transitional MB–LB wares such as White Painted VI and Red on Black, these groups do not exist at Tel Batash and the Cypriot imports that accompany the Monochrome ware are White Slip I and Base Ring I[13] – which generally belong entirely to LBIa contexts (STEEL in press). Though the absence of these transitional MB–LB Cypriot groups at Tel Batash may be a contingency of exposure, especially in light of the relatively small assemblage in Stratum X, it might be that this has chronological implications that place our Stratum X (or at least its termination) on the somewhat later end of the transitional MB–LB spectrum, possibly at the very beginning of the 18th Dynasty (BIETAK 2002: 37–38). Though Base Ring ware becomes plentiful in the Levant from the time of Thutmosis III, the earlier appearance of this ware has been noted in transitional contexts (early 18th Dynasty) (BERGOFFEN 2001a: 47–48, contra OREN 1969 and OREN 2001: 139; also ERIKSSON 2001b: 58) and thus its presence in our Stratum X is not exceptional. Accordingly, it is generally accepted that White Slip I does not pre-date the 18th Dynasty (ERIKSSON 2001a: 61,63; OREN 2001: 142), though FISCHER (2001: 170) raises the possibility that this ware could appear in pre-New Kingdom contexts. Thus, the imports in Stratum X suit a pre- to a very early 18th Dynasty chronological framework, in keeping with our view that this stratum strad-

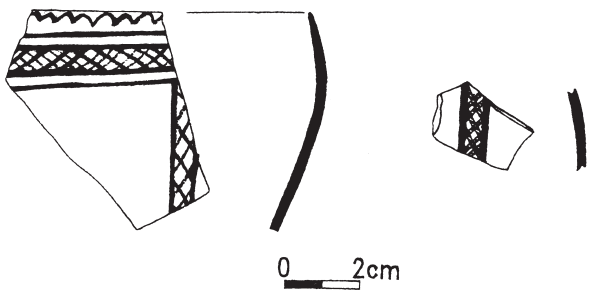

Fig. 5 White Slip I sherds

[12] OREN (2001:132) cites only one White Slip I bowl based on the information available to him at the time. Subsequent examination of the sherds by Dr. Louise STEEL proved that they belong to two different White Slip I bowls. Note also that OREN's description of one WS I sherd – "decorated with pendent parallel hatched lines" – is partial due to its not having been illustrated, omitting the rim motif of wavy line and rope lattice (see Fig. 5).

[13] Only one of the eight extant Base Ring sherds in Stratum X contains a small portion of a plastic relief typical of Base Ring I, while the rest are body sherds, mainly of closed vessels. The color and texture of the fabric of most of them appears to answer to Vaughan's description of "Base Ring Metallic Slip Ware" which is attributed to an early horizon, equaling the more conventional 'Base Ring I' (VAUGHAN 1991: 124–125).

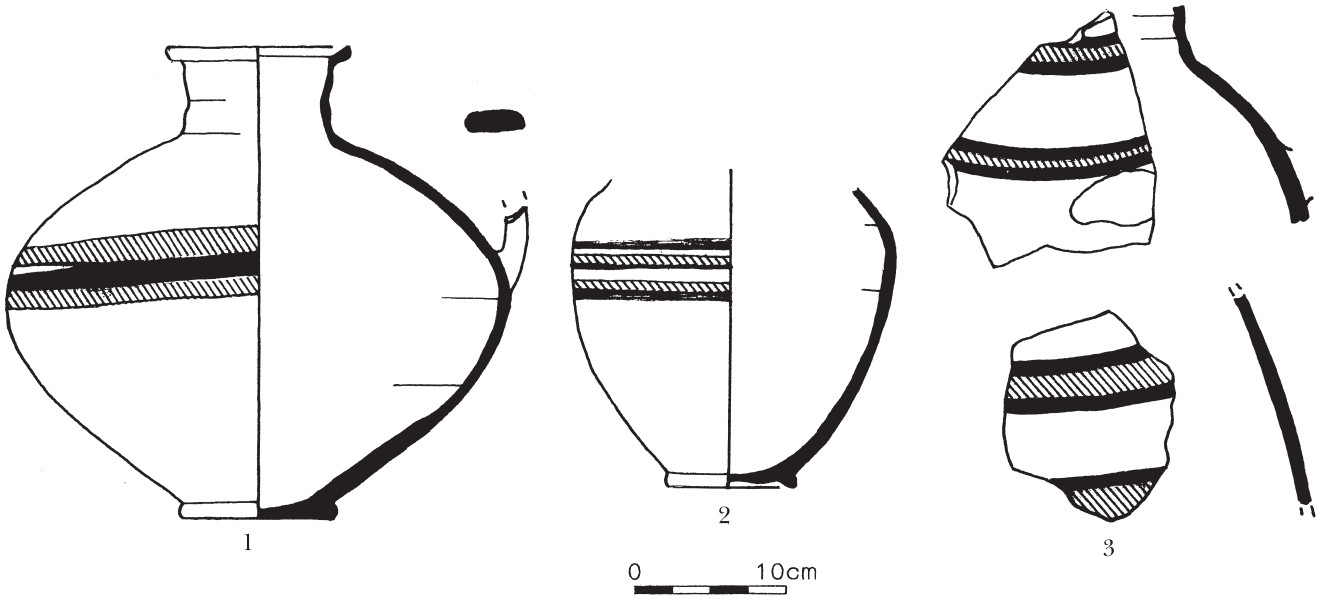

Fig. 6 "Bichrome-related" vessels

dles the protracted and differential transition from MB to LB (Dever 1992; 1997:293–294; Maier 1997: 270).

And if we have White Slip I and Monochrome, we may look for representatives of 'Bichrome Wheel-made Ware' as well. Only three vessels were found that could be associated with this ceramic family – two in Stratum X and one in Stratum IX – apparently supporting the supremacy of the regional over the chronological aspect of this ceramic group; all three are wheel made.[14] The two jugs from Stratum X are of light colored, well levigated clay, though their decoration of horizontal black and red bands is somewhat sloppy when compared to the pedantic execution on the typical Bichrome Ware (Fig. 6). Their shape is similar to the various jugs in the Bichrome Ware, though the arrangement of the painted red and black bands differs from that of the 'classic' Bichrome Ware decoration, where a red band is closely bordered by two black bands. The 'Bichrome-related' storage jar of Stratum IX is of light colored clay, but more carefully painted than the Stratum X jugs (see Fig. 6:3). The current understanding of this ceramic group is that a rather wide variety of wares, both well and more carelessly rendered, may be related to the core group, including Cypriot hand and wheel-made vessels, as well as their Palestinian counterparts (Artzy 2001: 168; Karageorghis 2001: 148–149). Bichrome Ware often appears in contexts with Cypriot White Slip I (and Base Ring I) (Åström 2000: 153; Bietak 2001: 175; Artzy 2001:166; Fischer 2001: 226–227; Eriksson 2001a). Thus, our vessels – both local and imported – answer well to this variegated definition of Bichrome Wheel-made Ware. This would place our Strata X and IX within the chronological range of Bichrome Ware, contemporary with Megiddo X and IX and with Tell el-Ajjul Cities I and II.[15] Stratum X, dated by us to no later than the 16th century, fits the accepted chronology of Bichrome Ware. The storage jar from Stratum IXA, on the other hand, is a little past the time of the acknowledged appearance of this ware, if

[14] Results of the petrographic analysis show that one stratum X jug (Fig. 6:1) was an import, most likely from Cyprus. The other two (Fig. 6:2–3)are locally made

[15] Bietak's description of the Bichrome sherds from Tell el-Dabᶜa's Stratum D/2 as having "only simple linear patterns" fits our vessels, though it is difficult to be certain that we are talking about the same phenomenon, especially since it is so limited at Tel Batash (Bietak 2001: 177; e.g. Fig. 4:1–2).

our date of the first half of the 15th century BCE for this stratum is correct. However, it may be noted that HULT (2001:212), based on her study of Bichrome Wheel-made Ware at Nitovikla in Cyprus, claimed that this group possibly continued there until as late as Late Cypriot II, when the quality of decoration was exclusively geometric and of a somewhat poorer quality, a description which would fit our Stratum IX vessel. The presence of Bichrome Ware or Bichrome Ware-related in Tell el-Dabᶜa C/3 (and later) also endorses the plausibility of finding bona fide examples or offshoots of this group in slightly later contexts (BIETAK 2001: 177, i.e. Figs. 7.9,14; 10.19–1).[16]

A C^{14} date taken from two samples of unidentifiable soft charred material from Stratum X Building 720 yielded equivocal results.[17] The first sample yielded a 'sigma one' date range of 1620–1520 BCE and a 'sigma two' date range of 1690–1490 BCE. Similar results were obtained from the other sample as well. Based on the assumption that the 'sigma one' date is more reliable, we can surmise that the destruction of this house took place no later than 1520 BCE. Since it is difficult to determine whether there was a gap between the end of the Strata XII–XI citadel and the erection of the private house of Stratum X, we can do no more than place the lifetime of this transitional MB–LB phase at Tel Batash to some time in the course of the 16th century, or possibly the very beginning of the 15th century BCE, most likely pre-dating the reign of Thutmose III. This diachronic uncertainty, an expected product of transitional periods, was noted by BIETAK and KOPETZKY (2000: 100; also ILAN 1995: 314). An additional consideration for the suggested absolute dating of Stratum X is the need to 'leave enough room' for the subsequent three major strata and their sub-phases, IX–VII, that must terminate by the second half of the 14th century BCE, based on our time frame for Stratum VII (see below).

Stratum IX

The subsequent Stratum IX Building 719, which had two sub-phases represented by floor raisings and minor architectural changes, finds us in LBI proper, probably sometime during the first half to mid 15th century BCE, assuming that this house was built directly on the ruins of its predecessor with no substantial gap (MAZAR 1997: 45–51). The assemblage, the majority of which comes from the upper, final phase of the house (Str. IXA), includes platter bowls with thickened inner rims, heavy carinated bowls with convex disc bases; the high ring base disappears. Other vessels include carinated kraters, cooking pots with everted triangular rims, storage jars, both plain and painted, with rounded rim exteriors and tapering knob or button bases, piriform jugs, biconical vessels and lamps with straight rims and rounded bases (Fig. 7). These vessels all began to appear in Str. X, as described above, and became dominant in Str. IX. Pithoi of any type disappear, a phenomenon characteristic of most of the Late Bronze Age, with few exceptions in the Northern Valleys (AMIRAN 1969: 143; BONFIL 1992: 33). As discussed above, part of a 'Bichrome-related' storage jar was found on the floor (above, Fig. 6:3); painted storage jars become more common, both in red and red and black (i.e. Fig. 7:6). Several examples of a bowl whose shape is considered to be of Egyptian inspiration were found in this building as well (see Fig. 7:8). This is the only Egyptian related shape to be found among all the Late Bronze Age pottery assemblages at Tel Batash and it may be noted that several such bowls appear in our Stratum VII as well (see below); all appear to have been locally made. Its very restricted (total of ten examples) appearance at Tel Batash is quite enigmatic, since such a bowl appears in Canaan mainly at sites with an Egyptian presence or affinity during the course of the New Kingdom (KILLEBREW 1998a: 148). It is such a plain, coarse utilitarian shape, that of all the Egyptian-inspired vessels typically found in Canaanite contexts that are considered to have been produced by immigrant Egyptian potters or local Egyptian-tutored potters for the use of Egyptians or Egyptianized locals residing in Canaan (MCGOVERN 1989; COHEN-WEINBERGER 1998; DESSEL 2001: 111–112; MARTIN 2004), it is not clear why this particular bowl was found in small numbers in a domestic setting at Tel Batash

[16] Though it should be noted that these are relatively small sherds and not whole vessels.

[17] C^{14} dates from Tel Batash were made in the University of Groningen by Prof. van der Plicht and Dr. H. Bruins. I thank them and Prof. A. MAZAR for the permission to mention these results.

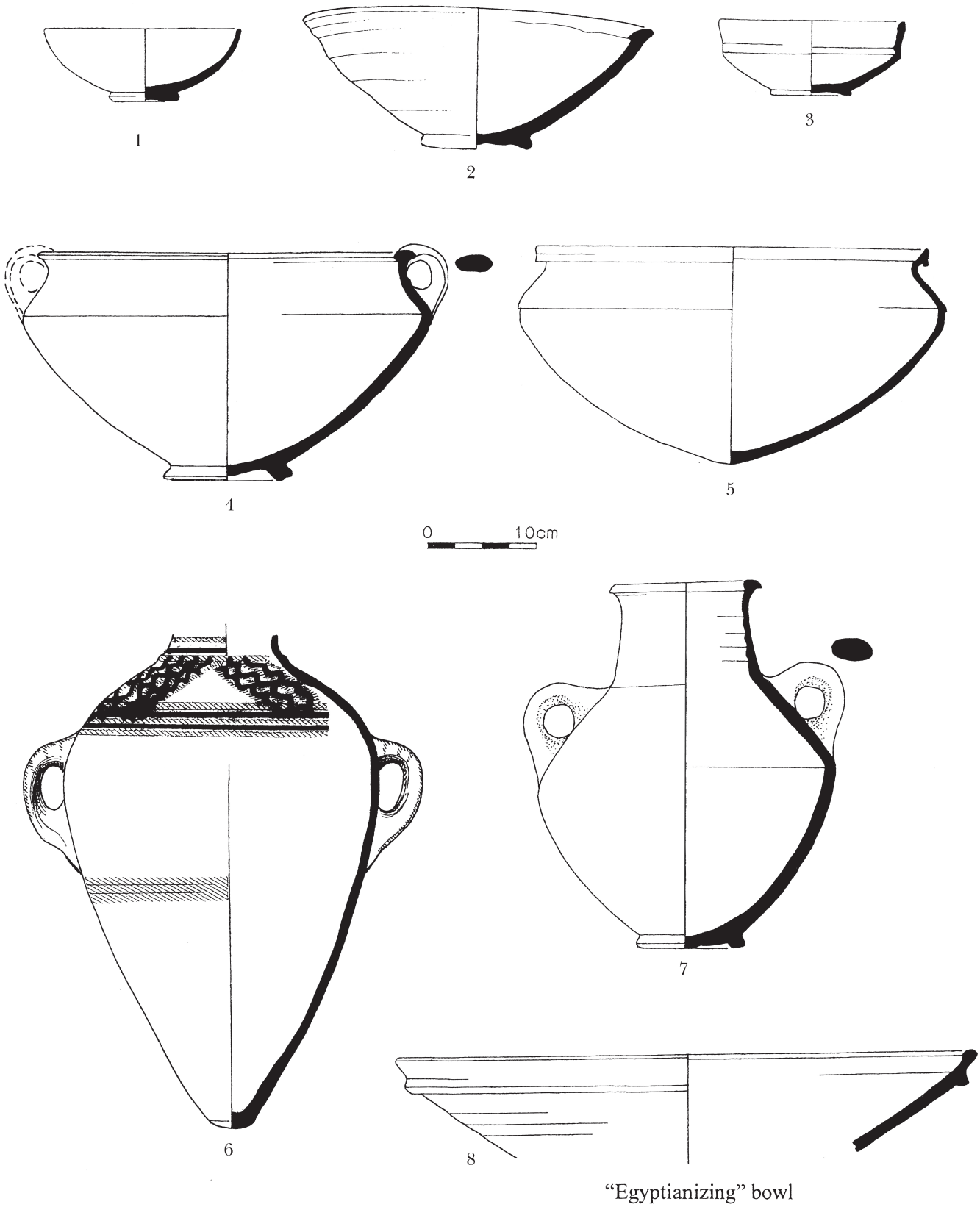

Fig. 7 Late Bronze Age pottery types in Strata IX–VII

in Strata IX to VII. If we assume from its wide open shape and sturdy, coarse manufacture that it was used for food preparation or serving of some sort, and that cuisine-related activity is basically conservative and ethnically linked (Mills 1999; Rice 1984b: 245–246; Yasur-Landau 1992; Killebrew 1999:108), the portent of its presence at our site must be further examined.[18] Its appearance may allude to the duration of Stratum IX in the early–mid-18th Dynasty, when the Egyptian presence in southern Canaan was well established.

The fabrics of this stratum's vessels are typical of the rest of the Late Bronze Age, and the last vestiges of the typical Middle Bronze Age fabric(s) disappear (see note 11). The amount of painted pottery increases, particularly storage jars and biconical vessels; the decoration is both bichrome and monochrome (red), mainly horizontal bands and/or triglyphs and metopes on the shoulder or upper part of the vessel.

The amount of Cypriot imports increases in Stratum IX, with some 44 vessels having been identified among the sherds (Steel in press). These include both open and closed shapes from the main Cypriot import families: Base Ring I and II and White Slip II; three small Monochrome sherds indicate they were probably not viable types at this time and in general the imports reflect the general trends found at most other southern Levantine sites in LBIA (Oren 1969; Gittlen 1981; Bergoffen 1989).

Stratum VIII

Following the destruction of the Stratum IX house, a large patrician dwelling, Building 475, covering about 180 sq. meters, was built, dated to the second half of the 15th century (Mazar 1997: 52–58). The building was very well preserved and yielded a total of 281 vessels from the destruction debris that sealed it.[19] This large assemblage is quintessential LB and essentially continues that of Stratum IX. It includes large and medium platter bowls with plain or thickened inner rims, mostly with disc bases and some distorted, gently carinated bowls and carinated hammer-head rim kraters. The cooking pots have fully developed triangular rims and their sizes range from extremely large to miniature, a feature that is typical of this stratum alone and possibly reflects variation in food consumption of some sort at this time (Mills 1999). Among the many storage jars, some 30% were painted in red or red and black, including a small jar with a unique bichrome design of a procession or possibly a hunting scene (Fig. 8:1). Several of the undecorated storage jars had 4 handles, a feature quite unknown from other contemporary sites, suggesting particular manufacture for the site or household (Fig. 8:2). The piriform jugs continue, with rim and shoulder handles; their thickened, rounded rims are identical to those of the storage jars, often making it impossible to differentiate between the two classes when only the rim and neck are found (Fig. 8:3–4). This (among other features) has implications for the mode of manufacture during this time – apparently the pottery became more mass produced and standardized. The significance of such a shift in the organization of ceramic production that is evidenced in the Stratum VIII assemblage must be further explored. The impetus for and the implications of standardized pottery production are discussed at length in many studies (i.e. Kelso and Thorley 1943; Frankel 1981; Rice 1984a: 47–48; 1987: 202–205; Kramer 1985; Wood 1990: 15–49; London 1991; Longacre 1999; Arnold 2000). While standardization can be viewed as the result of increased skill (Longacre 1999), which would imply a high level of production during this time, this appears to contradict the acknowledged generally inferior quality of vessels during the Late Bronze Age (Franken and London 1995). The dynamics involved are complex and multi-variate; one can envision a situation of standardized pottery production where the employment of non-potters in selected stages of vessel preparation and/or finish would have decreased the quality of the end product (London 1991: 202), as well as resulting

[18] This point should also be examined in light of the non-ceramic Egyptian finds at our site, which include a rich array of scarabs and beads mainly in Stratum VII (see note 24 and below).

[19] Of these, 170 were mainly restorable vessels, while the rest are carefully examined sherdage that represent other vessels that were unrestorable but not residual or secondary to the building. The complete data and description will be presented in Panitz-Cohen in press b.

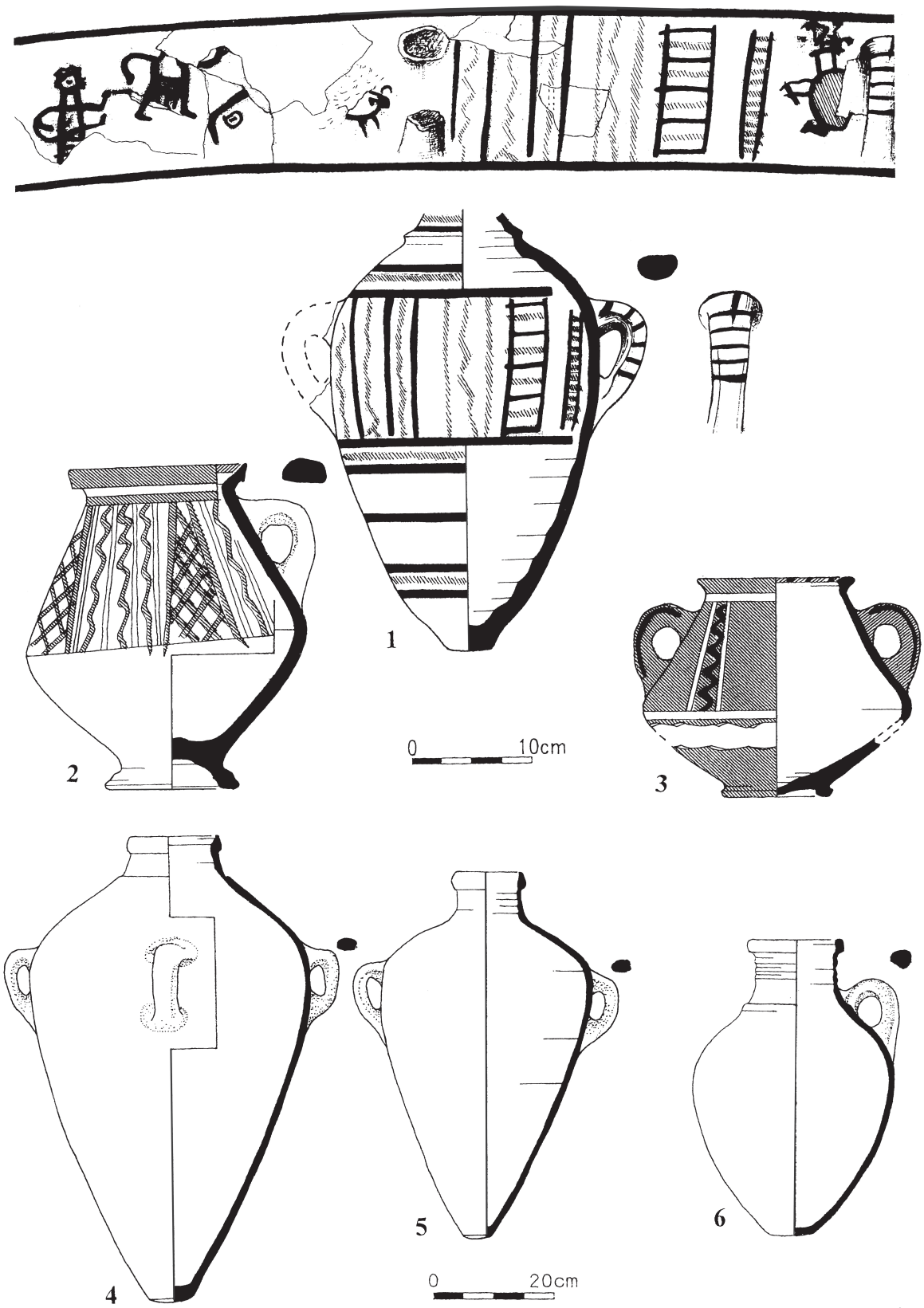

Fig. 8 Late Bronze Age storage jars, jugs and biconical vessels

in the kind of interactive vessel parts witnessed in the storage jar and jug rims in Stratum VIII. Once the mode of pottery production is inferred, it must be analyzed both by way of indigenous factors and against the geo-political context of the time, with the consolidation of the city-state system that will express itself so vividly in the Amarna letters of the subsequent period (MAZAR 1990: 232–234). It seems that these jugs were multi-functional, used for small-scale storage as well as for tableware. Biconical vessels (see Fig. 8:2–3) comprise only 2% of the household repertoire, and are found with either one or two shoulder handles. These are the most decorated vessels at our site and were apparently a relatively special serving vessel, though most are not particularly well-made and the decoration itself is somewhat careless.

The Stratum VIII building contained some 51 identifiable Cypriot imports, including the well-known gamut of White Slip II, Base Ring II and White Shaved, as well as two small sherds that appear to have belonged to a Cypriot-type wavy band pithos (Fig. 9).[20] Since these are such large vessels, the presence of only two small extant sherds might indicate that this vessel had been broken and redeposited in Stratum VIII as a secondary context (see note 20). If indeed there had been such a pithos at Tel Batash in Stratum VIII (or IX), it would be conspicuous in light of the lack of pithoi during the Late Bronze Age in the south of the country; they appear at Hazor and Ugarit (see above, AMIRAN 1969: 143 and BONFIL 1992). Three Mycenaen sherds were recovered from this house as well, including a fragment of a beaker jug (FS 144) representing the initial appearance of Aegean imports at Tel Batash and one of the earliest of such imports in the Levant.[21] The attribution of this stratum to LBIB, dating to the second half of the 15th century, is based on periodization of its imports, as well as its 'sandwiching' between the date of the end of Stratum IX (see above) and that of the subsequent Stratum VII, as detailed below. The ceramic repertoire of Stratum VIII does little to contribute to any chronological refinement, as aside from minor morphological features, it remains typologically virtually unchanged from Stratum IX. The events during this period in southern Canaan, with the entrenchment of Egyptian domination, accompanied by frequent military campaigns, appeared to have little effect on the local ceramic industry. The only perceptible changes are minor shifts in several morphological details and increased evidence of mass produced standardized vessels. All in all, the same fabrics, firing techniques, shapes and decorative styles continued with little change from Stratum IX, and subsequently into Stratum VII (see below).

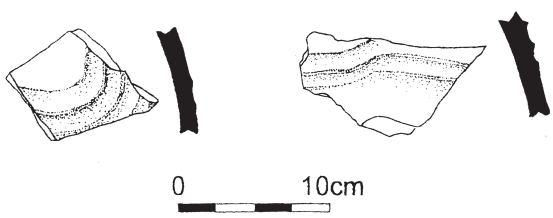

Fig. 9 "Wavy band" pithos sherds

Stratum VII

Building 315 of Stratum VII, the last of the patrician houses at Tel Batash, marks a rebuild of the destroyed Stratum VIII house, with renovation of the outer walls alongside a total change of the internal plan (MAZAR 1997: 58–69). The rich ceramic assemblage of Building 315 of Stratum VII is essentially similar to that of Stratum VIII and there is no apparent change in either the quality or quantity of the ceramic types. It contained platter bowls, carinated bowls, carinated kraters with hammerhead rims, triangular rim cooking pots, plain and painted storage jars, as well as piriform jugs and biconical vessels (see Figs. 7–8). Minor changes include certain morphological features, such as the abandonment of shoulder handles on jugs and biconical vessels, and lamps with everted rims. Certain changes were noted in the proportions of vessel types within specific vessel classes; for example, the

[20] These were identified by Louise STEEL. The petrographic analysis shows that both are locally made. GILBOA (2001: 164–165) lists the earliest known occurences of this type in the mainland (some imported and some locally produced) as being LBII. Thus, our sherds, possibly in secondary deposit, mark an exceptionally early appearance of this vessel in this region (if indeed the identification is valid).

[21] This vessel was identified by Penelope Mountjoy.

cooking pots were of a more standard size than in Stratum VIII and a certain type of bowl becomes dominant, as opposed to the larger type variability in the previous phase. These shifts are understood to be related to changes in micro consumption and function within the household, more than a macro change in ceramic production and distribution patterns (see note 6).

The fabrics of this stratum are the same as those of Stratum VIII, though there is a slight difference in the proportions of fabrics used for various vessels. For example, the main storage jar fabric of Stratum VIII is used more for small open vessels in Stratum VII, while a fabric more common with bowls in Stratum VII was used more frequently for jugs and storage jars in Stratum VIII. The colors, cores and inclusions appear to be the same (see note 11).

Many high quality imports were found in this house, representing some 54 vessels, which is ca. 15% of the entire household assemblage. The imports include both open and closed Base Ring II vessels, as well as White Slip II and White Shaved, including a 'spindle bottle' uniquely manufactured in the White Shaved technique.[22] This form is usually found in Red Lustrous Ware, and infrequently in Base Ring or White Slip. "It is so rare in the White Shaved ware, even within Cypriot funerary, ceremonial, or settlement contexts, and unique amongst the imported Cypriot repertoire in the Levant, that the significance of the spindle bottle from Tel Batash is therefore difficult to assess. Given the context in which it was found, in association with a patrician building with a variety of specialised unguent containers and its good state of preservation, it is very probable that the Tel Batash spindle bottle retained some of its ritual connotations and ceremonial function within its new cultural context" (Steel in press). Mycenaean imports are rare and include a complete Mycenean IIIA:2B alabastron (*ibid.*).[23]

Our date of Stratum VII in the 14th century BCE is based on scarabs of Amenophis III and Queen Tiy found in this assemblage, which provide a terminus post quem for this level, keeping in mind Kitchen's date for the reign of Amenophis III of 1391–1353. The Mycenaean IIIA pottery suits this date as well, as do the Mitannian and Cypriot cylinder seals found in this house (Mazar in press).[24] A ^{14}C date from a fused burnt cluster of almonds found in a complete jug in this house, provided dates that appear to be too early: the 'sigma one' dates are several decades before the 14th century: 1440–1400, while the lower end of the 'sigma two' date – 1460–1380 – would better suit our chronological conclusions, though still not precisely (see note 17).

Stratum VI

The subsequent Stratum VI is entirely different architecturally, with scanty walls and poorly preserved floors. Two phases were discerned, VIB and VIA; the latter contained a building, which was subsequently reused in Stratum V, the Philistine stratum (Mazar 1997: 72–76).

The ceramic assemblage of Stratum VI marks a certain departure from the typical LB repertoire that was so well represented up until this phase with little change. For example, several key LB types that were dominant during Strata IX–VII simply cease: the piriform jugs, carinated bowls and "Canaanite" storage jars, plain and painted, virtually disappear.[25] Other changes include different proportions of some vessel types, such as the plain bowls becoming deeper, often with a red band painted on their rim, and biconical jugs becoming stouter. The amount of painted decoration declines as well (Franken and London 1995).

Stratum VI includes several Cypriot imports, including Base Ring II jugs, a sherd of a White Shaved juglet and White Slip II Late hemispherical bowls typical of late 13th century contexts. A total of 20 imported vessels could be identified from the sherds, comprising only ca. 9% of the entire assemblage of this stratum. While this may

[22] See Kelm and Mazar 1995: 81, C14 for a color photo of this vessel.

[23] See Kelm and Mazar 1995: 79, C10 for a color photo of this vessel.

[24] See Kelm and Mazar 1995: 80 (C13) and 81 (C16) for color photos of scarabs and seals.

[25] The cessation of carinated bowls is a phenomenon noted at other sites in the 13th century BCE as well (Beck and Kochavi 1985: 33).

be indicative of the generally poor state of preservation that characterizes Stratum VI, it seems to mark a definite decline in the amount of imports to our site at this time. Notably, one of the only examples of a local imitation of a Base Ring bilbil found at Tel Batash was recovered in Stratum VI (Fig. 10:3). Most of the ceramic fabrics were a continuation of those common in Strata IX–VII, though roughly 20% were made of fabrics that become common in the subsequent Iron Age I. These new fabrics and firing modes (light red to reddish-brown, with a high sand content and 'crisp' high fired texture with no core) are found mainly in storage jars and jugs in Stratum VI, while in the subsequent Stratum V they become dominant in all vessels, especially those of the Philistine typological repertoire. We assume something of a gap between the end of the Late Bronze Age and the following Stratum V, which contains fine Philistine bichrome pottery, but further work needs to be done to pinpoint this alleged lacuna within the span of the late 13th and early–mid 12th centuries BCE.

Thus, during the time of increased Egyptian presence in Canaan (the 19th and early 20th Dynasties), the settlement at Tel Batash experiences a decline and the ceramic repertoire undergoes changes, as opposed to its previously much more static nature.

Cultural Distance from Egypt

A point that must be addressed during a discussion of any southern site in Late Bronze Age Canaan is the question of Egyptian or Egyptianizing elements in the material culture record. If we were to assess any affinity to Egypt based on the ceramic record alone, we would have to conclude that Tel Batash was outside the sphere of influence of this superpower during the entire Late Bronze Age, since no types that can be attributed to this group were found, aside from the several sherds of large coarse open bowls mentioned above (see Fig. 7:8). Admittedly, identifying Egyptianizing vessels in 18th Dynasty contexts in Canaan can be ambiguous (Mullins 2002), and such vessels are found in 19th–20th Dynasty contexts almost exclusively at selected sites with a marked Egyptian presence (Cohen-Weinberger 1998; Yannai 1996:281; Martin 2004). Such vessels were the result of Egyptians longing for a taste of home, rather than Canaanites craving such goods, which were poor competition for the more exotic and aesthetic imported wares on the market at that time. We can thus safely say that there was no direct Egyptian presence at our site.

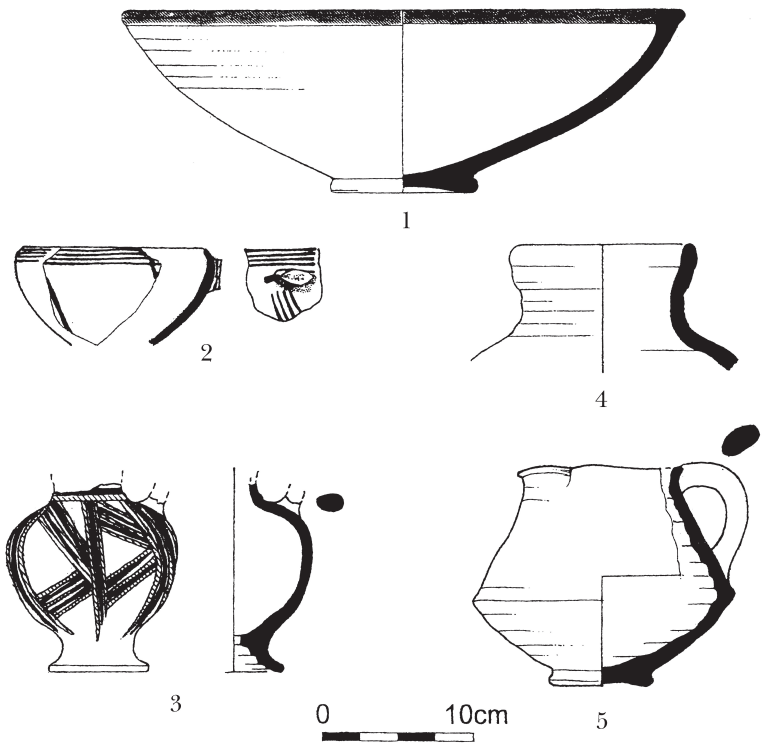

Fig. 10 Pottery types of Stratum VI

The virtually total lack of any Egyptian influence on the ceramics of Strata IX–VI is apparently a reflection of the cultural distance between the Late Bronze Age inhabitants of Tel Batash and the overlords of Canaan at the time. Tel Batash was a satellite town of the city-state of Gezer, and even there, the Egyptian expression in the ceramic repertoire is limited. The only Egyptian element in the material culture assemblage of Late Bronze Age Tel Batash are a number of high quality Egyptian scarabs found in the patrician houses of Strata VIII–VII (see notes 18, 24). These were prestige items that played an entirely different role than Egyptian pottery, which remained in its basic functional role and as such, was not an attractive commodity to emulate or import (YANNAI 1996:280). Though difficult to substantiate, the possibility exists that the symbolic value of Egyptian vessels played a role as well on some level, with the Canaanites consciously repudiating them as a reflection of their rejection of the undesired Egyptian overlords, viewing the vessels as "vehicles for ideological content" (ARNOLD 1985: 158–159).

SUMMARY

The ceramic assemblages of a period covering some 300 years, from the 16th to 13th centuries BCE, underwent only minor technological, typological, quantitative and decorative revisions, while a relatively major change took place in the final stage of the Late Bronze Age, the 13th century BCE. Though there is a dramatic change in architectural concept during the transition from MB to LB, the change in ceramics was slow and gradual, marked by the co-existence of older and newly introduced shapes and fabrics. Over the course of subsequent destructions and rebuilds of the patrician houses, which may or may not coincide with the well-documented inter-site clashes of this period in Canaan, much of the ceramics remained the same: the well-known conservatism of Late Bronze Age Canaanite pottery. And just during the period of the 19th Dynasty, which is understood to have been a period of relative stability and economic security, there is a general decline in the occupational level of our site, accompanied by rather significant changes in the long-lived ceramic repertoire.

Was the consolidated Egyptian rule a factor that dictated the transferal of ceramic types? How do we reconcile the partisanship and frequent bickerings of the Canaanite city states with this similarity of shape, decoration and mode of production that remains quite constant from Ugarit in the north to Tell el-Ajjul in the south, as well as to Trans-Jordanian sites in the east, during most of the Late Bronze Age? And how can we explain the regionality and ceramic changes that do exist, in light of this homogeneity? Can we speak of a Canaanite ethnic entity that preserved its own identity, expressed in parameters such as cult and ceramic traditions, and thus surviving the vagaries and pressures of Egyptian rule, aggressive Aegean commercial activity, forays of Habiru, Shasu and other envious nomads? Or did the laissez faire policy of Egyptian rule during the early part of the Late Bronze Age allow for this identity to prosper and when Egypt tightened its grip on Canaan during the 19th Dynasty, some of the homogenity broke down, expressing itself in the changes evident in Tel Batash Stratum VI?

The reasons behind these processes of ceramic continuity and change are a combination of indigenous and exogenous factors. The numerous micro and macro issues that took place in the geo-political arena all played a part in the formation of the ceramic record discussed just now and many questions remain to address and hopefully we will reach insights in our future study. Though these issues are not chronological, they do have bearing on the temporal dimension of material culture in that they occurred against a real historical background that can be dated. Following the brief presentation of the pottery of Tel Batash Strata X–VI, it can be seen that there is a complex relationship between ceramic change and other factors in the occupation history of the site. It seems that the pottery reflects not merely external states of disruption or harmony, but is differentially affected by various ecological, economic, cultural and social considerations. The quantifying of these processes of continuity and change, as well as analogy to other sites in and beyond the Shephelah, and petrographic analysis, along with edification by means of ethno-archaeological data, will serve to illuminate many economic and socio-cultural aspects of the Late Bronze Age in this key region.

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