THE INDUSTRIOUS SEA PEOPLES: THE EVIDENCE OF AEGEAN-STYLE TEXTILE PRODUCTION IN CYPRUS AND THE SOUTHERN LEVANT

Introduction

A distinctive group of installations found in Cyprus and the Levant in 12th century BCE contexts have traditionally been identified as 'bathtubs' used either for bathing (Courtois 1992; Karageorghis 1983a), described as an Aegean innovation (Karageorghis 2000: 473), or for purification rituals in cultic settings (T. Dothan 2003: 202–7; Karageorghis 1983a: 438; Steel 2004: 174–5). A review of their find-spots, however, demonstrates that these 'bathtubs' are often found in industrial locations. In this paper, I will argue for an alternative understanding that accounts for their presence in industrial contexts. The discovery of a 'bathtub' in association with a variety of weaving instruments at the Philistine site of Tel Miqne-Ekron suggests that some of these large tubs may have facilitated the manufacture and production of textiles, possibly as containers for fulling wool.

The textile industry has received little attention in reconstructions of Philistine culture despite the findings of loom weights at many Philistine sites. Discussion of weaving technologies has moved no further than recognizing the presence or absence of foreign style loom weights and associating them with gendered activities. The identification of fulling in the archaeological record of the Late Bronze and early Iron Ages corresponds with a number of other innovations in textile technologies that appear at this time on Cyprus and in the southern Levant that suggest changes in both textile manufacture and scale of production (Smith 2001). As documented in Mycenaean Linear B texts, the fuller's profession was one of high status, often associated with the royal court or other powerful institutions (Palaima 1997; Palmer 1963: 191–3; Ventris and Chadwick 1973: 123). The appearance of such a specialized craft in Philistia has significant implications for understanding the role of textile production within the economic underpinnings of Philistine society.

The bathtubs are generally described as large, "bath-shaped basins" constructed of either limestone or clay, often with a plaster lining or a rock- or gravel-lined base (Karageorghis 2000: 266). Some have a hole cut through the base or side wall, and some have attached handles or lugs. Bathtubs have been reported from a number of different contexts in both Cyprus and the Levant, including tombs, sanctuaries,

and private homes or in the large 'official' rooms of elite residences, where they are often found in or near areas interpreted as bathrooms. Descriptions of these installations usually invoke an image of wealthy individuals luxuriating in private bathing facilities (cf. Courtois 1992; Karageorghis 1983b: 373). Karageorghis even describes an image of a bather "with water being poured over him, perhaps by an attendant," and he suggests identifying a small, protruding ledge as a 'soap dish' (Karageorghis 1983a: 435).

A second interpretation for bathtubs found in Cyprus posits a religious function, in which the tubs performed some unspecified cultic role usually assumed to have involved a purification ritual (Åström and Åström 1972: 605; Karageorghis 1983a: 437–38; Steel 2004: 174–75). This particular interpretation has resonated in discussions of bathtubs discovered in Levantine contexts (e.g., Biran 1994: 174; T.

Dothan 2002: 202-6).

The literature on bathtubs generally assumes that both the installations and the activity of bathing are Aegean in origin, with the tradition arriving on Cyprus in the late 13th century BCE along with other Aegean practices and material culture (Karageorghis 2000: 273). However, the earliest cited bathtub (Karageorghis 2000: 266) comes from the Ayios Iakovos Sanctuary and dates to the 14th century BCE (cf. Gjerstad et al. 1934: 356-61). Described as a "large bath-shaped basin of terracotta," it was set into a shallow pit in the floor, with only its top edges protruding above the floor's surface. The bathtub was found filled with ashes and burnt bones (P. Aström 1972: 1), and was associated with an accumulation of artifacts described as "votive gifts" (Gjerstad et al. 1934: 359). Karageorghis dismisses the identification of this basin as a 'bathtub,' proclaiming that "It is not certain whether this basin was ever used as a bathtub, or whether it really resembled a bathtub," while pointing out that its identification was further compromised because it was not preserved and the field photographs, which depict it in situ, do not shed light on its function (2000: 266).

Karageorghis (2000: 266–74) and T. Dothan (2003: 202–7) provide the most recent overviews of these intriguing installations. In his catalogue, Karageorghis (2000: 272) notes in passing that a number were found in industrial areas (see Table 1). These find spots are generally assumed to represent secondary contexts. The recurrent discovery of similar installations in industrial areas, however, suggests that these contexts may not necessarily be secondary, but were areas associated with the primary function of these installations. The recent publication of a number of bathtubs from Philistia (T. Dothan 2003; Master 2005: 345; Stager 2006: 13) allows for an alternative understanding of some of these large basins as industrial installations, and compels us to reexamine the contexts of earlier finds in Cyprus and the Levant.

Cyprus

In Cyprus, bathtubs are often found on floors that are partially paved with stone slabs or have a hardened floor surface. Many

bathtubs are found smashed to pieces. Others are embedded in the floor surface. Some baths are found in contexts that suggest they were intentionally put out of use, as in the case of two examples from Enkomi, where one stood below a wall (Courtois 1992) and the other

was found upside down (Courtois et al. 1986).

Rooms are often identified as either bathrooms in domestic settings (e.g., at Enkomi and Pyla-Kokkinokremos), or cultic shrines (e.g., at Kouklia), based primarily on the presence of a bathtub (see Table 1). The identification of Room B in Building II at Alassa-Paliotaverna as a "public building containing a cult place" was based on the presence of a pillar-flanked hearth and bathtub which, according to the excavators, "is yet another argument in favour of this [cult] suggestion, having in mind the ritualistic nature of these artifacts in the LBA" (Hadjisavvas 1996: 113). These arguments run the risk of circular reasoning, with the installations identified as bathtubs based on their context, while at

the same time giving definition to that same context.

A number of bathtubs have been recovered from contexts that have been interpreted as secondary, or in which their function was unclear, but nevertheless seemed ill-suited for bathing. The terracotta bathtub from Kalavasos-Avios Dhimitrios (South 1980: 36, fig. 4, 38–39) is a good example. It was found in the corner of a large oneroom structure, set into a floor of hard white plaster, with only its rim protruding above floor level. Flat-lying stones paved the area flanking either end of the tub. South mentions that the tub had two loop handles and a relief-decorated exterior, but it is not clear from her report whether these features were visible above the ground surface, though they do not appear to have been, based on her description that the tub was "sunk below floor level in such a way that its rim project[ed] a short distance above the floor surface" (1980: 39). An outlet hole was pierced in the tub's lower wall, but was not connected to a drainage channel, as is typical of these installations. This suggests that whatever drained from the tub was not meant to be collected. Other features in the room included several variously sized pits and sherds of large pithoi, leading South to conclude that "It appears extremely unlikely that this large room was a bathroom, and the bath must have been set here for some other purpose" (1980: 39). Based on architectural similarities with Building X, a monumental complex located in an area to the north of the building in which the tub was found, South identified the tub room as having a public or administrative function (1983: 101).

Similar installations have also been found in contexts that have been identified as industrial, such as the tubs at Kition and Maa-Palaeokastro and some of the examples from Enkomi (Karageorghis 2000: 270–72). The functional nature of these areas was identified as industrial by the excavators based on the presence of production waste and industrial tools, including evidence of copper working and textile production, and/or by concentrations of tubs and tub fragments in

close proximity (Karageorghis 2000: 270–72).

Perhaps the best evidence for bathtubs in industrial contexts comes from the site of Maa-Palaeokastro, where more than twelve clay

bathtubs and bathtub fragments were found (Karageorghis and Demas 1988). The majority of the fragments and the most complete examples all derive from the floors and fills in the rooms along the southern half of Building III, a building interpreted as largely for storage, with some "specialized use of its south sector" (Karageorghis and Demas 1988: 63). Although many of the finds from Building III were linked to bathing activities, including a pithos for water storage, soot-covered pottery for water heating, and personal items such as a bronze fibula, pin and a beaded necklace (presumably lost by the bather), the large number of bathtubs found in the complex forced Karageorghis and Demas to suggest other possible interpretations, including the washing or dyeing of cloth or wool, or other undetermined industrial activity (Karageorghis and Demas 1988: 34). It is interesting to note that their discussion of the functional use of the Maa-Palaeokastro tubs was preceded by a similar discussion when they excavated the "bathroom" at Kition in Area I, Floor IV (1985b: 9–10), where they found a bathtub fragment in a later phase (see Table 1). One of their initial suggestions was that the room was used "for the dyeing and manufacture (?) of cloth," but they rejected this idea in favor of identifying the room as a bathroom, a functional space which they felt could be considered "an appropriate appendage to a small foundry" (1985b: 10).

Southern Levant

In the southern Levant, bathtubs have been found at a number of Philistine settlements, but they also appear at sites which are considered outside of the Philistine enclave (e.g., Megiddo and Tel Dan; see Karageorghis 2000: 266–74). The contexts in which they are found exhibit similar patterns to the bathtubs from Cyprus. In the sacred enclosure at Tel Dan, smashed fragments of a restorable bathtub were found in a stone-paved alleyway (Biran 1994: 165–83). Rooms alongside this alley contained an olive press and a large plastered bin, indicating that this part of the sacred area was set aside for industrial

activity (Stager and Wolff 1981).

A photograph of a clay bathtub found *in situ* in Stratum VIA at Megiddo (Karageorghis 2000: 274; Loud 1948: 45, fig 87, 386: 6; Paice 2004: 59, pl. 21:1) shows it as a built-in, plastered feature, embedded in the room's floor, with an associated bowl at floor level into which the contents of the tub may have drained. This installation was identified by Loud as a wine or oil press (Loud 1948: 45, fig. 87). It was probably only recognized as a "bath" once it was removed from its context (Loud 1948: fig. 386: 6). The published photograph clearly indicates that one of the handles, preserved on the back wall of the tub, was at least partially concealed by the surrounding plaster construction, and therefore does not appear to have been associated with the tub's function in the context in which it was found.

At Philistine sites, T. Dothan differentiates between bathtubs found in 'bathrooms' and those which come from contexts that do not have the 'appearance' of a bathroom (2003: 202). Dothan notes that bathtubs are often discovered in association with rectangular mudbrick platform

hearths, and are commonly found in large, communal assembly rooms where they "fulfill[ed] a role in purification and/or other rituals" (2003: 203–4). Mention is also made of a possible clay 'bathtub' fragment found at Tell Qasile (T. Dothan 2003: 203; Karageorghis 1983a: 274). However, purification rituals do not seem to be a central focus of the cultic activities in the Philistine temple complex at this site (Zevit 2001: 125–32), nor in what we know of Philistine cultic activities in general (Mazar 2000).

The two clearest examples of Philistine bathtubs come from Area G at Ashdod and Building 353 at Tel Miqne-Ekron. The buildings in which these bathtubs were found shared a similar architectural plan, consisting of a large front room with two smaller rooms at the rear. The Area G building at Ashdod has been redefined recently as an elite residence (T. Dothan 2003: 202), although the excavators initially described it as a workshop (Dothan and Porath 1993: 72). Building 353 at Tel Miqne has been identified as domestic (Mazow 2005). A third bathtub has been discovered in the Philistine levels at Ashkelon (T. Dothan 2003: 204–7, fig. 15; Master 2005: 344–45, figs. 20.7 and 20.8; Stager 2006: 13; forthcoming). Although not fully published, it too presents interesting parallels and will be discussed further below.

Ashdod

In Area G at Ashdod, Dothan and Porath (1993: 70–73, plan 11) uncovered remains of both a terracotta (1993: 266-67, basin 4141 in pl. 22: 2–3, pl. 23:1) and a possible limestone (1993: 267, pl. 24:1 and 3) bathtub. The clay tub was originally described as "a well-fired pottery basin...with a blackened hole in the base at one of its ends" (1993: 72). According to their reconstruction, the bathtub was located in the "courtyard" of a "workshop", which contained, among other things, "a large quantity of ashes, several grinding stones...and a stone bench or worktable..." (1993: 72). The bathtub was discovered set into the courtyard's surface. A small fire installation, initially called a kiln in the excavation report (1993: 72), but more recently described as a hearth (T. Dothan 2003: 202), also stood near the bathtub. Fragments of worked limestone, identified as part of another possible bathtub or basin (Dothan and Porath 1993: 72-3; T. Dothan 2003: 204), were found in "secondary use" embedded in the floor of a Stratum XII complex to the north of this workshop.

Tel Miqne-Ekron

Two Aegean-style limestone bathtubs were identified at Tel Miqne-Ekron. The first, discovered in Field I, dates to the initial phase of Philistine settlement at Tel Miqne in the 12th century (T. Dothan 2003: 204–5, fig. 13; Meehl et al. 2006). This bathtub was located in one room of a multi-room complex. Other features in the room included a freestanding hearth and a mudbrick bench. A flagstone pavement was laid around the tub's base. No other details or associated artifacts have yet been published pertaining to this example, but its location in Field I indicates that it must have been somewhere near the Field

I industrial area and pottery kiln complex (Killebrew 1996: 145-49,

151).

The second limestone bathtub was located in Field IV Lower, and dated approximately to the end of the 12th/beginning of the 11th centuries BCE (T. Dothan 2003: 204–6, fig. 14; Garfinkel et al. forthcoming; Mazow 2005: 78–80). It sat in Room A, the front room of Building 353, a multi-room complex built along the eastern side of Building 350, a temple or wealthy residential structure. Oval in shape, the tub had plastered sides and a cobble-lined floor, with a drainage hole equipped with a stone plug at one end of its sloping base. Other features in the room included a rectangular mudbrick platform hearth, flanked by two pillars, and a partially paved surface. The tub was filled with pea-sized gravel, interpreted by the excavators as evidence that this installation had fallen into disuse (Garfinkel et al. forthcoming).

Rooms B and C, two smaller rooms at the back, contained an assortment of artifacts attesting to craft production and, in particular, textile manufacture. The space in Room C was occupied almost entirely by three shallow, interconnected, plaster-lined basins set into the floor. In Room B, two spinning/plying bowls were found and a cluster of loom weights, indicating the possible location of a warp-weighted loom. Although individual loom weights were found scattered throughout the excavation area, this find is one of only two loom weight caches, and the only one which may indicate a use-context. The second loom weight cache was found together with an assortment of artifacts that suggest a storage area, including ivory, jewelry, zoomorphic objects, pottery, grinding stones and flint tools

(Barber 1991: 102-3).

Both caches contained a mixture of loom weight types (Mazow 2005: 165–67; Garfinkel et al. forthcoming), including the pierced pyramidal and doughnut styles, and non-perforated clay cylinders often identified as Aegean-style loom weights. The identification of these latter objects as loom weights has been proposed based in part on their discovery at Ashkelon, where large numbers have been found aligned in rows as if dropped from warp weighted looms (Stager 1995: 346). Additional hypotheses posit that these clay weights, or reels as they are sometimes called, were used to twine belts or strips of cloth which were then sewn together (Barber 1997: 516; 1999: 54–60). Either way, these clay cylinders were clearly associated with textile production.

Additional evidence of textile manufacture includes a number of large ceramic basins (cf. Dothan and Zukerman 2004: 23, fig 25: 2 and 26), which Sherratt has suggested may be connected with weaving (1998: 304–5), and a collection of spindle whorls. Worked ceramic sherds were also found concentrated in this area. These sherds, often referred to as stoppers, may have functioned as bobbins or spools around which thread could be wound, as initially proposed by Petrie

(1917: 53) and Cartland (1918).

Adjacent to Building 353 was a second building, Building 354, which exhibited a similar spatial organization. Although no bathtub or

hearth platform was found in this building, it contained an assortment of small pillar bases, postholes and pits, and the area could easily have functioned as a place for warping yarn or for drying finished fabrics. A large number of sunken store jar installations were also concentrated in these two buildings. Sunken store jar installations, found at Tel Miqne (Garfinkel et al. forthcoming) and at Ashkelon (Stager 2006: 14; forthcoming), consisted of the lower part of a store jar embedded in the floor and encircled by a pavement made of small pebbles, sherds and/or shell. I have argued elsewhere that these installations were used for craft production (Mazow 2005: 236–45). The concentration of weaving and industrial equipment in these two buildings provides strong evidence for the existence of a textile workshop, with permanent installations and separate activity areas.

Ashkelon

A limestone bathtub has been recovered from the Philistine city of Ashkelon. Although not yet fully published, some interesting features concerning the context of the bathtub can be noted. It was found in a secondary use context (Master 2005: 345), with a proposed "initial use belong[ing] to the early stages of Philistine settlement at Ashkelon" (T. Dothan 2003: 204). Interpolating from information provided by Stager, Dothan (2003: 205–7, fig. 15) has reconstructed the Ashkelon bathtub as situated in the corner of a large room, in the center of which was a mudbrick platform hearth. The published plans illustrate a number of built-in features, including a hearth (Stager 2006: 13), that might have been associated with the original function of the bathtub (Master 2005: 344, fig. 20.7; Stager 2006: 12). However, the bathtub was actually found embedded within a plastered construction that has been identified as a winepress (Master 2005: 345, fig. 20.8), suggesting an alternative function.

The larger context of the Ashkelon bathtub is difficult to define. Based on the very limited data published thus far, the room in which it was found was located in Grid 38, the excavation area with the largest exposure of the Philistine settlement (Master 2005: 344–45). Preliminary reports describe a large public building, dated to both the Philistine Monochrome and Bichrome phases (Stager 1995: 346), and associated with an area that "appears to have been primarily an open area, in part devoted to the production of wine and possibly also grappa..." (Barako 2001: 83). Based on the presence of large stone pillar bases, Stager has drawn architectural comparisons with Philistine palaces and temples, and has assigned it an administrative or cultic function (1995: 346). More recent architectural plans (Master 2005: Phases 20, 19 and 18a; Stager 2006: Phases 20 and 19; forthcoming) illustrate isolated blocks of single- and multi-room complexes dated to Phase 18a, which is contemporary with the use of the bathtub as a winepress. These structures are described as "industrial" (Master 2005: 345).

In addition to this wine distillery, more than 150 Aegean-style loom weights were recovered from this area along with concentrations of textile fibers, attesting to a large-scale textile industry (Master 2005:

342; Stager 1995: 346). Some of these loom weights were found aligned in rows along the walls, clearly indicating they were part of warpweighted looms (Stager 1995: 346), and arguing against the use of this area as a storage facility (Barber 1991: 102–3).

Both the spatial and chronological relationships between these loom weights and the bathtub remain elusive, but the co-occurrence of these features in light of the parallel examples at Tel Miqne and Ashdod argues strongly for a link between the bathtub installation

and textile production.

Although there have been a number of recent studies on weaving in the southern Levant, in terms of Philistine textile technologies, the discussion has not moved beyond a recognition of the presence of these foreign style loom weights at Philistine sites, and the assumption that they reflect the presence of Philistine women (e.g., Bunimovitz and Yasur-Landau 2002: 214–16). The evidence of a textile workshop at Tel Miqne and the large number of loom weights found at Ashkelon indicate active textile production at these Philistine settlements. Moreover, the parallel contexts of weaving tools with bathtubs, at both Tel Miqne-Ekron and Ashkelon, support the view that these bathtubs played a significant role in craft production, and particularly weaving.

Textile Production and Fulling

However, what specific role did these bathtubs play in the production of textiles? I propose that they were used either for scouring or fulling wool. Scouring is the process of cleaning wool and removing the natural lanolin and other greases. Fulling, or felting as it is sometimes called, is the stage of textile production associated with finishing a textile, and involves matting the woven textile to form the finished fabric. Both scouring and fulling require hot water and a detergent to keep the lanolin in suspension. Descriptions of fulleries from the Roman period record that the detergent of choice consisted of a mixture of ashes and urine (Beltrán de Heredia Bercero and Jordi y Tresserras 2000: 242). The latter ingredient was collected in large

public urinals (Moeller 1976: 20).

Fulling also requires some form of agitation, such as kneading, stomping or pounding the wet wool (Barber 1991: 216). Descriptions of fulling, illustrated in Roman period funerary stelae, portray men standing in large basins and treading on woolen textiles (Lovén 2000: 237, fig. 4). Roman sources also preserve information regarding both small- and large-scale fulleries (De Ruyt 2001; Pietrogrande 1976; Ward-Perkins and Amanda 1978: 61). A reconstruction of an industrial fullery from Roman Ostia depicts rows of men treading on wool, while standing in large sunken basins and leaning for support on small partition walls (De Ruyt 2001: fig. 4; Pietrogrande 1976: fig. 26). Although no evidence of fulled textiles has yet been found in the preclassical Mediterranean world, both a fuller and the activity of fulling are described in Linear B texts (Ventris and Chadwick 1973: 123, 322). These documents indicate that fulling was a specialized craft, and

traditionally a male occupation (Barber 1991: 274, 284; Palmer 1963: 191–98; Ventris and Chadwick 1973: 123; Ward-Perkins and Amanda 1978: 59–61). According to Barber (1991: 274), weavers would send

their woven cloth to a fuller for finishing.

Fullers also appear to have held relatively high status (Palaima 1997; Palmer 1963: 191–98; Shelmerdine 1999; Ward-Perkins and Amanda 1978: 59–61), and are listed along with potters on Linear B tablets from Pylos as specialists associated with the wanax, a term usually understood to mean king or ruler (Shelmerdine 1999). Palaima (1997) has proposed that the relationship between fuller and wanax was that of an attached royal craftsman. Ventris and Chadwick (1973: 123) have also recognized references to royal fullers in the Linear B documents, and the role of these royal craftsmen as attached specialists has been further examined by Shelmerdine (1999).

A symbiotic relationship might also have existed between fullers and the cosmetics industry. Lanolin, used as a moisturizer in cosmetics, could theoretically have been strained from the heated scouring water once the wool was removed from the tub. This relationship might be symbolized by a miniature bathtub-shaped ivory pyxis found in a large tomb at Kition (Karageorghis 1974: 42–43, 62–94, pls. LXXXVII, CLXX), and a second example of soapstone found at Enkomi (Dikaios

1971: 768, pls. 147:8, 176:55).

Maa-palaeokastro – A Late Bronze Age Fullery

The strongest evidence for the use of bathtubs in a large-scale fullery comes from Building III at Maa Palaeokastro on Cyprus. When compared to reconstructions of a Roman fullery (De Ruyt 2001: fig. 4; Pietrogrande 1976: fig. 26), striking parallels can be observed. These include rows of small, individual cells, with semi-partition walls between them, with each cell containing its own basin- or bathtub-

like installation embedded in the floor.

The plan of Building III at Maa-Palaekastro includes a long narrow corridor backed by a series of rooms separated from each other by low partition walls. These partitioned cubicles, which lacked any apparent structural function, puzzled the excavators, and prompted them to posit the existence of a possible staircase or light and ventilation access. Most of the bathtubs and bathtub fragments came from the floors and fills in these small rooms (Karageorghis and Demas 1988: 63). One of the most complete tubs was found in the corner of one of the cubicles, its smashed fragments found lying above a pithos- and pebble-paved surface in the corner of the room.

The northern part of the building at Maa-Palaeokastro is similar in plan to rooms along the southern end of the building. A wide hall that stretches the length of the building separates these two sections, and it is not clear whether access between them was possible. Objects of note found in this building include a large number of Aegean-style loom weights (n>30), which appear to have been concentrated in the central and northern parts of the building (Karageorghis and Demas 1988: 27–33, 227, 239, 251). Large numbers of pierced terracotta loom

weights, which have been traditionally recognized as weights for warp weighted looms, were also found throughout the site, although none were associated with Building III (1988: 227). This spatial distribution of artifacts suggests a segregation of tasks, with fulling occurring in the southern sections of Building III, weaving or twining with Aegeanstyle loom weights in the north, and weaving with pierced loom weights in other building complexes at the site. This distribution also provides compelling evidence in support of a functional link between Aegean-style loom weights and bathtubs.

Conclusions

Sherratt (2003: 44) has questioned the widespread assumption that trade ceased with the collapse of Late Bronze Age society, pointing to the increasing evidence of a flourishing urban economy in the Early Iron Age. She has argued instead that trade continued between Cyprus and the Levant, fueling the economy of the eastern Mediterranean, albeit involving different mechanisms than those that had proceeded it during the Late Bronze Age (1998; 2003). Although Sherratt cites evidence for contemporary industrial-scale production systems on both Cyprus and in the southern Levant (1998: 302–5; 2003: 46–48), her emphasis is on trade as the economic catalyst. Thus, in her view, it was the development of decentralized, direct commercial exchanges that fostered the growth of a new urban settlement pattern, seen particularly along the coastal areas of the Levant, and resulted in a large, pan-eastern Mediterranean "economic and cultural community" (1998: 294). Bauer (1998) has proposed similarly that the Sea Peoples, or Philistines more specifically, were mercantilists who, through decentralized trade networks, established trading colonies along the southern Levantine coast. Alternatively, I propose that the Philistines were not only distributors, as suggested by Bauer's model, but also active producers.

By re-examining a selected number of contexts that have produced remains associated with Philistine material culture, this paper has identified clear evidence for an active textile industry that has gone relatively unrecognized in previous reconstructions of Philistine society. My review of the contexts in which 'bathtubs' have been found suggests that some of these installations were not used for purification rituals or Aegean-style elite bathing etiquette. An industrial interpretation fits better with the find spots of many of these tubs. In particular, I have noted the link between a number of bathtubs and Aegean-style loom weights, and I have argued that those bathtubs found in contexts associated with textile manufacture might have been used for fulling wool. Although preliminary, the evidence points to the existence of at least two large-scale, specialized industries associated with Philistine society: pottery (cf. Killebrew

1998) and textile production.

Table 1. Bathtubs in the Levant and Cyprus

Site	Location	Date	Construction	Dimensions (m)	Associated Finds	Published
Tell Abu Hawam	Grid D4, Bldg 24?	Str. III 10th- late 8th c. (Balensi, et al. 1993)	Terracotta, "broken but in position" (Hamilton 1935: 24)		4 exterior handles, two on a side. at north end of multi-room building	Hamilton 1935: 24, Plate III and XXXVI; also cited in Karageorghis 2000: 273
Acco, The Persian Garden	Tomb C2	14 th c.'	Terracotta, upside down, missing base	1.15 long, 0.55 wide, 0.64 deep	Loop handles, 4 horizontal parallel ridges below handles Karageorghis remarked on its similarity to the tub from Kalavasos-Ayios Dhimitrios (2000: 273)	Ben-Arieh 1993; 28: Ben-Arieh and Edelstein 1977; 9, 19 fig, 6 and Plates II: 2,3, XV: 10; also eited in Karageorghis 2000: 273
Ashdod	Area G, courtyard of work-shop	XII, 12th century (Dothan and Ben-Shlomo 2005; 9, table 1.1) ²	Terracotta, immersed in floor		hole in base, stood next to platform hearth, other finds in room include grinding stones and a large quantity of ash building defined by excavators as "workshop" in residential area (Dothan and Porath 1993; 72) or "elitecommunal" with cultic associations (T. Dothan 2003; 202- 203)	Dothan and Porath 1993: 70-73 plan 11, 266-267, basin 4141 in pl. 22: 23, pl. 23: 1; fig. 12: associted in Karageorghis 2000: 273

¹ Based on published photographs of the Cypriot pottery associated with the tomb, Karageorghis (2000: 273) suggests that this date "may be too high".

² Ashdod Stratum XII-XI in Area G is contemporary with Tel Mique-Ekron Stratum VIA-VA according to Dothan and Zukerman (2004: 6, table 2).

Site	Ashdod	Ashkelon	Dan	Migne-Ekron
Location	Area G	Grid 38	Sacred Precinct	Field IVLower Bldg. 353a
Date	XII, 12th century BCE (Dothan and Ben-Shlomo 2005: 9, table 1.1) ³	Phase 18a, ⁴ approx. 1050 BCE (Master 2005)	10 th -beg. 9 th c. BCE	VIA, 4th quarter 12th/beg. 11th c. BCE (T. Dothan and Gitin 2005)
Construction	Limestone, found in secondary use, embedded in floor	Limestone, found in secondary use as "winepress"	Terracotta, smashed above cobbled surface	Limestone w/plastered sides and cobbles in base, set into
Dimensions (m)	1.05 long x 0.27- 0.18 wide x 0.10 thick		1.41 long x 0.82 wide x 0.65 high	1.09 long x 0.70 wide x 0.38028 deep
Associated Finds	long ends end in raised projections doesn't seem to resemble other bathtub examples located in building immediately north of residential area (Dothan and Porath 1993: 72)	located in corner of room near large caches of loomweights but exact spatial and chronological relationships are not known associated with a platform hearth (T. Dothan 2003: 204; Stager 2006: 13)	• raised shelf or "seat" at end of tub • located in alley outside olive press installation, in "sacred precinct"	• oval in shape, "plug" in base; located next to platform (hearth) with 2 columns; tub filled with pebble debris.
Published	Dothan and Porath 1993: 70-73 plan 11, 266-267, basin 4141 in pl. 22: 2.3, pl. 23: 1; T. Dothan 2003: 202-203, fig. 12: also cited in Karageorghis 2000: 273	T. Dothan 2003: 204, 207 fig. 15; Master 2005: 344, fig. 20.7, 345, fig. 20.8; Stager 2006: 13; forthcoming	Biran 1994: 176, fig. 137 and 182, fig. 143; also cited in Karageorghis 2000: 274	T. Dothan 2003: 204, 206 fig. 14; Carfinkel, et al. forthcoming: Mazow 2005: 78-80

³ See note 2.

⁴ The bathtub was found in a Phase 18a context, but the excavators' assume that it had a prior use in Phase 19, dated to approximately 1150 and contemporary with Tel Migne-Ekron VI (Master 2005).

Published	weights, basins room of (Mazow	T. Douhan 2003; 204, 205	r; shallow Harrison 2004a; Loud 1948: of three 45, fig 87, 386; 6; Paice dd 1948: 2004; 59, plate 21: 1; also cited in Karageorghis 2000: rs as 274 nding bs
Associated Finds	other finds include: loomweights, spinning bowl, Ig. ceramic basins located in multiuse front room of crafts workshop/residence (Mazow 2005: 349-354)	• located in room corner, hearth platform in center(?), bench along wall	• four small handles at rim; shallow bowl at one end. "remains of three wood posts" in room (Loud 1948: 45). • area defined by excavators as "domestic" with many grinding stones, ovens and stone tubs throughout.
Construction Dimensions (m)			0.58 long x 0.54 wide x 0.52 high
Construction		Limestone, burnt, set into cobblestone surface	Terracotta, cemented into floor, identified as wine or oil press
Date		VII, 2nd-3rd quarter 12th c. BCE (T. Dothan and Gitin 2005)	Str. VI, 1150- 1100 (Harrison 2004b: 13)
Location		Field INE (sondage)	Area AA. Room 2022°
Site		Migne-Ekron	Megiddo

corner of the drawing down toward the lower right corner (north), adjusting the orientation of the building so that its entrance is in the south, 2. the location of the Note corrections to the drawing published in T. Dothan (2003: 205, Fig. 13), which include 1, the direction of the north arrow should point from the upper left authrub should be moved to the southeast corner of the room (to the left of its present location), set into a flagstone surface, and 3, entrance into the building is through a doorway in the south wall of the smaller, southern room. For a more detailed drawing of this installation, reference should be made to Meehl, T. Dothan and Gitin (2006).

The "wine or oil press," which appears in situ in Fig. 87 (Loud 1948) most likely includes the clay "bath" that is pictured in Fig. 386: 6 in its reconstructed state clay and a possible second one of stone. Numerous stone tubs have been discovered in Stratum VI at Megiddo (Harrison 2004a), but, as they were not initially installation in Fig. 87 with the "bath" in Fig. 386: 6, led to Karageorghis' (2000: 274) cataloguing of these figures as portraying two separate bathtubs, one of note the similarity in the handle, which appears in the foreground of Fig. 87, and the shape of the vessel's rim). Confusion over Loud's original description, where he also mentions the spatial distribution of a number of stone tubs in the vicinity of Room 2022, and the fact that in his text he does not associate the ncluded in either Karageorghis' (2000) or Dothan's (2003) catalogues, they will be dealt with in a future publication.

Site	Location	Date	Construction	Construction Dimensions (m) Associated Finds	Associated Finds	Published
Megiddo	Bldg. 1060 ⁷	Str. III-II, 780- 600 BCE (Harrison 2004b: 13)	Terracotta, set into floor	0.62 long x 0.37 wide x 0.32 high ⁸	Terracotta, set 0.62 long x 0.37 • raised double band below rim into floor wide x 0.32 high • located in corner of central room with steps leading into this room and 2 side rooms • area defined by excavators as "domestic" but building noted as unusual (Lamon and Shipton 1939: 63)	Lamon and Shipton 1939: 63-64, fig. 74, plates 18.19 and 54; also cited in Karageorghis 2000: 274
Qasile			Terracotta, fragment			cited in T. Dothan 2003: 203; and Karageorghis 1983a: 274 as personal communication from A. Mazar

Site	Building	Date	Construction	Dimensions (m)	Construction Dimensions (m) Associated Finds	Published
Alassa-	Room B,	LCIIIA	Terracotta,		• two handles visible in photo	Hadjisavvas 1994; 1996:
Paliotaverna	Bldg. II, south		crushed on top		(Hadjisavvas 1996: XIX: 2)	109, 112, 113, fig. 2, plates
	wing of large		of "well-head"		located in one of two rear rooms	XIV: 2, XV: 2, XIX: 2;
	ashlar				off of courtyard; parallel room	Hadjisavvas and Hadjisavvas
	building				complex at west end of south wing	1997; also cited in
					with "hearth room" and "sunken	Karageorghis 2000: 270
					construction" between them.	
					• tub described as "almost identical"	
					to one from sanctuary at	
					Palaepaphos; assoc. with hearth	

⁷ Plates 18 and 54 note that this bathtub, Jar 91, was from locus 850, which appears in square O9 in Fig. 117 on the Stratum II plan. Although, as labeled in the air photograph, this locus does not seem to appear in building 1060, it seems logical to suggest that this clay bath is the one referred to in the text as coming from Building 1060, and the one which appears in the photograph in fig. 74.

⁸ Measured off drawing, Measurements from exterior walls.

Site	Building	Date	Construction	Construction Dimensions (m)	Associated Finds	Published
					• building function identified by excavators as "public building containing a cult place" (Hadjisavvas 1996: 113); also referred to as a "bathroom" (Hadjisavvas and Hadjisavvas 1997: 145)	
Ayios Iakovos	Sanctuary	14 th c.	Terracotta, with base formed by flat, sawn conglomerate piece; set into shallow pit in the rock	1.28 long x 0.63 x 0.47 (exterior dimensions)	• Inv. No. 52 • small pits on either side of tub • located in center of "sanctuary" court, most of "votive gifts" found in and around basin (Gjerstad, et al. 1934: 359). Åström (1972: 1) described the tub as filled with ashes and associated with burnt bones.	P. Åström 1972; Gjerstad, <i>et al.</i> 1934; 356-361; also cited in Karageorghis 2000: 266
Enkomi	Quarter 5W, NE of Bâtiment 18	LCIIIA	Carved	1.23 long x 0.68 wide x 0.64 high	• 4 small, vertically oriented, rectangular projections on exterior below rim • found in situ, in a "private house" (Courtois 1992: 51) but with a wall built across it essentially putting it out of use; next room to east had a flagstone paved surface and "latrines" (Courtois 1992: 51); • interpreted by excavators as a bathroom complex	Courtois 1984; 104, inv. 929, fig. 39/17; 1992; fig. 2; also cited in Karageorghis 1983a: 435 note I, 436 fig. 3; and in Karageorghis 2000: 266

Site	Building	Date	Construction	Construction Dimensions (m) Associated Finds	Associated Finds	Published
Enkomi	East of Bâtiment 18, domestic		Terracotta	1.40 long x 0.58 wide	one projection on exterior of each long side, found near well described by excavators as domestic	Schaeffer 1952: Plan LXXXVII; also cited in Courtois 1992: 151; and in Karageorghis 2000: 266, 270
Enkomi	West of Bâtiment 18, domestic		Terracotta	1.75 long x 0.70 wide	2 exterior projections along one long side • built along wall in comer of room • described by excavators as domestic	Schaeffer 1952: Plan LXXXVII; also cited in Courtois 1992: 151; and in Karageorghis 2000: 266, 270
Блкоті	Quartier 6W	TCIIIB	Terracotta	1.10 long x 0.54 wide x .635 high	• drainage hole in base • found broken but almost complete within collapsed debris • other finds in the room include ceramic and stone loomweights, a bone tool, a round pottery slice (possibly a "stopper"), a miniature bathub, and various utensils made from pebbles. Additional finds in the building include 3 or 4 large basins with drainage holes, and a large number of lerracotta "reels" • described by excavators as domestic and industrial (Courtois, et al. 1986: 51-53)	Courtois, et al. 1986: 52 ¹⁰

Courtois (1992: 151) describes this tub with handles along one side only, but it is not clear whether this description is based only on Schaeffer's plan, where the tub is set against a wall and therefore only one side is clearly visible, or if Courtois' description is based on seeing the tub itself. Karageorghis noted that neither this tub nor the tub from east of Bâtiment 18 can now be located (2000: 270).

objects found with the Enkomi tub found in Area I, Ashlar Building, Room 2), and one should also note the large amount of evidence for copper working in this Chantier dit des Ateliers. If so, then the bone tool mentioned by Courtois et all is probably the bone stylus/weaving tool described by Schaeffer (see also the 10 Based on its location, this may be the same vessel as mentioned by Schaeffer (1952: 28, plate LXII) and cited in Åström (1972: 519), discovered in the

Published	Courtois, et al. 1986; plate XIV.4; also cited in Courtois 1992; 151-152; and in Karageorghis 2000; 270	Dikaios 1969a: 181-182; 1969b: plan 273; also cited in Karageorghis 2000: 270 ¹²	Dikaios 1969a: 205; 1969b: plan 276
	• one handle visible in photograph • found upside-down (next to silver bowl with Cypro-Minoan inscription) • described by excavators as domestic and industrial area/crafts (Courtois, et al. 1986: 26-27)	• room 2 has 2 wells and slab-paved floor • pit sealed by floor V surface in Room 2, although mention also made that stone slabs of surface showed disturbance • finds in the wells include a wooden comb and 2 bone beaters/weaving tools (cf. Smith 2001: 89)* • described by excavators as "service" rooms for the residence on the upper floors (Dikaios 1969a: 182)	inv. 473, fragments other finds in courtyard include grinders, pestle, spindle whorl, terracotta loomweight Otikaios suggested domestic
Construction Dimensions (m) Associated Finds			
Construction	Terracotta	Terracotta, fragments in pit fill	Terracotta
Date		Level IIIA	Level IIIB
Building	Quartier 4E	Area I, Ashlar Building, Room 2	Area I, Ashlar Building (reconstructed), courtyard
Site	Елкоті	Enkomi	Enkomi

¹¹ Joanna Smith (2001) has recently argued that what had been formerly called 'bone stylae' are actually weaving tools.
¹² In Area 1. Level IIIA of the Ashlar Building, Dikaios (1969a: 181-182) describes fragments of a clay bathub found amongst other things scaled in a pit. The room, Room 2, in which the pit was found, had a stone-paved flooring and two dug wells. Finds from this room include a "bone stylus"/weaving tool, INV.6336/2 (see note 11).

Site Enkomi	Building	Date Level IIIB	Construction Terracotta.	Dimensions (m)	Construction Dimensions (m) Associated Finds Terracotta. 0.80 x 0.45 • reclanoular in share	Published Dikajos 1969a: 205: 1969b:
	Building (reconstructed), Rooms 39/39B		partially paved floor		well in room Dikaios described room function as bathroom in domestic context	-
Enkomi	Area III, Sector B (plan)	Level IIIA late (floors IV and IIIB, floor II	Level IIIA late Limestone, on (floors IV and slab-paved lill) and IIIB, area (floor II or red mortar (floor III)	0.76 x 0.50	near well and cemented sherd surface which was "probably for bathing" (Dikaios 1969a: 107) "bathroom" built above Level II copper industry and megaron-like hall with hearth	Dikaios 1969a: 107, 141; 1969b: plan 256; also cited in Karageorghis 2000: 270 ¹³ ; ¹⁴
Enkomi	Room 44 (Ashlar Building?)		Terracotta	0.80 high x 0.57 diameter	inv. 388, round, basin shaped, with Karageorghis 1983a: 434, outlet hole although not a typical bathub shape, according to Karageorghis, "If was certainly used as a bathtub".	Karageorghis 1983a: note 1, 435 fig. 2 ¹⁵

3 AH examples of bathtubs in Dikaios' report are marked as "larnax" where noted on plans, except for the fragmentary one from the courtyard in Level IIIB,

IV and III but still dated to Level IIIA, "the room was changed into a bathroom" (1969a: 107). Although Dikaios' text seems to continue to point the reader to the difficult to follow, but he initially appears to be describing one room in Sector B. Room 77 (plan 254), where, at the beginning of Level IIIA, a long, pillared hall ¹⁴ Although Karageorghis (2000: 270) mentions two bathtubs associated with Dikaios' (1969a) excavations in Area III, a rereading of the text suggests that there -evel IIIA plan (plan 254), his description of the redesigned bathroom area, with slab paved area around the tub, a stone-lined well to the north of the tub and a may only have been one, which was in use in both late Level IIIA (floors IV and III) and B (floor II) (1969a: 107 and 141). Dikaios' description of this area is is built with associated hearth, above what in Level II had been the location of a copper workshop. In a second and/or third phase of use, associated with floors ow walled area, resemble more the illustration of this room as depicted in the Level IIIB plan (Room 9 on plan 256), and it is probably this latter spatial organization that should be considered when describing the Area III bathtub.

performed a similar function. Found on its side in a depression, it was assumed to have fallen from an upper storey and therefore not associated with the room in A second feature found in Room 8, just to the north of Room 77 of the Level IIIA building (plan 254), described as "a sandstone trough (L. 070 m, W 065 m, H. 044 m) with a perforation in the side at the level of the bottom" (1969a: 107), seems similar in size and shape to the other 'bathtubs' and may have which it was found, where there were remains of a sherd paved area.

⁵ Cited in Karageorghis but I could find no further description of it in the Eukomi reports.

more		
Published	South 1980: 38-39, 36 fig. 4; also cited in Karageorghis 2000: 270 ¹⁸	Karageorghis 1985; 30,34; Karageorghis and Demas 1985a; 5-13a, plates X., XLV; 1985b; 5-23, plates 5-8; also cited in Karageorghis 2000: 272
Associated Finds	• NE corner of room, sunk into floor with rim of tub just above floor surface composed of hard plaster floor surface composed of hard plaster floor with flagstones placed at either end of tub. • low placement of "outlet" hole through side of tub, 2 opposing handles (on exterior?); and 4 parallel relief bands on exterior — alarge room, not a bathroom according to South (1980: 39), possibly "public or administrative" (South 1983: 101).	• fragments of base. • also in room were "well" and square phi, in room 31 was "unsuccessful" "well" with footholds, end of hall in room 32 was hearth. • Karageorghis (2000: 272) associated the tub room (Room 30, floor III) with a "bathroom" from the previous phase (Room 30b of floor IV) with a cement paving. One should also note from this same area
Construction Dimensions (m) Associated Finds	1.00 long x 0.65 wide x 0.63 high ¹⁷	(base only) 0.35 long x 0.405 wide x 0.138 high
Construction	Terracotta, sunk into plaster floor, with the flagstones placed at ends even with rim of tub	Terracotta
Date	rciic	LCIIIA
Building	Area 24, East Area	Area I, Room 30, floor IIII
Site	Kalavasos- Ayios Dhimitrios ¹⁶	Kition

have also been recovered from the site. At this time, it is not possible to determine whether or not these vessels are a similar type of bathub, but it is interesting to note the mention of a spatial distribution pattern, where, at least at the time of Keswani's report, these large tubs were only found in the South-East, East and West areas of the site (Keswani 1989; 19). 16 A number of large open vessels described as "tubs with rectangular mouths and relatively straight sides" (Keswani 1989: 19, see in particular fig. 20: 31, 32)

¹⁷ These measurements appear in Karageorghis (2000: 270).
¹⁸ Photograph of bathtub in Karageorghis (2000: 270, fig. 13.16) is identified in the caption as from Kalavasos-Ayios Dhimitrios,but it is probably the bathtub from Kourion illustrated in Christou (1994: 187, fig. 9).

Published		Maier 1976: 95-97, plate XIX: 4; Maier and Rarageorghis 1984: 91-102, figs. 74, 78; also cited in Karageorghis 2000: 272. ²⁰
Associated Finds	in floor II a large pithos, set into a deep pit with its rim at surface level (Karageorghis and Demas 1985b: 19). • area identified by excavators as residential, associated with stone and bronze tools and "weaving timplements," including terracotta reels, in all floor phases (Karageorghis 1985: 35: Karageorghis and Demas 1985b: 5-23). Karageorghis later defined this area as "residential-industrial" (2000: 272), probably based on the earlier, floor IV, workshops and "bathnoon".	• Karageorghis (1983a: 437; 2000: 272) noted the presence of an outlet hole and compared it in size to those at Pyla-Kokkinokremos • located in southwest part of hall (large room): other features include a number of rock-cut pits; also in northwest part of hall, a large pithos was set into a deep pit, with its rim at surface level; large rectangular rock-cut basin east of pithos • excavators suggested parallels with tubs in Minoan and Mycenaean contexts, and their use in rituals.
Construction Dimensions (m)		0.72 long
Construction		Terracotta, broken, found in a rock-cut trench
Date		LCIII/12th century
Building		Sanctuary I
Site		Kouklia-Palaepaphos 19

¹⁹ Karageorghis (1980, cited in Courtois 1992: 153, note 5) also mentions a limestone bathrub from a tomb in Kouklia-Palaepaphos.
²⁰ Maier's (1976: 97) reference to plate XVI should read XIX.

Site	Building	Date	Construction	Construction Dimensions (m)	Associated Finds	Published
					possibly purification. Also possibly for burials (Maier and Karageorghis 1984: 97) • area defined by excavators as sanctuary/ shrine	
Kourion- Bamboula	Trench 4, Room 39	rcill	Terracotta		 located in one room, with crushed limestone flooring, of multi-room domestic complex. No other information recorded 	Daniel 1938: 263, fig. 2, 270
Kourion- Bamboula	Trench 4, Room 37	ГСШ	Terracotta		found upside down, standing next to possible stone tub other objects in room include an amphora sunk into the floor located in one room of multi-room domestic complex. No other information recorded	Daniel 1938: 263, fig. 2, 270-271, fig. 12; also cited in L. Åström and Åström 1972: 519
Kourion- Bamboula	Trench 4.	I CCIII	Limestone		possible bathtub, L. Åström described it as "rectangular basin with outlet channel on one of the long sides" (L. Åström and Åström 1972: 544) found standing next to upside down clay tub (see above). Other objects in room include an amphora sunk into the floor located in one room of multi-room domestic complex. No other information recorded according to P. Åström, it "must have been used for bathing since it has an outlet channel" (L. Åström and Åström 1972: 605).	Daniel 1938: 263, fig. 2, 270-271, fig. 12, also cited in L. Åström and Åström 1972: 544, 605

Site	Building	Date	Construction	Construction Dimensions (m)	Associated Finds	Published
Kourion-	Tomb 35	LCIIIB-beg.	Terracotta	0.92 long x 0.62	 2 sets of opposing vertical loop 	Christou 1994: 180-183, 187,
Bamboula		Of CG I		wide x 0.63 high	handles (4 handles in toto); "tomb	figs. 6, 9; also cited in
					gifts" found inside	Karageorghis 2000: 272
Maa-	Bldg. III,	CCIII	Terracotta,	0.995 long x 0.51	obj. no. 588, almost complete	Karageorghis and Demas
Palaeokastro	Room 79,		smashed,	wide x 0.567	example, straight sided, 2 sets of	1988: 29, 226, plates LXI,
	Floor II		above pithos-	high ²¹	opposing handles, hole in base	CLXXXIV; also cited in
	-		and pebble-		through one of short sides ²²	Karageorghis 2000: 270
			paved surface			
Maa-	Bldg. III,	ICIII	Terracotta		• fragments	Karageorghis and Demas
Palaeokastro	Room 79D,					1988: 29, 226
	Floor II					
Maa-	Bldg. III,	LCIII	Terracota		• fragments	Karageorghis and Demas
Palaeokastro	Room 79E,					1988: 29, 226
	Floor II					
Maa-	Bldg. III,	LCIII?	Terracotta		 obj. No. 393, one of long sides 	Karageorghis and Demas
Palaeokastro	Room 79F				preserved with 2 handles ²³	1988: 30, 226, 251, plates
	(pit in Room				 found within fill of pit 2 from 	CXLIV, CCXXXVI
	(26C)				Room 79C which cut into floor II of	
					this room and is "likely to derive	
					from the use of this room"	
		The second secon			(Karageorghis and Demas 1988: 30)	
Maa-	Area 99, Floor LCIII	ICIII	Terracotta		 obj. No. 616 rim fragment with 	Karageorghis and Demas
Palaeokastro	=				handle	1988: 43-44, 229-230, plates
					 possibly roofed space 	LXXXII, CXCVI
					 only other feature in area is U- 	
					shaped hearth	

These measurements appear in Karageorghis (2000: 270).
 This description of the tub appears only in Karageorghis (2000: 270).
 Karageorghis and Demas describe only rim and base fragments (1988: 30) or "restorable" (1988: 226), but the photograph and illustration of obj. 393 on plates CXLIV and CCXXXVI depict a larger piece.

				T	I	T	T	T	T	I
Published	Karageorghis and Demas 1988: 235	Karageorghis and Demas 1988: 236	Karageorghis and Demas 1988: 84-85, 250, plates CLIII, CCXLV	Karageorghis and Demas 1988: 249	Karageorghis and Demas 1988: 223	Karageorghis and Demas 1988: 239, plates CIX, CCXI	Karageorghis and Demas 1988: 251	Karageorghis and Demas 1988: 251, plates CXLIV, CCXXXVI	Karageorghis and Demas 1988: 251, plates CXXXIV, CCXXX	Karageorghis 1983a: 435- 438; 1983b: 59-76, Plate LXIV, Fig. XC: also cited in Karageorghis 2000: 272
Associated Finds	• rim and base frags, described as similar in shape to no. 588	• fragment	• obj. No. 253, bathtub or basin fragment, with outlet hole	• fragment	• fragment	• obj. no. 403, fragment of base with outlet hole	• small fragments with outlet hole	• obj. no. 279, rim sherd with handle	• obj. no. 214, base fragment	 elliptical shape, sloping bottom, horizontal band of 'half-reel shaped' projections on exterior below rim with one 'protruding half bowl'
Dimensions (m)										1.53 long x 0.74 wide x 0.73 deep
Construction	Terracotta	Теггасоttа	Теггасоttа	Terracotta	Terracotta	Теттасота	Теттасоtа	Теггасота	Теттасоtа	Limestone
Date	TCIII	CCIII	CCIII	TCIII	rcill	rciii	ICIII	TCIII	CCIII	11 th c.
Building	Bldg. I, Area 24/4, btwn. Floors I/II	Bldg. I, Area 24B/1, btwn. Floors I/II	Building IV, Room 77A, Floor I	Building IV, Room 75B/2, Floor 1	north of Building II, west of Room 60/2, Floor II	Bldg. III, Room 78, Floors I/II	Bldg. III, Pit 5 (Room 83)	Bldg. III, Pit 1A (Room 88A)	Bldg. III, Room 59 and Area 100A	Tomb T.49
Site	Maa- Palaeokastro	Maa- Palaeokastro	Maa- Palaeokastro	Maa- Palaeokastro	Maa- Palaeokastro	Maa- Palaeokastro	Maa- Palaeokastro	Maa- Palaeokastro	Maa- Palaeokastro	Palaepaphos- Skales

Published		Karageorghis and Demas 1984: 16-18, 26-28, 35, 52, plates XXI, XLII, plan I, see also fig. 4 for block architectural plan; also cited in Karageorghis 2000: 272	Karageorghis and Demas 1984: 16-18, 26-28, 35, 52, plates XXI, XLI, plan I, see also fig. 4 for block architectural plan; also cited in Karageorghis 2000: 272
Associated Finds	• filled with gravel almost up to the rim, with 12 bowls and cups on top of the gravel (Karageorghis 1983b: 60)	• obj. no. 30, almost whole, rectangular with counded corners, 4 handles (1 near each corner), and outlet hole through side near base • found broken, together with tub base no. 30A, near large square pit cut into bedrock; patches of ash to south of pit suggested possible hearth. Also a lot of pithos sherds • located in one room of multi-room complex with large front courtyard; part of a row of complexes of standardized design identified as domestic space.	obj. no. 30A, lower part of tub with an outlet hole in short side near bottom ²⁴ see obj. no. 30 from Pyla- see obj. no. 30 from Pyla- see obj. no. 30 from Pyla- in Karageorghis and Demas 1984: 16-18, 26-28, 35, 55, 55, 55, 55, 55, 55, 55, 55, 55
Construction Dimensions (m) Associated Finds		0.74 long x 0.46 wide x 0.575 high	0.57 long x 0.38 wide x 0.128 high
Construction		Terracotta	Теггасоtta
Date		LCIIC/LCIII (ca. 1230- 1200)	LCIICA.CIII (ca. 1230- 1200)
Building		Area II, Complex d, room 24	Area II, Complex d, room 24
Site		Pyla- Kokkinokremos	Pyla- Kokkinokremos

²⁴ Although there is no mention of an outlet hole in the description (Karageorghis and Demas 1984: 35), one is visible in the photograph and drawing of this bathtub (Karageorghis and Demas 1984; plates XXI, XLII)

Site	Building	Date	Construction	Construction Dimensions (m) Associated Finds	Associated Finds	Published
Pyla- Rokkinokremos not given ²⁵	Provenience not given ²⁵	ГСИСЛСИ	Terracotta	0.453 long x 0.228 high	 obj. no. 117, lower part of tub. outlet hole near base in center of short side 	Karageorghis and Demas 1984: 42, 52, plates XXI, XLII; also cited in Karageorghis 2000: 272
Pyla- Kokkinokremos	Trial A, in entrance between room 5 and 6		Limestone	(base only) 0.88 x 0.47 x 0.15	(base only) • obj. no. 1, lower part/ tub base, 0.88 x 0.47 x 0.15 perforation at bottom in center of short side. smoothed interior, upper 2000: 272 Karageorghis and Demas 1988 x 0.47 x 0.15 plates XXI, XLIX, plan II; short side. smoothed interior, upper 2000: 272	Karageorghis and Demas 1984: 19-20, 43-44, 59, 91, plates XXI, XLIX, plan II; also cited in Karageorghis 2000: 272

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Site	Building Date	Date	Construction	Construction Dimensions (m) Associated Finds	Associated Finds	Published
Enkomi	Area III, room	Area III, room end of LCIIIC Soapstone	Soapstone	0.092 long	 No. 3269, miniature bathrub, moulding and a pair of projections on long sides, band of hatched triangles and incised lines on exterior 	Dikaios 1971: 768, Plates 147: 8, 176: 55; also cited in Courtois 1992: 153, note 3 ²⁶
Enkomi	East Building LCIII Site	ТСШ	Steatite	0.054 long x 0.032 wide x 0.03 high	0.054 long x • No. 904 (Enkomi 1958, lnv. No. Courtois 1984: 101, fig. 35/1; 0.032 wide x 0.03 153), miniature bathtub, pair of small also cited in Courtois 1992: high projections on long sides	Courtois 1984: 101, fig. 35/1; also cited in Courtois 1992: 153, note 3
Kition	Tomb 9, upper burial, Area I	lCII	Ivory	0.117 long x 0.045 wide and 0.033 high	 pyxis in form of miniature bathtub. Karageorghis 1974: 83, 91, with two sets of opposing handles (4 in toto), originally probably had a lid Karageorghis suggested its function as a cosmetics box 	Karageorghis 1974; 83, 91, plates LXXXVII, CLXX; Karageorghis and Demas 1985b; plate 5

²⁵ This bathtub, object number 117, is listed in the finds catalogue with those from Area II, complexes B.C and D, and therefore can be assumed to have been found in one of those complexes.

²⁶ Courtois describes both of the miniature bathtubs from Enkomi as "steatite" and dates them to the LCHIB (level IIIC)

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