Philistine Bichrome Pottery: The View from the Northern Canaanite Coast

Notes on Provenience and Symbolic Properties

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Introduction

In this essay, we propose to add some insights into the significance of the well-known Philistine Bichrome Ware (PhB) by looking at it from the outside—from outside the core area of its principal sphere of distribution. Especially significant in this respect is its distribution in the area immediately to the north of Philistia, along the Phoenician coast. PhB pottery was most extensively presented and discussed in T. Dothan's seminal volume *The Philistines and Their Material Culture* (1982: Chapter 3), which remains a standard reference work regarding this pottery. Since then, however, opinions have varied with regard to the inclusion or exclusion of specific vessels in this classification.[1]

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Ayelet Gilboa: This paper is dedicated to Prof. Amihai Mazar, whose undergraduate seminar on the Philistines I attended 20 years ago; my passion for both the region and the period have grown ever since.

Anat Cohen-Weinberger: The petrographic study presented in this paper is dedicated to Prof. Amihai Mazar, who was the first to encourage me to practice petrography; since then we have collaborated in a number of petrographic studies.

Yuval Goren: To Ami Mazar, in appreciation of this milestone in his distinguished career.

1. For the most explicit discussion of this issue, see Brug 1985: 54–57. One other example is represented by the inclusion of strainer-spouted jugs that do not belong to the PhB group in T. Dothan 1982: Figs. 26:2, 27:4–8, but instead, based on their decorative compositions, to the Canaanite/Phoenician repertoire (Gilboa 1999a). At the other end of the spectrum are the sweeping and all-encompassing definitions offered for PhB (see the comments regarding Tell Keisan below). For a summary of the earlier and later definitions and a survey of the changing intellectual milieus affecting the interpretation of this pottery, see Sharon 2001.

Our study is based on an approach quite similar to that of Brug (1985: 56): only vessels bearing the typical intricate PhB hand-painted designs are included. In contrast to Brug, however, we excluded also simple skyphoi (bell-shaped bowls) that are either decorated with very crude and haphazard designs (usually spirals) or undecorated. These have a different spatial distribution and in our opinion may represent different modes of production and different cultural meanings (for a preliminary discussion of these, see Sharon and Gilboa in press).[2]

Philistine Bichrome Pottery within the Core Area

PhB pottery is most prominently found in a core area ranging from the Yarkon Basin in the north (the Aphek–Tel Gerisa–Tell Qasile latitude) to Nahal Besor (Wadi ʿAzza) in the south—that is, by and large in the southern coastal region and its periphery (the Shephelah [but see further below]; see the lists in T. Dothan 1982: Chapter 2; Brug 1985: 54–103). This distribution was the crucial factor in equating PhB pottery with the biblical Philistines.

In Philistia, the so-called "locally-produced (monochrome) Mycenaean IIIC" phase preceding the PhB strata at Ashdod, Tel Miqne–Ekron, and possibly Ashkelon[3] is today almost unanimously recognized as representing an intrusion of a foreign population from either the west or north (or both), even by scholars who had previously adopted an antimigration attitude (e.g., Stager 1995; Bunimovitz and Yasur-Landau 1996, vs. Bunimovitz 1986; Drews 1998: 41, 44, vs. Drews 1993: Chapter 4; Bunimovitz and Faust 2001). Notable exceptions are Weippert (e.g., 1988: 380) and, more recently, Sherratt (most explicitly 1998; see also Bauer 1998).

The case regarding the subsequent and significantly more widespread PhB is less straightforward. Most scholars consider this pottery a ceramic development that occurred in situ (following A. Mazar 1985b), thus resulting in its variegated stylistic attributes. Conversly, T. Dothan and M. Dothan (1992), for example, have posited two waves of immigrants, the first of "Sea Peoples," "Proto-Philistines," or even the biblical *Anakim*, and the second of Philistines (although they often dubbed the initial, earliest Mycenaean IIIC phase as "Philistine" [e.g., T. Dothan 1998a: 154]). In their view, these two waves are exemplified, respectively, by "local Mycenaean IIIC" and PhB pottery (e.g., T. Dothan and Dothan 1992: 165–70, esp. 168, 258). More recently, ceramic evidence at Tel Miqne–Ekron has led T. Dothan to posit as many as four different waves of immigrants (2000: 156).

Some scholars indeed perceive PhB pottery too as constituting a genuine ethnic marker, either as a result of a normative/*Kulturgeschichte* approach or of symbolic considerations (see further below), but others have proposed other

2. Brug seems to have had similar problems in attempting to categorize this group of vessels (1985: 56).

3. The occurrence of strata yielding *only* Myc. IIIC pottery at such sites as Tel Haror and Tell el-Hesi, mentioned by some scholars (e.g., Finkelstein 1998: 142), has yet to be demonstrated.

socioeconomic processes for the production/distribution/consumption of this pottery, claiming that *in this phase*, to paraphrase Sherratt (1991: 317), an individual did not have to be of foreign ancestry or share a derivative "Philistine" group identity to use and possibly also produce a PhB pot (e.g., Brug 1985: 135; Bunimovitz 1986; 1990; Vanschoonwinkel 1999).

Philistine Bichrome Pottery outside the Core Area

The fact that PhB pottery occurs outside the "core area," albeit in drastically reduced quantities, has long been recognized. It has been identified in the regions of the Upper Galilee (Hazor and Dan[4]), the northern coast and Akko Plain (Dor and Tell Keisan), the Jezreel Valley and its margins (mainly Megiddo and Afula), the Central Hill Country (e.g., at Shiloh, Bethel, and Tell en-Nasbeh), and in the Negev Desert (e.g., at Beersheba and Tel Masos). In addition, one sherd from Tyre (Bikai 1978: Pl. 41:19) may belong to a PhB vessel.

The question often posed regarding local Mycenaean IIIC pottery about whether it represents solely the Philistines or other "Sea Peoples" as well has seldom been explicitly discussed with regard to PhB. T. Dothan, for example, states that "Philistine pottery and that associated with the Tjekker is identical" (1982: 69) and Stern considers PhB-like ceramics both at Dor and Tel Zeror as representing the material culture of the *Šikila* (= Tjekker; e.g., 2000b: 203, Fig. 10.3). The Tell Keisan excavators consider "Philistine Bichrome" pottery as representing the general "Sea Peoples" phenomenon (see the discussion of Tell Keisan below).

Generally, PhB pottery along the northern coast and in the Jezreel Valley, in conjunction with biblical and Egyptian sources, has been taken as evidence of some sort of "Sea Peoples" occupation (T. Dothan 1982: 69–82; Raban 1991: 18, 25; T. Dothan and M. Dothan 1992: 105; Stern 2000b: 206–7). In other regions, it is understood as representing trade relations (e.g., T. Dothan 1982: 269 regarding the PhB pottery at Tel Masos, ʿIzbet Sartah, Dan, and Hazor; see also Stone 1995: 22).

Philistine Bichrome Pottery along the Northern Coast and Hinterland

Dor

The examination of the material cultural of the *Šikila*, one of the peoples confronted by Ramesses III in Year 8 of his reign, was one of the primary reasons that Ephraim Stern, the director of the Tel Dor expedition, selected this site for excavation. The *Šikila* are traditionally associated with Dor on the basis of the Wenamun account and the Onomasticon of Amenope (see, e.g., Goedicke 1975: 175–84; Scheepers 1991: 38–41, 67–74; Stern 2000a: 85–99). It was expected that

4. Ilan, although he posits an association with the Sea Peoples for a number of sherds from Dan (1999: 94), considers only three to be of "true" Philistine Bichrome (1999: Pl. 80:5–7), with which we concur; all three are of containers.

a distinct material culture that would be similar, but not quite identical, to that of Philistia would be evident. Thus, finds such as incised scapulas, handles of bimetallic knives, a lioness-shaped drinking vessel, a uniquely painted "western-like" strainer-spouted jug, and others, in addition to the PhB-like pottery, were taken to represent the "Sea Peoples" aspect of the *Šikila* (see most recently Stern 2000b: 198–203; see also Sharon and Gilboa in press).

However, the dearth of PhB ceramics at Dor, previously noted in Gilboa 1998: 414, looms even larger after another half a decade of excavating the early Iron Age levels at the site (for summaries of the early Iron Age sequence at Dor, see for example Stern 1991; 2000a: 85–130, 345–63; Gilboa and Sharon 2003; Sharon and Gilboa 1997; in press).

Figures 1 and 2 illustrate almost all the "PhB-like" fragments uncovered to date at Dor, including some that may be only tentatively defined as such by visual examination. Also included are related fragments, the characterization of which was doubtful to the naked eye, but which were shown petrographically to have originated in Philistia and its margins (see below).[5]

Quantities

Considering the vast amounts of pottery excavated at Dor, spanning the entire early Iron Age, the proportion of PhB vessels is miniscule. Admittedly, a comparison with relative quantities of such painted pots in Philistia is still virtually impossible: most of the excavation reports on Philistine sites do not include quantitative data, and decorated pieces are much better represented in them than plain wares. The only site in Philistia for which quantitative data are provided thus far is Tell Qasile (Area C), where the mean frequencies of decorated Philistine pottery per stratum out of the total ceramic assemblage were 24% in Stratum XII, 14.3% in XI, and 14.6% in X (A. Mazar 1985a: 105, Table 11). However, most of the pottery from Area C at Tell Qasile originates in the temples and possibly functionally related surrounding buildings. It could always be claimed (and has been) that this creates a bias toward a higher proportion of decorated vessels.

The detailed quantitative analysis of the pottery from Tel Miqne–Ekron currently being carried out shows that the proportions of both Mycenaean IIIC and PhB decorated wares range from 16 to 30% in most contexts, and in the industrial area sometimes exceed 50% (we thank T. Dothan and Y. Garfinkel for this information). For Ashdod, Brug (1985: 67–68) calculated that "Philistine" pottery makes up ca. 27% of the total ceramic assemblage. Other sites in Philistia (possibly excluding Tel Seraʿ) produced significantly lower percentages, which are relatively slightly higher at sites on the Coastal Plain (varying from ca. 5 to 12%, using Brug's minimum figures [1985: 69–103]). Evidently, even such quantities by far surpass those at Dor.

5. The two fragments of strainer-spouted jugs found in Garstang's excavations at Dor (1924: Pls. 3:1, 3:6), interpreted as Philistine by T. Dothan (1982: 69 nn. 221–22) in fact are of local Phoenician Monochrome ware (Gilboa 1999a: Fig. 7). Another five sherds (all of closed vessels) from Stern's excavations, which were difficult to characterize, *might* possibly be added to this list (the sherds are in storage).

Vessel Types and Provenience

On visual inspection, some 17 fragments from Dor looked like "genuine" PhB, that is, they were similar in fabric, surface treatment, and pigment to PhB from sites in Philistia; the majority (10–11 fragments) belong to closed vessels, mostly jugs of undefinable types (Fig. 1:1, 3–6, 8–9, 11–13, and possibly 7; for a color photograph of No. 4, see Stern 2000a: Pl. 9:3 left [upside down]). Seven fragments (Fig. 2:1–2, 4–8; for a color photograph of No. 1, see Stern 2000a: Pl. 9:3 right) are of open shapes, but it was difficult to determine on visual examination whether these were indeed similar in fabric to open forms known from Philistine sites.

Petrographic Analysis

Sixteen PhB vessels from Dor were examined petrographically. The method involves preparing thin sections of the ceramic samples, which are examined under a polarizing microscope to identify the constituent minerals and rocks, as well as the texture of the matrix. The identification of these components commonly indicates the geographic region in which the source materials are located (i.e., geological formations and/or soils used), for the purpose of artifact provenience attribution. This depends on the availability of comparative materials and the quality of the reference database. Our petrographic database includes reference raw materials and a collection of ceramic thin sections from most of the important archaeological sites in the Levant (including those in Syria and Lebanon). The comparison of thin-section samples with this database allows us to determine the particular region in which a clay artifact was produced. When a reference ceramic database is not available, the results are interpreted on the basis of detailed geological maps. In several cases, these definitions are very specific (Gilead and Goren 1989) and in others, at least the general geological derivation of the raw material of a ceramic artifact, can be suggested (e.g., Greenberg and Porat 1996; Porat and Adams 1996).

The analysis enables the division of samples into petrographic groups of items that share similar properties of clay and temper. This classification is determined by the qualities of raw materials alone, regardless of variables such as the typology of the vessel, its chronological association, and the geographic location of the excavated site. It thus serves as an independent technical categorizing parameter of ceramic assemblages. Table 1 presents the petrographic groups defined in this study.

Group Hm: Hamra Soil or Hamric Alluvial soil. In this group, mainly quartz sand of the southern Levantine coastal plain is mixed with ferruginous, fine clay. Fewer sand-sized grains of accessory minerals—mainly minerals of the feldspar, amphibole, and pyroxene groups—accompany the quartz sand (Fig. 3A). The nature of this group together with its geographical distribution at Levantine sites clearly point to a coastal origin. In this area, red to dark reddish-brown silts and sands appear within the Rehovot Formation (Issar 1968) and the related ʿEvron Member in northern Israel (Sivan 1996: 107–10). It is most likely that this red soil, locally termed Hamra, was used after some purification by means of diluting

Fig. 1. Philistine Bichrome Closed Vessels and Related Wares from Dor

	Reg. No.	*Locus*	*Area/ Phase*	*Horizon at Dor*	*Description*	*Provenience*	*Petrographic Group (see text)*
1	183968	18316	G/10b	Early Ir1a	Light brown fabric. Pale black decoration	Lebanese coast	PP1
2	181673	18234	G/10b	Early Ir1a	Orange fabric. Black and red decoration	Carmel coast / Menashe hills	PP2
3	182188	18285	G/10/ 11?	Early Ir1a, possibly earlier	Pink fabric. Black and red decoration	Lebanese Coast	PP1
4	183797	18323	G/10c	Early Ir1a	Orange fabric, gray core. Pale black and red decoration	Yarkon basin to Akko bay	Hm1
5	185340	18389	G/10/ 11	Early Ir1a, possibly earlier	Orange fabric, dark brown core, numerous white and dark inclusions. White slip, black and red decoration	Northwestern Negev	Ls1
6	184007 184328	18316 18340	G/10	Early Ir1a	Reddish fabric, gray core. White slip, black and dark red decoration	Shephelah / Northwestern Negev	Ls1
7	188444	18570	G/9	Late Ir1a	Dark brown fabric, small white inclusions. White glossy slip, brown and orange decoration	Northwestern Negev	Ls1
8	197836	19514	D2/11–9	Ir1b	Reddish–dark brown fabric, small inclusions. White slip, black and brown–red decoration	Northwestern Negev	Ls1
9	77762/2	7914	B/11? 10?	Ir1b	Orange fabric, brown core. Black and red decoration	Southern Shephelah / Northwestern Negev	Ls1
10	98040	9813	G/7d	Ir1b	Orange fabric. White slip, black and red decoration	Not sampled	
11	12122/2	12320	B/7? 6?	8th-century locus	Orange fabric. Black and red decoration	Carmel coast	Hm2
12	66711	6652	E	?	Orange fabric, lustrous surface. Black and red decoration	Not sampled	
13	—	Surface	—	?	Light orange fabric, light surface. Black and dark red-purple decoration	Unclear, not Carmel coast (see text)	PP1/2?

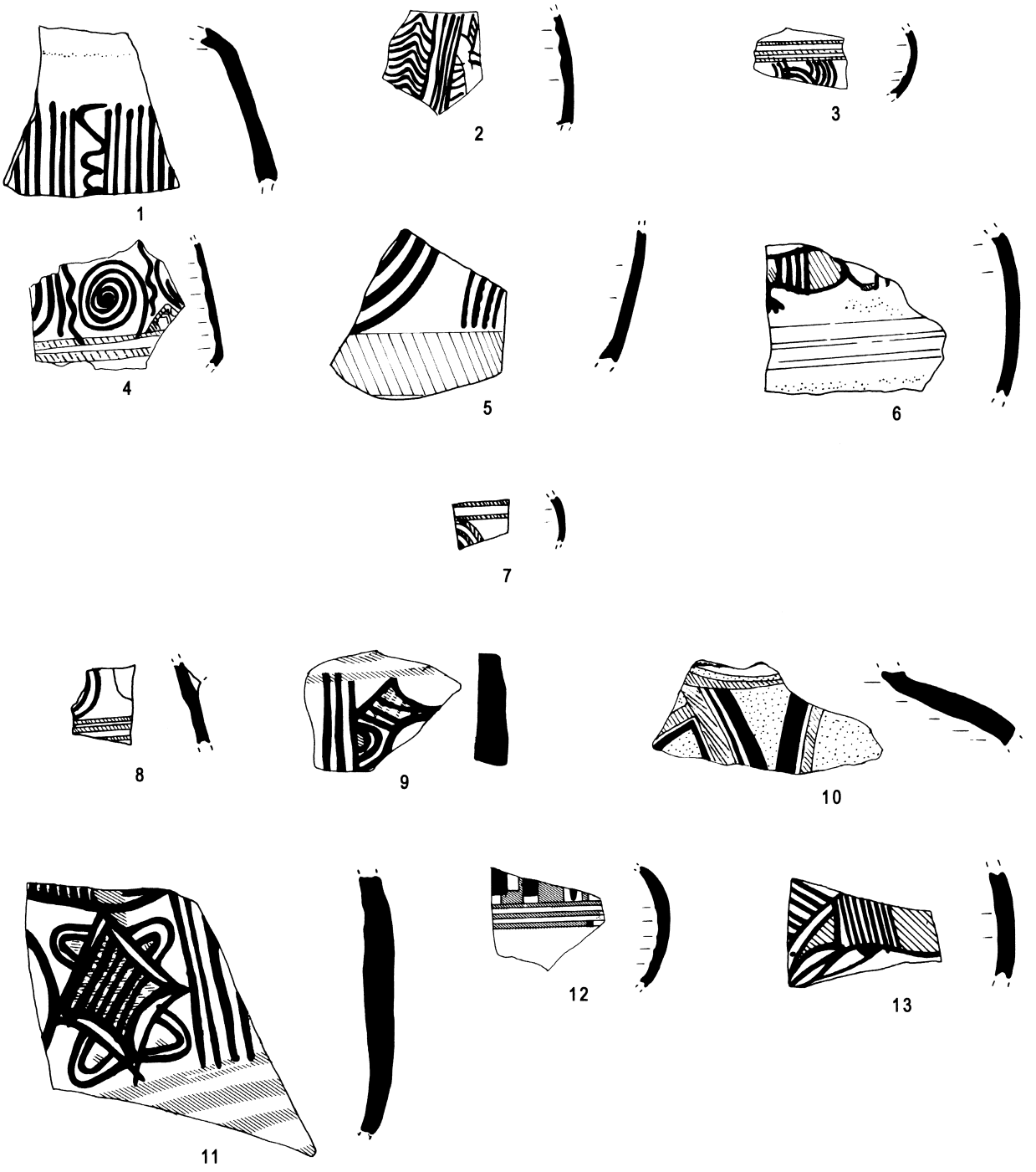

Fig. 1. Scale 1:5.

Table 1. Petrographic Groups

Group coding/definition		*Subgroup coding/definition*		*Suggested provenience*
Hm	Hamra soil or Hamric alluvial soil	1	Coastal sand (fine, well-sorted quartz and carbonates)	Central–northern coast of Israel, area between the Yarkon Basin and Haifa Bay (possibly local to Dor)
		2	Coastal sand accompanied by volcanic elements (tuff, weathered basalt) (rare)	Carmel coast or Haifa Bay
PP	Paleocene or Pliocene marl	1	Fine quartz and oxidized chalk with fragments of Amphiroa sp. algae	Lebanese coast
		2	Taqiye marl containing quartz and calcareous sand	Most likely the southern and northern flanks of the Menashe hills (along Wadi ʿIron and Wadi el-Milh)
UM	Unidentified marl	1	Carbonates, coastal quartz, and volcanic tuff	Mt. Carmel area
Ls	Loess soil	1	Dominated by quartz	Negev coastal plain
		2	Dominated by carbonates	Northwestern Negev, southern Shephelah

the sand component. Hamra soil is present along the coastal plain of Israel from the area of Ashdod northward and does not extend along the northern coast much beyond the Akko area. Therefore, the group is related to the coastal plain of Israel between Ashdod in the south and Akko in the north. At sites located along the Carmel coast (Tel Nami, Dor), tuffs from Mt. Carmel very occasionally appear together with the coastal sand. The more northern coastal sands (around Akko), are reported to contain only up to 10% quartz (Sivan 1996: 155, with references). In the Dor samples, however, quartz is dominant, indicating a more southerly origin.

1. Group Hm1: Quartz and carbonates temper
2. Group Hm2: Quartz and carbonates temper, with volcanic tuffs

Subgroup PP1: Paleocene or Pliocene Marl Accompanied by Quartz and Calcareous Sand Inclusions. This subgroup is characterized by light, highly calcareous marl containing sparse foraminifera and iron oxides. The matrix consists of fine carbonate crystals, exhibiting optical orientation. This marl is associated with chalk, often oxidized, fine quartz grains, calcareous coastal sand and coralline algae *Amphiroa sp*. (Fig. 3B). On the Levantine coast coralline algae of the genus *Amphiroa* occur in Quaternary bioclastic sediments of the Pleshet, Kurdane, and Hefer formations of Israel and contemporary beachrocks and sands on the Lebanese coast (Buchbinder 1975; Sanlaville 1977: 161–77; Almagor and Hall 1980; Sivan 1996; Walley 1997). The matrix and the nonplastic components suggest that the source of this subgroup should be related to Quaternary beach deposits

of the Lebanese coast, where Paleocene and Pliocene marls outcrop between Tyre and Sidon and north of Tripoli (Dubertret 1962). Petrographically, it is similar to the workshop materials from Sarepta (Anderson 1987; 1990).

Subroup PP2: Paleocene Taqiye Marl. This subgroup is characterized by highly calcareous marl containing sparse foraminifera and iron oxides. The matrix consists of fine carbonate crystals exhibiting optical orientation. This marl is associated mainly with fine quartz grains, as well as some chalk and chert fragments, and rare appearances of the coralline algae *Amphiroa sp*. and feldspar grains. Based on its petrographic affinities, the petrofabric is characteristic of marl of the Paleocene Age. This unit, known locally as the Taqiye Formation, outcrops over broad areas in the Levant, including the Shephelah, the Judean Desert, the northern and southern flanks of the Menashe hills, the central Jordan Valley, the Beqaʿ Valley, and the coast of Lebanon (Dubertret 1962; Sneh et al. 1996; Sneh, Bartov, and Rosensaft 1998; Sneh et al. 1998).

Similar units of the same geological age are lithologically consistent around the eastern Mediterranean from Turkey through the Levant to Egypt (the Esna Shales) and as far west as Morocco (Bentor 1966: 73). The nonplastic components derive from a coastal origin. In the southern Levant, coastal sediments are dominated by quartz sand that originally comes from the Nile. On the northern coast of Israel, this type of sand diminishes and the sediment becomes increasingly calcareous. The dominance of quartz sand together with the considerable amount of carbonatic sand suggest a source along the central coast of Israel. Within this area, the Taqiye Formation is exposed on the northern and southern flanks of the Menashe hills.

Group UM: Unidentified Marl Accompanied by Inclusions of Coastal Quartz and Sedimentary and Volcanoclastic Rocks. This group is characterized by carbonatic clay rich in silty rounded carbonatic particles and silty dolomite rhombs. The inclusions include a mixture of quartz grains with the occasional addition of feldspar grains, and sedimentary (limestone) and pyroclastic (tuff) rock fragments (Fig. 3C). The inclusion assemblage reflects a unique environment in which calcareous sedimentary rocks appear together with volcanoclastic rocks and coastal minerals. This geological setting appears on Mt. Carmel and in the adjacent area of the Umm el-Fahm Hills, where Late Cretaceous volcanic activity occurred (Sass 1957; 1968; 1980). In the Carmel area, 12 pyroclastic volcanoes were identified, as black massive pyroclastics, proximal flanks with variegated pyroclastics, and distal flanks with yellow pyroclastics. Since these eruptions occurred in seawater, the pyroclastics were deposited in a marine environment that affected their typical argillization processes. Some of these volcanic occurrences, however, also contain exposures of massive basalts and volcanic bombs, which cannot be mistaken for any other volcanic occurrence in the southern Levant (Sass 1957, 1980). Thus, the Carmel Ridge and Umm el-Fahm area are the only possible candidates for the origin of this group.

Group Ls: Loess and Quartz and/or Calcareous Sand Inclusions. To the naked eye, this ware is characterized by a light tan fabric. The coarse fraction contains

Fig. 2. Philistine Bichrome Open Vessels and Related Wares from Dor

	Reg. No.	*Locus*	*Area/ Phase*	*Period*	*Description*	*Provenience*	*Petrographic group*
1	184048	18320	G/10c/ 11?	Early Ir1a (?)	Brown fabric, many tiny inclusions; white slip, black decoration	Southern Shephelah	Ls2
2	184529	18337	G/10c/ 11?	Early Ir1a (?)	Light fabric, white inclusions; white slip, gray/black decoration	Northwestern Negev	Ls1
3	306740	19753	D2/12	Late Ir1a or Ir1a|b	Orange fabric, imprints of vegetal matter; dark red decoration	Northwestern Negev	Ls1
4	26082/6	2624	B/un-clear	?	Compact orange fabric, yellow core; white slip, black decoration	Not sampled	
5	—	Surface	—	?	Orange fabric, wet-smoothed; black decoration	Not sampled	
6	306047	19750	D2/9	Ir1b	Orange fabric; orange, gray and black decoration	Lebanese coast	PP1
7	305865	19707	D2/12	Late Ir1a or Ir1a|b	Orange fabric; black and dark red decoration	Not sampled	
8	77762/3	7914	B/11 or 10	Ir1b	White fabric, white slip, smoothed; black and red decoration	Nahal ʿIron to Carmel Range	UM1

quartz sand that is readily observable under a magnifying glass. In thin section, the matrix is silty and rather carbonatic. The silt is well sorted and contains mainly quartz but also a recognizable quantity of other minerals, including hornblende, zircon, mica minerals, feldspars, tourmaline, augite, and, more rarely, garnet, epidote, and rutile. Ore minerals are also abundant in this fraction. The nonplastic assemblage includes dense, well-sorted, rounded, sand-sized quartz grains, with the occasional addition of feldspars, hornblende, zircon, and augite (Fig. 3D). In several cases, these are accompanied by calcite cemented sandstone (locally termed kurkar), composed predominantly of quartz grains. In other cases, the inclusions are richer in limestone, chalk, or both.

Based on the published data (Goldberg et al. 1986; Goren 1987; 1988; 1991: 101–4; 1996; Goren and Gilead 1987; Porat 1987: 112–15; 1989: 50–52; Rognon et al. 1987; Gilead and Goren 1989: 7), the matrix is readily identified as loess soil, which occurs in the Levant mainly in the northern Negev and southern Shephelah. We must stress, however, that in using the term *loess*, we are referring to the set of aeolian and alluvial silty-clay sediments occurring in the northern Negev and Shephelah (Ravikovitz 1981: 341–86) that cannot be distinguished petrographically. Our collection of materials from Levantine sites, how-

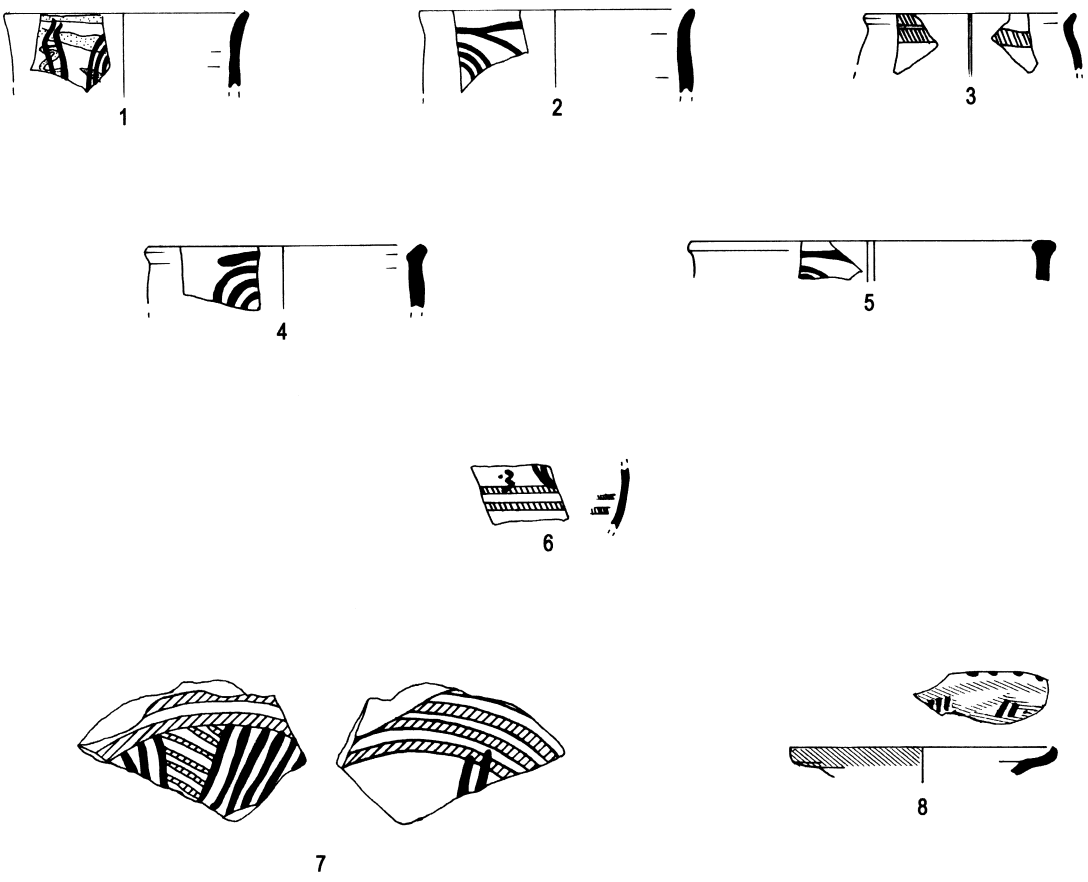

Fig. 2. Scale 1:5.

ever, indicates that the overall distribution of sites that doubtlessly produced pottery belonging to the loess petrographic groups does not extend significantly beyond the limits of the northern Negev–southern Shephelah zones. Loess-based pottery was produced in the rectangle delimited by Lachish or slightly to its north, Ashkelon, Gaza, and Beersheba from the Pottery Neolithic through the Medieval period.

In pottery assemblages that belong to this group, the inclusions accompanying the loess matrix are varied, indicating different geological environments within the area in which it is distributed. Consequently, they could be correlated with sands occurring naturally in the vicinity (Gilead and Goren 1989: Fig. 2; Goren 1991: 118–20, Fig. 13; 1995: Figs. 3–8). The use of loess with inclusions in which limestone is the dominant component is prevalent mainly at sites northeast of the Beersheba Valley and the southern Shephelah, whereas at sites in the inner southern Shephelah, chalk sand is commonly the dominant or even sole non-plastic component. At northwestern Negev sites, quartz is the major inclusion in

the loess (Gilead and Goren 1989: Fig. 2). Fresh fragments of marine mollusk shells and the calcitic cemented quartz sandstones or eolianite, the latter derived from fossilized sand dunes (kurkar), which are generally grouped within the Pleshet Formation, appear as well (Issar 1961).

In summary, this group can be defined as typifying southern Palestinian wares.

1. Group Ls1: Temper dominated by quartz
2. Group Ls2: Temper dominated by carbonates

Summary and Discussion of Petrographic Results

"PhB-Like" Closed Vessels. Eleven of the 13 fragments were analyzed. Five (Fig. 1:5–9) were determined without doubt to have been produced in the northern Negev / southern Shephelah; 2 (Fig. 1:2, 11) along the Carmel coast; 2 (Fig. 1:1, 3) north of Akko, apparently on the Lebanese coast; and 2 produced less-conclusive results. Of the last, Fig. 1:4 was produced somewhere between the Yarkon Basin in the south and the Akko Bay in the north, and Fig. 1: 13 could have been produced in the Shephelah, the inner Sharon Plain, the ʿIron Valley, or the coast of Galilee or Lebanon (but not the Carmel coast).

"PhB-Like" (?) Open Vessels. Four of the seven possible fragments were analyzed. Two skyphoi (Fig. 2:1–2) were produced in the southern Shephelah and northwestern Negev, respectively; one undefined open vessel (Fig. 2:6) on the Lebanese coast; and one (strainer?) bowl (Fig. 2:8) in the ʿIron Valley or its immediate vicinity. In addition, another skyphos of visually undefinable fabric (Fig. 2:3) was manufactured in the northwestern Negev. While this distribution is not clear-cut, some patterns are nonetheless apparent:

1. There was no significant production or consumption of "PHB-like" vessels at Dor comparable to that in Philistia, given the small number of such fragments found at Dor after more than a decade of excavating a complete sequence of early Iron Age levels (for the ceramic profile of this sequence, see Stern 1991; 2000a: Chapter 3 and pp. 345–63; Gilboa 1998; 1999a; 1999b; 2001a; 2001b: Chapter 5; Gilboa and Sharon 2003; Sharon and Gilboa in press [and references in these studies]). "PhB-like" vessels are intrusive in the local ceramic culture and cannot be taken to represent *Šikila* material culture.

2. In this small assemblage, small closed vessels (i.e., containers) are dominant. Most of the containers determined to be "PhB-like" indeed proved to have been imported from Philistia—in fact from its southern regions. They were probably imported for their contents and have no other cultural significance.

3. In addition to the containers, three skyphoi found at Dor are imports from Philistia—again, surprisingly, from its south. These are obviously not commercial containers and should thus be viewed in another context.

4. Only two fragments from the early Iron Age at Dor that bear clear "PhB-like" designs proved to have been produced on the Carmel coast, both from closed vessels (Fig. 1:2, 11). Furthermore, only one bowl (Fig. 2:8) was produced in the vicinity (in the ʿIron Valley), and one closed vessel (Fig. 1:13) *may* have been produced there (see above). These few fragments do indicate some produc-

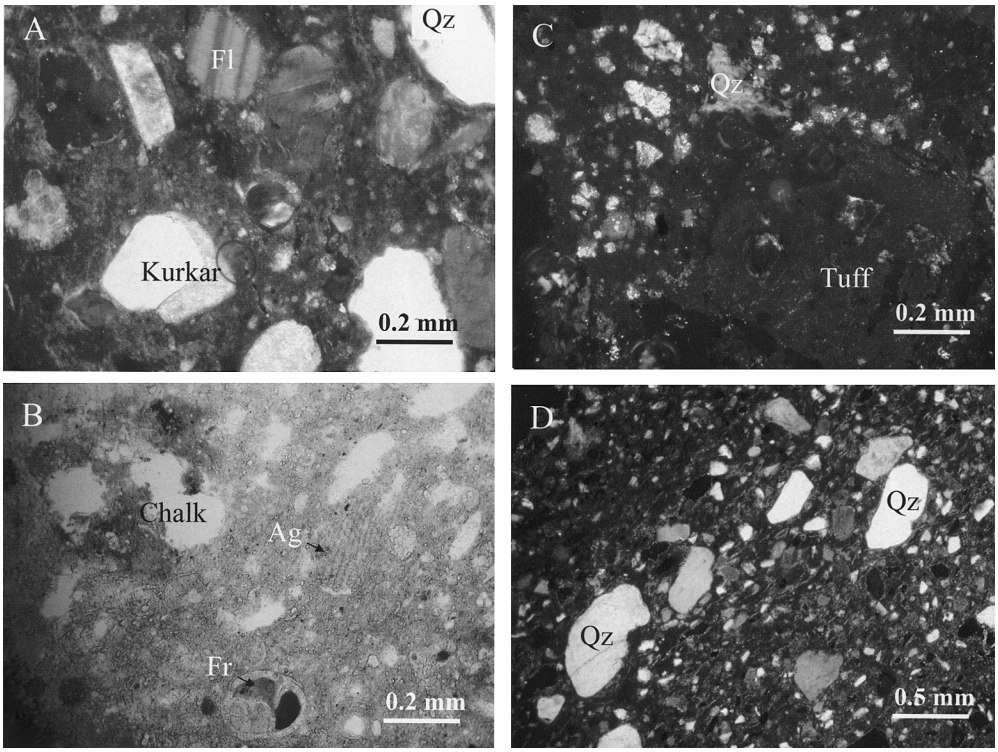

Fig. 3. Photomicrographs (Qz = quartz; Fl = feldspar; Ag = algae; Fr = foraminifer)
A: Bowl (Fig. 1:4). Kurkar fragment, quartz and feldspar grains embedded in Hamra soil (XPL);
B: Closed vessel (Fig. 1:3). Chalk and algae fragments embedded in calcareous marl (PPL);
C: Open vessel (Fig. 2:8). Tuff fragment and quartz grains embedded in carbonatic clay (XPL);
D: Closed vessel (Fig. 1:5). Quartz grains embedded in carbonatic silty clay (XPL).

tion, albeit apparently extremely limited, of "PhB-like" vessels, including Bichrome examples in the vicinity. This type of pottery, however, never became a significant component in the ceramic repertoire of the site, and the significance of its occurrence at Dor remains to be explored (see further below).

5. Surprisingly, two closed vessels (Fig. 1:1, 3) and one open shape (Fig. 2:6) seem to originate on the Lebanese coast.

Chronology

Other than four examples (Fig. 1:1, 6, 7; 2:6), none of the fragments was found in a primary context. However, four fragments (Fig. 1:1–2, 4, 6) were found in secure deposits of the earliest Iron Age horizon at Dor (Phase 10 in Area G of the early Iron 1A horizon),[6] and it seems quite safe to assume that this is

6. In Gilboa and Sharon 2001: Table 1, Phase 10 was assigned to Late Ir1a, but it is now recognized as a stratigraphically and typologically separate horizon, referred to as Early Ir1a (Gilboa and Sharon 2003: Table 1). For an explanation of the chronological terminology, see Gilboa and Sharon 2003.

indeed the period in which PhB fragments first occur. They certainly appear at least as early as this horizon (four fragments [Fig. 1:3, 5; 2:1–2] probably also belong to the same phase, but this is less conclusive; they could in fact be earlier). One fragment (Fig. 1:7) comes from the Late Ir1a horizon (Phase 9 in Area G). In terms of a chronological link with Philistia, these two horizons at Dor parallel Strata XII and XI at Tell Qasile (see Gilboa and Sharon 2003). Seven fragments (Fig. 1:8–10; 2:3, 6–8) were found in the subsequent transitional Ir1a|b and Ir1b horizons (Phases 8–7 in Area G, 12–9 in Area D2, and 11–9b in Area B1; for this sequence, see Gilboa and Sharon 2003: Table 1). These horizons apparently span late Stratum XI through Stratum X at Tell Qasile and at least the end of Stratum VIb through Stratum VIa at Megiddo (Gilboa and Sharon 2003). No "PhB-like" fragments were attributed to the extensive secure contexts of the subsequent transitional Ir1|2 horizon (Phases 6b in Area G, 8c in D2, and 9a in B1), and it can safely be assumed that they no longer existed then. As we are dealing with only a few fragments, we cannot determine how many of these pieces, if any, are redeposited (by far the largest PhB fragment, Fig. 1:11 comes from an 8th-century BCE assemblage), but it seems that the stratigraphic range in which they occur—Early Ir1a–1b, paralleling Strata XII–X at Tell Qasile (and no later)—reflects the reality.

This sequence has important chronological implications for understanding the Late Bronze/Iron Age transition at Dor. The only area in which stratified Late Bronze Age deposits were exposed to any meaningful extent is Area G in the center of the mound (see map in Stern 2000a: 78, Fig. 35). There, Phases 12 and 11 are definitely Late Bronze Age layers. Because the subsequent Phase 10 already contains PhB sherds (and some PhB fragments possibly originate *under* Phase 10 [see above]), no clear chronological corollary exists in this area for the "local Myc IIIc–bearing strata" in Philistia (for a detailed discussion of these issues, see Gilboa and Sharon 2003; Sharon and Gilboa in press).

Tell Keisan

A complete early Iron Age sequence was excavated only in Area B at Tell Keisan. The early part of this sequence (Strata 13–10) has been published in only preliminary form (see especially Humbert 1981: 385–97; 1993), but the ceramics are extensively presented and discussed by Burdajewicz (1992; 1994). The later early Iron Age levels (9–8c) are fully published in the excavation report (Briend and Humbert 1980). Philistine Bichrome pottery found at the site was considered by the excavators to be of local manufacture (but on what basis is not made explicit [e.g., Humbert 1988: 72]) and thus not strictly "Philistine" (e.g., Briend 1980: 210; Puech 1980: 229) but, rather, the result of the "diffusion" of ideas and objects. The question of whether or not the excavators envisaged a "Sea Peoples" presence at the site remains somewhat open-ended, although Humbert has suggested that Stratum 13 may have been destroyed by "Sea Peoples" (1988: 72–73, 76). Stern considers the "Philistine Ware" at the site to be evidence of the presence of Sea Peoples on the Akko Plain (2000b: 204).

According to Burdajewicz, the Tell Keisan repertoire of Strata 13–10 was closely connected to that of Philistia. This connection was manifold, first and foremost represented by the occurrence of Philistine vessels. Under the designation "Philistine," Burdajewicz also includes all kinds of bell-shaped bowls with painted spiral decorations, the Phoenician Bichrome group that he believed was Philistine-influenced, and numerous sherds of various vessels bearing two-colored decorations, all of which he considers either definitely or possibly Philistine. Thus, Burdajewicz counts 30–60 Philistine sherds in Area B alone, mainly from Strata 10 and 9 (1994: 87–93, 154, Table III.2). He notes that, regarding vessel types, at Tell Keisan this pottery group—which may have been either locally produced or imported—includes only a small assortment of the much larger PhB repertoire, excluding most of the more common shapes: "espèce de production raffiné [*sic*], à vocation plus ou moins spécifique" (Burdajewicz 1994: 155). Burdajewicz concludes that nevertheless, the Philistine pottery at Tell Keisan (and in other regions in which it occurs, including Philistia) does not attest to a foreign population and cannot be used as an ethnic marker: it was used by the local Canaanite population and represents a local substitute for the by-then-inaccessible western luxury pottery (1994: 153–61).

Burdajewicz considers the following items to be Philistine:

In Strata 13/12b: a closed vessel or krater with PhB decoration (Burdajewicz 1994: Pl. 15:17). *In Stratum 12a*: a fragment of a closed vessel with typical PhB decoration (1994: Pl. 22:19). *In Stratum 11*: two bell-shaped bowls with spirals on a white slip, one monochrome and one bichrome (1994: Pl. 25:12–13). *In Stratum 10b*: a bell-shaped bowl that he assumes only accidentally did not retain its decoration (1994: Pl. 29:10). *In Stratum 10a*: five bell-shaped bowls (1994: Pl. 33:1–1c, 3, 5), at least one with a monochrome spiral, and three shallow carinated bowls with thickened molded rims, decorated with an external band of paint and striations on the rim (Burdajewicz's Type BI.6 [see below]). *In Stratum 9c*: four decorated fragments (Briend and Humbert 1980: Pls. 68:7, 69:4, 72:2, 7); five jugs (Briend and Humbert 1980: Pls. 71:8 [with PhB decoration]; 72:1, 5–6, 10 [Nos. 6, 10, and possibly 5 have PhB decoration]), a goblet with two-colored decoration and another similar fragment (Briend and Humbert 1980: Pl. 73:4, 8 [the parallels cited from Tell Qasile in Burdajewicz 1994: Fig. 3 are not, in our opinion, valid]); and two bowls bearing PhB decoration (Briend and Humbert 1980: Pl. 80:11–12). Probably because of their strainer spouts, Puech considered two jugs from Stratum 9c to be Philistine (1980: 219; referring to Briend and Humbert 1980: Pl. 71:8b–8c). However, they are painted with simple designs in red, mostly red bands, and do not belong to the PhB group; the same applies to the amphoriskos from this stratum considered Philistine by Stern (2000b: Fig. 10.9 [upper]). *In Stratum 9b–a*: a "waisted" PhB juglet and three additional two-colored fragments (Briend and Humbert 1980: Pl. 61:3, 12, 15, 17). *In Stratum 8c*: two bell-shaped bowls with spirals, one with monochrome and the other with bichrome decoration (Burdajewicz 1994: Pl. 35:2–3). *In unclear stratigraphic contexts*: a bell-shaped bowl with a dark red spiral on a white background; two Type

BI.6 bowls; and a simple rounded bowl with a bar handle and interior decoration in two colors (1994: Pl. 35:1, 5–6, 9).

It seems, however, that the excavators' and especially Burdajewicz's definition of "Philistine" pottery is somewhat too sweeping. Based on a comparison with the fragments considered Philistine in the excavation report (Briend and Humbert 1980) and by Brug (1985), Burdajewicz concludes that the identification of a vessel as "Philistine" is quite a fuzzy, subjective matter (1994: 98, Table III.1); he states that he classified practically any piece with two-colored decoration as Philistine in style (1994: 94). This is extremely misleading; for example, as indicated above, the virtual equation of "Philistine" with two-colored decoration led Burdajewicz to suggest that the Phoenician Bichrome decoration derived from Philistine pottery (1994: 95).

Thus, most of the above-mentioned vessels and fragments are in fact common two-colored "Canaanite" vessels of Late Bronze Age derivation. This also applies to the three carinated bowls of Type BI.6, decorated with striations on the rims and a red band on the exterior above the carination (Burdajewicz 1994: Pl. 33: 6–8). Burdajewicz considers these bowls a typical Canaanite shape with a typical Philistine decoration, and compares them with T. Dothan's Types 13–16 (Philistine vessels of Canaanite derivation) and with various bowls with similar profiles from such sites as Azor, Tell Qasile (BL 14 and BL 15), and Ashdod (for the parallels and references, see 1994: 89). At these sites, some of the bowls are plain, some have simple two-colored designs, many are red-slipped, and only one or two may bear typical PhB designs. While the specific parallels cited by Burdajewicz are indeed valid, his interpretation is not. These bowls are a Canaanite form, sometimes bearing the concentric two-colored designs of Canaanite derivation, and are attested (albeit rarely) in the ceramic assemblages of sites in Philistia (as are numerous other Canaanite shapes). The quantitative data from Tell Qasile shows that this was indeed a rare type, somewhat more frequent in Stratum XII (eight examples) and gradually diminishing in quantity until Stratum X. To consider these bowls at Tell Keisan Philistine is erroneous.

Also in evidence at Tell Keisan, as at Dor but even more so, is the phenomenon of the bell-shaped bowls/skyphoi. As indicated above, this shape accounts for 20 of the ca. 30 items in Burdajewicz's "Philistine" group. Burdajewicz (1994: 54–55) is of the opinion that these bell-shaped bowls were modeled on Mycenaean skyphoi and were manufactured locally "under the influence" of the "Sea Peoples." Some have decorations that are by and large similar to those on Philistine pottery (i.e., mainly spirals), and others are white-slipped (e.g., Burdajewicz 1994: Pls. 15:16, 29:10, 331a–1c). Burdajewicz (1994: 88) concurs with A. Mazar's view (1985a: 90 n. 4) that these poor-quality bowls were a regional, northern variation of Philistine bowls. As suggested above, the occurrence of these simple skyphoi should be disassociated from the PhB phenomenon and are not a northern aspect of Philistine pottery (Sharon and Gilboa in press).

Quantities and Vessel Types

We argue that the "Philistine" phenomenon at Tell Keisan echoes that at Dor. Throughout the early Iron Age, only a few genuine PhB vessels occur (ca. eight):

the unidentified vessel in the problematic Stratum 13/12b context (Burdajewicz 1994: Pl. 15:17); the closed-vessel fragment in Stratum 12a (Burdajewicz 1994: Pl. 22:19); the stirrup jar, two bowls, two jugs (and possibly a third) in Stratum 9c (Briend and Humbert 1980: Pls. 72:5–6, 10, 80:11–12), and the juglet in Stratum 9a (Briend and Humbert 1980: Pl. 61:3). As at Dor, most are closed vessels, but at Tell Keisan, as opposed to Dor, there are also two open examples. Fabric analysis was not conducted on the Tell Keisan vessels; it is clear, nevertheless, that, as at Dor, they are intrusive in the local repertoire. They also comprise mainly containers and are probably evidence of the import of a liquid commodity from Philistia.

Other Northern Sites and Survey Results

Shiqmona

No PhB pottery has been identified at this site (J. Elgavish, personal communication).

Tell Abu Hawam

The lack of PhB pottery from Hamilton's excavations at the site led B. Mazar (1951) to posit an occupational gap in the 12th and part of the 11th centuries, although, in light of the dearth of this pottery throughout the region, a lack of PhB pottery cannot in itself be considered a valid basis for such a suggestion. In contrast, Balensi argues (as opposed to the widely held opinion based on Hamilton's publications) that the site *did* produce Philistine pottery that was not published by Hamilton (Balensi 1980: 279, 372), but she neither reproduces the pottery nor specifies its contexts (see also Brug 1985: n. 271). Balensi states that this pottery was not "early" (equivalent to Qasile XII) but parallels Qasile XI (1980: 279, 372). Because we could not locate the specific pieces she was referring to, this statement is difficult to evaluate. Among the *published* vessels that Balensi considers Philistine (1980: 279, 372), however, none should be associated with the PhB repertoire, with the possible exception of the flasks with a radial decoration and spoons (two spoons of flasks are mentioned in Balensi 1980: 132, but have not been published). One such flask was uncovered at the foundation level of Stratum IIIa Building 27 (Hamilton 1935: Pl. 14:161; in addition to the decoration visible in the photograph, it bears a six-pointed star under each handle). A double flask (Balensi 1980: Pl. 6.4:11) was uncovered under Building 42 and possibly belongs to Strata IV1–IV2. Other than these, one fragment of an apparently crude skyphos (Balensi 1980: Pl. 6.6:7) comes from an unclear context within the Stratum IV range; Balensi dubbed it "Sub-Philistine" and compared it to bowls from Tell Qasile X.

The dearth of PhB pottery at Tell Abu Hawam is striking, especially vis-à-vis its occurrence at nearby western Jezreel sites surveyed by Raban (1982; 1991; 1999 [see also below]). It should be borne in mind that the reliability of such negative evidence from Tell Abu Hawam is problematic, because Hamilton discarded an overwhelming percentage of the pottery in the field. Balensi estimates the material she managed to locate, illustrate, and discuss as constituting ca. 50% of the total (1980: 340), but judging from the scale of the excavations, even this figure

seems far too optimistic. Still, it is safe to assume that PhB fragments would not have been included among the "uninteresting" pieces discarded by Hamilton.

Akko and Its Vicinity

The Mycenaean IIIC pottery excavated by M. Dothan at Tel Akko led to the proposed identification of this site as one of the seats of the Shardana (e.g., 1989). Only a few such sherds have been published to date, and an assessment of quantities and production locales must await the publication of the Akko material. Apparently, there are not many Mycenaean IIIC pieces, but PhB material is almost entirely absent at the site. Only two PhB fragments of closed vessels were found in these extensive excavations (Michal Artzy, Avner Raban, and Ezra Marcus: personal communications). PhB pottery is absent in the material collected during a survey conducted in the Akko hinterland (Lehmann 2001; personal communication), nor was it identified in the Upper Galilee survey that included the coastal strip running from Akko to the present-day Israel/Lebanon border (Frankel and Getzov 1997; Frankel et al. 2001; N. Getzov: personal communication).[7]

Summary and Discussion

While the above survey of PhB pottery along the northern coast does answer a few questions, it also leaves many open and, moreover, posits new ones.

First and foremost, it is clear that PhB tableware is intrusive along the coast north of the Yarkon Basin, at least from Dor northward.[8] The inhabitants of these regions, the postulated Šikila and Shardana territories, continued to use plain, minimally decorated tableware, as they did in the Bronze Age (see, for example, Gilboa 2001b, Gilboa and Sharon 2003 for Dor; Briend and Humbert 1980; Burdajewicz 1994 for Tell Keisan).

The very few PhB vessels found both at Dor and Tell Keisan are mainly small closed vessels, strongly suggesting the possibility that they served as containers

7. Similarly, not a single sherd of such pottery was found in the Lower Galilee Survey (Gal 1992; 1998) or those of Haifa East (Ronen and Olamy 1983), the ʿAtlit Map area (Ronen and Olamy 1978), and the Daliya Map area (Olamy 1981). Although one cannot completely rely on negative evidence from surveys (irrespective of what methodologies they use), the cumulative evidence seems significant. Among the potsherds from ʿEn Hagit (a site in Wadi Milkh, close to Dor) that Stern considers Philistine, only one (2000b: Fig. 10.8 on the left) is a PhB fragment, of a container.

8. Whether the coastal strip and its hinterland between the Yarkon Basin and Dor (i.e., the northern Sharon Plain and especially the Iron Valley and its margins) should be included in the "PhB-consuming sphere" is a moot question at this point. Although the existence of PhB pottery at Tel Zeror, for instance, has often been mentioned (e.g., T. Dothan 1982: 70 nn. 230–31; Stern 2000b: 203), this has yet to be established with certainty. For example, one of the oft-cited examples is a strainer-spouted jug that did not retain any decoration and possibly had none. Nothing links this vessel to the PhB group; on the contrary, it is probably a regular Canaanite/Phoenician vessel. Another example is a regular Phoenician jug/flask. Other than the famed lion-shaped cup, the site produced only a miniscule quantity of PhB-related pottery (see Brug 1985: 96). Small-scale excavations at Tell Jatt produced one PhB fragment of a closed vessel (Porath, Yannai, and Kasher 1999: Fig. 11:14). No PhB pottery was reported from the map surveys of Maʿanit (Neʾeman 1990), Hadera, and Michmoret (Neʾeman, Sender, and Oren 2000).

for some imported commodity. At Dor, as expected, it has indeed been shown that these vessels represent an import from Philistia, but it was surprising that a significant number of them (8 or 9 of the 16 analyzed sherds) originated from quite far away—from a PhB-producing center (or centers) in the southern Shephelah / northern Negev—which illuminates another facet of this settlement's trade relations in the early Iron Age.

While the PhB-like pottery from Tell Keisan and Akko has not been analyzed, its small quantities coupled with the fact that most vessels, again, are containers probably point to a similar phenomenon; this, however, is yet to be confirmed by fabric analysis.

In assessing the significance of this phenomenon, let us return to an examination of the origin of these wares.

The Significance of Philistine Bichrome Pottery in Philistia

In Philistia, the decorations on the tableware and associated pottery from the phase preceding PhB, the so-called local Mycenaean IIIC horizon—and especially the very custom of using decorated tableware—must have carried a symbolic meaning, as recently recognized by some scholars (e.g., Bunimovitz and Faust 2001; Sharon 2001). It reflected group identity and, in this case, ethnicity as well, and probably also promoted it (representing an emblemic style, to use Wiessner's terminology [e.g., 1983: 257]). This is unequivocally indicated by the fact that of all the material media, this labor-intensive pottery is one of the main remaining indicators of the foreign ancestry of the newcomers (contra Sherratt 1998), while other practices may have been abandoned. It can safely be assumed that, at this early stage, the symbolic meaning was shared by both the producers and the consumers of these vessels. This is suggested by the restricted spatial distribution of the pottery (contra Finkelstein, for example [2000: 164; see also above], who assigns a chronological significance to this distribution), and by the fact that provenience analyses of this pottery (see below) and kilns uncovered at Tel Miqne and possibly also at Ashdod (e.g., Killebrew 1996) indicate that they were produced in the locales in which they were consumed.[9]

The problem of assessing the possible emblemic properties of the subsequent (often dubbed "derivative") PhB ceramics is much more complicated. It should be stressed that at this stage, too, this mostly highly decorated pottery is the main medium that still echoes the foreign origin of part of the population of Philistia. However, these elaborate ceramics are spatially much more widespread, occurring at almost every site on the coast of Philistia, in the Shephelah, and on its margins. At most of these sites, however, the relative quantities of this pottery, wherever they can be assessed, are low (for Brug's summary of this issue, see above). This is true even of the heartland of Philistia—the (extensively surveyed) Shephelah (Y. Dagan: personal communication).

9. An alternative suggestion advanced by Stone (1995: 22) is that Mycenaean IIIC did not travel far, as the population of the area, producers and would-be consumers alike, was at this stage busy establishing itself in its new territories.

Furthermore, based on the Mycenaean IIIC pottery from Tel Miqne and Ashdod published thus far (see mainly M. Dothan and Porath 1993: Figs. 14–17; T. Dothan 1998a: Fig. 5; 1998b: 21; 2000: Figs. 7.7–7.8; Killebrew 1998a: Fig. 3: 25; 1998b: Figs. 6–7, 10, 12), it seems quite obvious that the range of shapes in the PhB group is much more variegated than that in the *initial* Mycenaean IIIC assemblage. The latter is dominated by open forms—bowls, kraters, and (much less so) kylixes—and by "feeding bottles" with basket handles. Only a very few examples of other types of vessels have been published to date, for example, strainer-spouted jugs and stirrup jars (see further below).

Brug (1985) and Bunimovitz (1990), for example, have suggested that at this stage, the PhB pottery was consumed by the general population of Philistia, which was mostly autochthonous, in addition to a small fraction (the elite?) of the newcomers who settled in its midst (e.g., Bunimovitz 1990: 211; for an assessment of the demographic processes in Philistia in the early Iron Age, see Finkelstein 2000). These scholars concluded that for this stage, therefore, PhB pottery cannot be considered an ethnic marker. However, the symbolic meaning (or lack thereof) of this pottery for its extended clientele was not taken into consideration in either the earlier or the later discussions (e.g., Bunimovitz and Yasur-Landau 1996; Bunimovitz and Faust 2001). Was PhB pottery at this stage, whether produced by "westerners" (as hinted at by Bunimovitz) or by Canaanite potters (as suggested by Brug), simply the best available fine tableware, replacing the no-longer-available fine ware (Mycenaean) imports (as suggested by Bunimovitz [1986] and Sherratt [1998]; see also Drews 1998: 45) and consumed by whoever could afford it? Or did PhB pottery, even as late as this period, still convey group identity, and if so, what sort of identity?

The only available explicit symbolic evaluation of PhB ceramics is that recently offered by Sharon (2001: 581, 600–601; for a more implicit assessment, see Stone 1995: 23), suggesting that the transition from local Mycenaean IIIC to PhB pottery in Philistia was a deliberate transformation, echoing and transmitting the emergence of a new group identity in Philistia following the social disorder in the wake of the Egyptian withdrawal.

The picture from the northern coast may shed some light on this question. The data presented above show that the inhabitants along the northern part of the coast did not consume PhB tableware. A number of explanations may account for this phenomenon.

1. Lack of interaction. This, however, seems unlikely for these two adjacent and easily accessible regions and, moreover, is refuted by the evidence of pottery (commodity containers), surely among other goods, traveling in both directions, for instance, the Phoenician Bichrome containers found at Tell Qasile (Mazar 1985a: Fig. 41:12–13, for example) and containers originating in the northern Negev found at Dor (see above).

2. Marketing strategies on the part of the PhB producers or distributors. It may be postulated theoretically that the distribution of PhB tableware over relatively long distances was simply not a sufficiently profitable enterprise. However, it is clear that PhB tableware, including elaborately painted kraters, indeed reached

relatively distant destinations. At Jezreel Valley sites, for example, as on the coast, while most of the vessels are containers, a fair quantity of elaborately painted kraters is also represented (for Megiddo, see T. Dothan 1982: Chapter 2, Pls. 17:2, 4–5, 18:4–5, 19:5, 7; Loud 1948: Pl. 143:17 and possibly Pl. 137:11; for Tell Qiri, see Hunt 1978: Fig. 42:1, 3), as well as at Afula (M. Dothan 1955: Fig. 15:5), Tel Reʿala (Raban 1991: Fig. 3:3), and Mishmar Haʿemeq (K. Covello-Paran: personal communication). These vessels, as discussed above, are all but unattested in the coastal regions (for the single, simply decorated krater at Tell Keisan 9c, see Briend and Humbert 1980: Pl. 80:12). Megiddo even yielded at least one example of the later kraters known in Philistia, the red-slipped type decorated with black spirals (T. Dothan 1982: Chapter 3, esp. 79, Fig. 60:6) that is unattested on the coast. This wider range of open PhB vessels is also attested in the Central Hill Country, for example, at Tell en-Nasbeh—of the ca. 50 reported "Philistine" sherds, at least 28 can be considered PhB according to our narrower definition (see Wampler 1947: Pls. 80, 86). Significantly, not only are containers represented, but also at least a dozen sherds of elaborately painted kraters (Wampler 1947: Pl. 80:3–10, 13–14; for additional profiles, see Pl. 86: upper row left and right), as well as other open shapes. At Bethel, too, of the four definite PhB fragments, three belong to kraters (Albright and Kelso 1960: Pl. 38: 12–14). From this perspective, the lack of such vessels on the northern coast is even more significant.

3. In light of the above, we would opt for a third possible explanation, as follows. Although PhB pottery definitely represented the finest tableware in the vicinity, unparalleled by any vessels produced on the northern coast, it was not in demand in this area, even though the earlier Late Bronze Age inhabitants were accustomed to using a certain amount of fine imported tableware (see, e.g., the lists in Leonard 1994: 201–11). PhB producers and distributors must have recognized that there was no clientele for their products in this region. This is comparable, for example, to the phenomenon observed by Reina and Hill (1978) in the different communities in the Guatemalan highlands that they studied in the 1960s and 1970s, which provided ample testimony of the maintenance of a clear distinction of *costumbre,* including both the production and use of specific pottery vessels vis-à-vis those of the other surrounding communities. The inhabitants, merchants included, were perfectly familiar with their neighbors' *costumbre* (Reina and Hill 1978: 238, 242, 251, 274, e.g., and passim), especially if these were would-be clients (see also Rice 1987: 201). However, elaborate hand-painted pottery apparently was not a component of *costumbre* north of the Yarkon Basin.

We would therefore argue that, not only is it clear that the inhabitants of the northern coast did not share the possibly symbolic environment exemplified by this pottery, but they deliberately avoided the use of PhB tableware as a boundary-maintenance strategy, precisely because it carried a symbolic meaning for their southerly neighbors. Although there is no reason to assume a priori that a medium carrying symbolic meaning for one group should be recognized as such by its neighbors and consequently avoided, this seems to apply in this case. Although, as amply demonstrated by Brug (1985: Chapter 3), quantities of PhB

ceramics drop sharply outside the confines of the southern coast and Shephelah, nowhere is this as drastic as between the northern and southern parts of the coast.

It seems, therefore, that although, as claimed by Brug and Bunimovitz, elaborately painted PhB tableware was indeed used at this stage by larger segments of Philistia's population, it still conveyed group identity. The crucial question is, however, what sort of identity?

In assessing the symbolic properties of PhB ceramics, we currently find three major lacunae in our understanding. The first is the crucial question of the affiliation of the PhB producers: that is, whether the *initial* production of this pottery originated in the Canaanite sphere or among the Mycenaean IIIC producers/consumers. The second is whether all the formal "western" attributes of the different components of the PhB group could have "derived" from the local Mycenaean IIIC repertoire or whether an alternative overseas impetus must perforce be postulated. Perhaps the most obvious case in point is that of the cylindrical and horn-shaped bottles, undoubtedly of Cypriot (probably LC IIIB) derivation, which thus far are unattested in the local Mycenaean IIIC assemblages. Third, the nature of the typological interdependence (if any) between PhB ceramics, once these appear, and their Mycenaean IIIC contemporaries is far from clear. For example, as noted above, the very beginning of the local Mycenaean IIIC phenomenon is exemplified mainly by open shapes, namely, bowls and kraters. The evidence published thus far from Tel Miqne–Ekron suggests that this applies to the *initial* PhB repertoire (from Stratum VIB) as well (e.g., T. Dothan 1998b: 25). But the PhB groups soon become morphologically much more diversified, and judging by the published evidence from Tel Miqne, the same seems to apply to the Mycenaean IIIC repertoire, albeit apparently to a lesser extent. So how are these phenomena related?

As noted above, Sharon (2001) has recently suggested that this nascent identity should be understood in the context of the disintegration of Egyptian control in southern Canaan. Following his line of thought, we would like to propose a more indirect association between the disintegration of the Egyptian apparatus and the emergence of PhB pottery. We also maintain that the available evidence is insufficient to allow for an assessment of the symbolic significance of PhB ceramics.

The social turmoil caused by the withdrawal of the Egyptians, probably chiefly affecting the local elites, may explain the elevated social position the newcomers managed to acquire in the first place. The suggestion that these newcomers formed at least part of Philistia's elite has already been put forward by several scholars, for example, A. Mazar (1985b: 106), Bunimovitz (e.g., 1990: 212), and Stone (1995: 7). Indeed, the very fact that conspicuous foreign practices, such as the production/consumption of alien pottery, asserting their foreignness, are in evidence is the best indication of their confidence in their social and perhaps political status.

From this point on, there are several alternatives. If it can be demonstrated that PhB pottery originated in the autochthonous milieu, it would be logical to

suggest that the incentive for the use of elaborately-painted tableware among larger portions of the population in the nearby vicinity—a custom alien to Canaanite tradition—may have been a desire to emulate the customs of the foreign elite by producing a similar range of status-reinforcing tableware. This would mean that what is represented is a sought-for identity on the part of the region's autochthonous elites, rather than the emergence of a *shared* group identity in Philistia. Still, a directly opposite underlying mechanism—competition rather than emulation—cannot as yet be ruled out.

On the other hand, if it can be shown that the initial production of PhB pottery occurred among the newcomers, a different symbolic intent should be read into this phenomenon; and both these possibilities raise another question. Assuming a symbolic interpretation for both local Mycenaean IIIC and PhB pottery, what sort of symbolic meaning, if any, should we read into the *abandonment* of local Mycenaean IIIC production? And how should the period of overlap (at least in terms of consumption) between these pottery styles—as exemplified at Ashdod Stratum XIIIa, Tel Miqne VI, and possibly Ashkelon—be understood?

The processes of acculturation or outright assimilation are usually considered to explain this phenomenon (Stone 1995, contra, e.g., Bunimovitz 1990: 219; see also Sharon 2001). Further insights into these processes, however, require much more explicit questions. How are the initial production of PhB pottery and the (gradual?) cessation of local Mycenaean IIIC production related and, in fact, is there a causal relationship between the two phenomena at all? Why would an elite relinquish one of its most assertive media? Was this a deliberate action on the part of the Mycenaean IIIC consumers, in effect an expression of a sense that a separate identity/status was no longer worth investing in or that it should be denied altogether? Assuming that both these pottery groups were produced by specialists, were they commissioned—that is, were the potters attached or rather independent specialists?[10] Were PhB producers, whether "Canaanites" or "newcomers," competing with Mycenaean IIIC producers and eventually put them out of business or were both types of pottery produced by the same workshops? (For a possible hint that the latter is suggested at Tel Miqne, see T. Dothan 2000: 153.)

The answers to these questions may also have chronological implications. Following A. Mazar's (1985b) and Ussishkin's (1985) seminal discussions of PhB chronology and based on the Ashdod and Tel Miqne sequences, a lower chronology than that proposed by T. Dothan (e.g., 1982: 295) for the beginning of PhB production has generally been accepted—i.e., that it begins ca. the mid-12th century, allowing for some 50 years for the Mycenaean IIIC phase—and for contexts that lack both Late Bronze Age imports on the one hand and PhB pottery on the other, the most frequently cited being Tel Seraʿ Stratum IX (e.g., Oren 1993: 1330–31). However, if Canaanite potters started producing PhB pottery and it was only later adopted at Mycenaean IIIC–consuming sites, it is quite possible that at some sites the production of PhB pottery began earlier than at others.

10. For a discussion of these different modes of specialization, see, e.g., Earle 1981; Costin 1991, with references.

Provenience analyses conducted thus far on both Mycenaean IIIC and PhB pottery cannot yet answer these questions. While these studies indeed suggest that both wares were probably produced in two of the major urban centers of the period, namely, Ashdod and Ekron, and were mostly used locally, with a minimal interchange between these two sites, hardly any analyses have been performed on PhB pottery from other sites—that is, those that lack a Mycenaean IIIC horizon, with four exceptions. The analysis of a few PhB vessels from Beth-Shemesh and Tell ʿEitun shows that they are probably not local and suggests that they may have been produced on the coast. Two PhB vessels from Deir el-Balah (a bowl/krater and closed vessel) together with an apparently undecorated bell-shaped bowl represent a separate petrographic family and may have been produced at the site or elsewhere along the southern coast. Of the pottery analyzed from Tell Qasile, the majority was produced at the site and some examples apparently originated in the near vicinity. However, many of the fragments analyzed are not illustrated and it is therefore difficult to determined how many of them are in fact "genuine" PhB according to our definition (see Perlman and Asaro 1969; Asaro, Perlman, and Dothan 1971; Perlman, Asaro, and Friedman 1971; Asaro and Perlman 1973; Edelstein and Glass 1973; Yellin and Gunneweg 1985; Gunneweg et al. 1986; Killebrew 1998a: 210–11).

Back to the Northern Coast

Philistia's neighbors to the north apparently deliberately avoided adopting these customs, a need not felt in more distant locales, such as Upper Galilee, the Central Hill Country, and the Jezreel Valley.[11]

Yet another question is raised by the petrographic results of the Dor sample. As indicated above, two fragments of closed vessels (Fig. 1:2, 11) may indicate some production, even if limited, of this type of vessel on the Carmel coast. Where were these products marketed? Obviously not in the immediate vicinity. The same question applies regarding the totally unpredictable origin of three vessels on the Lebanese coast (Figs 1:1, 3; 2:6). Although for the time being these small fragments defy classification in every respect, no pottery of this kind has been found in Lebanon, either in the large early Iron Age pottery assemblages excavated in and around Tyre or in Sarepta (see Chapman 1972; Pritchard 1975; Bikai 1978; Anderson 1988; Khalifeh 1988). Is it possible that some workshops in this region produced foreign-like pottery to be marketed far afield? Even though we are dealing with only a few small and typologically problematic fragments in this instance, the question should be borne in mind.

11. But it should be noted that in Raban's 1991 survey of Philistine pottery in the western Jezreel Valley, not all the illustrated fragments belong to the PhB group, for example, the bowl in Fig. 2:2, which is part of the local Canaanite assemblage, and the jug in Fig. 2:5. Nevertheless, this is the only survey conducted in the northern part of the country that reports PhB fragments.

Future Prospects?

Answers to all these questions are difficult to come by at present, but this does not mean that they are not within our reach. A carefully-designed research plan involving studies of microchronology, microprovenience, technological investigations, and assessments of modes of production and distribution of both local Mycenaean IIIC ceramics and PhB ceramics, of the kind conducted by Killebrew (1998a; 1998b), may prove instrumental. Such studies conducted in conjunction with a careful comparative typological analysis of Mycenaean IIIC ceramics on the one hand and PhB pottery on the other will certainly be possible after the abundant and well-stratified assemblages of both groups from Ekron together with additional sites are published (if, for example, a new "western" impetus is demonstrated for PhB pottery, this will necessitate a substantial revision of many of the scenarios posited above).

The modes of production and distribution of pottery in the early Iron Age in our region have generally not been investigated holistically (with the notable exception of parts of Wood 1990 and Killebrew 1998a). The results presented above, although admittedly very limited, indicate that it is time to do so. Moreover, as implied by our discussion, this procedure should distinguish between *different components of the groups*, for example, the different classes of vessels within each group, which may very plausibly exemplify different modes of production. Much work certainly remains to be done, but this seems the most fruitful potential avenue of inquiry.

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