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A New “Roman” Sword from Soknopaiou Nesos (El-Fayyum, Egypt)

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Abstract: A long and well preserved sword was brought to light in 2006 during the archaeological excavations carried out by the Soknopaiou Nesos Project (University of Salento, Lecce) in the *temenos* of the main temple in Soknopaiou Nesos, modern Dime. The current state of research would suggest a classification as a Roman, or at least Roman influenced, weapon of the late Republican period. However, some peculiar elements of this sword seem to point to an oriental or Egyptian final assemblage. It thus may give a new impulse to the still open discussion about the appearance of Hellenistic swords starting from the period of Alexander's Successors. The weapon can have been used by soldiers of the late Ptolemaic period as well as by members of the Roman army. The question whether the sword ended up in the *temenos* as part of local defensive arms or as a votive object will largely remain speculative, as its find context is not stratigraphically reliable.

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I. Introduction (P. Davoli)

The Soknopaiou Nesos Project (SNP), directed by Mario Capasso and Paola Davoli, started working at Dime es-Seba, the Graeco-Roman Soknopaiou Nesos, in 2003.¹ The *kome* (ca. 600 x 320 m) was one of the numerous settlements founded during the regional project of land reclamation realized by Ptolemy I and II. It is located in a desert area, north of Lake Qarun, and its function was mainly religious and commercial (Fig. 1). Archaeological evidence attests to the presence in this area of settlements, tombs and other features datable from the Neolithic to Islamic periods. The local landscape has undergone several drastic changes during this long period of time, from a wet to a hyper-arid environment. However, there is a strong possibility that one of the reasons for a new foundation or refoundation of a settlement at the beginning of the Hellenistic period was the presence of a revered sanctuary on top of a natural hill. In fact, below the Hellenistic period temple dedicated to the god Soknopaios, features of a previous phase have been found but not yet precisely dated.²



Fig. 1. Satellite view of Lower Egypt and Fayyum (drawing by Bruno Bazzani; satellite image courtesy of NASA - Jacques Descloitres, MODIS Land Science Team).

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At the end of the Ptolemaic period or beginning of the Roman period the temple was renovated and the *dromos* restored and extended toward the south, probably twice. Also the settlement was enlarged and the houses aggregated in blocks to accommodate an increase of the population. The abandonment of the *kome* is dated to the mid-third century AD, but the reasons are so far unknown. However, people returned to live in the *temenos* area between the fourth and the seventh century.

The archaeological excavation carried on by the Soknopaiou Nesos Project is mainly concentrated in the temple area, where no previous scientific work was carried out. The sacred area, dedicated to the god Soknopaios, is enclosed by a

temenos wall (ca. 88 x 125 m) and is in general quite well preserved across its elements, i.e., the main temple, chapels, houses and service buildings. Despite natural erosion, the spoliation of the limestone blocks and illicit excavations, the *temenos* area is an interesting context to study and one of the better preserved in the Fayyum (Fig. 2). A considerable number of papyri has been found by treasure hunters in the temple precinct at the end of the nineteenth century and the beginning of the twentieth; these are now preserved in several collections. Basalt statues were also found in a good state of preservation, but it is not clear where they were found, whether inside the *temenos* or on the *dromos*, the ceremonial road that crosses the settlement from north to south and connected the temple with the edge of the town.³



Fig. 2. Soknopaiou Nesos: view of he temenos from south-east (courtesy of SNP).

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Fig. 3: Soknopaiou Nesos: plan of the temple area, 2012
(courtesy of SNP).
[Full size image here](#) ↗



Fig. 4: Soknopaiou Nesos: view inside the temenos: the area west of ST 20, with building ST 21 (courtesy of SNP).

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Topographic and geophysical surveys have been carried out in the settlement during the regular excavation seasons; these have allowed a better knowledge of the archaeological site. Two methods have been followed in the geophysical survey,⁴ magnetometry and electrical resistivity, but they did not produce the expected results because the difference in the magnetic fields of the materials used in the buildings and the sand that covers them is too small. However, it was possible to establish the presence of buildings buried by sand and debris in different areas, and of some highly magnetic zones. These can be interpreted mainly as ovens or fireplaces in domestic buildings, but two strong positive peaks suggested the presence of anomalous materials. One of these is located in Area 1 of the geophysical survey, which is located inside the *temenos* (Fig. 3, Fig. 4), west of building ST 20 under excavation. The anomaly revealed the presence at a shallow depth (calculated between 50 and 80 cm) of an “object” about 1 meter long, south of the standing walls of a building (labelled ST 21) built with local stone and mud brick and with the same technique as the Ptolemaic temple ST 18. Our first hypothesis for the interpretation of the

magnetic anomaly was the presence of a basalt statue, which would have been a common occurrence in a temple area. It was then decided to open a new sector in building ST 21 to verify this supposition. In fact, the finding of a statue in context would have probably shed new light on those found in the past and of which the place of discovery is still unknown. However, the magnetic anomaly turned out to be something completely unexpected for a temple context: a complete iron sword (ST06/338/1474+2557) (Fig. 5, Fig. 6).

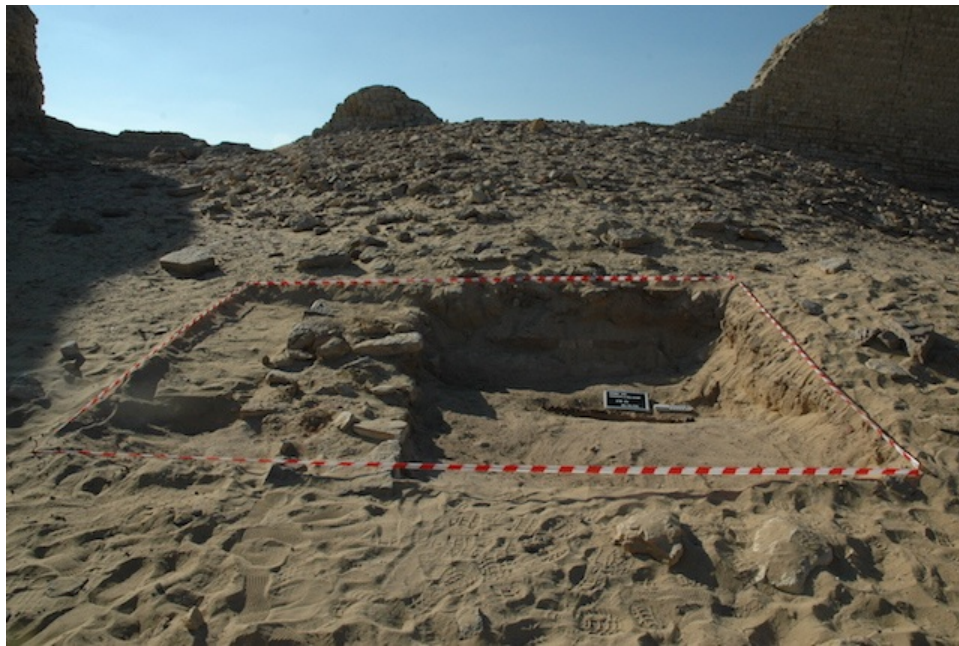


Fig. 5: Soknopaïou Nesos: Saggio 1 (south part): the sword ST06/338/1474 as it was discovered (courtesy of SNP).

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Fig. 6: Soknopaiou Nesos: detail of the sword in situ (courtesy of SNP).

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Its first appearance was of extreme fragility, and thus we operated with a first consolidation before starting its removal and transfer to the Supreme Council of Antiquities general storehouse at Kom Aushim. Aly Taha Omar, from the Egyptian-Italian Center for Restoration and Archaeology in Cairo, consolidated the sword and the sand below it with sprayed paraloid and prepared a wooden box for its transportation (Fig. 7). In 2008 Mohammed Ahmed, a freelance conservator, removed the paraloid and proceeded with the cleaning and consolidation of the sword. The rusted iron that covered completely the object turned out to be from the scabbard and not from the blade, which is perfectly preserved, along with the final part of the scabbard, where the iron sheet is thicker than in its upper part. Every iron piece has been maintained and consolidated. The ebony pommel did not need any treatment and is still very solid and unchanged. In contrast, the padding of the grip made with a red textile was found in very fragile condition and only partly preserved. It has also been treated in order to preserve it to the maximum extent possible.

In 2012 a series of X-ray images was taken in the storehouse by means of an

old portable X-ray machine from Medinet el-Fayyum.⁵ The results, however, are not useful for a detailed study of the manufacture of the object.

At present the sword and all its related pieces are stored in a wooden box, with foam supports shaped to fit, in the SCA general storehouse of Kom Aushim (Fayyum); they are registered in the SCA official register as no. 159.



Fig. 7: Soknopaiou Nesos: the sword after consolidation in situ (courtesy of SNP).

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II. The archaeological context (P. Davoli)

The trench, called Saggio 1, was initially 4 x 3 m; it was then enlarged to 10 x 6 m to cover the area of building ST 21, which was only partially visible at the beginning of the excavation. The area had a slope down toward the east and was covered by sand mixed with mud brick debris in varying concentrations.

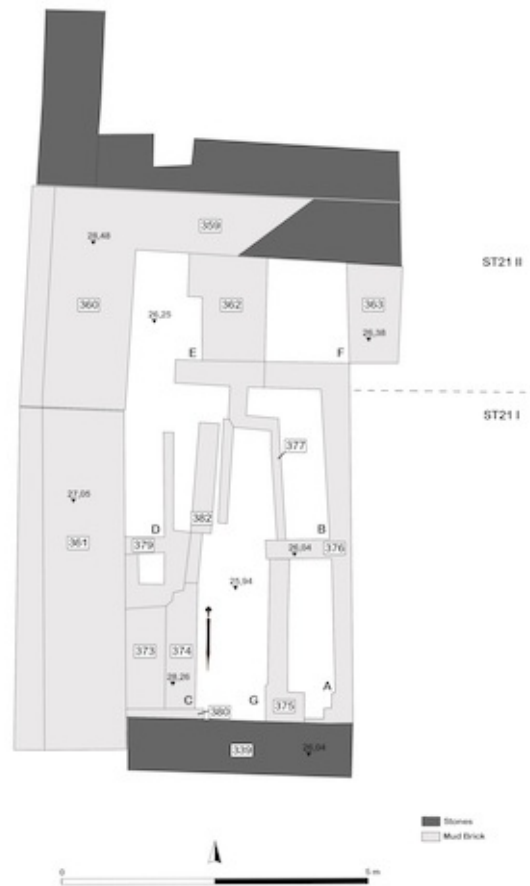


Fig. 8: Soknopaiou Nesos: Saggio 1: Plan of ST 21 (drawing by S. Alfarano; courtesy of SNP).

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Fig. 9: Soknopaiou Nesos: view of building ST 21 from south (courtesy of SNP).

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Fig. 10: Soknopaiou Nesos: view of building ST 21 from north (courtesy of SNP).

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The excavation was limited to the surface layers that covered the upper part of

the subterranean rooms of ST 21. In fact, the building is almost completely destroyed in its ground floor, and only parts of the north walls survive. It is actually composed of two structures built in two different phases: the most ancient one is called ST 21 I, while the most recent is ST 21 II ([Fig. 8](#), [Fig. 9](#), and [Fig. 10](#)). The two buildings seem to have been part of one structure, of which only part of the underground rooms and walls survives. In fact, the south wall 339 seems to be part of the second phase (ST 21 II). The technique and building materials are different and not uniformly used: the walls of the underground rooms are built in mud brick, while the perimeter walls are made with a mixed technique, with rough slabs of local brown limestone at the base and mud brick on top.

Seven underground rooms have been recognized, of which at least five were originally covered with barrel vaults, all oriented north–south and made in mud brick. The exploration of these rooms has been postponed till after the end of the excavation of the main temple ST 20, for logistical reasons.

Room A (2.0 x 0.90 m) was a cellar, accessible through a shaft located in the southeast corner, and was originally covered by a vault.

Room B (2.5 x 0.80 m) was a L-shaped cellar covered by a vault, and with the entrance shaft probably located northwest of it.

Room C (2.10 m long) is a cellar with its original vault completely preserved. This is covered with part of the mud-brick floor of the upper room. The entrance vertical shaft is at its north side and is still well preserved (53 x 45 cm).

Room D (1.70 x 0.64 m) was also a barrel-vaulted cellar, but its north end is not preserved.

The central, irregular space G was probably not a cellar but only a space full of sand in the foundations of the building. The sword and a castanet half were found on top of it. The sword was lying 80 cm north of the stone wall ST06/339 and immediately to the east of the vault of room C (ST06/374).

Rooms E and F are part of the second phase building (ST 21 II). E was a cellar (1.70 x 0.90 m) with a sort of niche on its east wall, while it is not clear if room F (1.48 x 0.92 m) was used as a cellar or if it was a space in the foundations.

The stratigraphy covering the building (average thickness 60 cm) is

unreliable, and the objects in it are certainly not in their original contexts.⁶ The surface deposits were made of wind-blown sand and debris (ST06/336),⁷ and of a concentration of mud bricks (ST06/337). These two units covered a layer of sand with mud brick rubble and organic materials, such as seeds of different fruits (ST06/338) and straw. In the surface layers ST06/336 and 337 a broken pottery statuette (ST06/336/1395),⁸ three bronze coins, including one of Ptolemy VI (ST06/336/1447) and two *drachmae* of Antoninus Pius (ST06/336/1455, 1456),⁹ a fragment of a capital made in plaster (ST06/337/1419), a wooden bolt (ST06/337/1729), a complete lamp (ST06/337/1587),¹⁰ and a blue glass bead (ST06/337/1755) have been found. The iron sword, with a knob in ebony (ST06/338/1474) and the terminal part of the scabbard (ST06/338/2557), was found lying horizontally oriented north–south, at an elevation of 26 m asl (Figs. 5, Fig. 6). It seems an artificial deposition, at about 50 cm below the surface, but a depositional pit cutting DSU ST06/338 has not been recognized. Other items found in the same DSU are a fragment of a wooden seal (ST06/338/1390), an iron blade of a knife (ST06/338/1462), a bronze needle (ST06/338/1472), an illegible coin (ST06/338/1473), a wooden knob for a box (ST06/338/1479), a wood castanet half (ST06/338/1688),¹¹ and a bead in blue faïence (ST06/338/1751).

III. The sword (Ch. Miks)¹²

1. Description of the find

The sword (ST06/0338/1474) was found near structure ST 21, which was revealed in Saggio 1 (season 2006). At the time of the deposition, it was still stuck within its scabbard (ST06/0338/2557). Unfortunately, despite the arid climate the preservation of all components of the weapon was not good enough to conserve them permanently in their original position. Even upon restoration a certain reduction of material is to be observed. The following analysis essentially draws upon the blade with the pommel and parts of the grip as well as remains of metal components of the suspension and the lower end of the sword scabbard (Fig. 11).



Fig. 11: Soknopaiou Nesos: the sword and its accessories after restoration. Photo and drawing (courtesy of SNP; drawing by

C. Caputo).
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With the exception of a few nicks, the iron blade is fully preserved. It weighs around 1.3 kg (including the pommel and grip). From the point to the remains of the peened over/riveted end of the tang it measures 945 mm, consisting of the 172 mm long tang, 13.7 mm wide at its lower end, and the 773 mm long blade. The latter is characterized by slightly declining shoulders and waisted contours, that is to say, a partially arched indentation in the course of both cutting edges, and an extremely long point. Accordingly, its width changes significantly. It reaches 58 mm at the shoulders, 41.9 mm at the waist and 56.8 mm again at the transition to the point. The cross-section of the blade is of a flattened rhombic shape with a clearly accentuated central ridge. The strength of the blade along this central ridge also varies from 7.8 mm at the start of the tang, which demonstrates a rectangular cross-section, to 5.5 mm at the transition to the point of the blade. A particular local thickening of the point is not found. Its final area is once more accented by a slight kink in the blade's edges. Without a metallographic analysis we cannot attempt any conclusions on the forging technological composition of the blade. Neither an optical nor an X-ray survey, the latter realized in adverse circumstances, yielded structures which might suggest the composition of different iron/steel elements with potentially varying degrees of hardness.¹³



Fig. 12: Soknopaiou Nesos: details of the sword hilt: 1. side and frontal view of pommel and grip. 2. upper side of the pommel with the rivet head on the end of the tang. 3. bottom side of the pommel with entrance point of the tang (courtesy of SNP).

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The single entirely preserved element of the former hilt is a dominant pommel, which remains applied to the end of the tang of the sword (Fig. 11, Fig. 12). According to P. Davoli, it is made of a piece of ebony. It is 95.7 mm wide, 81.7 mm high and 66 mm deep. Deep indentations divide its body clearly. Basically, the central design element is a ball, which sits on a central base protruding to its front and rear. At the same time, each side has an “inserted”, or annexed, cylindrical or spindle-shaped element. The pommel is vertically drilled through with a conical drill hole that allows it to be slid onto the tang. On its bottom side, the shape of the drill hole is adjusted to the rectangular cross-section of the sword’s tang, which is still around 8.5 mm wide at the point of entrance (Fig. 12.3). At the point at which it exits on the top of the pommel, the end of the tang is peened over to a mushroom-shaped mere approximately 6.5 mm wide and about 3 mm high, through which all of the hilt parts of the sword would formerly have been fixed to the tang to prevent them from slipping (Fig. 12.2). The fact that the rivet head lacks an additional metal plate to ensure a sufficient pressure of the riveting denotes the density and hardness of the wood

of which the pommel was made.

Parts of the grip immediately below the pommel had originally been preserved (Fig. 12.1). They did not consist of firm hilt plates or of a grip sleeve but of a red textile, which was wrapped tightly around the tang as a thick bundle. When the sword was found, it remained on three of the four tang sides with an approximate length of 61.5 mm. In contrast to the length, the width discernible at the time of about 29 mm and the depth/width (including the tang) of a maximum of ca. 27 mm, will have been quite close to the original dimensions of the grip.



Fig. 13: Soknopaiou Nesos: lower end of the scabbard frame with preserved terminal knob (courtesy of SNP).

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The well preserved sword blade and pommel stand in stark contrast to the scanty remains of the scabbard (ST06/0338/2557). The best-preserved fragment

is a 215 mm long piece of a metal binding of the lower end of the scabbard (Fig. 11, 13). This constitutes the parts of two channel-shaped edge bindings made of a 2 mm thick iron sheet. In the area of the former point of the scabbard they are merged within the nozzle-shaped neck of a separately manufactured spherical terminal knob (diameter 20 mm) with a horizontal groove all around. The internal width of the binding's channel is 14.5 mm at the most and conveys a vague idea of the thickness of the former organic scabbard body at its lower end. The organic parts of the scabbard have disappeared, and therefore it is not possible to determine what material it was made of. Given the dimensions of the binding's channel, however, the scabbard could very well have been supported by a thinner wooden body. Numerous metal fragments, which the restoration process separated from the blade, could indicate that the edge binding once continued above the area of the scabbard's point, and thus that once a complete scabbard frame may have existed (Fig. 11.1). Among these there are four 22 mm wide strip-like fragments of 2 mm thick iron sheet, possibly originating from horizontal frame- or carrying-clamps (suspension bands). The remains of four simple iron rings (diameter 19 mm) further indicate the former existence of a corresponding suspension of the scabbard. They are made of 3.5 mm strong rod material with circular cross-section.

2. The blade

The waisted blade of the sword with its long extended point doubtless places the present weapon alongside comparably shaped Roman or at least Roman-influenced swords from find contexts of the Late Republic and the beginning of the early Roman Principate. With its 773 mm long blade it can be classified as a long sword. At least this is what an analysis of preserved sword blades of the Roman Principate suggests, according to which the transition between short swords (*gladii*) and long swords (*spathae*) is to be estimated at a blade length (without the tang) between 550 and 600 mm.¹⁴ To what extent this statement can be transferred to the swords of the Roman Republic is, however, the subject of controversy.¹⁵ This is due particularly to a group of blades that was identified by the majority of scholars in the past two decades¹⁶ as belonging to the type

described in ancient literature as the *gladius hispaniensis*.¹⁷ According to a text, the authorship of which is assigned to Polybius (ca. 200–120 BC),¹⁸ the Roman army adopted the *gladius hispaniensis* at the end of the third century BC from Celtiberians and apparently adapted the foreign weapon to their own technical abilities or ideas of forms as they existed already at this date. The written sources describe this kind of sword as relatively short and handy. Unfortunately, there are so far no unequivocal indications from “pure” Roman contexts that might permit an absolutely certain archaeological identification of this standard weapon of the Roman army in late Republican times. In any case, the body of Republican *militaria*, for which the use by regular Roman soldiers can certainly be proven, is minimal. Thus, those blades, which are favored by scholars as evidence for the *gladius hispaniensis* (e.g., [Fig. 14.1–2](#), [Fig. 15](#)), of which the waisted blade shape after all shows a strong relation to early Roman Imperial short swords of the Mainz type,¹⁹ are in their large majority from sites in contact areas between the Roman sphere of influence and the late Iron Age societies of Central and western Europe.²⁰ In these areas, Italo-Roman imported goods were frequent components of representative behavior of higher social classes.²¹ Nevertheless some of the mentioned societies had independent, highly evolved traditions of sword making.

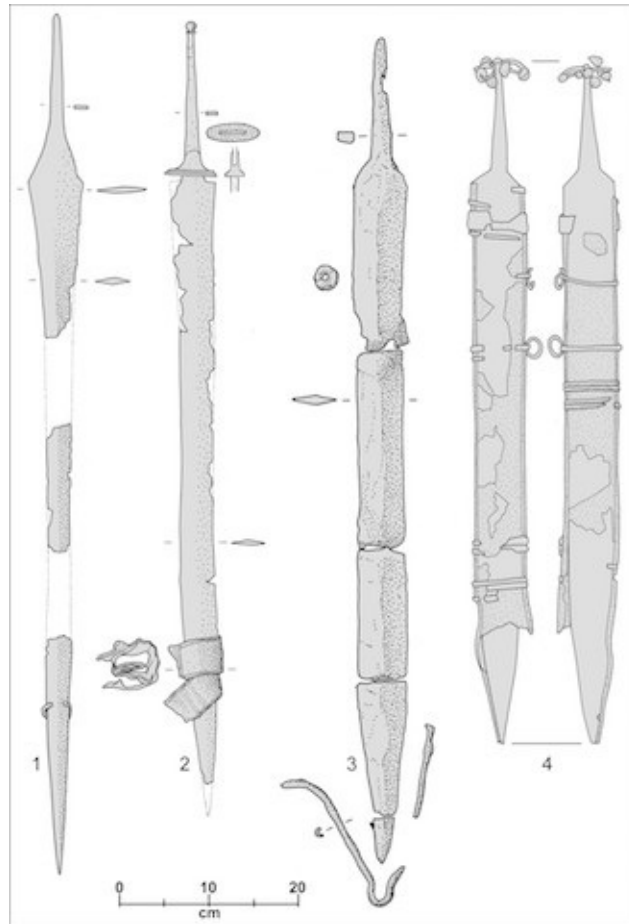


Fig. 14: Swords from late Iron Age and Hellenistic find contexts: 1-2. hoard or votive finds (?) from Alesia; terminus ante quem around 52(?) B.C. (redrawn after Rapin 2001, pl. 6). 3. from a grave filling near the hippodrome on the Tel es-Samarat in Jericho (West Bank); ca. first half of the 2nd century B.C. (redrawn after Stiebel 2004, fig. 266). 4. found beneath a layer of destruction debris in the « Maison de sceaux » (Quartier de Skardhana) on Delos; terminus ante quem 69 B.C. (redrawn after Siebert 1987, fig. 19).

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Fig. 15: Swords from South Alpine graves of the late pre-Roman Iron Age: 1. San Bernardo in Ornavasso (Italy), grave 31 (after Bianchetti 1895, pl. 4,5). 2. Giubiasco (Canton Ticino, Switzerland), grave 471. 3. Giubiasco, grave 71. 4. Giubiasco, grave 108 (nos. 2-4 after Ulrich 1914, pls. 78,6.8; 86,3-4).

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Keeping the above in mind, we have to assume a use of potentially Roman imported swords alongside native products that adapted an originally Roman design for locally preferred longer blades.²² The putative identified *gladii hispanienses*, with their blade lengths ranging between 590/600 and 700 mm, and in individual cases achieving significantly greater lengths, thus also clearly contrast with the Roman infantry's short swords of the Roman Principate, with blade lengths mostly below 550 mm. When it comes to the above mentioned length analysis of predominantly Roman Imperial blades, the supposed *gladii hispanienses* must thus be classified as long swords (*spathae*). This apparent

contradiction has raised doubts in recent literature about the accuracy of using the length 550/600 mm as the dividing threshold between short and long swords.²³ However, a closer examination reveals that there is no such contradiction. The linguistic/academic distinction between *gladius*, alias short sword, and *spatha*, alias long sword, common today, essentially relies on a passage of Tacitus (*Annales* 12.35). In this source of the late first century AD the term *spatha*, which is used literarily for the first time here to characterize a specific kind of sword, is contrasted with the term *gladius*, which was well established in literature, without any further explanation. According to Vegetius (*Epitome* 2.15.4),²⁴ who refers to older written sources, the *spatha* is merely a *gladius maior*. This insight allows us to understand the specific text passage in Tacitus as offering a contrast between short and long swords. At the same time, the term *gladius maior* also means that while the basic word *gladius* referred to a “sword”, it need not necessarily have specified a short one. It is the adjectives added to the primary word or the literary context that allow for a more precise definition. However, in the case of the *gladius hispaniensis*, literary sources²⁵ just reveal that the weapon should have been shorter than contemporary Gaulish swords.²⁶ Their blade dimensions, between 700 and 900 mm, frequently range at the upper end of the spectrum of lengths which is ascertainable for Roman Imperial long swords.²⁷ In the early Roman Principate, i.e., in the period in which Tacitus wrote, the longest blade normally even reached the shorter length, or at the most the lower end of the described range.²⁸ It thus appears conceivable that the *gladius hispaniensis* was not an explicit short sword even by ancient or at least Roman Imperial standards, but instead was a *gladius maior* (= *spatha*) with a comparatively short blade.²⁹ At least this would be valid for the majority of the sword finds which currently appear as *gladius hispaniensis* in recent literature. The above-mentioned contradiction would thus have been solved.

In any event, however, the constant association of archaeological finds with special terms from ancient literature is always risky, because it gives a scientific theory based on archaeological finds the appearance of being a statement of facts ascertained through ancient primary written sources. At the same time it forces a group of real objects into a literarily prescribed frame of historical development

and use, to which future interpretations of archaeological evidence and finds are adjusted more or less consciously. The price of this framework could be a good degree of critical distance and academic objectivity. That is to say, if an object is described rather vaguely in ancient literature, and the situation of archaeological sources is not absolutely clear, the use of ancient terms should definitely be avoided and a neutral, purely find-material oriented description of types should be preferred. In the case of alleged finds of *gladii hispanienses*, regardless of the arguments pro and contra the accuracy of their designation,³⁰ we are confronted with, first, the problem of an imprecisely defined or definable maximum length and, second, the problem of their relation to swords of the Roman Principate.

With respect to the first point, as indicated above, the group of supposed *gladii hispanienses* also includes blades that doubtless belong to its form typology, but contrary to literary descriptions, do not fall short of the contemporary “Gallic” *spathae* in terms of their length.

With respect to the second point it should be noted that blades of the group of supposed *gladii hispanienses* continue to be evidenced until the beginning of the early Principate.³¹ Then, as early as the Augustan period, their lengths at once stand in a strong contrast with the significantly inferior lengths of those infantry swords, the use of which by the Roman army for the first time is demonstrated by archaeological contexts. Whereas we lack finds that could illuminate possible intermediate steps, and the line of development to these typologically related short swords thus remains obscure, the length and some form elements of the presumed *gladii hispanienses* continue without a break until the early Roman Imperial long swords.³²

In order to prevent typological confusion and a bias with regard to the *gladius hispaniensis*, I prefer to continue using the same terminology of sword types defined for the beginning of the Principate on a secure material basis, as also in the late Republican period, so long as no conceivable typological changes call for a different categorization.

Precisely in this sense, the sword from Soknopaiou Nesos can be classified as a *spatha* of the Nauportus type.³³ This type comprises those long swords with clearly waisted blade (contours) and long points, thus closely related to early

Roman Imperial short swords of the Mainz type (variants “Sisak”, “Mühlbach” and “Classic”).³⁴ While the tang length of the present sword corresponds to the usual value of this blade type, the 773 mm long blade clearly differs from most comparable examples, with the majority of blade lengths between 640 and 700 mm. The width, too, of 58 mm is somewhat above the common dimensions, which range between 40 and 55 mm. The dimensions of at least one of the two Nauportus type swords from Alesia (Dép. Côte d’Or, France [Fig. 14.1] with a possible *terminus ante quem* at 52 BC) are roughly comparable.³⁵ This rapier-like sword blade tapers strongly to its point, though unfortunately only preserved in fragments, and displays a maximum width of 58 mm. Old photos allow its reconstruction to a blade length of about 735 to 760/770 mm (ca. 925 to 955 mm including the tang). The proportions of the weapon from Soknopaïou Nesos, however, find closer parallels in the second blade from Alesia (Fig. 14.2)³⁶ or for example also in swords from graves 71, 119 and 471 of the cemetery at Giubiasco (Canton Ticino, Switzerland),³⁷ even though the blades of the latter are only between 610 and 700 mm long (without the tang) and between 40 and 56 mm wide (Fig. 15.2–3). The three last mentioned grave finds already date to the second half of the first century BC and the early Augustan period.³⁸ In any case, a closer examination of comparable pieces with similarly strongly, intentionally waisted blades,³⁹ such as the example from Soknopaïou Nesos, discloses an essential concentration of find contexts in the first century BC and the Augustan period.⁴⁰

3. *The components of the scabbard*

Together with the sword blade from grave 471 at Giubiasco, some traces of its wooden scabbard and large parts of the iron scabbard frame were preserved (Fig. 15.2).⁴¹ Along with the respective remains of horizontal strip-like frame clamps and carrying clamps (suspension bands), one of which included the fragment of a hooked-in carrying ring, the frame surely conveys a good impression of what we can presume to be the appearance of the scabbard frame of the *spatha* from Soknopaïou Nesos. Self-sustaining iron scabbard frames are generally assumed to have been used by the Roman army upon Celtiberian inspiration in context

with the establishment of the *gladius hispaniensis*,⁴² and recur in Roman contexts until the general abandonment of so-called “frame-scabbards” around the mid-first century AD. Their evidence again concentrates in the first century BC, whereas the use of copper alloy was important for more recent frame-scabbards. With respect to the frame clamps and carrying clamps (suspension bands), the shift to non-ferrous metal had apparently concluded already in the early Augustan period. This observation is supported by the circumstance that most iron scabbard frames of Roman or Roman-influenced swords from the last third of the first century BC are already combined with bronze/brass clamps⁴³ alongside the first completely non-ferrous metal frames, as for example the Nauportus type *spatha* from grave 119 at Giubiasco.⁴⁴ Then again, a (Nauportus type?) *spatha* in grave 31 (La Tène D2) in the necropolis of San Bernardo in Ornavasso (Italy) has an iron scabbard frame (Fig. 15.1), probably combined with at least partially iron clamps and simple carrying rings.⁴⁵ On the other hand, a sword from Delos), revealed beneath the debris of the destruction caused by a pirate attack in 69 BC, was equipped solely with simple iron frame clamps and carrying clamps (suspension bands), holding together a pure leather scabbard with a leather frame (Fig. 14.4).⁴⁶ For a closer chronological classification of the scabbard frame that belongs to the *spatha* from Soknopaiou Nesos, its pure iron composition –so far as this is reconstructable – as well as the shape of its terminal knob can be taken into account (Fig. 11, 13). The separately produced spherical knob with a horizontal groove all round and the nozzle-shaped neck seem to vaguely anticipate the structuring or fastening traits common, although more elaborate and diverse, to many of the mainly non-ferrous metal terminal knobs of scabbard bindings of the early Roman Principate.⁴⁷

To sum up, a date for the frame-scabbard from Soknopaiou Nesos to the period between the mid-first century BC and the early Augustan period seems plausible.

4. The hilt elements

Without doubt, the most remarkable elements of the sword presented here are the remaining parts of its hilt, i.e., the pommel and what is left of its grip.

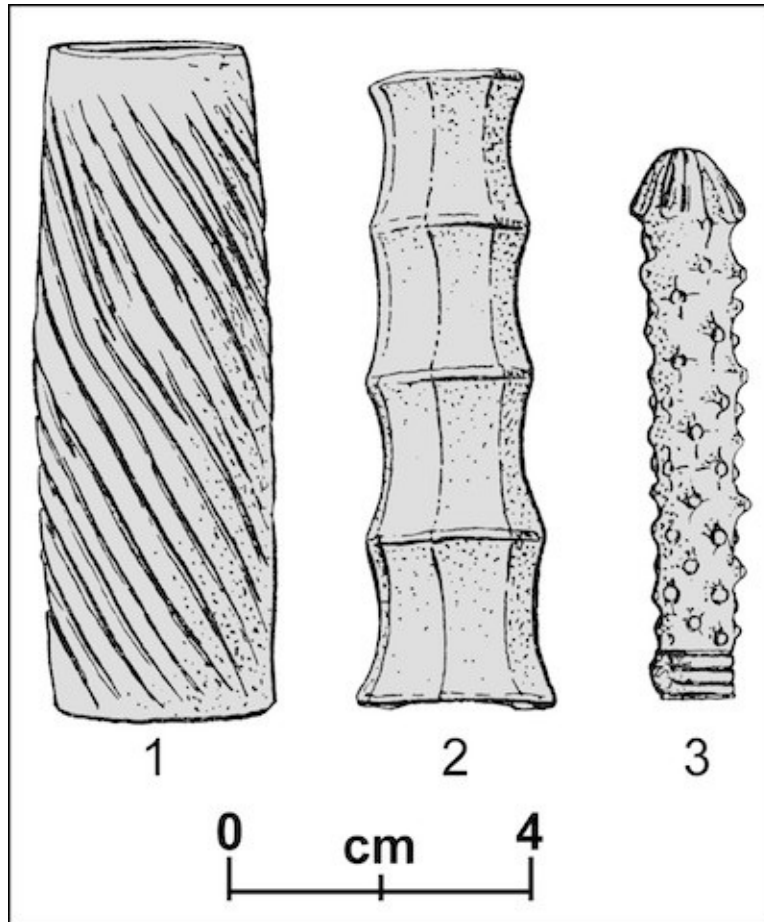


Fig. 16: Bone grip sleeves of swords (1-2) and knives (3) from the Roman Principate: examples from the legionary fortress in Mainz (after Behrens 1912, fig. 20,1-2.4).

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What is unusual about the grip is the fact that it is simply made of cloth wrapped around the tang (Fig. 12.1). Judging from other swords of the Roman Principate, one would most probably have expected a Roman or Roman-influenced sword to have a solid, tube-shaped, wood or bone grip sleeve, slid onto the tang (Fig. 16.1–2).⁴⁸ Among the earliest archaeologically attested Roman grips of this kind are cylindrical to barrel-shaped grip sleeves with their surface decorated with parallel grooves/cannelures running along the axis of the grip or spirally around it (Fig. 16.1). A relatively homogenous group of similarly produced grips, with a certain chronological concentration in the Augustan and Tiberian period, presumably draws on Republican traditions.⁴⁹ The census-relief

of the so-called Ara of Domitius Ahenobarbus in Rome (late second to first half of the first century BC)⁵⁰ shows Roman soldiers, and a depiction of a sword grip with similar cannelures (Fig. 17), possibly supporting the aforementioned hypothesis. On the other hand, we cannot exclude that the spiral groove of this stone relief may just mean a simple textile or leather band wrapped tightly around the blade tang. Ultimately, it is conceivable that even the similarly arranged groups of grooves on the surface of the solid grip sleeve at the beginning of the Roman Principate represent an abstract decorative adaptation of an originally real wrapped feature. If we accept this last suggestion, the singularity of the remains of the sword grip from Soknopaïou Nesos could simply result from a modern research gap caused by the perishable character of the wrapping material.

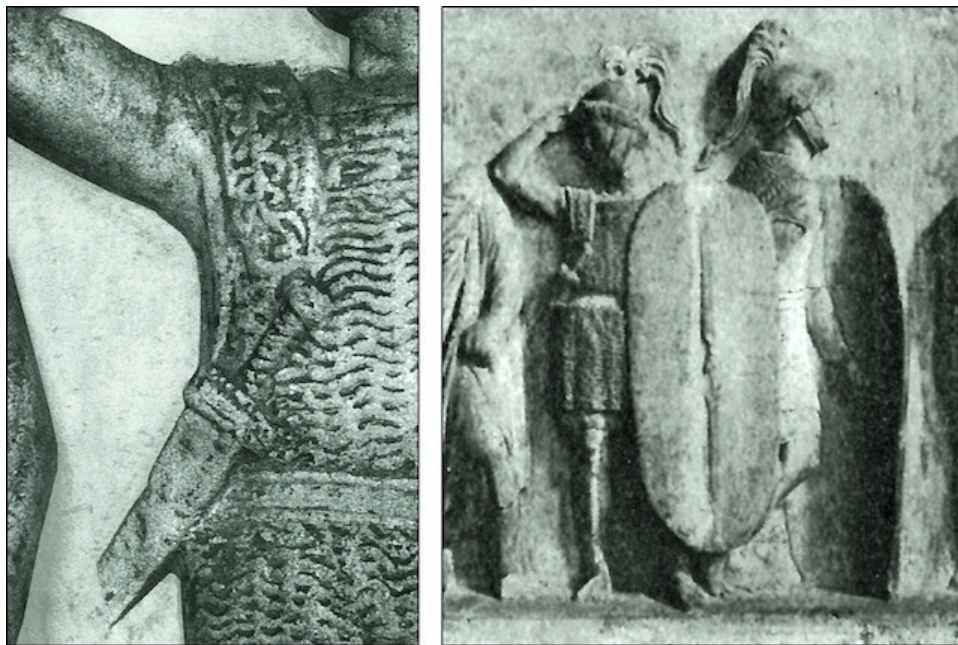


Fig. 17: Soldiers on the «Census-Relief» from the so-called «Ara of Domitius Ahenobarbus» in Rome (Musée du Louvre Paris); late 2nd century to first half of the 1st century B.C.: details of the sword and full view (left image after Miks 2007, pl. 294,C; right image after Michon 1909, fig. 1).

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Fig. 18: Grave stela from the Certosa necropolis in Bologna; second half of the 5th century B.C.: detail and full view (after Morigi Govi, Sassatelli 1984, pl. pp. 312/313).

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Fig. 19: Arms reliefs on two screen panels of the porticus ballustrades in the sanctuary of Athena from Pergamon; around ca. 183 B.C.: full view and details of the swords (after Droysen 1885, pls. 43-44,1).

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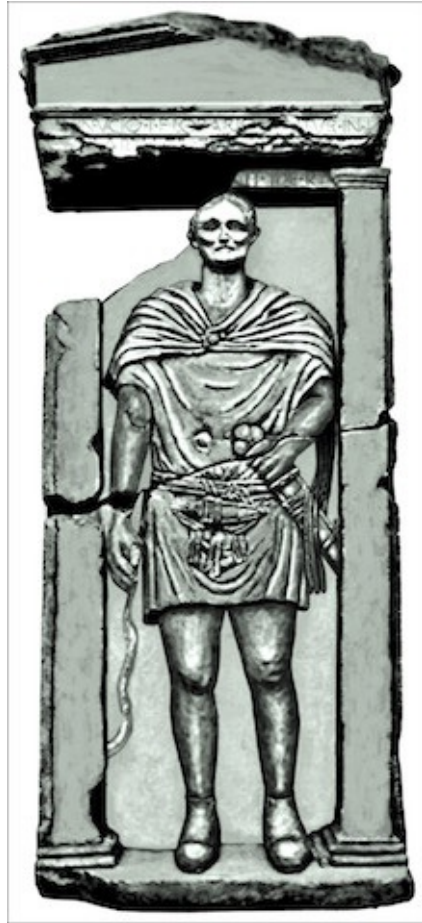


Fig. 20: Epitaph of Minucius, a Centurio of Legio [M]artia, in Padua; ca. 44-42 B.C. (after Franzoni 1987, pl. 13).

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Fig. 21: Depiction of riders (detail) on a relief of a pillar tomb from Arlon (Belgium); ca. third quarter of the 1st century A.D. (after Junkelmann 1992, fig. 163).

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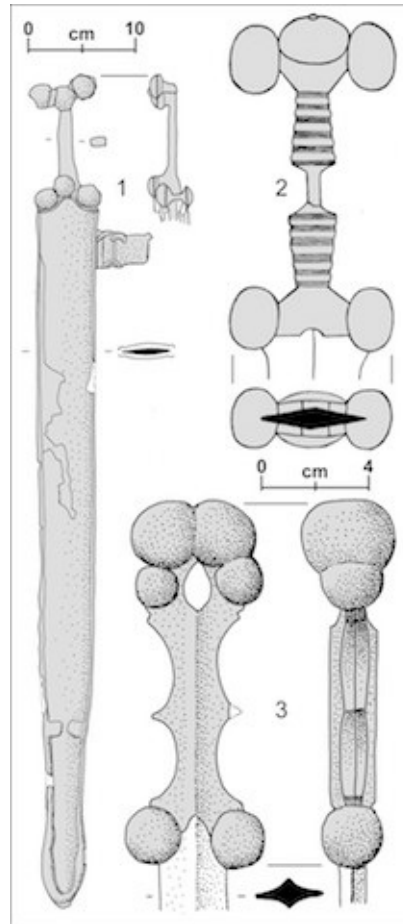


Fig. 22: Examples of hilt elements with “knobbly” structures in sword finds from the late Hallstatt and Latène period: 1. from grave 1 of the Saint-Maur-des-Fosses necropolis, Dép. Val-de-Marne, France; ca. second quarter of the 3rd century B.C. (redrawn after Leconte 1990-1991, fig. 5.1). 2. from the river Saône near Mâcon, Dép. Saône-et-Loire (France; after Ferry 1870, pl. 41,2a-b). 3. so-called « Knollenknaufschwert » from the Danube near Ulm, Baden-Württemberg (redrawn after Richter & Jahn 1925, fig. 1).

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Fig. 25: Fragment of a funerary stela from Kadiköy/Chalkedon,
Istanbul (Musée du Louvre Paris); ca. early 1st century B.C.
(after Pfuhl & Möbius 1979, pl. 321,2272).

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Fig. 26: Relief plate with the divine triad Baal-Shamin, Aglibol and Malakbel, found on the Bir Wereb in Wadi Miyah near Palmyra (Musée du Louvre, Paris); ca. first half of the 1st century A.D. (Photo: © 1997 RMN / Hervé Lewandowski; source: <http://www.louvre.fr/en/oeuvre-notices/divine-triad>; used under the terms noted at <http://www.louvre.fr/en/conditions-use-images>).
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Fig. 27: Soknopaïou Nesos: votive (?) miniature sword made of lead, found near the southern temenos wall in the temple precinct (courtesy of SNP).

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Lastly, the classification of the pommel made of ebony is no less problematic (Fig. 11, Fig. 12). The contours of its front side present a shape that is so far mainly familiar from ancient reliefs. Worth mentioning are, for example, the early hilts of Celtic warriors on Etruscan monuments, as for example a stela from the Certosa necropolis in Bologna, ancient Felsina, ([Fig. 18] second half of the fifth century BC);⁵¹ or the hilts of captured Galatian arms on the balustrade screens in the Athena sanctuary from Pergamon ([Fig. 19.2–2a] around 183 BC),⁵² and finally representations of swords in the context of late Republican to early Imperial Roman army equipment, as for instance on the epitaph of the centurion Minucius in Padua (Fig. 20, ca. 44–42 BC)⁵³ or the

relief blocks of a pillar tomb with the scene of an equestrian combat from Arlon (Belgium [Fig. 21] ca. third quarter of the first century AD).⁵⁴ Both the latter monument, possibly representing Gaulish auxiliary cavalry of the Roman army, and the Pergamene arms reliefs or monuments such as the stela from Bologna, which ought to be considered alongside further Italian representations of barbaric warriors with similar sword hilts,⁵⁵ could support the hypothesis that such hilts were inspired by Celtic armament. This had similarly structured metal hilt elements, both three-dimensional objects (Fig. 22.2)⁵⁶ – especially on the so-called “Knollenknaufschwerter” with knobbly pommels (Fig. 22.3)⁵⁷ – as well as riveted elements on the front side combined with hilt components made of organic material (Fig. 22.1),⁵⁸ as is evidenced already for the late Hallstatt/early Latène period. Irrespective of the fact that the so-called *gladius hispaniensis* is the adaptation of a special blade shape from Celtiberian armament, it seems questionable whether Celtic hilt forms developed such a great impact as to have the centurion Minucius in Padua (Fig. 20) and numerous other Roman officers be depicted on Italian funerary or honorary monuments of the first century BC with similarly designed sword- or dagger-pommels.⁵⁹ Examples are, among others, the reliefs in Modena (Italy; [Fig. 23] ca. second half of the first century BC),⁶⁰ in Mentana (Italy; [Fig. 24] 40–30 BC),⁶¹ in Isernia (Italy; around 27 BC)⁶² or in the Museum of Fine Arts in Boston (ca. last quarter of the first century BC).⁶³ It is striking that – apart from the relevant hilts – the other equipment presented on the mentioned monuments, or more precisely, the armament and the clothing (such as *linothoraces* or muscle cuirasses, *pteryges* and *paludamenta*) and – as far as identifiable – also the manner of bearing the sword on the *balteus* display unequivocal Hellenistic-Italic traditions. Occasionally, this connection is even unquestionable for the hilt of the sword/dagger, as for example on an Augustan epitaph in the Carlsberg Glyptothek in Copenhagen.⁶⁴ As on the above-mentioned relief from Mentana (Fig. 24), the officer is represented with nothing but a draped *paludamentum* in otherwise heroic nudity. He thus carries on the tradition of the idealized Hellenistic image of the ruler,⁶⁵ which in this case is further emphasised by the hilt of a Graeco-Italian *xiphos*. Following on from the strong Hellenistic

influences, evident in the aforementioned Roman relief depictions, we are confronted with the question whether spherical structured forms of pommels actually ought to be stressed as an element which emanates from Celtic influence, or whether Hellenistic armament can have had similar pommels. In the absence of significant archaeological finds from Eastern Mediterranean contexts of the third to the first century BC, we cannot give a secure answer to this question. At least the tang of the sword from Delos (*terminus ante quem* around 69 BC)⁶⁶ mentioned above (Fig. 14.4), with its preserved mushroom- or ball-headed rivets from the fitting of a previously organic pommel, could represent a suitable clue, if we were to consider that the piece need not necessarily be an imported Roman weapon.⁶⁷ We can perhaps gather the best impression of the former appearance of this pommel by consulting early Roman Imperial reliefs from the oasis town of Palmyra, which show armed gods in an hybrid Hellenistic-oriental style (e.g., Fig. 26).⁶⁸ On top of the local costume, these gods wear *pteryges*, and finally also a muscle cuirass or, alternatively, an oriental lamellar armor resembling Hellenistic *linothorax* (including *fascia* and *chlamys*). According to oriental custom, the sword is mostly fixed to a narrow waist belt but has a frame-scabbard with two carrying clamps (suspension bands), corresponding to early Roman Imperial weapons. In so far as discernible, the hand-guards of these swords often demonstrate a more or less high angular shape, such as those represented already on Greek weapons on the balustrade screens (Fig. 19.2b–c) from Pergamon (ca. 183 BC)⁶⁹ or on eastern Greek epitaph reliefs from the second to first century BC (Fig. 25).⁷⁰ Most probably, the shape is to be interpreted as a reminiscence of the wide angular scabbard lockets of traditional Graeco-Italic *xiphē*.⁷¹ The oriental and Mediterranean details of costume and armor are now joined and complemented by “knobbly” sword pommels, which are represented en masse on Palmyrene reliefs of gods of the late first century BC to first century AD. According to the proportions of the individual “knobs” to one another, here, too, we can observe both depictions which – regarding the sword from Delos – could indicate an organic spherical pommel with a fitting of metal mushroom- or ball-headed rivets,⁷² as well as depictions in which the exterior contours and interior composition of the front

side perfectly correspond to the preserved ebony pommel of the sword from Soknopaiou Nesos (Fig. 11, Fig. 12). The most striking examples in this context are provided by the much cited Palmyrene relief plate (ca. first half of the first century AD) with the divine triad Baal-Shamin, Aglibol and Malakbel in the Louvre in Paris since 1945 (Fig. 26).⁷³ Although we cannot exclude the possibility that Celtic south-east migrations during the third century BC⁷⁴ started a massive Celtic influence on Hellenistic sword equipment, possibly continued by the Galatian colonization in central Anatolia, it has little explanatory force for the concentration of “knobbly pommels” in divine depictions in a Hellenistic-oriental desert metropolis.⁷⁵ Unfortunately, the Palmyrene wealth of significant sword depictions from the beginning of the early Roman Principate is unique in the Parthian Empire and its peripheral areas. Even from Ptolemaic to early Roman Egypt, no contemporary illustrations of swords seem to be available, as far as the authors know, which indicates once more that the “knobbly pommels” could have been usual elements of a late Hellenistic oriental form tradition or merely that they were frequently used in the region in question, respectively the Fayyum or even the closer surroundings of Soknopaiou Nesos.⁷⁶ Related considerations notwithstanding, a miniature sword/dagger (Fig. 27; SO12-/3852) of lead (length just above 6 cm) which evokes Celtic-influenced late Iron Age sword hilts (Fig. 15,4),⁷⁷ was found near the Southern wall of the *temenos* in Soknopaiou Nesos and was possibly once donated as a votive.⁷⁸ The bent design of its grip/hand-guard⁷⁹ could serve as a reminder that the possibility of Celtic/Galatian foreign influences should not be ignored entirely even in the Fayyum.⁸⁰

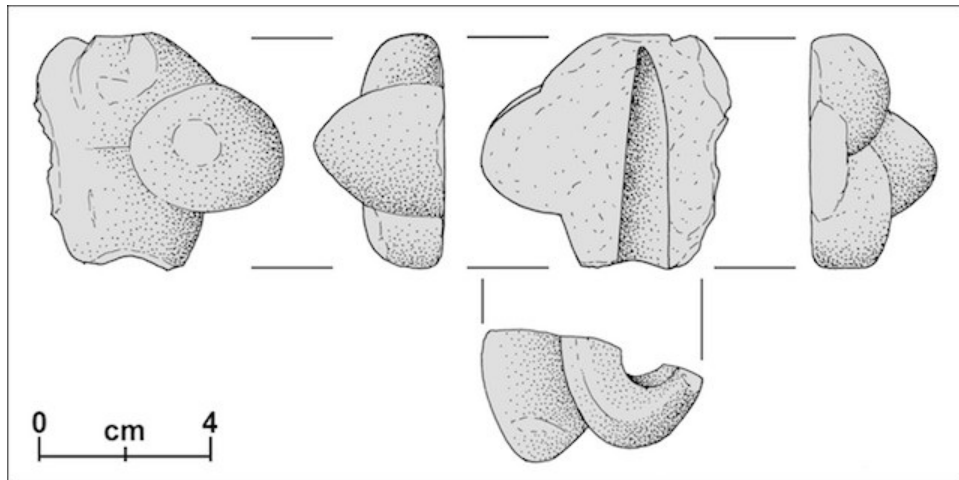


Fig. 28: Fragment of an assumed “knobbed mace-head” made of serpentine, found in grave 26 (Naqada II-period) in the pre-dynastic elite necropolis HK6 from Hierakonpolis; ca. first half of the 4th millennium B.C. (after Sievertsen 2008, fig. 2-3).

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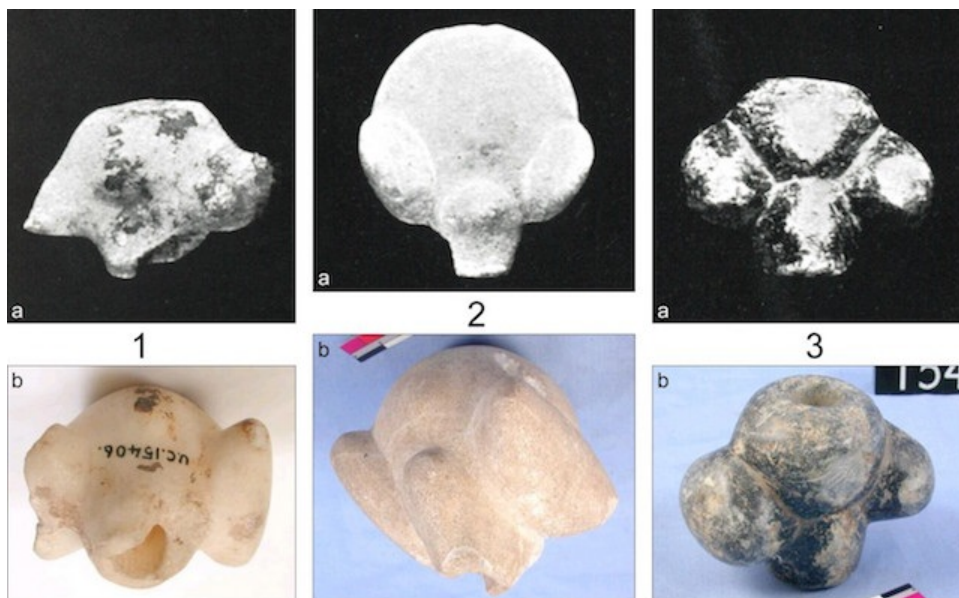


Fig. 29: Alleged pre-dynastic “knobbed mace-heads” of quartz (1), calcite (2) and steatite (3) in the Egyptian collection of the University College London (inv.-nos. 15406, 15407 & 15408), purchased on the Egyptian antiquities trade (1-2) and in Upper Egypt (3), sites unknown (images 1a-3a after Petrie 1920, pl. 26, 61.63.65; Photos 1b-3b: Petrie Museum © 2013 UCL [trimming and presentation under the terms of CC BY-NC-SA license, version 3.0]).

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Fig. 30: Presumed “knobbed mace-head” (Cairo Egyptian Museum J.E. 25554) made of serpentine(?), found in Luxor (Photos: © Ch. Eckmann [RGZM Mainz] by courtesy of the Egyptian Museum Cairo).

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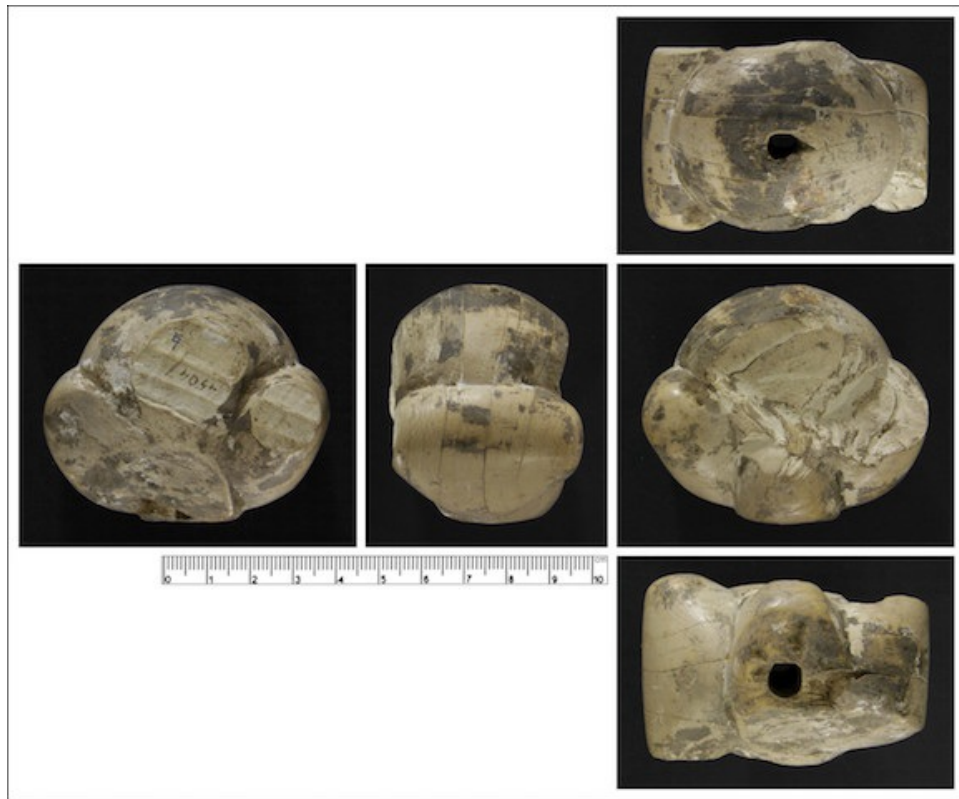


Fig. 31: Damaged, putative “knobbed mace-head” (Cairo Egyptian Museum J.E. 45047) made of ivory, found in Mit Rahina in 1914 (Photos: © Ch. Eckmann [RGZM Mainz] by courtesy of the Egyptian Museum Cairo).

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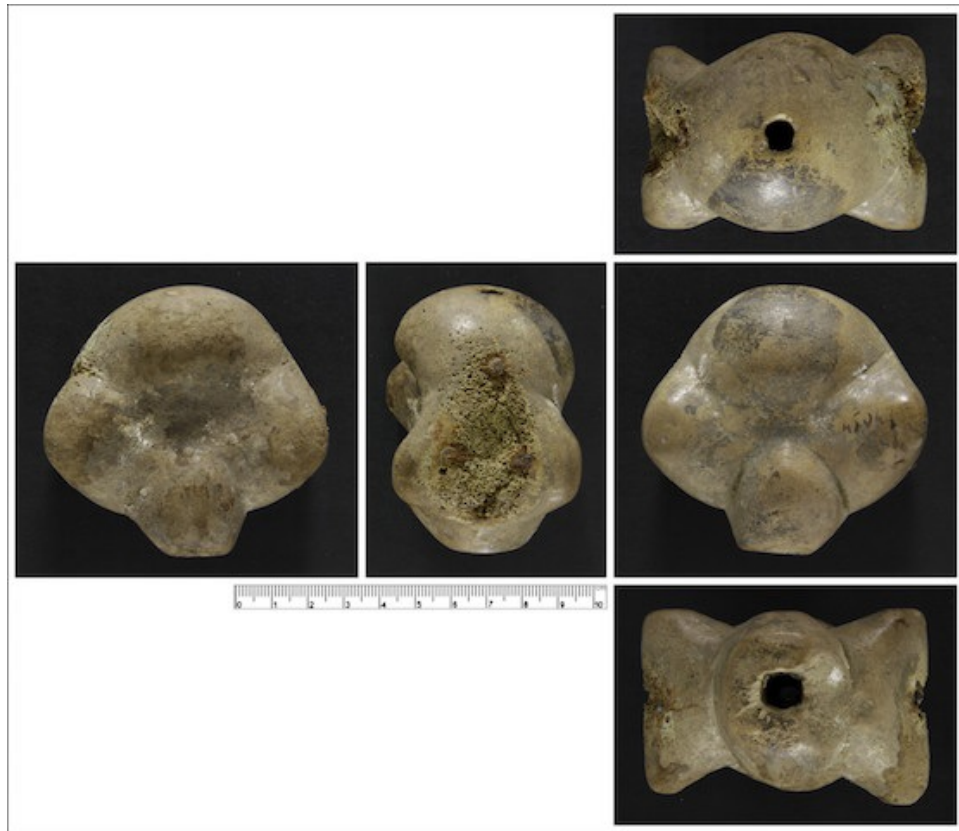


Fig. 32: Presumed “knobbed mace-head” (Cairo Egyptian Museum J.E. 45047) made of horse (?) bone (with iron nails originally fastening now lost cover sheets/pieces), found in Mit Rahina in 1914 (Photos: © Ch. Eckmann [RGZM Mainz] by courtesy of the Egyptian Museum Cairo).

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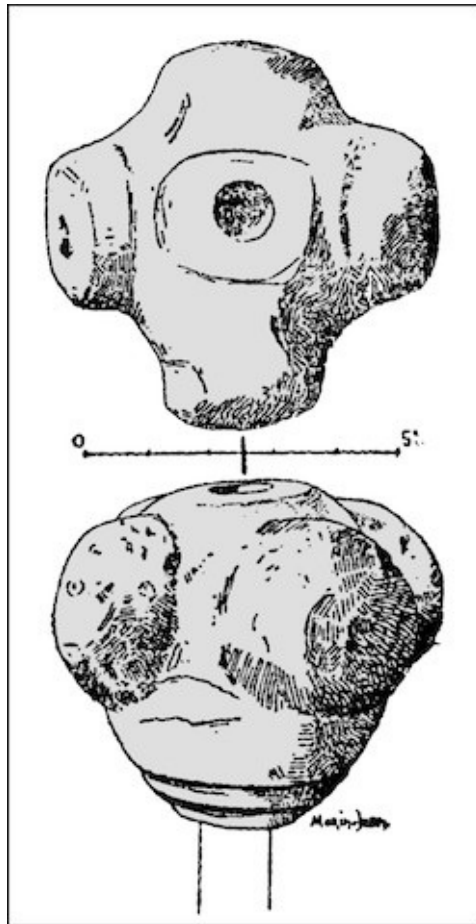


Fig. 33: Knobbed mace-head, made of white limestone, found in regular excavations in the settlement of Susa, Iraq; final 5th/early 4th millennium B.C. (after De Morgan 1912, fig. 109).

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Irrespective of the above discussion, the choice of ebony as the material for the sword pommel of the weapon from Soknopaïou Nesos (Fig. 11, Fig. 12) does not seem to suggest an import from Europe or Asia Minor. A closer inspection reveals, in addition, that the model and comparable examples for its entire form can ultimately not be established in the La Tène milieu. This becomes apparent as soon as the pommel is regarded not just from the front, and the barely latèneide spindle-shaped/cylindrical shape of the lateral “knobs” can be appreciated more clearly. Viewed from above (Fig. 11.2, 12.2–3), the piece has contours rather like the head of a hammer. Surprisingly, an intensive review of

Egyptian small finds has directed us to a group of rare objects, which are entirely or partially similar to the presented sword pommel, not just looking from the top, but also from the front. However, these small finds are manufactured of stone or of bone, and, according to W. M. Flinders Petrie,⁸¹ they are interpreted as pre-dynastic mace-heads. While many of these finds cannot be dated with greater precision, the damaged longitudinal half of a similar “knobbed mace-head” of green serpentine (Fig. 28), found in 2006 in grave 26 (ca. first half of the fourth millennium BC; Naqada period II) in the pre-dynastic elite necropolis HK6 at Hierakonpolis,⁸² seems to preliminarily confirm this dating. Three further “knobbed mace-heads” made of quartz (Fig. 29.1a–b; height: 47 mm), calcite (Fig. 29.2a–b; width/height: 77 x 70 mm) and of dark green steatite (Fig. 29.3a–b; width/height: 69 x 55 mm),⁸³ were acquired on the Egyptian antiquities market in Upper Egypt by the Egyptian collection of University College London.⁸⁴ They seem to be more or less exact analogies to the sword pommel from Soknopaiou Nesos, but made of stone. At least three further good parallels are stored in the Egyptian Museum in Cairo.⁸⁵ One of them (Fig. 30, J.E. 25554) consists of green-black stone (presumably serpentine; width/height/depth: ca. 72 x 55 x 49 mm) and was found in Luxor/*Thebai*. The other two old finds (J.E. 45047) are from Mit Rahina/*Memphis* (1914) and are made of ivory (Fig. 31; width/height/depth: ca. 67 x 56 x 44–45 mm) and bone (Fig. 32; perhaps horse bone; width/height/depth: ca. 80 x 75 x 54–55 mm). The remains of small iron nails and discoloration from corrosion in the latter example (Fig. 32) show that the cancellous bone protruding from both narrow sides was covered by non-ferrous metal sheets. Unfortunately, there is no further information on the find contexts of the three pieces in the Cairo Egyptian Museum, as was the case for the London collection. The “knobbed mace-heads” represent a comparatively insignificant number within the spectrum of the shapes of Egyptian mace-heads.⁸⁶ Their appearance is attributed to Near Eastern influences in the first half of the fourth millennium BC.⁸⁷ Literature, partly dating back nearly a century,⁸⁸ has referred to the Near Eastern knobbed mace-heads from *Susa*, Iraq (Fig. 33; final fifth / early fourth millennium BC)⁸⁹ and from grave 114 at Tepe Gawra near *Khorsabad* (Iraq, ca. 4000–3800 BC)⁹⁰ as the ideal examples or

predecessors of the Egyptian ones. However, these objects are essentially rather representatives of the large group of “pear-shaped mace-heads” with mainly smooth surfaces, including three to four semi-spherically protruding round to oval bumps, almost resembling applications. Even though a “pear-shaped mace-head” made of pink limestone and with three knobs from the Naqada-II-period grave 3740 at Badari⁹¹ may support the idea of the influence of these Near Eastern knobbed mace-heads on the Egyptian development of mace-heads, it does not suffice to determine a coherent line of development toward those Egyptian examples with more strongly subdivided forms like those in the sword hilt from Soknopaiou Nesos.⁹² Nevertheless, because of the mentioned fragments of mace-heads from grave 26 (HK6) from Hierakonpolis (Fig. 28) the appearance of this shape as early as the fourth millennium BC cannot be argued away.

In light of the above observations, we must of course face the question of how the existence of a sword pommel of identical design can be explained in an almost four millennia younger weapon.

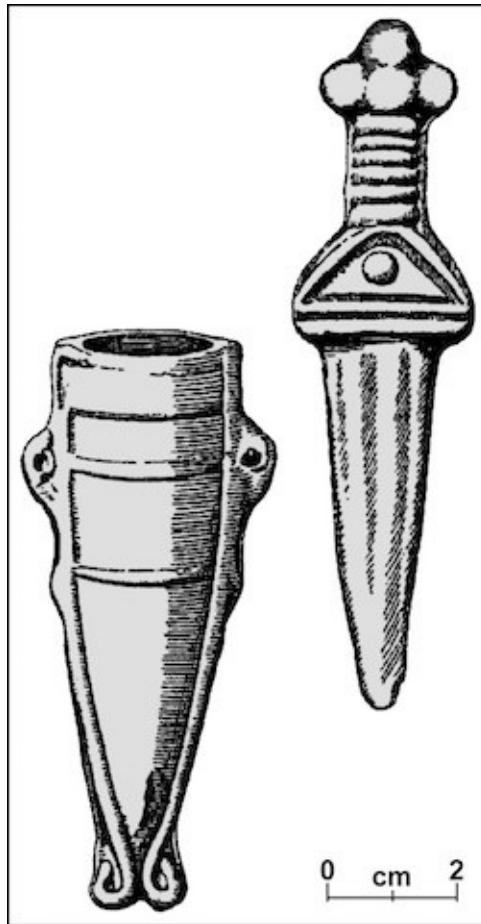


Fig. 34: One of several miniature daggers, made of terracotta, found during excavations of a terracotta workshop (site n. 9 [5]) in ancient Naukratis near An-Nibayrah (British Museum London, GR 1886.4-1.1537); Ptolemaic period (after Walters 1903, fig. 53).

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An initially intuitive explanation could be that a mace-head that was already an antiquity in the Ptolemaic/Augustan period, possibly having been dug up from the ground, could have been mounted in secondary usage to a contemporary sword due to its pleasing form or other motivations. However, the numerous depictions of comparable pommels on contemporary Roman and Hellenistic/oriental monuments discussed above necessarily refute this explanation. What is more, a range of locally produced Ptolemaic to early Roman miniature swords/daggers of terracotta are known from Egypt, some of which present comparable pommel shapes to that of the sword of Soknopaiou

Nesos, including an attached, horizontally ribbed grip (possibly imitating a wrapped feature?). The finds from an apparently Hellenistic terracotta workshop in the eastern part (site no. 9[5]) of the antique Naukratis near An-Nibayrah⁹³ are just one example (Fig. 34). Bearing this in mind, we must rather question whether the one or the other object is similarly a pommel of Hellenistic to Roman dating, rather than, as interpreted so far, a pre-dynastic “knobbed mace-head.” Such a function is readily conceivable for the two bone examples from the Cairo Egyptian Museum (Fig. 31, Fig. 32), and it should not be entirely excluded even for stone representatives. This way, we can trace the use of sword elements made of stone (among others, scabbard-slides, hand-guards and pommels), which originate from middle- or east Asian influences, in the North Pontic, South Russian area and in the Near East throughout the entire Roman Imperial period.⁹⁴ It is noteworthy that some of the presumably pre-dynastic Egyptian “knobbed mace-heads” contrast to the majority of the other forms of mace-heads by their common feature of a shaft hole, clearly conical to the upper point of emergence, and markedly angular to rectangular at the lower end. The majority have a pierced drill hole, which is straight, only slightly conical or even vaguely hourglass-shaped at the mounting, with a round cross section. This peculiarity could obviously simply be intended to prevent an arbitrary contortion of the “knobbed mace-head” out of its shaft because of its special, irregular design. Still, we must observe that these angular and conical drilled passages correspond to the ideal design of a tang’s passage on early to middle Roman Imperial sword pommels of Roman style. Such considerations notwithstanding, the question remains whether there were circumstances that induced the long survival of an evidently pre-dynastic form of mace-head until its deployment as a pommel for a late Ptolemaic to early Augustan weapon. The importance of the mace as a symbol of power and domination in the Near East and Egypt seems the only conceivable explanation.⁹⁵ This role lies behind the use of the mace as a consistent component of the attributes of oriental deities.⁹⁶ Assuming this much, there is finally the question whether the mace-head, the characteristic element of this symbol of power, was shifted from the shaft of a mace to the tang of a sword in the course of an iconographic change in the images of the gods. The

accumulation of knobbly pommels or those similar to knobbed mace-heads could, in this term, be easily apprehended in relation with depictions of deities in Palmyra (Fig. 26). This does not necessarily imply that the actual transferral of the mace-head shape, as displayed by the sword from Soknopaiou Nesos (Fig. 11, Fig. 12), was really understood as a personal symbol of power for the respective sword-bearer. The possibly intentional divine reference could rather point to a military symbol of victory and/or assistance or an apotropaic function, as similarly discussed for Roman pendants and knife or sword hilts in the shape of “Hercules maces” (Fig. 16.3).⁹⁷ On the basis of this interpretation, the cultural reciprocity between Occident and Orient during Alexander’s campaigns, or the subsequent empires of Alexander’s successors, might have facilitated an adaptation and western diffusion of the “knobbed mace-head”/knobbly pommel form by means of the Hellenistic sword armament, up to the depiction of “knobbly” sword hilts on monuments in late Republican Italy.

IV. Conclusions (P. Davoli, Ch. Miks)

The shape and dimensions of the sword from Soknopaiou Nesos (Fig. 11) suggest a classification as a *spatha* of the Nauportus type. The design of the scabbard and hilt encourages a dating to the second half of the first century BC or, at the latest, to the Augustan period. According to current state of research, it counts as a Roman or Roman-influenced weapon. Nevertheless, the aforementioned conclusion has to be tempered by the fact that so far the development of Hellenistic swords during the last three centuries BC is quite unclear. Due to the lack of a solid amount of preserved real weapons our knowledge in that matter is mainly dependent on more or less detailed and sometimes quite fanciful iconographical sources in the fine arts. It remains substantially unclear how and when the design of Hellenistic swords possibly picked up certain developments and inspirations from the western Mediterranean area, particularly Spain and Italy, but also Gaul, and to which degree these inspirations were related to Greek traditions and potentially oriental influences.⁹⁸ In this respect, we must be aware that the partial or full classification of a few swords found in East Mediterranean sites of the Hellenistic period, such as from a grave in Jericho (West Bank; [Fig. 14.3]; ca. first half of the second century BC)⁹⁹ and from the settlement finds in Delos (Fig. 14.4; *terminus ante quem* 69 BC),¹⁰⁰ as Roman *gladii hispanienses* is quite precarious.¹⁰¹ Otherwise the sword from Soknopaiou Nesos would now theoretically be the third contextualized “foreign find” of this kind in the eastern Mediterranean, while an example of the “regular” late Hellenistic swords, which should be used by the majority in that region during the mentioned time, would be so far completely unknown to scholarship. However, the blade of the weapon from Soknopaiou Nesos has the dimensions of a long sword, and even with the greatest tolerance, we can no longer assume its use by heavy Roman line infantry, i.e., by legionaries. We can consider that in the late Republican Roman army at least infantry or cavalry auxiliary contingents were mainly composed of allied peoples with still strong indigenous elements of costume and armament.¹⁰² An accurate analysis of the preserved hilt elements suggests that at least the “final mounting”

of the sword from Soknopaiou Nesos presumably took place in an oriental, perhaps even Egyptian workshop. With regard to its postulated dating, it is also imaginable that it was used in the course of arming parts of late Ptolemaic troops. On the basis of this circumstance alone, special explanatory models of the sword's arrival in the Fayyum are redundant. On the other hand, countless possibilities arise – even for a weapon from a Roman armory¹⁰³ – in the context of Roman-Egyptian relations and conflicts as early as the period between the reinstatement of Ptolemy XII (80–51) in 55 BC, possible thanks to a Roman military intervention, and the establishment of Egypt as a Roman province in 30 BC.

Soknopaiou Nesos itself was, nevertheless, neither a settlement under military influence, nor one displaying evidence for a military installation in its surroundings, which could directly associate the sword with a garrison. The settlement was essentially inhabited by Egyptians,¹⁰⁴ and most of the activities represented in papyri are related to the temple, trade, and the breeding of camels. Roman soldiers are mentioned in second and third-century AD papyri with the function of supervising affairs within the *kome* and of receiving materials for the army by the local priests.¹⁰⁵ The last transactions are witnessed by regular receipts.¹⁰⁶ A number of petitions from Soknopaiou Nesos (first to third century AD) are addressed to a *centurio*, but it is unclear where these centurions lived.¹⁰⁷ The presence of soldiers in many villages of the Fayyum, both from the Ptolemaic period and the Roman Principate, is well known from papyri and other written sources. In this context, the find of a Hellenistic or Roman sword in Soknopaiou Nesos should not really come as a surprise, regardless of whether members of the army lived in the town or not. In addition, the place of discovery of the weapon, i.e., within the *temenos* of the main temple, could be significant for the question of the function it served in its last phase. It cannot be stressed enough that the find context was not reliable from an archaeological point of view, as the sword was no longer in its original place of deposition, but instead displaced secondarily, possibly even in recent times. The same can be stressed for the other archaeological contexts where a few other *militaria* have been found, like an iron and a bronze arrowhead (ST10/706/3346 and

ST12/851/3991) of different shapes and dating, as well as the above mentioned miniature lead sword (Fig. 27; SO12/-/3852).¹⁰⁸ It is nevertheless not questionable that all these weapons have been found inside the *temenos*.

In short, there are two possible explanations of the final function of the sword. Either it was an “active” weapon until its deposition somewhere in the *temenos*, belonging to the defensive repertoire of the settlement and/or the sanctuary, or it was a votive object dedicated to the temple, maybe exhibited for a certain time, and then stored in an adjoining building (ST 21?) or, perhaps, ritually buried.¹⁰⁹

In the first case, we have to assume that the sword was discarded as an obsolete weapon, given its date and the long life of the settlement, which was abandoned in the mid-third century AD. Its deposition place was in the surface layer made of sand and debris and thus cannot be considered as a first century BC level.

In the second case, the sword must be classified as an individual votive offering rather than as part of a larger offering of war booty, due to the lack of other items of coeval armament. Depending on its original owner, it can thus have had a decisive individual symbolic value¹¹⁰ or have been of supra-regional importance.¹¹¹ Assuming a certain time of use, it seems plausible that it was dedicated at the latest in the early first century AD. Nonetheless, this does not exclude the possibility of a much earlier date for its dedication and removal from the original exhibition place already during the renovation of the temple at the end of the Ptolemaic/beginning of the Roman period.¹¹²

All these considerations are merely speculative until future excavations will possibly yield new finds in more reliable contexts that can illuminate the meaning of the presence of weapons within the temple precinct, as well as the significance of the presence of soldiers in Soknopaiou Nesos.

Bibliography

- Alston, R. 1995. *Soldier and Society in Roman Egypt. A Social History*, London, New York.
- Andronicos, M. 1984. *Vergina. The royal tombs and the ancient city*, Athens.
- Bailey, D. M. 2008. *Catalogue of the Terracottas in the British Museum IV: Ptolemaic and Roman Terracottas from Egypt*, London.
- Baitinger, H. 2011. *Waffen Weihungen in griechischen Heiligtümern*. Monographien des Römisch-Germanischen Zentralmuseums 94, Mainz.
- Behrens, G. 1912. "Neue Funde aus dem Kastell Mainz," *Mainzer Zeitschrift* 7, 82–109.
- Beylier, A. 2012. *L'armement et le guerrier en Méditerranée nord-occidentale au premier âge du Fer*. Monographies d'Archéologie Méditerranéenne 31, Lattes.
- Beylier, A., A.-M. Curé, E. Gailledrat and S. Munos 2012. "Les épées à sphères du Cayla de Mailhac (Aude): nouvelles données chronologiques," *Bulletin de l'Association Française pour l'Étude de l'Âge du Fer* 30, 11–13.
- Bianchetti, E. 1895. "I sepolcreti di Ornavasso," *Atti della Società di Archeologia e Belle Arti per la Provincia di Torino* 6, 1–297.
- Biborski, M. 1994a. "Die Schwerter des 1. und 2. Jahrhunderts n. Chr. aus dem römischen Imperium und dem Barbaricum," *Specimina Nova* 9, 91–130.
- Biborski, M. 1994b. "Römische Schwerter im Gebiet des europäischen Barbaricum," *Journal of Roman Military Equipment Studies* 5, 169–197.
- Biborski, M. 2004. s. v. *Schwert*, §4–5, in J. Hoops, *Reallexikon der Germanischen Altertumskunde* 27, Berlin and New York, 549–568.
- Biborski, M., and J. Ilkjær. 2006. *Illerup Ådal 12. Die Schwerter*. Jutland Archaeological Society Publications XXV:12, Aarhus.
- Bienkowski, P. R. v. 1908. *Die Darstellungen der Gallier in der hellenistischen Kunst*, Vienna.
- Bishop, M. C., and J. C. N. Coulston. 2006. *Roman Military Equipment. From the Punic Wars to the Fall of Rome*, second Edition, London.

- Brunton, G., and G. Caton-Thompson 1928. *The Badarian Civilisation and Prehistoric Remains near Badari*, British School of Archaeology in Egypt & Egypt Research Account 46, London.
- Budde, L. 1973. "Das römische Historienrelief I," in H. Temporini (ed.), *Aufstieg und Niedergang der Römischen Welt*, I,4, Berlin and New York, 800–804.
- Calmeyer, P. 1976–1980. s. v. *Keule* (B. Archäologisch), in D.-O. Edzard (ed.), *Reallexikon der Assyriologie und Vorderasiatischen Archäologie*, Berlin and New-York, V, 579–583.
- Capasso, M., and P. Davoli (eds.) 2012. *Soknopaiou Nesos Project I (2003–2009)*, Rome and Pisa.
- Caputo, C. 2012. "Le terrecotte figurate," in M. Capasso and P. Davoli (eds.), *Soknopaiou Nesos Project I (2003–2009)*, Rome and Pisa, 363–378.
- Cardarelli, A. (ed.) 1988. *Modena dalle origini all'anno Mille*. Studi di archeologia e storia 2. Catalogo di mostra, Galleria Civica, Comune di Modena 1989, Modena.
- Chaume, B., and A. Rapin 1999. "Quelques réflexions d'ordre technochronologique sur le poignard à «antennes» de Larçon (commune de Salives, Côte-d'Or)," in B. Chaume, J.-P. Mohen and P. Périn (eds.), *Archéologie des Celtes. Mélanges à la mémoire de René Joffroy. Protohistoire européenne*, Montagnac, 49–68.
- Ciałowicz, K. M. 1987. *Le têtes de massues des périodes prédynastique et archaïque dans la vallée du Nil*. Prace archeologiczne 41, Warsaw and Krakow.
- Connolly, P. 1997. "Pilum, Gladius and Pugio in the Late Republic," *Journal of Roman Military Equipment Studies* 8, 41–57.
- Couissin, P. 1929. "Les armes gauloises figurées sur les monuments grecs, étrusques et romains. Deuxième partie," *Revue Archéologique* (Ser. 5) 29, 235–280.
- Crawford, M. H. 1974. *Roman Republican Coinage*, Cambridge.
- Cuvigny, H. 2010. "Un reçu de rations militaires contre paiement des publica,"

- in K. Lembke, M. Minas-Nerpel, and S. Pfeiffer (eds.), *Tradition and Transformation: Egypt under Roman Rule. Proceedings of the International Conference, Hildesheim, 3–6 July 2008*. Culture and History of the Ancient Near East 41, Leiden and Boston, 37–52.
- Daris, S. 1988. “Documenti minori dell’esercito romano in Egitto,” in *Aufstieg und Niedergang der römischen Welt*, II 10.1, 724–742.
- Davoli, P. 2012. “Lo scavo archeologico: 2003–2009,” in M. Capasso and P. Davoli (eds.), *Soknopaiou Nesos Project I (2003–2009)*, Rome and Pisa, 119–227.
- Davoli, P. 2014. “The Temple of Soknopaios and Isis Nepherses at Soknopaiou Nesos (El-Fayyum),” in G. Tallet and Chr. Zivie-Coche (éds.), *Le Myrte et la rose. Mélanges offerts à Françoise Dunand par ses élèves, collègues et amis*. CENIM 9, Montpellier, I, 51–58.
- De Morgan, J. 1912. “Observations sur les couches profondes de l’Acropole à Suse,” in J. de Morgan (ed.), *Mémoires de la Délégation en Perse*. Recherches Archéologiques 13, Paris, 1–25.
- Dentzer-Feydy, J. and J. Teixidor 1993. *Le antiquités de Palmyre au musée du Louvre. Catalogue du département des antiquités orientales*, Paris.
- Diebner, S. 1979. *Aesernia – Venafrum. Untersuchungen zu den römischen Steindenkmälern zweier Landstädte Mittelitaliens*. Archaeologica 8, Rome.
- Dixneuf, D. 2012. “Introduction à la céramique de Soknopaiou Nesos,” in M. Capasso and P. Davoli (eds.), *Soknopaiou Nesos Project I (2003–2009)*, Rome and Pisa, 315–362.
- van Driel-Murray, C. 1994. “Wapentuig voor Hercules,” in N. Roymans and T. Derks (red.), *De tempel van Empel. Een Hercules-heiligdom in het woongebied van de Bataven*. Graven naar het Brabantse verleden 2, ’s-Hertogenbosch, 92–107.
- Droysen, H. 1885. “Die Balustradenreliefs,” in R. Bohn, *Das Heiligtum der Athena Polias Nikephoros*. Altertümer von Pergamon 2, Berlin, 93–138.
- Ducati, P. 1910. “Le pietre funerarie felsinee,” *Monumenti Antichi dell’Accademia dei Lincei* 20, 356–727.

- Ferry de, H. 1870. *Le Mâconnais préhistorique. Mémoire sur les âges primitifs de la Pierre, du Bronze et du Fer en Mâconnais et dans quelques contrées limitrophes*, Mâcon and Paris.
- Feugère, M. 1993. *Les Armes des Romains de la République à L'Antiquité tardive*, Paris.
- Feugère, M. 1994. "L'équipement militaire d'époque républicaine en Gaule," *Journal of Roman Military Equipment Studies* 5, 3–23.
- Franzoni, C. 1987. *Habitus atque habitudo militis. Monumenti funerari di militari nella Cisalpina Romana*. Studia Archaeologica 45, Rome.
- Friedman, R. F. 2008. "Excavating Egypt's early kings: Recent discoveries in the elite cemetery at Hierakonpolis," in B. Midant-Reynes and Y. Tristant (eds.), *Egypt at its Origins 2. Proceedings of the International Conference "Origin of State. Predynastic and Early Dynastic Egypt," Toulouse (France), 5th–8th September 2005*. Orientalia Lovaniensia Analecta 172, Leuven, 1157–1197.
- Frielinghaus, H. 2011. *Die Helme von Olympia. Ein Beitrag zu Waffen Weihungen in griechischen Heiligtümern*, Olympische Forschungen 33, Berlin and New York.
- Gabelmann, H. 1973. "Römische Grabmonumente mit Reiterkampfszenen im Rheingebiet," *Bonner Jahrbücher* 173, 132–200.
- Gaerte, W., H. Ranke, P. Thomsen and B. Meissner 1926. s. v. *Keule*, in M. Ebert (ed.), *Reallexikon der Vorgeschichte*, Berlin, VI, 334–338.
- García Jiménez, G. 2012. *El armamento de influencia la Tène en la Péninsula Ibérica (siglos V–I a. C.)*, Monographies instrumentum 43, Montagnac.
- Gawlikowski, M. 1990. "Les dieux de Palmyre," in W. Haase (ed.), *Aufstieg und Niedergang der Römischen Welt* II, 18, Berlin and New York, 2605–2658.
- Gilbert, G. Ph. 2004. *Weapons, Warriors and Warfare in Early Egypt*, BAR International Series 1208, Oxford.
- Gendron, Ch., J. Gomez de Soto, T. Lejars, J.-P. Pautreau and L. Uran 1986. "Deux épées à sphères du Centre-Ouest de la France," *Revue Aquitania* 4, 39–54.

- Gostenčnik, K. 2005. *Die Beinfunde vom Magdalensberg. Archäologische Forschungen zu den Grabungen auf dem Magdalensberg 15*. Kärntner Museumsschriften 78, Klagenfurt.
- Graue, J. 1974. *Die Gräberfelder von Ornavasso. Eine Studie zur Chronologie der späten Latène- und frühen Kaiserzeit*. Hamburger Beiträge, Beiheft 1, Hamburg.
- Guštin, M. 1991. *Posočje in der jüngeren Eisenzeit – Posočje v mlajši železni dobi. Catalogi et monographiae*. Katalogi in monografije 27, Ljubljana.
- Himmelmann, N. 1989. *Herrscher und Athlet – Die Bronzen vom Quirinal. Ausstellungskatalog Bonn*, Milan.
- Hölbl, G. 1994. *Geschichte des Ptolemäerreiches. Politik, Ideologie und religiöse Kultur von Alexander dem Großen bis zur römischen Eroberung*, Darmstadt.
- Horvat, J. 1997. Roman Republican weapons from Šmihel in Slovenia, *Journal of Roman Military Equipment Studies* 8, 105–120.
- Horvat, J. 2002. The Hoard of Roman Weapons from Grad near Šmihel, *Arheološki Vestnik* 53, 117–192.
- James, S. 2011. *Rome & the Sword. How Warriors & Weapons Shaped Roman History*, London.
- Junkelmann, M. 1992. *Die Reiter Roms 3. Zubehör, Reitweise, Bewaffnung*, Mainz.
- Keppie, L. 1991. “A centurion of the legio Martia at Padova?,” *Journal of Roman Military Equipment Studies* 2, 115–121.
- Kimmig, W. 1940. “Ein Keltenschild aus Ägypten,” *Germania* 24, 106–111.
- Kiernan, Ph. 2009. *Miniature Votive Offerings in the north-west Provinces of the Roman Empire*. Mentor 4, Mainz and Ruppolding.
- Krämer, W. 1962. “Ein Knollenknaufschwert aus dem Chiemsee,” in J. Werner (ed.), *Aus Bayerns Frühzeit. Friedrich Wagner zum 75. Geburtstag*. Schriftenreihe zur Bayerischen Landesgeschichte 62, Munich, 109–124.
- Krier, J. and F. Reinert 1993. *Das Reitergrab von Hellingen. Die Treverer und*

das römische Militär in der frühen Kaiserzeit, Luxemburg.

Landolt, M. 2004. *La nécropole hallstattienne de Chaillon (Meuse)*. Mémoire de maîtrise, dactylographié, Université Marc Bloch, Strasbourg.

Landolt, M. 2005. “La nécropole hallstattienne de Chaillon (Meuse),” *Bulletin de l’Association Française pour l’Étude de l’Âge du Fer* 23, 41–43.

Leconte, L. 1990/1991. “Les nécropoles laténiennes de Saint-Maur-des-Fossés (Val-de-Marne),” *Antiquités Nationales* 22/23, 43–80.

Lohmann, H. 2009. “Die sogenannte Domitius-Ara,” in R. Einicke, S. Lehmann, H. Löhr, G. Mehnert, A. Mehnert and A. Slawisch (eds.), *Zurück zum Gegenstand. Festschrift für Andreas E. Furtwängler*. Schriften des Zentrums für Archäologie und Kulturgeschichte des Schwarzmeerraumes 16, Langenweißbach, 109–122.

Mansuelli, G. A. 1963. “Les monuments commémoratifs romains de la vallée du Pô,” *Monuments et Mémoires. Fondation Eugène Piot* 53, 19–93.

Mesnil du Buisson, Comte du, R. 1962. *Les tessères et les monnaies de Palmyre. Inventaire des collections du Cabinet des Médailles de la Bibliothèque Nationale*, Paris.

Michon, E. 1909. “Les bas-reliefs historiques romains du Musée du Louvre,” *Monuments et Mémoires* 17, 145–253.

Miks, Ch. 2007. *Studien zur römischen Schwertbewaffnung in der Kaiserzeit*. Kölner Studien zur Archäologie der Römischen Provinzen 8, Rahden/Westf.

Milner, N. P. (ed.) 1996². *Vegetius: Epitome of Military Science*, Liverpool.

Mitthof, F. 1994. “Quittung eines Soldaten an πρεσβύτεροι κώμης über verschiedene Lieferungen. Eine Neuedition von P. Alex. Inv. 463,” *Zeitschrift für Papyrologie und Epigraphik* 102, 207–212.

Morehart, M. 1956–1958. “Early sculpture at Palmyra,” *Berytus* 12, 53–83.

Morigi Govi, Cr. and G. Sassatelli (eds.) 1984. *Dalla Stanza delle Antichità al Museo Civico. Storia della formazione del Museo Civico Archeologico di Bologna*, Bologna.

Paysan, M. 2005. “Im Feuer geboren – dem Wasser geweiht. Technologische

- Untersuchung und Rekonstruktion der Herstellungstechnik keltischer Knollenknaufschwerter im Hinblick auf deren chronologische Einordnung,” *Fundberichte aus Baden-Württemberg* 28.1, 93–206.
- Pernet, L. 2008. “L’armement républicain des nécropoles de Giubiasco et d’Ornavasso. Des tombes d’auxiliaires dans les vallées alpines,” in M. Poux (ed.), *Sur les traces de César. Militaria tardo-républicains en contexte gaulois. Actes de la table ronde de Bibracte, 17 octobre 2002*. Collection Bibracte 14, Glux-en-Glenne, 275–293.
- Pernet, L. 2010. *Armement et auxiliaires gaulois (II^e et I^e siècles avant notre ère)*. Protohistoire européenne 12, Montagnac.
- Pernet, L., E. Carlevaro, L. Tori, G. Vietti, Ph. Della Casa and B. Schmid-Sikimić 2006. *La necropoli di Giubiasco (TI) 2. Les tombes de La Tène finale et d’époque romaine*. Collectio archaeologica 4, Zürich.
- Petrie, W. M. F. 1886. *Naukratis 1, 1884–1885*. Memoir of the Egypt Exploration Fund 3, London.
- Petrie, W. M. F. 1920. *Prehistoric Egypt*. British School of Archaeology in Egypt & Egypt Research Account 31, London.
- Pfuhl, E. and H. Möbius 1979. *Die ostgriechischen Grabreliefs* 2, Mainz.
- Poulsen, V. 1962. *Les Portraits Romains 1. République et Dynastie Julienne*. Publications de la Glyptothèque ny Carlsberg 7, Copenhagen.
- Quesada Sanz, F. 1997a. “*Gladius hispaniensis*: an archaeological view from Iberia,” *Journal of Roman Military Equipment Studies* 8, 251–270.
- Quesada Sanz, F. 1997b. *El armamento ibérico. Estudio tipológico, geográfico, funcional, social y simbólico de las armas en la Cultura Ibérica (siglos VI–I a.C.)*. Monographies instrumentum 3, Montagnac.
- Rapin, A. 2001. “Des épées romaines dans la collection d’Alise-Sainte-Reine,” *Gladius* 21, 31–56.
- Reddé, M. and S. von Schnurbein (ed.) 2001. *Alésia. Fouilles et recherches franco-allemandes sur les travaux militaires romains autour du Mont-Auxois (1991–1997) 2 – Le matériel*. Mémoires de l’Académie des Inscriptions et Belle-Lettres 22, Paris.

- Richter, O. and M. Jahn 1925. "Eine neue keltische Schwertform aus Süddeutschland," *Mannus* 17, 92–104.
- Rohde, E. 1982. *Pergamon; Burgberg und Altar*, Berlin.
- Samuel, D. 1981. "Greeks and Romans at Soknopaiou Nesos," in R. S. Bagnall, G. M. Browne, A. E. Hanson, and L. Koenen (eds.), *Proceedings of the Sixteenth International Congress of Papyrology, New York 24–31 July 1980*. American Studies in Papyrology 23, Chico, 389–403.
- Schönfelder, M. 2009. "Archäologische Untersuchungen zur Elite in der keltischen Gesellschaft. Eine Zwischenbilanz," in M. Egg and D. Quast (eds.), *Aufstieg und Untergang. Zwischenbilanz des Forschungsschwerpunktes „Eliten“*. Monographien des Römisch-Germanischen Zentralmuseums 82 Mainz, 59–78.
- Sekunda, N. 2001. *Hellenistic infantry reform in the 160's BC*. Studies on the History of Ancient and Medieval Art of Warfare 5, Łódź.
- Seyrig, H. 1970. "Antiquités Syriennes : Les dieux armés et les Arabes en Syrie," *Syria* 47, 77–116.
- Siebert, G. 1987. "Délös – Quartier des Skardhana," *Bulletin de Correspondance Hellénique* 111, 629–642.
- Sievertsen, U. 2008. "Ein Buckelkeulenkopf aus dem Elitefriedhof HK6 in Hierakonpolis," in E.-M. Engel, V. Müller and U. Hartung (eds.), *Zeichen aus Sand. Streiflichter aus Ägyptens Geschichte zu Ehren von Günter Dreyer*. Menes 5, Wiesbaden, 627–645.
- Smekalova, T. 2012. "The Geophysical Survey," in M. Capasso and P. Davoli (eds.), *Soknopaiou Nesos Project I (2003–2009)*, Rome and Pisa, 111–118.
- Solyman, T. 1968. *Die Entstehung und Entwicklung der Götterwaffen im alten Mesopotamien und ihre Bedeutung*, Beirut.
- Speidel, M.P. 1981. "The Prefect's Horse-Guards and the Supply of Weapons to the Roman Army," in R. S. Bagnall, G. M. Browne, A. E. Hanson, and L. Koenen (eds.), *Proceedings of the Sixteenth International Congress of Papyrology, New York, 24–31 July 1980*. American Studies in Papyrology 23, Chico, 405–409.

- Stiebel, G. 2004. "A Hellenistic gladius from Jericho," in E. Netzer, *Hasmonean and Herodian Palaces at Jericho 2. Final Reports of the 1973–1987 Excavations*, Jerusalem, 229–232.
- Stilp, F. 2001. *Mariage et suovetaurilia. Etude sur le soi-disant «Autel de Domitius Ahenobarbus»*, Supplément à la Rivista di Archeologia 26, Rome.
- Szombathy, J. 1901. "Das Gräberfeld zu Idria bei Bača," *Mitteilungen der prähistorischen Kommission der kaiserlichen Akademie der Wissenschaften zu Wien* 1.5, 291–363.
- Tanabe, K. 1986. *Sculptures of Palmyra I*. Memoirs of the Ancient Orient Museum 1, Tokyo.
- Tobler, A. 1950. *Excavations at Tepe Gawra II*, Philadelphia.
- Tomaschitz, K. 2002. *Die Wanderungen der Kelten in der antiken literarischen Überlieferung*. Mitteilungen der Prähistorischen Kommission 47, Vienna.
- Torelli, M. 1968. "Monumenti funerari romani con fregio dorico," *Dialoghi di Archeologia* 2, 32–54.
- Trousdale, W. 1975. *The Long Sword and Scabbard Slide in Asia*. Smithsonian Contributions to Anthropology 17, Washington.
- Ulbert, G. 1969. "Gladii aus Pompeji. Vorarbeiten zu einem Corpus römischer Gladii," *Germania* 47, 97–128.
- Ulrich, R. 1914. *Die Gräberfelder in der Umgebung von Bellinzona Kt. Tessin*. Kataloge des Schweizerischen Landesmuseums Zürich, Zürich.
- Walters, H. B. 1903. *Catalogue of the Terracottas in the Department of Greek and Roman Antiquities, British Museum*, London.
- Wehrberger, K. 2000. "„In Erwartung verlässlicher archäologischer Befunde“: Die Knollenknaufschwerter in Europa," in L. Bonnamour (ed.), *Archéologie des fleuves et des rivières*, Paris, 75–83.
- Weidemann, K. 1971. "Untersuchungen zur Kunst und Chronologie der Parther und Kuschan vom 2. Jh. v. Chr. bis zum 3. Jh. n. Chr.," *Jahrbuch des Römisch-Germanischen Zentralmuseums Mainz* 18, 146–178.
- Werner, J. 1956. *Beiträge zur Archäologie des Attila-Reiches*. Abhandlungen der

Bayerischen Akademie der Wissenschaften – Philosophisch-historische Klasse N.F. 38, Munich.

Werner, J. 1964. “Herkuleskeule und Donar-Amulett,” *Jahrbuch des Römisch-Germanischen Zentralmuseums Mainz* 11, 176–197.

Ypey, J. 1984. s. v. *Damaszierung*, in J. Hoops, *Reallexikon der Germanischen Altertumskunde*, Berlin and New York, V, 191–213.

Zanker, P. 1975. “Grabreliefs römischer Freigelassener,” *Jahrbuch des Deutschen Archäologischen Instituts* 90, 267–315.

Notes

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² The temple was built on demolished buildings and on top of a natural hill: see Saggio 4 in Davoli 2012, figs. 125, 128 and 129.

³ For an overview of the temple see Davoli 2014.

⁴ Smekalova 2012, 111–115.

⁵ We would like to thank Ahmed Abd el-Aal, Director of the Fayyum SCA Inspectorate, for the permission and the help given in this delicate operation.

⁶ The excavation is carried on according with the stratigraphic method: Davoli 2012, 119–127.

⁷ DSU ST06/336 is located between the elevations 26.7 m and 26.21 m asl; in it 28 kg of pottery fragments have been recovered. In DSU ST06/337 (2.3 x 1.3 m, from 26.58 m to 26.09 m asl), ca. 8 kg of pottery sherds were collected, as well as in DSU ST06/338 (from 26.21 m to 26 m asl). The pottery is mixed and the fragments are datable from the third century BC until the fourth–fifth AD.

⁸ It is the head of a young male, dated between the second and third centuries AD: cf. Caputo 2012, Cr II 3 pp. 370–71.

⁹ I warmly thank Adriana Travaglini (University of Salento) for dating the coins; she is in charge of the forthcoming catalogue of the coins from the excavation.

¹⁰ It has been dated to the fourth–fifth century AD: Dixneuf 2012, no. 244, pp. 340, 356.

¹¹ These kinds of wooden musical instruments are common finds in Fayyum archaeological sites and are dated to the Roman period: see an on-line exhibition of Graeco-Roman Music in Egypt: <http://www.umich.edu/~kelseydb/Exhibits/MIRE/Objects/ObjectsNumber/Group>

A pair of similar castanets was found at Soknopaiou Nesos by the University of Michigan expedition:
<http://www.umich.edu/~kelseydb/Exhibits/MIRE/Objects/ObjectsNumber/263601obn.html>.

¹² I kindly thank Dr. Manuela Struck (Nackenheim) for translating my part of the article, the common conclusions and the abstract from German into English.

¹³ See e. g. Biborski 2004, 562–568; Biborski and Ilkjaer 2006, 280–295; Bishop, Coulston 2006, 241, fig. 147; Miks 2007, 52–56 for the forging technological variants in the construction of the sword blades from the more recent pre-Roman Iron Age to the Roman Principate. See Ypey 1984, 191–213 for the pattern welding of weapons of the pre-Roman Iron Age to the Viking period.

¹⁴ Miks 2007, 21–23.

¹⁵ James 2011, 30, note 72; García Jiménez 2012, 162.

¹⁶ See, among others, Feugere 1993, 97–100; Connolly 1997, 49–56; Quesada Sanz 1997a; Quesada Sanz 1997b, 260–270; Bishop, Coulston 2006, 54–56; García Jiménez 2012, 147–164.

¹⁷ For the different literary sources see, for example, Quesada Sanz 1997a, 253, tab. 1; Miks 2007, 24–29.

¹⁸ The fragment is passed down in the context of a Byzantine encyclopedia from the tenth century: Suidas, s. v. μάχαира (Polybius, Frag. 179 [96]).

¹⁹ Named by Ulbert 1969, 120. Cf. also Miks 2007, 58–65, 108–112.

²⁰ See, for example, Feugere 1994, 10–11, 15, figs. 10–12; Connolly 1997, 49–56; Pernet 2010, 53–62, 101–105.

²¹ See among others Schönfelder 2009, 70–73.

²² On the question of influence see, for example, Pernet et al. 2006, 51.

²³ James 2011, 30, note 72; García Jiménez 2012, 162.

²⁴ Vegetius, *Epitome* 1.8. Cf. Milner 1996, xvi–xxviii.

²⁵ Cf. Miks 2007, 26–28.

²⁶ On the latter see, among others, Pernet 2010, 84–101.

²⁷ Cf. Miks 2007, 20–22, fig. 1.

²⁸ Ibid., 21–22, fig. 2.

²⁹ For this, see also Connolly 1997, 56.

³⁰ Objections and possible alternatives are presented in Miks 2007, 24–51

³¹ Cf. *spathae* of the Fontillet and Nauportus types in Miks 2007, 77–80

³² Ibid., 107–108

³³ Ibid., 79–80. Corresponding blades are generally also included under the term “proto-Mainz-swords of group 1” (Biborski 1994a, 93–94; idem 1994b, 173), “type Bell-Zemplin” (Biborski 2004, 549–551) or “glaives de type 2” (Pernet et al 2006, 50–51; Pernet 2010, 104–105, fig. 68).

³⁴ Miks 2007, 58–61.

³⁵ Rapin 2001, 31–56, esp. 44, pls. 2, 6,2 7,2 9,1; Reddé, Schnurbein 2001, 219, cat.-no 150,B pl. 53,149 (right).

³⁶ Rapin 2001, 44, pls. 2, 6,1, 7,1, 8,1; Reddé and Schnurbein 2001, 219, cat.-no. 150,B, pl. 53,149 (left).

³⁷ Ulrich 1914, 559, pl. 78,6 (grave 71); ibid., 585–586 (grave 119); ibid., 666, pl. 86,3–4 (grave 471); Pernet 2008, 276–277, figs. 3,2, 8,1–2; Pernet et al. 2006, 76–77, pls. Grave 71,1, grave 119,1, grave 471,1–2.

³⁸ Pernet et al. 2006, 76–77, 294 (grave 71), 304 (grave 119), 329 (grave 471).

³⁹ Some older pieces, as for example one of the blades of a reconstructed weapon hoard of the second century BC from Grad near Šmihel pod Nanosom (Občina Postojna, Slovenia; Horvat 1997, 113, fig. 10.2; idem 2002, 133, 163, pl. 1.1) appear to suggest a certain waisted character due to the worse conditions of conservation of exterior contours at bend- or breakpoints of the blade, rather than a corresponding intention during the manufacture of the sword.

⁴⁰ Cf. Miks 2007, 107–108.

⁴¹ Pernet et al. 2006, 50.

⁴² Connolly 1997, 49–56 esp. 53; Miks 2007, 220. As representations of swords with scabbard frames on eastern Greek epitaphs (cf. [Fig. 25](#)) of the second to early first century BC indicate (cf., e.g. Pfuhl and Möbius 1979, 547–548, no.

2272, pl. 321), potential Hellenistic examples cannot be entirely excluded, either. Alternatively, one could of course speculate on the growing influence of the Roman *gladius hispaniensis* upon the relevant depictions. Real Hellenistic sword finds comparable to the representations have not yet been identified. This could partially be due to the rash categorization as *gladius hispaniensis* of potentially suitable examples, as for example the swords from Delos (Fig. 14.4; *terminus ante quem* 69 BC; Siebert 1987, 637, no 3, figs. 17–19) or from Jericho (West Bank; [Fig. 14.3]; first half of the second century BC; Stiebel 2004, 229–232, fig. 266).

⁴³ As is the case, for example, of the short swords of the Mainz type from the graves 11 / 12 and 17 from Idrija pri Bači (Občina Tolmin, Slovenia). Szombathy 1901, 333, 338–339, figs. 157–158, 182–182b; Guštin 1991, 15–16, 56, pls. 12,3, 16,2.

⁴⁴ Ulrich 1914, 586; Pernet et al. 2006, 77, pl. grave 119,1.

⁴⁵ Bianchetti 1895, 118–119, pl. 4,5; Graue 1974, 65, 220, pl. 20,4; Pernet 2008, 277, fig. 9; idem 2010, 104, fig. 68, pl. 125,1.

⁴⁶ Siebert 1987, 637, no. 3, figs. 17–19.

⁴⁷ For characteristic details and chronological aspects of the individual button forms, see Miks 2007, 226–228.

⁴⁸ Cf. Miks 2007, 199–211.

⁴⁹ Ibid., 200, pl. 151.

⁵⁰ See, among others, Michon 1909, 147–157, figs. 1–3; Budde 1973, 802–804 esp. 804, figs. 12–13; Stilp 2001, 83, figs. 22–23, 46; Miks 2007, 34, pl. 294,A.C; Lohmann 2009, 109–122, esp. pl. 1,1.

⁵¹ Left figure in the lower zone on side “A” of the stela. Ducati 1910, 439–441, pl. 4; Morigi Govi, Sassatelli 1984, 326, cat.-no. 184, with color plate between pages 312 and 313.

⁵² Droysen 1885, 95–96, 111, pl. 44,1 (hilt to the right above a helmet in the lower left corner of the screen panel). For the construction context of the arms reliefs see, among others, Rohde 1982, 30–35 (for the mentioned screen panel, see ibid., fig. p. 32, above).

⁵³ Franzoni 1987, 46–48, no. 26, pls. 13–14,1; Keppie 1991, 115–121, fig. 1.

⁵⁴ Gabelmann 1973, 149–151, cat.-no. 8, fig. 17; Krier and Reinert 1993, 74, fig. 56,b.

⁵⁵ See, for example, depictions of Gauls on Etruscan ash cists in Bieńkowski 1908, 112–113, cat.-no. 71, fig. 119; *ibid.*, 122–124, cat.-nos 77–78, figs. 125–126; *ibid.*, 125–126, cat.-no. 80, fig. 128; Couissin 1929, 248–255, figs. 141–158.

⁵⁶ Cf. late Hallstatt swords of the graves 1018 and 2008 from the necropolis of Chaillon (Dep. Meuse, France; Landolt 2004; *idem* 2005; Beylier 2012, 53–54, fig. 40.2–3) or a find from the Saône near Mâcon (Dép. Saône-et-Loire, France; Chaume and Rapin 1999, 60–61, fig. 16.a–b).

⁵⁷ See, among others, Krämer 1962; Gendron et al. 1986; Wehrberger 2000; Paysan 2005; Beylier 2012, 48–55. A dating of the swords with knobbed pommels to the early La Tène period, which departs from conventional middle- to late La Tène period approaches to their chronology, is advocated by the renewed examination of a find from Mailhac (Dép. Aude, France). See Beylier et al. 2012.

⁵⁸ Cf., for example, a sword from grave 1 (La Tène B2/C1; ca. second quarter of the third century BC) from St. Maur-des-Fossés (Dep. Val-de-Marne, France). Leconte 1990/1991, 47–52, fig. 5.1.

⁵⁹ Cf., for example, the representation of the dagger on denarii of M. Iunius Brutus and L. Plaetorius Cestianus around ca. 43/42 BC; Crawford 1974, 100, 518, no. 508.3, pl. 61,19.

⁶⁰ Left amor depiction with a sword slung around. Mansuelli 1963, 89, fig. 52; Torelli 1968, 38, fig. 8; Franzoni 1987, 105–106, pl. 14,3; Cardarelli 1988, 235–236, cat.-no. 303, fig. 193.

⁶¹ Hilt in the hand of the *tribunus militum* Lucius Appuleius (central figure). Zanker 1975, 304–305, fig. 44.

⁶² See the representation of soldiers in the right bottom corner of the narrow sides of the monument for Marcus Nonius. Diebner 1979, 136–140, cat.-no. Is 27, pl. 19 (fig. 27b–c).

⁶³ Sword hilt in the hand of Publius Gessius, depicted in officer's habitus (central figure). Zanker 1975, 303–304, fig. 43.

⁶⁴ Poulsen 1962, 133–134, cat.-no. 114, pl. 189.

⁶⁵ Zanker 1975, 306, fig. 46. Himmelmann 1989, 100–125 esp. 118–123.

⁶⁶ Siebert 1987, 637, no. 3, figs. 17–19.

⁶⁷ A relation between the Italic pommel depictions and the riveted fitting from Delos is suggested also by Bishop and Coulston 2006, 56. Nevertheless, they directly classify the sword as a Roman *gladius hispaniensis*.

⁶⁸ For the style, see, among others, Weidemann 1971 148–165. For Palmyrene divine depictions, see also Seyrig 1970; Gawlikowski 1990. For a sword-related selection of Palmyrene depictions, see Miks 2007, pls. 304–305.

⁶⁹ See, e.g., Droysen 1885, 95–96, 111, pl. 44,1 (sword hilts in the right half of the plate of the screen).

⁷⁰ E.g. Pfuhl and Möbius 1979, 547–548, cat.-nos. 2269–2270, 2272, pls. 320–321.

⁷¹ Cf. e.g. the *xiphos* from grave II (“grave of Philip”; second half of the fourth century BC) of the necropolis of Vergina (Per. Kendrikí Makedonía, Greece). Andronicos 1984, 144–145, figs. 99–100.

⁷² Cf., e.g., the sword of the divine depiction between two lions on the panelling of a cult niche in the temple of Rabaseirè near the Agora of Palmyra. Mesnil du Buisson 1962, 275–278, fig. 170; Tanabe 1986, 18, 120–121, figs. 81–82.

⁷³ Morehart 1956–1958, 60–61, fig. 11; Dentzer-Feydy, Teixidor 1993, 144–145, cat.-no. 153, fig. p. 145 (with earlier literature).

⁷⁴ For a commented compilation of ancient literary sources see Tomaschitz 2002, 92–179.

⁷⁵ The introduction and distribution of relevant pommels in Asia Minor and the eastern Mediterranean through the Celtic Galatians is supported, for example, by Sekunda 2001, 77–79.

⁷⁶ On the other hand, neither do we know of sword depictions of potentially more usual local alternative forms.

⁷⁷ Cf., e.g., the sword from grave 108 (first century BC) of the cemetery from Giubiasco (Canton Tessin, Switzerland). Ulrich 1914, 581, pl. 78,8; Pernet et al. 2006, 76–77, 303, pl. Tombe 108,1.

⁷⁸ Cf., e.g., the debate on the ritual, and alternatively profane, use of miniature arms in the area of the Roman northwest provinces in the late pre-Roman Iron Age until the Roman Principate in Kiernan 2009, 40–113, esp. 104–113 (with references to further regions).

⁷⁹ The same feature is also in a Ptolemaic model sword (made of terracotta) from the collection of the British Museum, London (inv. GR 1925.II-20.23): Bailey 2008, 87–88, cat. 3290, pl. 50.

⁸⁰ Considerations on and indications for the *de facto* presence of Celtic or Galatian mercenaries in Egypt are given in, among others, as early as Kimmig 1940, 109–110.

⁸¹ Petrie 1920, 23, pl. 26,61.63.65.

⁸² Friedman 2008, 1178–1182 esp. 1180–1181, figs. 12,a, 13,b; Sievertsen 2008, 627–645, figs. 2–3.

⁸³ According to the information on material in the online catalogue of the Petrie Museum (<http://petriecat.museums.ucl.ac.uk>). In Petrie 1920, 23, nos. 61, 63, 65, pl. 26 two of the objects are described as consisting of “hard white crystalline marble” and one of “dark green chlorite”. Cf. Sievertsen 2008, 631–632, fig. 4.

⁸⁴ Petrie Museum of Egyptian Archaeology (inv. UC15406; 15407; 15408).

⁸⁵ We kindly thank Dr. Latfi Abdel Hami and Dr. Said Amer (Egyptian Museum Cairo) for the permission to publish these finds here. We also owe special thanks to Christian Eckmann (Römisch-Germanisches Zentralmuseum Mainz), who took the photographs of the objects.

⁸⁶ Ciałowicz 1987, 22–26, fig. 1, esp. 25–26, pl. V,1–2; Gilbert 2004, 35–41, figs. 5.1–5.6 esp. 5.6,4–5 (type 6b).

⁸⁷ Sievertsen 2008, 632–641.

⁸⁸ Cf., e.g., Petrie 1920, 23; Sievertsen 2008, 632–634, figs. 5–6

⁸⁹ Made of limestone. De Morgan 1912, 21, fig. 109.

⁹⁰ Made of black haematite. Tobler 1950, 85, pl. 104,21.

⁹¹ Brunton and Caton-Thompson 1928, 51, pl. 53,8; Gilbert 2004, 178, fig. 5.6,5.

⁹² Contrary to this perspective, Sievertsen 2008, 635 interprets the piece from Badari as a “direct connecting link” to the above mentioned fragment of a mace-head from grave 26 of the elite necropolis HK6 from Hierakonpolis.

⁹³ Petrie 1886, 45; Walters 1903, 259–260, cat.-nos. 628–632, fig. 53; Sekunda 2001, 79, fig. 16; Bailey 2008, 87–88, cat.-nos. 3288–3293, pls. 50–51.

⁹⁴ For this see, among others, Werner 1956, 38–43; Trousdale 1975, 71–119; Miks 2007, 310–312, fig. 68.

⁹⁵ Gaerte et al. 1926, 336–338; Calmeyer 1976–1980, 582–583; Sievertsen 2008, 636–637.

⁹⁶ See, e.g., Solyman 1968, 65–100.

⁹⁷ Werner 1964, 176–183; Gostenčnik 2005, 217.

⁹⁸ For considerations on western or Roman influences on the armies of the Ptolemaic and Seleucid Empire during the second century BC, see, e.g., Sekunda 2001.

⁹⁹ Stiebel 2004, 229–232, fig. 266.

¹⁰⁰ Siebert 1987, 637, no. 3, figs. 17–19

¹⁰¹ E.g., Bishop and Coulston 2006, 56.

¹⁰² Cf., e.g., Pernet 2010, 126–167, 184–188.

¹⁰³ On the historical events of this period, see, e.g., Hölbl 1994, 201–227.

¹⁰⁴ Samuel 1981, 389–403.

¹⁰⁵ *P.Grenf.* II 51 (143 AD), *P.Grenf.* II 48 (191 AD), *SB X* 10619 (201/2 AD) mention *eques* of the *Veterana Gallica*: Alston 1995, 167–69.

¹⁰⁶ Daris 1988, 734–35. See also Speidel 1981 and Mitthof 1994; Cuvigny 2010, 49.

¹⁰⁷ Alston 1995, 88–90.

¹⁰⁸ These objects will be published in a forthcoming SNP catalogue.

¹⁰⁹ On the problem of the removal and disposal of older weapon votives,

including their secondary rearrangement in the ground, see for instance Frielinghaus 2011, 137–141 on the case of Olympia.

¹¹⁰ Cf., e.g., the remarks on the deposit of Roman Imperial army weapons in the Batavian sanctuary of Empel ('s-Hertogenbosch, prov. Noord-Brabant, Netherlands). Driel-Murray 1994, 92–107, esp. 105–106.

¹¹¹ Suetonius (Vitellius 8.1), for instance, reports that Vitellius was handed the sword of Julius Caesar at his proclamation by the Roman army at the Rhine on January 1st AD 69. He notes that this sword had been kept in the temple of Mars in Cologne.

¹¹² An estimation of the official duration of presenting dedicated weapons in sanctuaries is difficult in individual cases. It is necessary to distinguish votives of purely personal, from those of public interest, votives of single pieces from larger collections of equipments (e.g., dedications of spoils of war) and, last but not least, votives of common citizens from those of important personalities. Cf., for example, on the places and duration for the presentation of dedicated weapons of the Archaic to Classic period in Greek sanctuaries in Baitinger 2011, 129–137; Frielinghaus 2011, 170–184.

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