

‘A Marriage of the Aegean and the Orient’. Bronzes of the Siana Group Reconsidered

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ABSTRACT

The material culture of the so-called Eastern Aegean–Western Anatolian Interface during the Late Bronze Age has so far been analysed mainly through the prism of ceramic production and funerary evidence. Both of these classes of evidence indicate its special character. To test this proposition, this contribution focuses on a group of possibly indigenous metal finds. In particular, discussed here is the so-called Siana Group of flanged swords and knives with a characteristic narrow tang at the end of the handle. They were first categorised by Nancy Sandars in 1963 and show an interesting mixture of Aegean and Near Eastern typological traits. Both the Siana swords and the Siana knives occur almost exclusively in the Eastern Aegean–Western Anatolian Interface, although some of the knives have been found also outside this particular region. The Siana Group, originally dated to LH IIIB–IIIC, can now be more securely dated to the LH IIIA₂–IIIB periods. It seems that most of these metals came from graves, while some knives were retrieved from settlement contexts as well. It is argued here that this group presents a unique local product of the area of the Eastern Aegean–Western Anatolian Interface, incorporating and transforming both Aegean and Near Eastern influences. Moreover, other examples of earlier or contemporary Western Anatolian finds of swords that have shapes that did not typically occur in the Aegean are presented here as well, as they illustrate the local background of weapon styles the LH II/III turn in the area.

KEYWORDS

Late Bronze Age; metals; Aegean; Western Anatolia; Dodecanese; Levant; interface; sword; knife.

OF SWORDS, KNIVES, AND SPEARHEADS

This article aims to re-assess the so-called Siana group of Aegean metal swords and knives, defined by Nancy Sandars in 1963 (140–142). She coined the term ‘Siana’ based on the Rhodian site where a sword, a knife that was typologically similar to it, and a spearhead were found together. Unfortunately, they were without secure archaeological context, but the merchant, who brought them, claimed that they had come from a chamber tomb in Siana (SANDARS 1963, 140). The characteristics of the swords of this group were then further elaborated by Imma Kilian-Dirlmeier (1993, 49). There has been no subsequent targeted study of the Siana knives, and so far this particular group of swords and knives has not received much attention from the Aegean Bronze Age scholarship. For a summary of current state of knowledge on Aegean weapons and warfare see GEORGANAS (2012).

As their distribution shows a recognisable pattern, it seems worthwhile to make it a topic of a targeted study. For the time being, this group includes only 6 swords and 22 knives. Its significance stems from the fact that all these items occur almost exclusively in the area of the so-called Eastern Aegean and Western Anatolian Interface (as defined by Penelope Mountjoy), comprising the Western Anatolian coast and the adjacent islands, from Troy in the North to the Dodecanese in the South. Based on the painted Mycenaean-style pottery, Mountjoy argued that this territory was somewhat different from the surrounding Aegean

and Anatolian regions, mixing cultural influences from both the Aegean and Anatolia as well as from the Near East. As a result, she has defined Upper and Lower Interface, with border around the Mykale range north of Miletus, with the Lower Interface showing more Minoan and Mycenaean influence (MOUNTJOY 1998). This paper thus assesses the characteristics of this region from the perspective of metal finds, seeking to understand the local character of this part of the Eastern Mediterranean. It focuses on the typologically unique group of Siana swords and knives, dating mainly to the Late Helladic period (LH IIIA2–IIIB), with the aim to identify whether they could be local products. To strengthen the case for a developed local metallurgy, some unusual chronologically slightly earlier as well as contemporary finds of swords are also discussed, such as the typologically hybrid swords standing between Karo's and Sandars' Types B and C. These are here called the 'Interface swords'. Finally, swords with direct Levantine affiliation will also be discussed. On the contrary, the spearhead from the said Siana grave, which is of relatively common Aegean type, will not be treated in such a detail (see the last section of this paper).

In general, Middle (MBA) and Late Bronze (LBA) metal finds in the Aegean are still, perhaps surprisingly, under-researched. Despite their typological variability, they did not receive as much attention as the Early Bronze Age (EBA) finds. On top of that, while there has been a lot of discussion concerning the technology of EBA manufacturing techniques, partially linked to provenance studies of raw-materials involved (see, for example, PERNICKA 1987; PERNICKA *et al.* 1990; STOS-GALE – GALE – GILMORE 1984; STOS-GALE 1992), only little has so far been done with the Late Bronze Age in this respect (see especially JUNG – MEHOFER 2013). For this reason, the present study will target mainly typological and chronological aspects. A rigorous provenance programme is certainly the desired next step.

THE 'SIANA' SWORDS

Sandars was the first to define this group of swords as Type H (SANDARS 1963, 140–142). A different classification was offered by Kilian-Dirlmeier, who included this type of swords in her Type 2b of the Horned swords group (KILIAN-DIRLMEIER 1993, 48–49). In any case, the Siana swords do belong into the horned family of swords. They have a short blade (the average length is around 35 cm), which is either of a triangular shape with straight sided edges from base to tip or 'leaf-shaped' with curved edges. The midrib is composed of usually three or more lines that either converge toward the tip of the blade or are parallel and straight. The horns can be solid cast or 'folded' (according to the expression used by SANDARS 1963, 121), in case that the edges of the metal appear to be hammered together. Interestingly, the folded variant of horns is also typical for her Type Cii sword (SANDARS 1963, 121). The shape and length of horns of Siana swords vary. All of the horns were at some point bent or, in some cases where the horns are solid cast, they resemble the so-called 'downward hooked quillons' such as those on Sandars's Type G swords (for the definition of quillons and more information on Type G swords see SANDARS 1963, 139, pl. 26). The flanged hilt with no rivets would have originally been covered with non-metallic hilt-scales. At the end of the handle there is a straight narrow thorn-shaped protrusion of the tang for attaching a pommel. This feature is the most significant one for the Siana swords and knives. Sandars already recognized this as a Syro-Levantine influence (SANDARS 1963, 141) and described this type of swords as representing 'a marriage of the Aegean and the Orient', a fitting expression, which inspired also the title of this paper (**Fig. 1-2**).

After Sandars' ground-breaking work, other scholars discussed this group as well, and new pieces were discovered and incorporated into it (MEE 1978, 137; MEE 1982, 60; KILIAN-DIRLMEIER

1993, 48–49; AKYURT 1998, 32; BENZI 2002; 2004; 2005; PULAK 2008; HOREJS 2014, 266; DIETZ *et al.* 2015, 20; YALÇIKLI 2006, 37). These scholars largely followed the ideas expressed by Sandars, and recognized the unique appearance of the group and identified its distribution in the Eastern Aegean and Western Anatolia. So far, a total of six swords have been found, three in the Dodecanese (at Siana and Ialysos on Rhodes, Pyli on Kos) and two on the coast of Anatolia (Bodrum and Müsgebi). The sixth piece is said to have come from Pergamon (So6) and was brought to the Ashmolean Museum by Sir John Evans (the father of Sir Arthur Evans) (**Map 1** – squares).



Map 1: Distribution of the Siana swords (squares) and the Ugarit-type swords (dots). Larger signs indicate two and more finds from a given site. Map by M. Roháček and P. Demján.

The dating of the Siana group of swords was originally designated as LH IIIB to IIIC by Sandars (1963, 40) based on the only two swords that she knew: the Siana and Pergamon pieces, both without context. However, potentially indicative was the Siana-Type knife from Ialysos Tomb OT 27 (= Old Tomb 27), the context of which could be dated to LH IIIB–IIIC. Sandars thus claimed that Siana swords were based on Levantine prototypes and belonged to turbulent times of the LH IIIB to IIIC period, connecting them with the raids of the Sea Peoples (SANDARS 1963, 140, 142). Later on, with more data at hand, Christopher Mee pointed out that the pottery from Ialysos OT 27 should actually be dated a bit earlier, to LH IIIA2–IIIB (MEE 1982, 60, n. 5). Kilian-Dirlmeier had four examples of Siana swords at her disposal (from Siana, Pergamon, Pyli, and Ialysos), but only one of them (Ialysos, So2) came from a known context – an LH IIIB tomb in this case – so she suggested a LH IIIB dating (KILIAN-DIRLMEIER 1993, 53). However, based on newly uncovered evidence from Müsgebi, located east of Bodrum (AKYURT 1998, 32; PULAK 2008) and Pyli on Kos (BENZI 2005, 17–18), from where additional previously unpub-

lished or partly published swords came,¹ the first occurrence of these swords can therefore be as early as LH IIIA2. It seems now that the dating of the whole group should span LH IIIA2–IIIB rather than IIIB–IIIC (DIETZ 1984, 105; BENZI 2005, 17–18).

As the number of swords has risen and the dating of their various contexts has been clarified since the time of the original publication by Sandars, it is useful to list them anew here, in line with the catalogue in style of the *Prähistorische Bronzefunde* series.

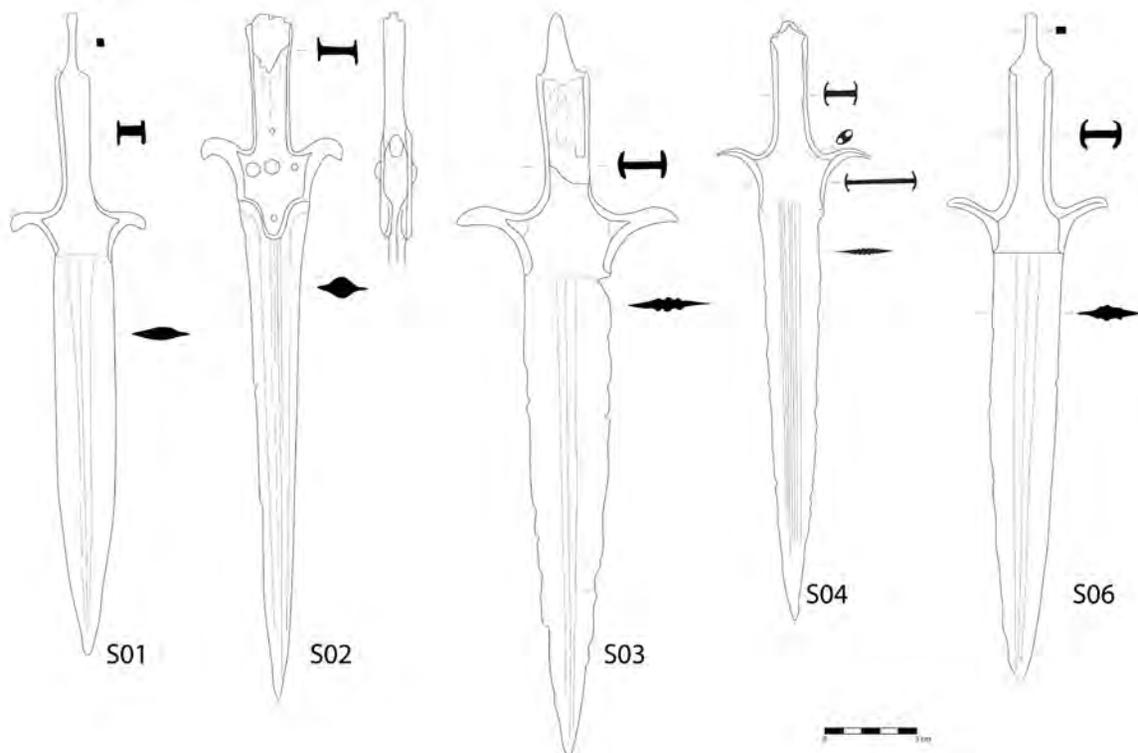


Fig. 1: Siana Type swords from Siana (S01), Ialysos (S02), Pyli (S03), Müsgebi (S04), and possibly Pergamon (S06). Redrawn after KILIAN-DIRLMEIER 1993, Taf. 18:97, 98, 99, 100, and AKYURT 1998, şek. 37:1.

CATALOGUE OF THE 'SIANA' SWORDS

S01 Siana, Rhodes

Context: Unknown (said to be from a chamber tomb). **Date:** assumed to be LH IIIB–IIIC. **Length:** 34.5 cm. **Currently:** The National Museum of Denmark, Collection of Classical and Near Eastern Antiquities, inv. no. 5668. **Bibliography:** SANDARS 1963, 140, pl. 27:53; DIETZ – TROLLE 1974, 32, fig. 23; DIETZ *et al.* 2015, 20, pl. II:5; KILIAN-DIRLMEIER 1993, 49, Taf. 18:97; YALÇIKLI 2006, 36, Abb. 4:5. (**Fig. 1**).

¹ The sword from Pyli S03 was first published by Kilian-Dirlmeier (1993, 49, pl. 18:99), however, at that time it was not associated with a known context.

Commentary: The sword has solid cast horns in the shape similar to 'downward hooked quillons'. The midrib is composed of three grooves, which converge toward the tip of the leaf-shaped blade. The hilt is flanged, and the tang protrusion is thin. This is the eponymous piece based on which Sandars defined the whole group and dated it to the late LH IIIB-early IIC, and connected it with the raids of the Sea Peoples (SANDARS 1963, 140).

So2 Ialysos, Rhodes

Context: Chamber Tomb 53. **Accompanying finds:** golden and silver rings, a seal, jewellery, pottery. **Date:** LH IIIB. **Length:** 37.0 cm. **Currently:** Archaeological Museum of Rhodes, inv. no. 4841. **Bibliography:** MAIURI 1926, 219; BENZI 1988, 61, fig. 4:1; BENZI 1992, 173, 347, tav. 178:a. T. 53/24; KILIAN-DIRLMEIER 1993, 49, Taf. 18:100. (**Fig. 1**).

Commentary: The Ialysos sword is one of the few examples of this type to come from a documented context. However, it should be considered with special care, as it is not certain if this piece belongs to the Siana group. It has a hilt covered with non-metal inlay, which is slightly extended and protrudes into the blade. A similar fashion of inlaying could have been present on the Bodrum sword So5 as well. The high single line midrib is of a pyramidal shape in section, converging from the sides towards the tip, which is generally more alike to sword So5. The shape of the blade is not curved on the edges, which is, again, more similar to the So5. The horns are solid cast in shape reminding downward hooked quillons. The end of the handle is broken off, so it cannot be discerned for sure if there was a tang protrusion or not. Remains of organic covering of the handle seem to be fastened by rivets. One cannot be sure what type of the sword this is due to the appearance of rivets (other swords have their hilts rivetless), a slightly different midrib, and a crucial diagnostic feature, the tang extension, missing. Mario Benzi suggested that this sword belongs more likely to the Aegean Type G, especially as the blade does not have the usual shape or a midrib similar to examples such as Siana So1 or Pergamon So6 pieces. Moreover, he also pointed out riveting (BENZI 1992, 173; BENZI 2005, 18). Kilian-Dirlmeier however put this piece in the same typological group as Siana swords (KILIAN-DIRLMEIER 1993, 48). Here, this piece is considered a part of the group, or at least somehow linked with it, especially after comparing it to the sword from Bodrum So5. Both swords seem to have the same design of the hilt and a similar midrib, although So5 does not seem to have rivets. I consider the general appearance of the sword from Ialysos to some degree similar to other swords of the Siana group. Yet, one should keep in mind the already mentioned broken tang extension and untypical rivets, both of which may indicate that this sword might be of a different type.

So3 Pyli, Kos

Context: Chamber Tomb. **Accompanying finds:** a spearhead and pottery. **Date:** LH IIIA2-IIIB. **Length:** 40.2 cm. **Currently:** Archaeological Museum of Kos, inv. no. unknown. **Bibliography:** KILIAN-DIRLMEIER 1993, 49, Taf. 18:99; BENZI 2005, 17-21, 22, fig. 13. (**Fig. 1**).

Commentary: A damaged sword from Pyli, said to have come from a grave, with its handle still covered with organic material. The horns are solid cast and in the shape of downward hooked quillons. Three lines on the midrib are of the same form as on Pergamon So6, only the lines are closer together here. The tang protrusion is not thin, but rather pointed in a triangular manner, perhaps due to corrosion. Benzi (2005, 18) inspected this piece and suggested, based on pottery, that it had come from the same grave, and suggested a date of LH IIIA2-early IIIB.

S04 Müsgebi, Muğla Province

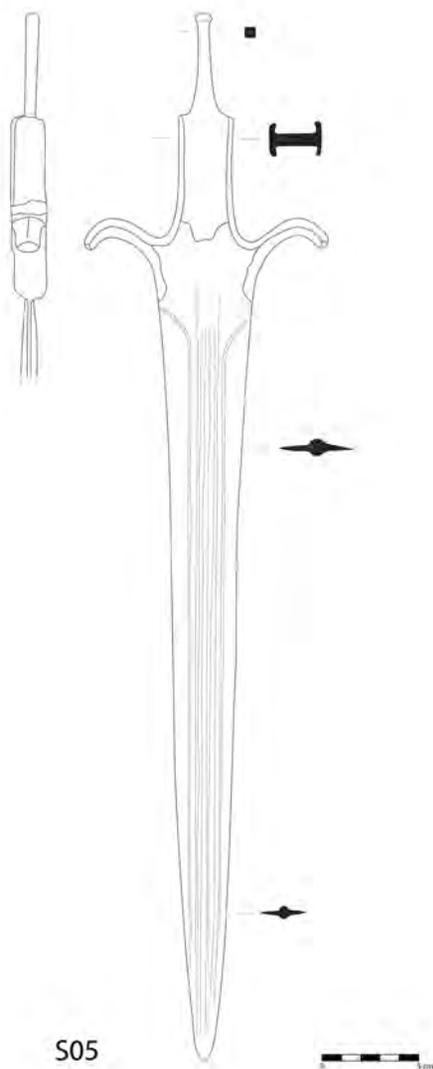
Context: Chamber Tomb 11. **Date:** LH IIIA2–IIIB. **Length:** 32.3 cm. **Currently:** Bodrum Museum of Underwater archaeology, inv. no. 675 (#18). **Bibliography:** BOYSAL 1969, 33; MEE 1978, 137; AKYURT 1998, 32, şek. 37:a; PULAK 2008, fig. 245. (**Fig. 1**).

Commentary: This example from Tomb 11 at Müsgebi cemetery has a broken tang. The folded horns were shaped by hammering flanged edges of the hilt, and the midrib has (probably) four grooves on a flat rib that go straight from the hilt to the tip. Excavated by Boysal (1969), it was first recognized by Mee as a sword of Sandars Type H (MEE 1978, 137). It was published in more detail by Akyurt (1998, 32), who assigned it a LH IIIB date. Based on vessels deposited in the tomb alongside the sword, it could also belong to LH IIIA2 (PULAK 2008, 382–383).

S05 Bodrum, Muğla Province

Context: Unknown. **Date:** LH IIIA2–IIIB(C?). **Length:** 53.7 cm. **Currently:** Archaeological Museum Selçuk, inv. no. 1/13/74. **Bibliography:** YALÇIKLI 2006, 30, Abb. 1:2, 2:2. (**Fig. 2**).

Commentary: This is one of the more recent additions to the list and it should be pointed out here that this is the longest Siana sword so far. It was discovered and brought to the Selçuk



**Fig. 2: Siana Type sword from Bodrum (S05).
Redrawn after YALÇIKLI 2006, 30, Abb. 2:2.**

museum in 1974, but unfortunately without known secure context (YALÇIKLI 2006, 29). The design of the hilt suggests that the organic inlay on the flanged hilt protruded into the blade (such as on the example So2). None of this material was preserved, however. The blade has a triangular shape with straight sided edges. The midrib is a single line and is round in section with grooves. There are side lines along the base of the blade, suggesting that they converged down towards tip of the midrib. This midrib is slightly different from Siana So1 or Pergamon So6, because those have their one composed of three separate grooves that go down in parallel. However, in general appearance, the midrib of So5 is still reminiscent of the one of the Siana sword. The folded horns on the guard are thinner and longer than on other swords of this group. The tang protrusion at the end of the handle is also quite long. Derya Yalçıklı (2006, 39, 40) suggested the same dating as Sandars, the 12th and 13th centuries Bc. Although Yalçıklı only listed parallels from Siana and Pergamon and probably used Sandars' original dating, she was aware of the sword from Müsgebi So4 and admitted that its dating could be as early as LH IIIA2 (Yalçıklı 2006, 39).

So6 Pergamon, Izmir Province

Context: Unknown. Date: Unknown. Length: 35.8 cm. Currently: Ashmolean Museum, Oxford, inv. no. 1927-1385. Bibliography: EVANS 1909, 63; PRZEWORSKI 1939, 192, Taf. XVIII:5; SANDARS 1963, 140, pl. 27:52; KILIAN-DIRLMEIER 1993, 49, Taf. 18:98; YALÇIKLI 2006, 36, Abb. 4:4.; HOREJS 2014, 266, 274, fig. 4:3. (**Fig. 1**).

Commentary: The sword is said to have come from Pergamon. The folded horns are shaped by flanged edges of the hilt. Its tang protrusion is broken at the end (but the attribution is secure), and the midrib is composed of three lines, which tower up in section.

NEAR EASTERN PARALLELS

Good parallels for the Siana swords can be found at Ras Shamra-Ugarit (SCHAEFFER 1956, 277-278, fig. 124, pl. X; SANDARS 1963, 141, 153, pl. 27:58), Alalakh (WOOLEY 1955, 276 AT/36/4, pl. LXX), Sa'idiyev (PRITCHARD 1980, 16, figs. 5:13, 52:10), and even in Egypt (PETRIE 1917, 27, pl. XXXII:9; SANDARS 1963, 153, pl. 27:60).² Those swords share a thorn-shaped tang protrusion similar to that of the Siana group (SANDARS 1963, 140-141; NIEMEIER, W.-D. 1999; NIEMEIER, B. 2014; SHALEV 2004, pl. 22:178-179; BENZI 2005). However, the Levantine swords have a different way of construction and are composed of two separate parts: a blade with a long tang and a grip, and a non-metallic hilt with guard. At the end of a sword there is a pommel. The example from Alalakh has a crescent shaped pommel and the one from Sa'idiyev has a round one. The pommel of the sword from Ras Shamra-Ugarit is missing, so the tang is clearly visible.

It is possibly no coincidence that the only examples of the true Levantine type³ encountered in the Aegean (**Fig. 3; Map 1** - dots) come from the chamber tombs at Değirmentepe near Miletus on the Southwestern Anatolian coast. In this case, two out of three have the grip pre-

2 Petrie (1917, 27, pl. XXXII:9) published a blade with a part of the tang and the non-metal guard, while Sandars (1963, 153, pl. 27:60) published only a fragment of the hilt, the guard. They are the one and the same piece, however, now in Ashmolean Museum. See also NIEMEIER, B. 2014, 233, n. 9.

3 Aside the Type Ugarit swords discussed in this paper, there is possibly one more Levantine specimen coming from Western Anatolia. A sword, currently in the collection of the RGZM in Mainz and said to be from Pergamon (EGG - PARE 1995, 75, Abb. 2), is very similar to LBA sword types from the Levant (compare for example the *Cast Hilt Dagger* Types in SHALEV 2004, pl. 14-16). Despite its uncertain origin, it could be another piece of evidence for a stronger presence of non-Aegean sword types in the Interface area.

served. One example from Kastanea on Samos island preserves only the blade with the tang. In the Lower Interface, the context from old excavation is problematic; yet, Benzi, based on Wolf-Dietrich and Barbara Niemeier's publications, suggested that one of the Değirmentepe swords might have possibly come from a burial context with LH IIIA2-III B pottery (BENZI 2005, 19-20; NIEMEIER, B. - NIEMEIER, W.-D. 1997; NIEMEIER, W.-D. 1998, 36).

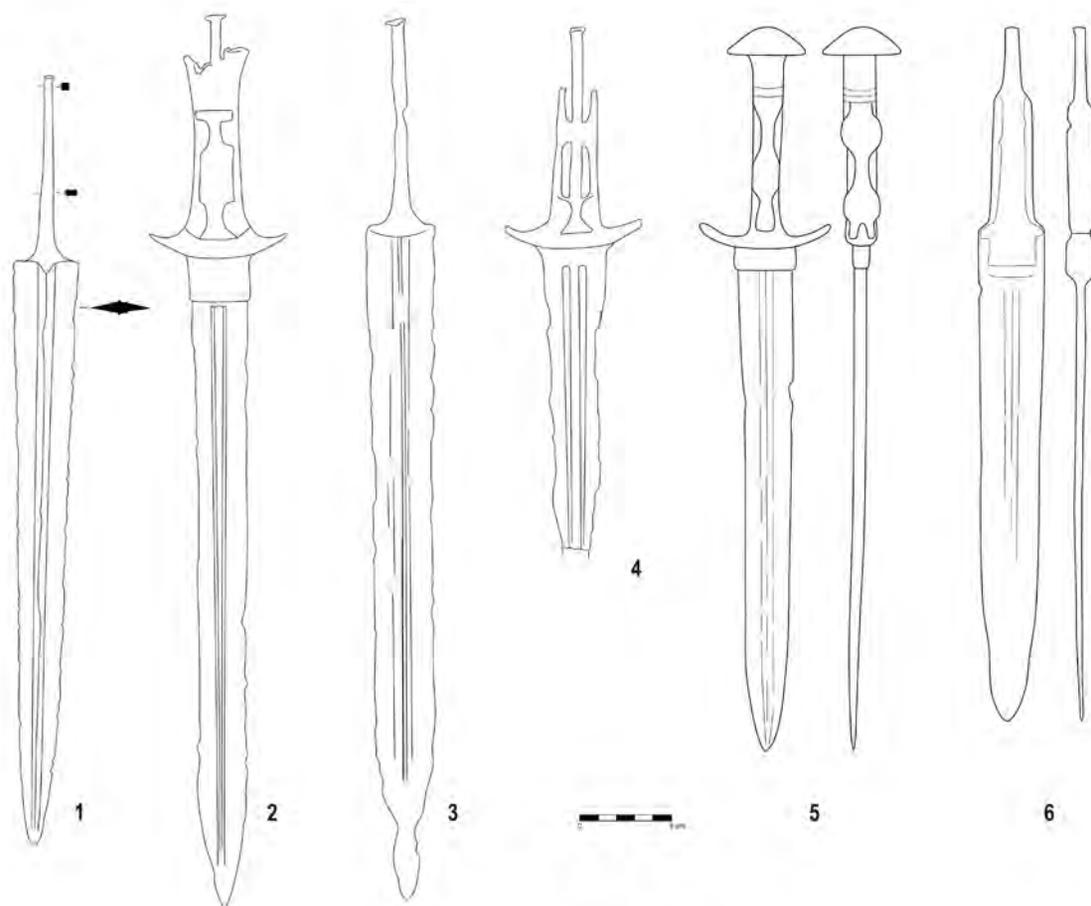


Fig. 3: The Ugarit-Type Swords and swords from the Şarköy Hoard. 1: Kastanea; 2, 3, 4: Değirmentepe; 5, 6: Şarköy-Kozman Deresi Mevkii. Redrawn after KILIAN-DIRLMEIER 1993, Taf. 58:447; BENZI 2004, 15, fig. 2; HANSEN 2005, 91, Abb. 1:1, 3.

This type of sword has received some welcomed attention more recently. While Reinhard Jung and Mathias Mehofer considered this sword a Levantine product and suggest naming it the 'Ugarit' type (JUNG - MEHOFER 2008, 122), Wolf-Dietrich Niemeier claimed that its origin was Hittite (NIEMEIER W.-D. 1999, 154). A few years ago, Barbara Niemeier studied X-ray scans of Değirmentepe swords and their composite parts. She also considered these weapons as Hittite products (NIEMEIER B. 2014). If those swords were truly Hittite, they could have been linked to the Hittite campaign in Western Anatolian territories, about which we know from the Hittite written sources (BECKMAN *et al.* 2011). However, more evidence is needed to indicate the true provenience of this sword type. In addition, the mixed equipment of Uluburun shipwreck suggests that the weapons could be imported into the Interface area also via maritime routes.

The form of the midrib of the Siana swords and the multiple (usually three) lines down the blades can be found on examples from Anatolia and the Near East, for example on finds from Boğazköy (CLINE 1996), Kastamonu (BILGI 2005, 121, 148, şek. 84), Ras Shamra-Ugarit (SCHAEFFER 1956, 277–278, fig. 124, pl. X), and Bulgarian Varna (ATHANASSOV – KRAUSS – SLAVČEV 2012).⁴ It does not commonly appear on swords in the Aegean (for comparison see KILIAN DIRLMEIER 1993, Taf. 9–33). The guard, on the contrary, has typical Aegean horns, as Sandars has already pointed out. For comparison, she uses the example of the horned sword from Siteia on Crete (SANDARS 1963, 141). Even though not all Siana swords have the same thickness and shape of horns, the obvious Aegean style of horned shoulders can still be observed. After all, as has already been mentioned, Kilian-Dirlmeier considered this group as a subvariant of her Aegean horned swords Type 2b. In Sandars' terminology, this would be a subvariant of her Type C, but Sandars ultimately decided to categorize this group as a different Type H. The tang protrusion for attaching a pommel appears more frequently on swords from the Near East (SHALEV 2004, pl. 10–11, 22; NIEMEIER W.-D. 1999, 153, footnotes 126–129). The result, the Siana sword, is thus a very unique product, combining Near-Eastern with Aegean elements.

ŞARKÖY HOARD

Interesting additional information comes from a rather specific find of the Şarköy hoard, mixing different typological features of both the Siana and Ugarit swords. One sword and one dagger provide interesting parallels to the Siana phenomenon (**Fig. 3; Map 1**). They come from a bronze hoard found in Şarköy-Kozman Deresi Mevkii (Tekirdağ Province) in the European part of Western Turkey (HARMANKAYA 1995, 222–224, şek. 2:a–b, 3:a). Originally, the whole hoard was dated to the 12th–11th centuries BC. New dating, however, moved it to the late 14th–early 13th century BC, or in relative terms LH IIIA2–IIIB (HANSEN 2005, 93). In the hoard, there is an atypical horned sword and a thin flanged tanged dagger. Svend Hansen found no parallels in the Aegean for the horned sword (HANSEN 2005, 90), but the shape is strongly reminiscent of the Levantine swords discussed in the previous section. The difference is that this sword is cast as one entire piece with no additional non-metal features. The sword has a pommel similar to the Sa'idiyev piece and its general shape, including the guard and the blade, is similar to the sword from Ras Shamra-Ugarit. Barbara Niemeier, who investigated Milesian 'Levantine' swords, connected the Şarköy sword with this group as well (NIEMEIER, B. 2014, 232). The other piece from Şarköy has been called by Hansen a 'Canaanite' dagger (HANSEN 2005, 90). It is a dagger with a tang similar to the Siana group of swords from the Levant. Hansen stated, probably based on the shape of the tang, that parallel features could be seen in the Ras Shamra-Ugarit sword and a dagger from the Uluburn shipwreck (HANSEN 2005, 90; for comparison with other Levantine daggers see SHALEV 2004, pl. 14–16). In comparison with Levantine daggers, the tang at the end of the handle of this dagger does not appear to be present in the Levant, so the Şarköy piece could be unique. The horned sword might be similarly unique. The occurrence of these two items in Western Turkey and the fact that they share similar typological features with Siana and Ugarit/Hittite swords is important, together with their dating. This can be a further example in favour of strong metal interactions in the Eastern Aegean–Western Anatolian region.

4 It should be added that a golden dagger from Perşinari in today's Romania has a similar converging design of the midrib (MÜLLER-KARPE 1994, 437–438, Abb. 4:2).

CONCLUSION I: THE SIANA SWORDS

Overall, it can be suggested that these swords actually combine the thorn-shaped tang protrusion common to Levantine swords, non-Aegean type of midrib, and shapes of horns common to Aegean swords. However, when we compare typologically one sword to another of this group, we can observe that they are not identical. The swords from Siana, Pergamon, and Pyli look more similar to each other than the sword from Bodrum, which shares similarities with the typologically ambiguous sword from Ialysos. Unfortunately, their find contexts are uncertain in most cases, and while some swords certainly came from graves, some were only said to have come from graves. Given that the majority of the known examples of the Siana Type of swords and the only certain occurrence of the 'Ugarit/Hittite' swords is in the Aegean and Western Anatolia, it is quite likely that the Siana swords did indeed originate in the area of the Interface, probably in its Lower part, even though we do not have any analytical proof for their provenance so far. In recent years, investigations that examined the material culture from this territory (MOUNTJOY 1998; PAVÚK 2015; GIRELLA – PAVÚK 2015) have shown interesting similarities in pottery production, namely the acquiring and adapting different influences to create own unique products (MOUNTJOY 1998; PAVÚK 2015, 75). Alongside pottery, metal items of interesting combination of cultural influences appear as well. Swords of the Siana type could be another indicator that the Interface is somehow different in the way local communities approached the different impeti to combine various typological features into a new product. The following section therefore focuses on further typological irregularities, this time those that appear within yet another group of swords that were found inside, or close to, the discussed Interface.

LOCAL SWORD PRODUCTION IN THE INTERFACE?

Is there any possible evidence for the local production of swords in the Interface area? While several of the discovered swords match the standard Aegean types very closely, one would need metallurgical analyses to pinpoint their provenance. Yet, there is a group of swords that seemingly fits the Aegean spectrum, but, at the same time, systematically shows differences from it. It also seems to merge the characteristics of the Sandars' Type B and C swords (**Fig. 4-5**). They are here designated as the 'Interface swords'. This group includes Late Bronze Age swords from the Dodecanese (more precisely the islands of Rhodes, Kos, and Karpathos), from Lesbos, and Izmir and Balıkesir in inland Western Anatolia (**Map 2**). These swords were first comprehensively discussed by Sandars (1961, 28), who distinguished them from Karo's Type B, but she noted their peculiarities as well as some similarities with the later horned type, Type C. She therefore suggested that they are the result of combined classical features of type B and/or C, which can easily happen at trading station, for example (SANDARS 1963, 122). While the pieces were already briefly discussed in a recent contribution by the author (ROHÁČEK 2018), this paper provides a good opportunity to describe them in more detail.

CATALOGUE OF THE NON-CANONICAL 'INTERFACE' SWORDS

IS1 Amenomiloi-Makeli, Karpathos

Context: Chamber tomb with several graves. **Accompanying finds:** spearhead, razor, pottery. **Date:** LH IIIA-B. **Length:** 25.8 cm. **Currently:** Archaeological Museum of Rhodes, inv. no. BE 257/X. 101. **Bibliography:** CHARITONIDIS 1961-2, 69, fig. 15, pl. 26:12; MELAS 1985, 151, 330-331, fig. 139:C101, 140:C101; KILIAN-DIRLMEIER 1993, 46, Taf. 15:78. (**Fig. 4**).



Map 2: Distribution of the so-called Interface Swords. Map by M. Roháček and P. Demján.

Commentary: Damaged short sword from a chamber tomb at Amenomiloi-Makeli on the island of Karpathos (MELAS 1985, 151, 330–331, fig. 139:C101, 140:C101). Based on ceramic grave offerings, the context of the tomb is dated LH IIIA–IIIB (MELAS 1985, 28). The handle and the blade of the sword are broken, although an old drawing of this sword shows the handle complete with a rectangular tang (CHARITONIDIS 1961–2, fig. 15, pl. 26, 12). There are no rivet holes. The hilt is flanged, and the midrib is raised bearing a pyramidal shape with one thin line on each side. The design of the shoulders is quite similar to that of the long sword IS₃ from Ialysos. Horns are present, but the design of horns is not fully compatible with the ‘proper’ horned swords; rather, they resemble the general shape of shoulders of Type B swords. Melas finds parallels from Crete (Knossos and Chersonissos), Mycenae, Rhodes, and Kos (MELAS 1985, 151, with references).

IS₂ Kameiros, Rhodes

Context: Grave? **Date:** LH IIIA? **Length:** 33.5 cm. **Currently:** British Museum, inv. no. 1861.10-24.31/2749. **Bibliography:** SANDARS 1961, 28, pl. 19:6; MEE 1982, 53; KILIAN-DIRLMEIER 1993, 38, Taf. 9:47; BENZI 2005, 20. (**Fig. 4**).

Commentary: The short sword from Kameiros on Rhodes represents an interesting piece, which may be considered an Aegean Type B sword. It has a short straight blade with a thin midrib and a flanged guard. The hilt has six rivets, four form a cross-shaped formation in the upper part and the remaining two are on the handle. At the end of the handle, a broken-off hole

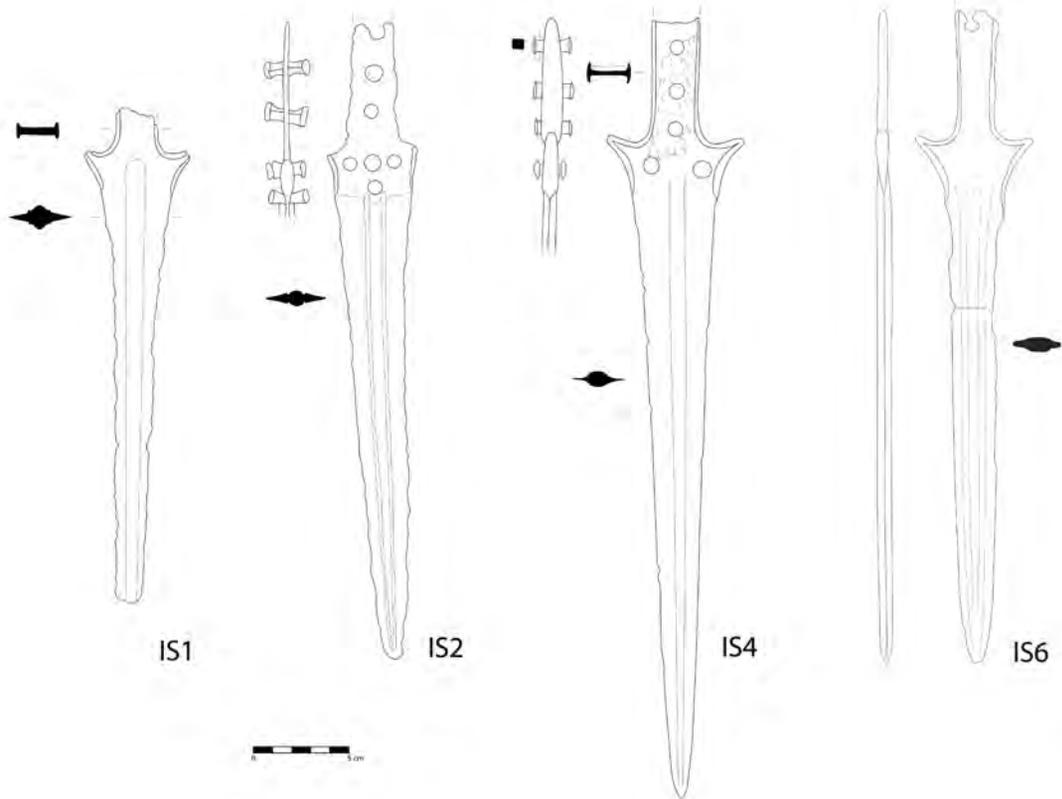


Fig. 4: The so called Interface Swords from Amenomiloi-Makeli (IS1), Kameiros (IS2), Asklepeion (IS4), and Thermi (IS6). Redrawn after KILIAN-DIRLMEIER 1993, Taf. 9:47; 9:51; 15:78; LAMB 1936, pl. 25:32. 63.

for another rivet is visible. Mee noted some similarities with a sword from the Shaft Graves at Mycenae, but doubted the dating (MEE 1982, 53). Benzi noted LH IIIA as probable date of this piece (BENZI 2015, 20). An interesting (and possibly important) parallel can be found in Seyitömer Höyük in inland North-west Anatolia (BILGEN 2011, 193, 195, res. 280; BILGEN 2015, 105, fig. 118), where several short swords/daggers have a similar design to this sword from Kameiros. Although their midrib is wider and flatter than the one on the Rhodian piece, the flanged guard and the shape of the blade seem to be the same. The swords from Seyitömer Höyük came from Level IV, which is dated to the 18th century BC by OSL of ceramic samples (BILGEN 2015, 8). Although the original context of the Kameiros piece is unknown, it is almost certainly much later than those from Seyitömer Höyük. These inland Western Anatolian pieces, discovered only recently, certainly seem worthwhile of (re-)consideration in terms of their possible connections between Anatolia, the Near East and the Aegean. They could even have had an important role in the invention of Karo's Type B Aegean sword, as they belonged to a period pre-dating the first Shaft Graves in Mycenae by at least 100 years and strongly resemble the Type B swords from these graves.⁵

5 The shape of the guard and the hilt, including flanges, is quite similar to those from the Argolid. They may indicate even earlier relations to the Aegean and Anatolia. The intention here is only to shortly introduce this observation in relation to the finds from Seyitömer Höyük. This argument will therefore need more elaboration, as is intended in the forthcoming research.

IS3 Ialysos, Rhodes

Context: Chamber Tomb 4. **Accompanying finds:** Other weapons, jewellery, pottery. **Date:** LH IIIA2. **Length:** 109.0 cm. **Currently:** Archaeological Museum of Rhodes, inv. no. E 9385/3622. **Bibliography:** MAIURI 1926, 98, fig. 15:18; SANDARS 1961, 28; BENZI 1988, 60, fig. 3:2; BENZI 1992, 172, tav. 177:a. T. 4/18; KILIAN-DIRLMEIER 1993, 45, Taf. 14:72. (**Fig. 5**).

Commentary: A very long sword with a flanged hilt from a rich tomb at the Rhodian site of Ialysos, dated to LH IIIA2, based on the style of pottery in the grave (BENZI 1992, 172). This sword stands in terms of its design somewhere between Types B and C: while the general shape of the shoulders is close to Type B, there is already a part that foreshadows horns, a feature of Type C. The tang is broken, but two rivet holes are still visible. In LH IIIA2, chronologically later sword types – horned Type C and cruciform Type D – were already broadly used in all the Aegean. It seems as if this piece from a luxury tomb follows the old design of Mycenaean swords or at least honours the old tradition (JUNG – MEHOFFER 2009, 118). The midrib is thin and raised, with four grooves on it (KILIAN-DIRLMEIER 1993, 55, Abb. 14:72). Kilian-Dirlmeier classified this sword within her Type 1b of horned swords (KILIAN-DIRLMEIER 1993, 45).

IS4 Asklepeion, Kos

Context: Possible graves located ‘east of the Lapidarium’. **Accompanying finds:** spearheads, a knife, a dagger, and a ring. **Date:** LH IIIA–LH IIIB.⁶ **Length:** 40.7 cm. **Currently:** Archaeological Museum of Kos, inv. no. unknown. **Bibliography:** SANDARS 1963, 145; MORRICONE 1975, 253, fig. 198, 257, fig. 204; DRIESSEN – MACDONALD 1984, 69, no. 20 (Ci); KILIAN-DIRLMEIER 1993, 43, Taf. 9:51. (**Fig. 4**).

Commentary: The Asklepeion piece is in terms of the design similar to the horned Aegean Type C swords, but one can notice differences. The flanged hilt has five rivets, remains of non-metallic covering, and the shoulders are more horned and sharp than in the previously discussed atypical swords. The short blade has a flat midrib and it is similar to the blade of the sword from Kameiros IS2. Driessen and Macdonald categorized this piece as Sandars’ Type C sword (DRIESSEN – MACDONALD 1984, 69, no. 20 [Ci]). However, when compared to the majority of the typical Type C swords, the blade is quite short.

IS5 Izmir, Izmir Province

Context: Unstratified, Roman period fill. **Date:** Unknown. **Length:** 48.0 cm. **Currently:** Izmir Archaeological Museum. **Bibliography:** BITTEL – SCHNEIDER 1943, 200–203, 207–208, Abb. 3, SANDARS 1961, 27–28, pl. 19:7; AKYURT 1998, 24–25, şek. 19:a; BENZI 2005, 20. (**Fig. 5**).

Commentary: The sword from Izmir is of medium length. It was recovered out of context, having been found in a construction fill in the area of the Roman agora (SANDARS 1961, 27–28, pl. 19:7). It has a central midrib made up of three lines that converge down the tip, which is an element that occurs in swords from Anatolia and the Near East (such as the already mentioned swords from Boğazköy, Kastamonu, or Ras Shamra-Ugarit), and which subsequently appears in similar variants on the swords of the Siana group. The hilt is not complete, but it seems likely that not only the shoulder, but also the whole tang was flanged. The shoulders have four rivets. Without the midrib shaped thus, it would be quite a canonical sword of Type B, but the appearance of the midrib puts this sword somewhere in between the Aegean and the Near Eastern types. This was already noted by Sandars (1961, 27–28), who stated that this sword is not a typical example of her group. Mee, however, found similarities with the regular type B swords from the Shaft Graves in Mycenae that he considered the Shaft Graves period as plausible dating for

6 Dating according to Salvatore Vitale (personal communication), see also VITALE 2016, 89, footnote 11.

this sword (MEE 1978, 130). Akyurt speculated that the sword may have come from a grave and suggested a LH I date, equally connecting it with the group of the Shaft Grave swords (AKYURT 1998, 24-25). Nevertheless, later dating can be valid, too, since the Type B swords appeared on Greek Mainland after LH I until LH IIIA, as Benzi pointed out (BENZI 2015, 20). Additionally, it should be noted that a canonical Aegean sword of Type B was found south of Izmir as well.⁷

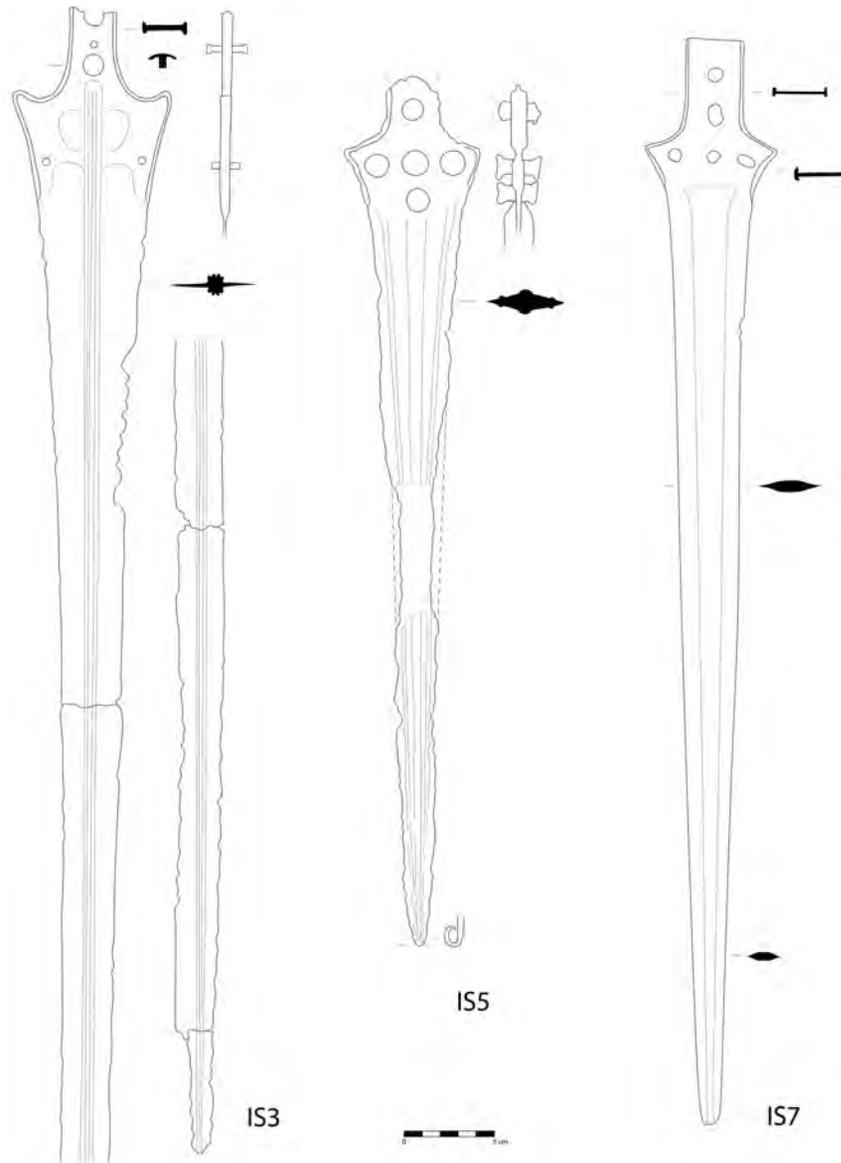


Fig. 5: The Interface Swords from Ialysos (IS3), Izmir (IS5), and Balikesir (IS7). Redrawn after KILIAN-DIRLMEIER 1993, 45, Taf. 14:72; SANDARS 1961, pl. 19:7; YALÇIKLI 2006, 30, Abb. 2:1.

7 See GENÇER 2006, res.3 right, 4 right. It was found together with a knife in a pithos grave at site Sarımeşe Tepe, district of Cumaovası. The sword looks like a regular one of the Aegean Type B but its length, c. 39 cm, is shorter than the usual Mycenaean Shaft Graves Type B swords. In absence of ceramic offerings in the grave, its dating is uncertain, but LH I cannot be excluded (see GENÇER 2006).

IS6 Thermi, Lesbos

Context: Settlement, House T, Room 4. Date: LH IIIA2. Length: 34.0 cm. Currently: The Archaeological Museum of Mytilene, inv. no. unknown. Bibliography: LAMB 1936, 207, pl. 25:32.63; SANDARS 1963, 146; KILIAN-DIRLMEIER 1993, 45. (**Fig. 4**).

Commentary: Among all so-far discussed examples of swords combining Type B and Type C features this one is the sword closest to the appearance of Type C. Lamb, who excavated this sword, however, described it as untypical (LAMB 1936, 207). The shoulders resemble the sword from Asklepeion IS4. The hilt is flanged, and the midrib seems to have been flat. At the end of the handle there is a part preserving the remains of one rivet hole. It should be noted that is the only sword in this article, which came from a secure settlement context.

IS7 Balıkesir, Balıkesir Province

Context: Unknown. Date: assumed to be LH IIIA2-III B. Length: 59.9 cm. Currently: Archaeological Museum Selçuk: inv. no. 1/23/94. Bibliography: YALÇIKLI 2006, 31, Abb. 1:1, 2:1. (**Fig. 5**).

Commentary: The sword has a wide flat midrib and five rivet holes on the hilt. It was brought to Archaeological Museum of Selçuk without known find spot. Yalçıklı compared this piece to swords from Kastamonu, Boğazköy, Izmir, Tell el-'Ajjul, Atchana, Ras Shamra-Ugarit, and Mycenae and dated it to 14th or the 13th century BC. She considered this piece an indigenous product (YALÇIKLI 2006, 39, 40). However, it still does remind of an Argive Type B swords from Shaft Graves even though the midrib is wider than that of a typical sword of this form, and shoulders do not have a strictly triangular shape, but are rather curved on the sides.

CONCLUSION II: THE INTERFACE SWORDS

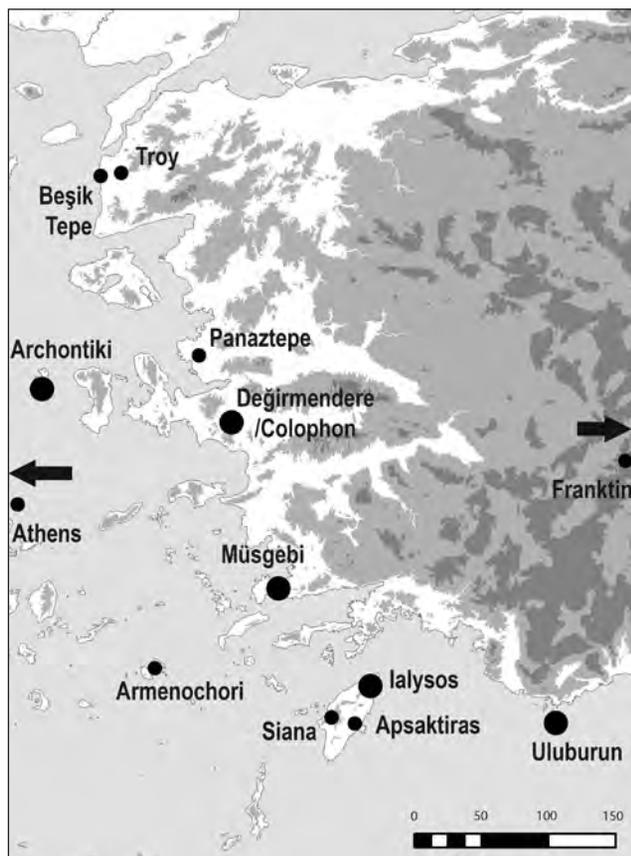
The untypical appearance of these swords, whether they resemble more closely Karo's Type B or Sandars' Type C, could also be explained in terms of it being an indication of different metallurgical tendencies in the Interface.⁸ While the study and classification of Aegean swords has already a long tradition (SANDARS 1961; 1963, DRIESSEN - MACDONALD 1984; KILLIAN-DIRLMEIER 1993; MOLLOY 2010), only partial attention has been given to the general overview of Anatolian swords so far (for example, for the 2nd millennium BC see MÜLLER-KARPE 1994; ÜNAL 1999; YALÇIKLI 2006; GENZ 2017). Based on finds from a much earlier period in the Anatolian sites of Malatya (dating to the late 4th millennium BC) or Alaca Höyük (dating to the mid-3rd millennium BC; MÜLLER-KARPE 1994, 431; YALÇIKLI 2006, 33), Anatolia seems to have been the homeland of the earliest swords. One could therefore suggest a long and significant local tradition of manufacture, potentially, in the Western Anatolian regions as well. Western Anatolia has only a limited number of known and published swords, and most of them are either fully discussed or at least mentioned in this article. A certain local metallurgical sword production in Western Anatolia has not been proven yet, but the presence of these swords may point to a local approach. Ahmet Ünal, who studied a sword from Kastamonu in the Black Sea region and a sword from Boğazköy already suggested local sword traditions for Western and Central Anatolia (ÜNAL - ERTEKIN - EDİZ 1991; ÜNAL 1999, 217-221). This hypothesis is also mentioned by Yalçıklı, in her discussion of the swords from Balıkesir and Bodrum (YALÇIKLI 2006, 39). Therefore, these non-canonical swords from the Interface, even though not forming a unified group of their own, may likely testify to a production within the Interface, incorporating multiple cultural influences, just as is the case of the ceramic production. Approaching these Sandars Type B/C swords from this angle can be the first step in a new reconsideration,

8 For a general overview about metallurgy in Anatolia see MUHLY 2011.

followed by a similar approach for the Siana swords (Sandars Type H), which can be viewed as the contemporary or later result of the development of local metallurgical traditions. By LH IIIB, the majority of the common Aegean sword types became of the short variety. Therefore, Types E, F, and G, and the local Type Siana (Type H) could then follow a similar fashion, but under eastern influences.

THE 'SIANA' KNIVES

Another component of the so-called Siana group are knives.⁹ A typical example of this group has a single-edged narrow blade that can be slightly curved, with or without line(s) along the back of the blade. The hilt is flanged with no rivets. The significant diagnostic feature is a short thorn-shaped tang extension at the end of the handle, such as in the case of the Siana swords (SANDARS 1963, 140). So far, there is, perhaps surprisingly, no comprehensive study of the Aegean and Anatolian knives, other than that of Sandars (1955). This article describes only this one type of knives, which was included in her article, even though Sandars did not classify them as a separate group yet, as she put them within her Class 2 (SANDARS 1955, 179, 193). In the 1960s, she finally defined the Siana knives as a distinct group, along with her Type H swords (SANDARS 1963, 140). Since then, scholars who discussed the respective swords also included these knives in their discussion (MEE 1978, 137; MEE 1982, 60; DIETZ 1984, 58, 105; DIETZ *et al.* 2015, 29; AKYURT 1998, 32; BASEDOW 2000, 123; BENZI 2002; 2004; 2005; PULAK 2005,



Map 3: Distribution of the Siana knives. Larger signs indicate two and more finds from a given site. Map by M. Roháček and P. Demján.

9 I would like to thank to Magda Pieniżek for helping me with the typology of the Aegean knives.

300; PULAK 2008). This group of knives was considered by Sandars as belonging to the 12th century BC, and she suggested that the weapon was used by the raiding Sea Peoples, similarly to her suggestion of the function of the swords. However, after her studies, other scholars re-dated the chronological span of the group to LH IIIA2–IIIB (DIETZ 1984, 105; BENZI 2005, 18).

The Siana knives are more numerous than the Siana swords, and the number of known knives has grown primarily in the last decades (**Figs. 6–7**). Sandars was aware of only 4 pieces, but today the number is as high as 22. There are a few examples from Rhodes, one from Astypalaia, and 5 from Archontiki on the Eastern Aegean island of Psara. On the Anatolian coast we know of pieces from Müsgebi, Colophon/Değirmendere, Panaztepe, and the Troad (Beşik-Tepe and Troy). Moreover, there are two typologically uncertain pieces, one from Panaztepe (ERSOY 1988, 67) and one from Beşik-Tepe (BASEDOW 2000, 123–124), which were considered as belonging to the Siana group but their typology needs to be verified again. Unlike in the case of the swords, the Siana knives occur also outside the Eastern Aegean and the Western Anatolian coasts. There is one knife from Athens, one from Franktin in central Anatolia and two pieces from the Uluburun shipwreck (**Map 3**).

Knives are typologically connected to the group of swords, with which they share the same presumed origins, as already identified by Sandars, and the date of the IIIB–IIIC (SANDARS 1963, 140). However, more knives with new contextual information available shed more light on the Siana group, and it seems that the dating of the knives could also be moved to the LH IIIA2–IIIB period (DIETZ 1984, 105; BENZI 2005, 18). However, there are still some knives with uncertain context, which sometimes might include a LH IIIC date.¹⁰ Therefore, a post-LH IIIB dating cannot be completely ruled out.

CATALOGUE OF THE 'SIANA' KNIVES

Ko1 Siana, Rhodes

Context: unknown (said to have come from a chamber tomb). Date: originally suggested LH IIIB–IIIC. Length: 30.5 cm. Currently: The National Museum of Denmark, Collection of Classical and Near Eastern Antiquities, inv. no. 5670. Bibliography: SANDARS 1963, 140, pl. 27:54; DIETZ – TROLLE 1974, 32, fig. 23; DIETZ *et al.* 2015, 29, pl. VIII:43. (**Fig. 6**).

Commentary: The Siana knife (SANDARS 1963, 140, pl. 27:54) was the one brought to light along with the Siana sword and the spearhead and was used to define the whole group. It is a very thin knife with a slightly curved blade. The handle is almost of the same width as the blade. At the end of the flanged handle, where the remains of organic covering are still discernible, is a typical short tang for pommel extension.

Ko2 Ialysos, Rhodes

Context: Grave OT 27. Accompanying finds: a spearhead, pin, and pottery. Date: LH IIIA2–IIIB. Length: 31.0 cm. Currently: Archaeological Museum of Rhodes, inv. no. unknown. Bibliography: FURTWÄNGLER – LÖSCHKE 1886, Taf. D:9; SANDARS 1963, 140, pl. 27:56. (**Fig. 6**).

Commentary: It was the knife from Ialysos on which the dating of the whole Siana group was originally based (SANDARS 1963, 140, pl. 27:56). It is similar to the eponymous knife from Siana Ko1, only Ko2 seems to be slimmer and is longer. It has slightly curved blade with two lines going along its back. The typical tang is present at the end of the flanged handle. The knife came from Old Tomb 27, along with a spearhead, some pottery, and a pin. It was previously

10 See the catalogue entries for Apsaktiras Ko5, Psara K11–12, K14–15, Troy K18 and Athens K19.

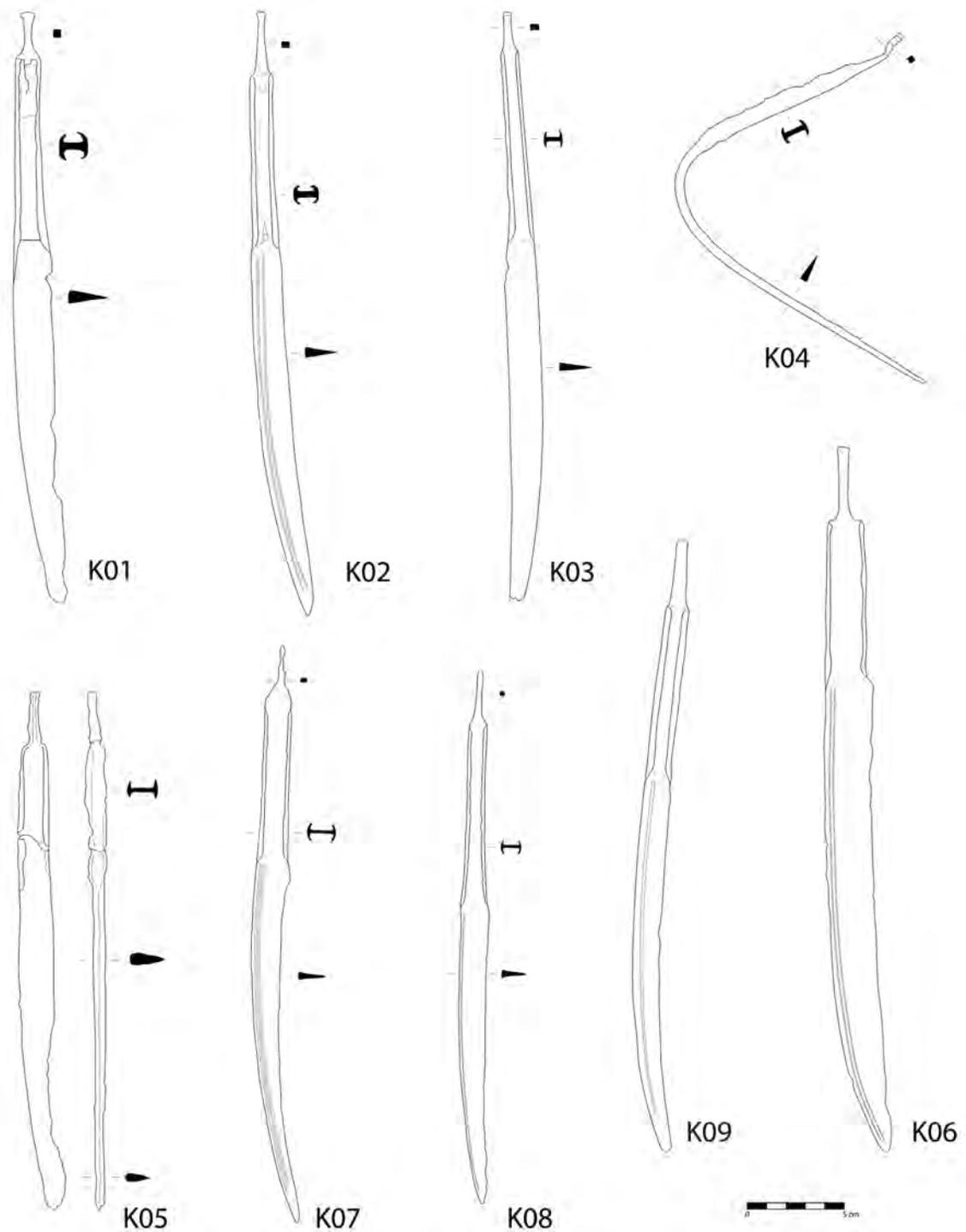


Fig. 6: Siana Type Knives from Siana (K01), Ialysos (K02, K03, K03), Apsaktiras (K05), and Armenochoiri (K06), Müsgebi (K07, K08), Değirmendere/Colophon (K09). Redrawn after SANDARS 1963, pl. 27:54, 56; BENZI 1992, tav. 179:f, n; DIETZ et al. 2015, pl. VIII:44; ZERVOUDAKI 1971, pl. 559:a; AKYURT 1998, şek. 34:a, b; PRZEWORSKI 1939, Taf. V:2.

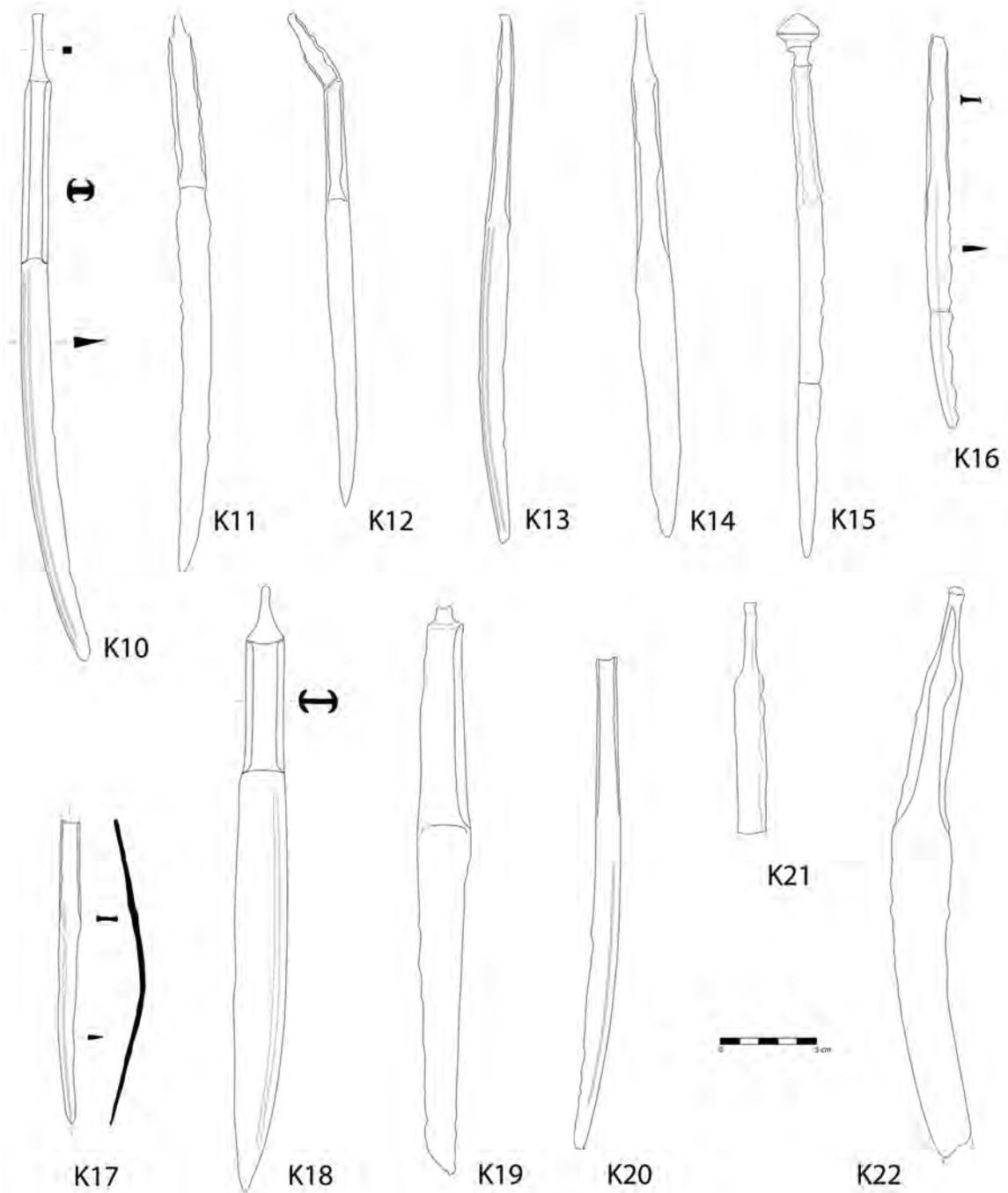


Fig. 7: Siana Type Knives from Değirmendere/Colophon (K10), Archontiki (K11-K15), Panaztepe (K16), Beşik-Tepe (K17), Troy (K18), Athens (K19), Uluburun (K20, K21) and Franktin (K22). Redrawn after SANDARS 1963, pl. 27:57; DELIGIORGI 2006, figures on pages 149 and 150; ERKANAL-ÖKTÜ 2018, Taf. 9:B13; BASEDOW 2000, Taf. XCVI:1; SCHMIDT 1902, 256, Abb. 6464; MOUNTJOY 1984, 138-139, fig. 8; PULAK 2005, 300, pl. LXXI:a; ÖZGÜÇ 1955, 303, fig. 23.

dated to LH IIIB–IIIC by Sandars (1963, 140). Mee, however, pointed out that the tomb should be dated to LH IIIA2–IIIB (MEE 1982, 106, n. 5 on Siana-Kymisala; see also DIETZ 1984, 105).

Ko3 Ialysos, Rhodes

Context: Grave 48. Date: LH IIIA2–IIIB. Length: 30.0 cm. Currently: Archaeological Museum of Rhodes, inv. no. 4748. Bibliography: BENZI 1992, 177–178, 334, tav. 179:f. T 48/15. (**Fig. 6**).

Commentary: This knife comes from Tomb no. 48 and has almost the same appearance as the knife from Siana Ko1. In this case again, the whole knife appears slimmer but there are no lines on the blade that go along its length of its back. It preserves part of its non-metal covering, attached with flanges on the handle.

Ko4 Ialysos, Rhodes

Context: Grave 59. Date: LH IIIA2–IIIB (or only IIIB). Length: 31.5 cm. Currently: Archaeological Museum of Rhodes, inv. no. 4948. Bibliography: BENZI 1992, 177–178, 360, tav. 179:n. T 59/C. (**Fig. 6**).

Commentary: This knife from Tomb n. 59 is similar to Ko3. The tang is quite long and almost broken off, and the knife is bent. Benzi believed the bending of the knives could have represented ritual killing of the knife at the point of its deposition in the grave (BENZI 1992, 178). Context of both knives Ko3 and Ko4 should be dated to LH IIIA2–IIIB, with Ko4 from Tomb 59 dated primarily to LH IIIB (BENZI 2005, 18).

Ko5 Apsaktiras, Rhodes

Context: Burial. Date: LH IIIA2–IIIC1. Length: 26.4 cm. Currently: The National Museum of Denmark, Collection of Classical and Near Eastern Antiquities, inv. no. 12417. Bibliography: DIETZ 1984, 57, 58, fig. 62:12; DIETZ *et al.* 2015, 29, pl. VIII:44. (**Fig. 6**).

Commentary: The piece from Apsaktiras is said to come from a burial context (DIETZ 1984, 57, 58). It has a damaged handle, flanges, and the tang. The blade is slightly curved. Fragments of an organic inlay can be seen. Dating is uncertain, but associated pottery from Apsaktiras spans LH IIIA2–IIIC1 (DIETZ 1984, 106–107).

Ko6 Armenochori, Astypalaia

Context: Chamber tomb. Date: Unknown. Length: 36.0 cm. Currently: Unknown. Bibliography: ZERVOUDAKI 1971, 550–551, pl. 559:a. (**Fig. 6**).

Commentary: A typical blade that is curved up with incised lines along the back. The handle is flanged and there is a thin tang. It is reported to have come from a chamber tomb in the Dodecanese island Astypalaia.

Ko7 Müsgebi, Muğla Province

Context: Tomb 7. Accompanying finds: pottery. Date: LH IIIA2–IIIB. Length: 29.5 cm. Currently: Bodrum Museum of Underwater Archaeology, inv. no. 676-B. Bibliography: AKYURT 1998, 32, şek. 34:a; PULAK 2008, n. 10. (**Fig. 6**).

Ko8 Müsgebi, Muğla Province

Context: Tomb 14.¹¹ Accompanying finds: pottery. Date: LH IIIA2–IIIB. Length: 27.4 cm. Currently: Bodrum Museum of Underwater Archaeology, inv. no. 677-B. Bibliography: AKYURT 1998, 32, şek. 34:b; PULAK 2008, n. 10. (**Fig. 6**).

Commentary on Ko7 and Ko8: There are two knives from Müsgebi on the Anatolian coast, which share the same typological features as the Rhodian knives – a long thin body and a flanged handle with a narrow tang. The longer example Ko7 has two incised lines on the back of the blade along its entire length and the shorter Ko8 has only one line at the same place (AKYURT 1998, 32, şek. 34:a–b).

Ko9 Değirmendere/Colophon, Izmir Province

Context: Unknown. Date: LH IIIA2–IIIB (?). Length: 31.2 cm. Currently: British Museum, inv. no. 1935, 8-23-10. Bibliography: PRZEWORSKI 1939, 47, 192, Taf. V:2. (**Fig. 6**).

Commentary: The knife is made of bronze with preserved ivory inlay. It has a typical thin body, a curved blade, and incised lines on the back. It has a flanged handle with a thin tang extension.

K10 Değirmendere / Colophon, Izmir Province

Context: Tomb A. Accompanying finds: a silver pin and a glass bead. Date: LH IIIA2–IIIB (?). Length: 33.7 cm. Currently: British Museum, Inv. no. 1935, 8-23-9. Bibliography: GREENWELL 1902, 5–6, fig. 4; PRZEWORSKI 1939, 47, Taf. V:3; SANDARS 1963, 140, pl. 27:57. (**Fig. 7**).

Commentary: The knife has a typical thin body, a curved blade, and incised lines on the back. The knife resembles Ko3 from Ialysos from Tomb n. 48. It has the same incised lines on the back of the blade and a thin handle and tang. This knife from Colophon Tomb A (SANDARS 1963, 140, pl. 27:57) came from a tholos tomb of a Mycenaean type. However, this is not the tomb excavated by Hetty Goldman in 1922, later published by R. Bridges (1974). This must be an earlier illicit excavation, the finds from which ended in the British Museum and are included by Stefan Przeworski in his publication (PRZEWORSKI 1939, 47, 192, Taf. V:3, 5).

K11 Archontiki, Psara

Context: Unknown. Date: LH IIB–LH IIIC. Length: Unknown. Currently: Archaeological Museum of Chios. Bibliography: DELIGIORGI 2006, 149. (**Fig. 7**).

K12 Archontiki, Psara

Context: Unknown. Date: LH IIB–LH IIIC. Length: Unknown. Currently: Archaeological Museum of Chios. Bibliography: DELIGIORGI 2006, 149. (**Fig. 7**).

K13 Archontiki, Psara

Context: Tomb 107 or 99. Accompanying finds: a spearhead and bracelet. Date: LH IIIA2–IIIB2. Length: Unknown. Currently: Archaeological Museum of Chios. Bibliography: DELIGIORGI 2006, 149. (**Fig. 7**).

11 Designations of the tombs seem uncertain. Boysal (1969) published pottery from Müsgebi tombs, but he did not mention any knives. Akyurt (1998, 32) mentioned only Tomb n. 25, from where knives Ko7 and Ko8 came. Erkanal-Öktü quoted Akyurt, but he stated that knives came from Tombs 7 and 25 (ERKANAL-ÖKTÜ 2018, 108, n. 331). This paper follows Aruz (*et al.* 2008, 383–384, n. 10), where he stated that the knives are from Tombs n. 7 and 14 and referencing to Boysal's original publication. Therefore, it should be noted that numbers of tombs are unclear.

K14 Archontiki, Psara

Context: Unknown. Date: LH IIB–LH IIIC. Length: Unknown. Currently: Archaeological Museum of Chios. Bibliography: DELIGIORGI 2006, 149. (**Fig. 7**).

K15 Archontiki, Psara

Context: Unknown. Date: LH IIB–LH IIIC. Length: Unknown. Currently: Archaeological Museum of Chios. Bibliography: DELIGIORGI 2006, 150. (**Fig. 7**).

Commentary on K11–K15: An interesting subsection of this group is represented by these five pieces from the Psara island. They come from Archontiki, a settlement with a cemetery of a Mycenaean character (DELIGIORGI 2006). Since the excavations at this site have only been partially published, it is not an easy task to gain more technical and contextual details about the assemblage. One example certainly came from a grave, and the others most likely originated from a burial context as well. The knives generally adhere to the typological appearance of the Siana group. The most interesting knife is K15 which has its non-metal covering of the handle preserved, put in-between the flanges and a button-shaped pommel with a pyramidal top made of the same material. It is also quite thin, resembling knives from Rhodes. Although this knife is damaged and corroded, it actually provides the best indication of what the Siana knives would have really looked like. The remaining four examples from Psara share the same features of having a flanged rivetless handle, a thin curved blade, and a tang at the end. One corroded piece K11 still has the traces of the covering left on the handle. K12 and K13 resemble the examples from Ialysos on Rhodes. The last knife K14 is thicker and looks similar to the knife from Troy K18.

K16 Panaztepe, Izmir Province

Context: Grave B. Accompanying finds: pottery, jewellery. Date: LH IIIA. Length: 20.4 cm. Currently: Izmir Archaeological Museum, inv. no. 9976. Bibliography: ERKANAL-ÖKTÜ 2018, 108, 229–230, Taf. 9:B13, Taf. 346:B13. (**Fig. 7**).

Commentary: This recently published knife from Panaztepe has a thin body, a flanged hilt with a broken upper part, and a blade with a line along its back, which is positioned more in the middle of the blade when compared to other Siana knives, which have this line closer to the back of the blade. Despite its damaged handle, the report states that it had a thorn-shape tang protrusion, which can be connected with Siana knives. Erkanal further suggests that it is 'likely to [be] Siana' (ERKANAL-ÖKTÜ 2018, 108), comparing it to Siana knives from Müsgebi and Franktin. As it seems that the knife had a tang protrusion (probably triangular at its base) and other typological criteria of the Siana knives, namely a rivetless flanged hilt and a curved blade with a line, I consider this knife as belonging to the Siana group as well. However, one should be careful with knives, which have their end of the handle missing (see the footnote n. 12 in the next catalogue entry). On top of that, there is another knife from Panaztepe, which was previously identified as Siana Type (ERSOY 1988, 58, fig. 3:3) but it was decided not to include it into the catalogue here. It will be discussed in following subchapter listing uncertain Siana knives.

K17 Beşik-Tepe, Çanakkale Province

Context: Cemetery, disturbed context, Y128. 7. Date: LH IIIA2–B1. Length: 15.5 cm. Currently: Çanakkale Archaeological Museum, inv. no. 4646. Bibliography: AKYURT 1998, 19, şek. 18:m; BASEDOW 2000, 123, Taf. XCVI:1. Yi28. 7. (**Fig. 7**).

Commentary: The knife from the cemetery of Beşik-Tepe lacks a tang extension due to a damage. Basedow (2000, 123) claims this piece was a Siana knife. Despite the missing tang, its affiliation with the Siana group seems to be possible.¹² Along the back of the blade there is a line and the blade reminds one of the knife from Panaztepe K16, but it should be noted that both K16 and K17 are the smallest knives of the Siana group. As already mentioned, beside this knife K17, Beşik-Tepe yielded one more knife claimed originally by Basedow to be of Siana Type (BASEDOW 2000, 124). Again, it was decided not to include it into the catalogue here and it will be discussed in following subchapter on uncertain Siana knives.

K18 Troy, Çanakkale Province

Context: Settlement, Room VIIe. **Date:** LH IIIB-IIIc. **Length:** 31.7 cm. **Currently:** Schliemann Collection, Staatliche Museen zu Berlin, inv. no. Sch 6464. **Bibliography:** SCHMIDT 1902, 256, Abb. 6464; BUCHHOLZ 1999, 475, Abb. 83:b; HÄNSEL 2014, 134, 184, Taf. 5:3. (**Fig. 7**).

Commentary: The knife from Troy belongs to Level VII (SCHMIDT 1902, 256, Abb. 6464). It has some remains of the covering still on the handle. Its blade is thicker than most of Dodecanese knives. The back of blade has typical incised lines. Interestingly, in the publication by Hans-Günter Buchholz (1999, 475, Abb. 83:b), the knife is pictured with a knob pommel attached to the tip of the tang protrusion, whereas the original publication depicted this knife without a pommel (SCHMIDT 1902, 256, Abb. 6464). Buchholz also mentioned that it has a pommel attached to its tang (1999, 382). The presence of the pommel on Buchholz's figure seems difficult to explain. However, Buchholz (1999, 382-383) discussed this piece as part of a group of knives from Crete, Greek Mainland, Troy, and Cyprus with a similar style, some of which were classified by Sandars as her Class 4, thus having a solid cast handle which usually ended with a knob-shaped or similar pommel (SANDARS 1955, 181). Suggested similarities will be discussed further in the concluding part of this chapter.

THE 'SIANA' KNIVES FOUND OUTSIDE INTERFACE

K19 Athens, Attica

Context: Chamber Tomb. **Accompanying finds:** bronze greaves and pottery. **Date:** LH IIIC? **Length:** Unknown. **Currently:** Lost. **Bibliography:** MOUNTJOY 1984, 138-139, fig. 8. (**Fig. 7**).

Commentary: The knife has a straight blade, which does not curve up as is typical of the group. The handle is covered with a non-metal inlay. At the end of the handle, there is a part of the typical tang, which is partially broken off. The whole piece seems thicker than other knives of this group. This knife was reported by Mountjoy (1984, 138-139) in conjunction with a pair of bronze greaves and other finds from a chamber tomb on the south slope of Acropolis in Athens. The context includes pottery sherds from LH IIB1-III A1 and IIIC. Mountjoy noted its possible affiliation with Siana group, and according to the associated finds suggested a LH IIIC date for the item.

K20 Uluburun, Antalya province

Context: Shipwreck. **Date:** Late LH IIIA2. **Length:** 25.5 cm. **Currently:** Bodrum Museum of Underwater Archaeology, inv. no. 4452. **Bibliography:** YALÇIN - PULAK - SLOTTA 2005, 624, Abb. 175; PULAK 2005, 300, pl. LXXI:a, upper part. (**Fig. 7**).

¹² On the other hand, it should be noted that when the knife seems to have a damaged upper part of the handle – hence when one cannot be sure what exactly was at its end – it could also belong to Sandars Class 3a (SANDARS 1955).

Commentary: This knife from Uluburun is better preserved than the second example from the same shipwreck. It resembles pieces from Dodecanese, but it lacks the tang protrusion at the end of the hilt, probably just as in the case of the Beşik-Tepe knife K17. The handle has flanges without rivets and a line on the back. The length is typical and comparable to blades of some of the knives of the Siana group. The Uluburun shipwreck is dated to the late 14th century BC, corresponding to LH IIIA2 (YALÇIN – PULAK – SLOTTA 2005, 624).

K21 Uluburun, Antalya province

Context: Shipwreck. **Date:** Late LH IIIA2. **Length:** circa 12.0 cm (broken). **Currently:** Bodrum Museum of Underwater Archaeology, inv. no. 3242. **Bibliography:** YALÇIN – PULAK – SLOTTA 2005, 624; PULAK 2005, 300, pl. LXXI:a, lower part. (**Fig. 7**).

Commentary: This knife from Uluburun has a broken off blade, with only its flanged handle preserved. Its affiliation to the Siana group is suggested by the presence of the typical tang on the handle (PULAK 2005, 300, pl. LXXI:a low).

K22 Franktin, Kayseri Province

Context: Settlement. **Date:** LH III. **Length:** 28.6 cm. **Currently:** Unknown. **Bibliography:** ÖZGÜÇ 1955, 303, fig. 23. (**Fig. 7**).

Commentary: Unlike the other examples discussed here, this one comes from Southeastern Anatolia (ÖZGÜÇ 1955, 303, fig. 23). The blade tip is broken, but the knife demonstrates all typical features of this group. It appears to be more curved than is usual. While examples from the Aegean and Western Anatolia have narrow handles and curved blades, the Franktin [Fırakdin] example is fully curved as a whole piece. Tahsın Özgüç reported that Mycenaean stirrup-jar was found within the knife and suggested that this site was clearly connected with the Aegean area (ÖZGÜÇ 1955, 303; MEE 1978, 128). This example is the easternmost located Siana knife, and, as already mentioned, it does not look like a typical Siana piece, despite the characteristic tang and flanged hilt.

UNCERTAIN SIANA TYPE KNIVES

There are two knives previously claimed as Siana knives. However, they are not included in this catalogue, as they do not have enough typological alignment with the group. Therefore, they will be revisited here and their belonging to the group should be reconsidered, or at least treated with a special care.

First, there is a knife from illicit excavations Panaztepe published by Yaşar Ersoy as a sub-variant of the Siana knife (ERSOY 1988, 67–68, 58, fig. 3:3). Other authors followed this identification (AKYURT 1998, 32; BENZI 2005, 18; PULAK 2008, 382). The most distinct feature of this knife is the decorated back of the blade in the form of three cross sections, and also vertical wavy lines and ziz-zags, which are not common in Aegean or Anatolia, but appear on Central European/Northern Italian bronzes (ERSOY 1988, 67). Although the knife has a similar shape to a Siana blade and a flanged handle, there is no tang protrusion. Ersoy stated that the knife is complete (ERSOY 1988, 59). Therefore, his identification should be reconsidered. In absence of a tang, the flanged rivetless knife can also fulfil criteria for Sandars Class 2 or even the already mentioned Class 3a (if the upper part is indeed broken; see SANDARS 1955). The similar shape of the blade can occur on other types of Aegean knives as well and not only on Siana knives. Therefore, one cannot claim with certainty that this is a Siana knife.

The second case is a knife blade from Beşik-Tepe, which was described by Basedow as a Siana knife as well (BASEDOW 2000, 123, 124, Taf. XCVI:1. Zi26.3). It probably lacks the hilt,

and as preserved it is just a long curved flat single-edged blade. Therefore, it is difficult to say what type of knife it originally was. It should, however, be pointed out that after having observed the piece, which used to be exhibited in the Çanakale Archaeological Museum (likely now exhibited in the new Troy Museum), it does not seem to be typologically a part of the Siana group.

CONCLUSION III: THE SIANA KNIVES

The knives of Siana group are more numerous than swords and provide more contextual evidence for the entire typological group, especially as they come from graves at Ialysos and Müsgebi. The chronological focus is on the late stage of LH IIIA2 and on the LH IIIB, to which the majority of the knives seem to belong. However, a dating to LH IIIC cannot be excluded either, as there are several possible dates with wide ranges (such as in case of the pieces from Apsaktiras K05, Psara K11–12, K14–15, or Troy K18). The late example from Athens K19 could suggest a later distribution in Attica after LH IIIB. From the typological analysis and comparisons it seems that the group of knives from Rhodes (or the Dodecanese more generally), Müsgebi, Değirmenedere/Kolophon, and perhaps also Psara are typologically more homogeneous. They mostly represent what is conceived of as the typical appearance of the knife. When we move further to the North, knives vary. However, the narrow tang protrusion remains the most significant feature. Knives from Troy and Fraktin, when compared to those from Dodecanese have different proportions and sizes. The ‘Old’ Panaztepe¹³ piece might have been misidentified as Siana, in fact belonging to Class 2, if it really did not have a tang protrusion. Panaztepe K16, Beşik-Tepe K17, and Uluburun K20, even though they most probably belong to the Siana group, should be treated carefully because of their missing tang. In a situation when the upper part of the handle is broken off, the knife can be easily classified as Class 3a (for the definition see SANDARS 1955, 179). In case of the knife from Troy K18, whether it was pommelled or not, Buchholz’s investigation has led to the question whether the Siana knives have some similarities with Sandars Class 4 knives (for Class 4 description see SANDARS 1955, 181). None of the Siana knives has the original pommel preserved, except for the K15 from Psara. It is certain, however, that they were all designed to have one. When we look at the knife K15, we can have a general idea of what they originally would have looked like. And when we look at knives of both Sandars Class 4 and Siana, we can observe similarities, especially with respect to the pommelled handle. This might not be as indicative as might seem, but one can wonder if there is a typological connection or a relationship between Siana and Class 4. For example, a knife belonging to Class 4 comes from Psara (DELIGIORGI 2006, 150) and an additional one from Uluburun (PULAK 2005, LXXI:a, in the centre). Interesting and slightly atypic example is the newly discovered knife from Kaymakçı in Western Anatolia (ROOSEVELT *et al.* 2018, 673, fig. 22, 1; PIENIAŻEK *et al.* 2019).

As has already been stated, there is only one general work on Aegean knives so far (SANDARS 1955), which was written more than sixty years ago, and although it continues to provide a solid basis for identification, I would suggest that time is ripe for a serious reconsideration of the corpus of Aegean knives, as there are no other known parallels for Siana knives other than those discussed here. One exception is a similarly tanged knife from Alalakh, which is also the site where an ‘Ugarit’ sword was discovered. It has a characteristic tang, but its hilt is riveted, and the blade looks like a double-edged dagger of a leaf-shaped form (WOOLEY 1955, 278–279, pl. LXII: kn. 6). No parallels are known, I believe. This might either be the consequence of the

13 Discussed in section *Uncertain Siana knives* and not included in the catalogue.

current state of knowledge, or it might also underline the possibility that the territory of the Interface might be the homeland of Siana knives.

THE 'SIANA' SPEARHEAD

Spearhead was the third component of the original Siana group, in addition to the sword and the knife. In order to provide a complete overview of the group, spearheads will be introduced briefly here even though their analysis does not represent the main aim of this paper. The piece from Siana is characterized by a round leaf-shaped blade with faceting of the socket and a marked splay of the facets at the base of the blade (SANDARS 1963, 140; MEE 1982, 60). Sandars found parallels with similar faceting at Ialysos, Ras Shamra-Ugarit, and Tarsus (SANDARS 1963, 140; MEE 1982, 60, 106, n. 7). The spearhead from Siana was classified by Olaf Höckmann within his large Group D, and more specifically as its Variant III (HÖCKMANN 1980, 29, Abb. 5:D.29). This variant lists only two pieces, the one from Siana and a little spearhead from Trouves in the Peloponnese (HÖCKMANN 1980, 135, D28, D29). Group D includes different spearheads from the Greek Mainland, Crete, and the islands (HÖCKMANN 1980, 26, 29, 34, Abb. 4, 5, 6). Different classification, however, was provided by Robert Avila. He claimed Siana spearhead as similar to his Type VII (AVILA 1983, 48–49, Taf. 16:104). He classified spearheads from the sites Preveza, Lithovouni, and Kallithea on Greek Mainland as belonging to the same group (thus being similar to Type VII) (AVILA 1983, Taf. 15–16). Yet, the only true pieces of Type VII, he suggested, are spearheads from Achaia and Delphi (AVILA 1983, 47–48). Despite this different classification, it should be noted that the Greek and Near Eastern parallels discussed by Sandars, Avila, and Höckmann look more or less similar to the Siana piece, so it is hard to suggest an accurate provenience of this type of spearhead. Even if it was found within the region of the Interface, it is questionable whether it is indigenous or not.

CONCLUSIONS

While there is a number of truly Aegean-style metal artefacts found in the Eastern Aegean and Western Anatolian Interface, there is a distinctive group of swords and knives, named the Siana Group by Sandars, which shows an inspiration from the Near Eastern products. In addition, the Interface yielded a number of swords, termed Interface swords here, which look very much like the known and established Aegean types, but, at the same time, show distinct irregularities, such as IS₃ from Ialysos or IS₅ from Izmir. The sum of these typological irregularities, combined with the information gathered from the analysis of pottery, jewellery, and funerary habits along the Interface, indicates that this group actually matches the 'in-betweenness' of the area and helps to define its place within the Aegean and Near Eastern Late Bronze Age world. Standing admittedly between the Mycenaean world in the West and Syro-Levantine and Hittite worlds in the east, yet in its own right. Looking at the distribution of the Siana metal group (**Map 1** and **3**), the area of Eastern Greek islands/Western Anatolia could be considered as the home base of this group. The geographic border zone, where the Aegean and Anatolian influences crossed, was also an important maritime hub of the Eastern Mediterranean with access to other cultural spheres, especially in its Lower part, which had a strong connection to the Levant.

Sandars already considered the Dodecanese as an important connecting place to the Levant (SANDARS 1963, 142). Benzi stressed out the location of Ialysos settlement on Rhodes as

an important trade station connected to both Greek Mainland and Cyprus (BENZI 1991, 951, 969). This significant group of weapons and knives should therefore be seen as a result of LH IIIA2–IIIB ‘international’ relations. The dating of this group, according to up to date contextual information, seems more likely to be earlier than LH IIIC, though the 12th century BC cannot be ruled out completely. While the swords have so far been found exclusively in this territory, knives were distributed more widely around its epicentre and were far more numerous. The area of the Eastern Aegean and Western Anatolian Interface is overall different, not only in terms of its pottery assemblages, but also in terms of metals.

I thus suggest that the Siana group is, with all probability, a local product, created by engaging with and adapting the Aegean and Anatolian/Near Eastern objects that were in circulation, and stands alone as a distinctive group due to its typological uniqueness, which continued until the End of Late Bronze Age. Whether there were specific production centres and how many, we do not know – more chemical provenancing is needed for that (there is actually none so far for the objects discussed here).¹⁴ But even looking at the typological variability within the Siana group makes clear that we deal with several possible workshops here. The two sizes also need further explanation. And while the Siana group is relatively unified, the so called ‘Interface swords’ show a much greater variability, both typologically, but also in dimensions, which became clear only now, when they were collected here anew. Finally, the broader occurrence of the true Levantine types of swords along the West Anatolian coast adds an interesting facet to the whole story and also needs explanation. It is likely that the cosmopolitan nature recently postulated for the Izmir area (VAESSEN 2017), will hold true also for the remaining Interface, certainly its Central and Lower parts.

But we should probably get rid of all terms such as ‘irregularities’, because those are always meant from the Aegean viewpoint. The emerging patchwork of the sword and knife styles gives actually one an idea now, of how the things were intended to be along the Interface, and not just how they happened to be.

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14 The chemical analysis of finds from the 2nd Millennium used to be looked down to with distrust, but it has been shown quite clearly by Jung and Mehofer (2013) that the hope is not completely lost and there was more of fresh copper raw-material coming in (and thus less re-smelting) than has been expected before.

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