STUDIES IN ANCIENT ART AND CIVILIZATION, VOL. 22 (2018)
pp. 7-22, https://doi.org/10.12797/SAAC.22.2018.22.01

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SEVERAL REMARKS ABOUT THE NEAR-EASTERN CONTRIBUTION TO EARLY ARCHAIC GREEK WARFARE

Abstract: In recent years Archaic Greek warfare has become one of the issues most often raised among scholars focused on Ancient Greece in general. Questions about the emergence of the phalanx, evolution of fighting styles and types of weapons feature prominently in the mentioned discourse. The considerations of the provenance of these innovations certainly do not go beyond the frames of that debate. Taking the vast scope of interactions between the Near East and the widely understood Greek world into account, presuming the possible presence of the Near-Eastern influences in Archaic Greek warfare seems to be legitimate. The aim of this paper is an attempt to point out archaeologically traceable solutions in the terms of weapons and tactics in Greek warfare which may have been drawn from the Oriental area and assess their potential significance for the development of Greek warfare.

Keywords: Greek warfare; Archaic Period; conical helmet; shields; Near-Eastern warfare; composite shields

Influences from the Near-East were undoubtedly important in the formation of Greek culture. In reference to the material heritage we may point to personal gems and seals betraying evident Eastern inspirations and the presence of diversity of artistic patterns originated in the Near East (Boardman 1970, 111–112; Hurwit 1985, 115). Moreover, the Greek intellectual legacy owes a lot to the Near-Eastern interactions. The Hesiodic epic is full of loans known from Eastern wisdom literature (Hall 2010, 29). In the philosophical thought of Tales, Anaximander and Anaximenes we

may encounter observable impulses from the mentioned area. Presumably, this state of affairs was determined by the relative proximity between the Near East and Asia Minor which allowed for a mutual exchange of ideas (Jaeger 2007, 49–50).

Obviously, the above examples do not describe the entire juxtaposition of inventions taken from the Near East as a whole and it seems that regarding their abundance, it is worth considering the presumable scope of influences transmitted into Greek warfare by cultures from the Eastern area. Based on archaeological records we are able to infer that some elements of armaments used on the Greece mainland since the Bronze Age evince foreign provenance. The presence of the guard collar on the Mycenaean plate amours, such as found in Dendra, is an element originating in the Near East, where its use has been proved in the case of panoplies worn by charioteers (Taracha 2007, 150). The functioning of bronze spearheads attached to the shaft with a hollow socket should also be considered an invention from the Eastern area. Spearheads characterized by the mentioned construction are known from Mycenaean sites (Snodgrass 1964, 115–118). Nonetheless, this paper will concern a considerably wider scope of changes in Greek warfare which have appeared in the beginning of the Archaic period. In the process of analysis devoted to this issue, the possible ways of adopting military solutions by Greeks need to be discussed. There is no doubt that the Archaic period was a time of intensified activity of Greek mercenaries in the Mediterranean area. Assyrian sources of the 8th and early 7th century BC mention Ionians who took part in the resistance against Assyrian kings extending their range of their power westward. In this case, there is no literal mention that they served as mercenaries but we cannot exclude such a possibility (Niemeier 2001, 16). It is worth emphasizing that 'Ionians' was common name used by the Assyrians for Greeks coming from Asia Minor, Euboea and Cyclades (Luraghi 2006, 34), so it is hard to precisely settle which members of what ethnical entity this textual evidence really refer. Nonetheless, another Assyrian text dated back to the 8th century BC tells us about man named Yamani who presumably was a Greek warrior serving in the guard of King Azuri of Ashdod during the conflicts between this city and the Assyrians (Niemeier 2001, 16; Rollinger 2006, 202). What is more, we encounter more conspicuous evidence of Greek military service in the Assyrian army. Tablets dated back to the 7th century BC list names which might have meant whole units of Greek mercenaries employed by the Assyrians (Brown 1984, 301). A settlement inhabited by Greek mercenaries hired by Psammethichos I was found in Israel, near the city

Ashdod (Boardman 2000, 51). The oldest known depiction showing Greek soldiers probably serving as mercenaries is the so-called Amathus bowl dated back to the late 8th or early 7th century BC. Its Oriental style suggests it may have been produced in Cypro-Pheonician workshop (Hale 2013, 182). The upper band of this vessel shows hoplites taking part in the city siege on the side of the aggressors and defenders as well. This pictorial evidence may indicate the situations during which the Greek mercenaries were forced to fight against each other in the wars waged in the Near East.

The relevant question is could the soldiers be a medium for transferring martial innovations from the Near East to the Greek mainland? Some analogy, known from the Aegean area may support this hypothesis. Namely, the introduction of the bronze helmets on Crete by the Late Minoan II could be connected with the appearance of foreign warriors called Ke-se-no (Molloy 2012, 125–126). Nevertheless, it needs to be emphatically underlined that activity of mercenaries is not the only plausible explanation for the presence of Oriental inspirations clearly noticeable in early archaic Greek militarism. Other possible ways of such a transmission can be ascribed to a commercial exchange, migrations of craftsmen or political accumulation of goods (Winter 1988, 194–196, 202–214). It is certain that at least some part of Near-Eastern helmets which date back to the Iron Age could have spread to the Greek mainland through Cyprus and afterwards became the source of technological and stylistic inspirations easily observable in the Greek helmet tradition (Dezsö 1998, 11–16). Nonetheless, the settlement of the problem of transmission is not aim of the present paper and on account of its limited volume it needs to be omitted. At this point I would like to feature a kinship between the types of armaments known from the Greek world and those occurring in the Oriental area.

The earliest Near-Eastern helmets influencing the development of archaic Greek helmets originated in Assyria and appeared for the first time in the 9th century BC (Dezsö 2001, 18–19). Although the Assyrian helmets of that period are not the most numerous elements of arms known from the archaeological record, the meticulous analysis of them is crucial for the better understanding of the evolution of Greek helmets. An assemblage of Assyrian helmets from Nimrud is a very good example for the further exploration of this topic. One of them, dated back to the second half of 9th century BC, represents the so-called conical type. This helmet is joined at the riveted protome, shaped like an ox's head shaped, to the tip of crest. Holes which enabled horsehair to be attached were made on the both sides of the crest. A row of quasi-rivets located between the ribs is observable

in the mid-height of the helmet (Dezsö and Curtis 1991, 115–124). Another conical Assyrian helmet based on the included inscription should be dated back to the *c.* 830-810 BC. This artefact is also characterized by a curved crest crowned by riveted protome. The helmet was made of one piece of metal and its surface is covered by four ribs reaching through the entire perimeter (Dezsö and Curtis 1991, 114). The conical Assyrian helmet dated back to the late 9th century BC is distinguished by a completely different construction. Its main part was made of one piece of metal and its curved crest composed of three separated parts is crowned by the protome in the shape of an ox's head. All the parts of the mentioned helmet were riveted (Dezsö and Curtis 1991, 114–121). Two slightly later conical helmets dated back to *c.* 800-700 BC were made of one piece of iron and their surfaces were hammered. A pointed tip is a feature of both artefacts (Dezsö and Curtis 1991, 114–121). Presumably, analogical helmets were depicted on two bronze figurines from Olympia dated back to *c.* 700 BC (Kasas 1980, 124). Nonetheless, the potential significance of the pointed conical helmet for Greek warfare of the early archaic period is difficult to assess. Presumably, their rare presence in the iconographical sources and archaeological record indicate their relatively low popularity in early archaic Greece.

One of the most important finds among early Archaic Greek helmets is a conical helmet found in Argos dated back to *c.* 720 BC (Pl. 1: 1), made of four separate parts fixed by the means of rivets. Its skull-part does not have a nose-guard, likewise to Assyrian helmets dating back to a similar period. The elongated cheek-pieces could perhaps provide better protection for susceptible areas such as the neck or throat. The arched crest was fixed to the erected protome (Born and Hansen 1994, 10–11). A helmet evincing similar constructional features was also found in Tiryns**.** The helmet crowned by the crescent crest is portrayed on a fresco depicting an Assyrian warrior from Til Baspip (Pl. 1: 2) dated back to the 8th century BC (Luraghi 2006, 38) The same types of helmets were worn by warriors shown on the depictions from the times of Sennacherib's reign located in Nineveh Palace (Stevenson Smith 1960, 53–54; Cifarelli 1998, 212–214). Another conical helmet, found at an undetermined site on the Peloponnese, dated back to the late 8th century BC reveals partly similar constructional features as in the case of the mentioned finds known from the Greek mainland. Its cheek pieces made of separated bronze sheets are elongated and also, the helmet does not have a nose-guard. As opposed to finds from Argos and Tiryns, mentioned helmet in not joined at crest, but its upper part is pointed

(Born and Hansen 1994, 12–13). The conical helmet dating back to the late 8th or early 7th century BC originated in the Italian Apulia was made of single bronze sheet and was crowned by a horse-shaped protome which is constructed of seven parts fixed by means of rivets. Its skull-part is lacking in a nose-guard and its face-contour was square-shaped. The cheek-pieces of this helmet were not elongated and their edges remained in parallel line to its rear part (Born and Hansen 1994, 47–52).

Tracing the development of the Neo-Assyrian and early Greek helmets we can reach a conclusion that some of their features mutually coincide. The lack of a nose-guard, presence of a protome, riveted elements and a skull-part made of a single metal sheet seem to be common between both groups of helmets. It leaves no doubt that the early Illyrian helmets like these found in Olympia or Kalavrita dated back to the beginning of 7th century BC (Born and Hansen 1994, 18–19; Frielinghaus 2011, 247) were inspired by patterns drawn from Assyrian technological tradition but adapted to local needs. In this context, an Illyrian helmet should be deemed the final outcome of an experiment which consisted of testing particular foreign patterns visible in the case of conical helmets and afterwards, further development of technical solutions meeting then needs in the widest scope, thereby giving rise to the evolution of a new type of Greek helmet. The high quantity of Illyrian helmets discovered during excavations and iconographical material confirm the high dissemination of this kind of defensive weapons on the Greek mainland (Hockey *et al.* 1992, 281–291; Backer 2007; Frielinghaus 2011, 239–257; Pantermalis 2016; Blecić Kavur 2017, 31–57) which we may presumably interpret as evidence of their high usefulness in the battle conditions.

One of the most important elements of weaponry wielded by the Archaic Greek soldier was undoubtedly a shield. Iconographical material is presumably the only evidence of its use in the Bronze Age in Greece. A case found in Mycenae dated back to the LH IIIC depicts warriors bearing shields which are distinguished by indentation in the lower part and a relatively small diameter. Based on different iconographical sources, we may assume that shields characterized by small measurements were widespread in Mycenaean Greece (Molloy 2010, 410–412). Round shields dating back to the beginning of the Archaic Period are a rather scarce group of finds, thus attempts to recreate the evolution and links with the Eastern shield may prove difficult. Nonetheless, there are some hints allowing us to investigate this hypothetical correlation.

Iconographical sources confirm the use of lion-protome shields in the Neo-Assyrian and Neo-Hittite states in the 9th to 8th century BC (Batmaz 2013, 243). The Urartian fortress located in Ayanis has provided a remarkable find in the form of shield (Pl. 1: 3) with a diameter approximately of 1m and made of a thin bronze sheet which has been hammered and annealed. The surface of the mentioned shield is covered by three concentric bands consisting of animal depictions. The inner band includes depictions of bulls and two other bands show lions. The central part of the shield is equipped with a lion-protome. Despite fact that the date of the shield is ambiguous, it seems plausible to set its chronological frameworks between the 9th and 7th century BC (Batmaz 2013, 243–246).

A richly adorned shield which is distinguished by an abundance of zoomorphical depictions was found in the Idaean cave. As in the case of the shield from Ayanis, its chronology remains uncertain. According to Benton's view, the said shield should be dated back to *c.* the 7th century BC with regard to its resemblance between its zoomorphic depictions and those known from the Chigi Vase (Benton 1938, 57). Notwithstanding, such elements as the shown set of strips in the bridles find their parallels in Assyrian iconography dating back to the 9th century BC (Hencken 1950, 299).

There are a few more examples of the Orientalizing shields found on the mentioned site. They were made of a single bronze sheet and their diameter does not exceed 0.7m. Similarly as in the case of other shields characterized by Eastern provenance, their decoration consisted of concentric bands filled by zoomorphic motifs. It seems that several of them may have been created in Phoenician workshops, but it is also tempting to identify Assyrian and Egyptian motifs (Frothingham 1888, 36–46). The mentioned shields generally date back to the *c.* 8th and 7th century BC (Benton 1938, 52–64).

Another shield including lion-protome surrounded by zoomorphic motifs has been found also in sanctuary in Delphi (Baitinger 2011, 29). Regarding its resemblance to the Cretan shields, we may estimate the chronology of the Delphi shield to the early Archaic Period.

A unique specimen of Greek shield was found during the excavations in Carchemish. The mentioned find comes from so called 'inner city'and precisely from building D destroyed during the city siege. The shield dated back to the late 7th century BC presumably belonged to a mercenary who served in Necho II's army. Although the artefact was not preserved intact, we may assume that its aboriginal diameter was roughly 0.7m. The central

stage of the shield from Carchemish is occupied by a depiction of Gorgeion. As in the case of other shields, the central part is surrounded by zoomorphic motifs including running dogs, hares and gazelles (Woolley 1921, 125–128; Niemeier 2001, 19–20).

At present, the issue of provenance, basically whether the shields discussed above were imports or merely imitations of Eastern patterns is not unequivocally settled. Arguably, their presence in widely understood Greece could be closely connected to the intensification of contacts between Greece and the Near East in the Archaic Period. The presence of metallurgists from Northern Syria tried to explain the discovery of a vast amount of bronze Orientalizing objects on Crete , however there is no sufficient proof to attest this hypothesis (Curtis 1994, 1). Stylistic features of the majority of Cretan shields should be considered as a manifestation of local artistic influences corresponding to Proto-Corinthian style (Benton 1938, 59–62). Setting aside the issue concerning quantitative share of Greek and Eastern patterns among early Archaic shields, it is worth considering what impact they could have had on development of Greek warfare.

Following the constructional characteristics of the Greek shields evincing oriental influences, such as finds from the Idaean cave or Carchemish, it is easy to notice that most of them are distinguished by a relatively scant weight and thickness. For many years, it used to be thought that these factors could affect the low effectiveness of thin bronze shields in combat conditions. Recent research performed in experimental archaeology and also use-wear analysis debunked this view, proving that even bronze shields a few millimeters thick were capable of being used during combat (Molloy 2009, 1057–1060; Uckelmann 2016, 193–195). Nevertheless, there are some circumstances to claim that the efficiency of light bronze shields used in the Aegean area in the early Archaic Period may have been based on a composite structure. An Iliad, includes a description of the manufacturing process of the shield of Achilles which provides us with interesting information about the technological solutions used for the production of shields. According to the Homeric epic poem, the shield of Achilles was made of two layers of bronze, two layers of tin and one layer of gold placed between them (Wees 1992, 19). Additionally, Hephaistos was supposed to have adorned the alluded shield intricately. Fragments of the Iliad including descriptions of the struggles between Achilles and other warriors suggest that his shield could not be pierced by the spear of the enemy. An experiment performed using a replica of the shield made in accordance with hints included in the Iliad proved that the shield manufactured

in the manner described above indeed cannot be pierced with a spear (Paipetis and Kostopoulos 2008, 183–197). Despite the fact that a several millimeter thickness of archaic Greek bronze shields may cast some doubts on their efficiency, context within which Carchemish shield has been found clearly indicates on its functional significance. The mentioned shields from the Idaean cave had holes used for fixing a hand-grip, so it is unlikely that they were merely votive offerings (Frothingham 1888, 436). Such technological solutions would be an appropriate justification for using those shields in combat, but the current state of research is so far insufficient to confirm this thesis definitely. Considering the later development of Greek shields with composite structures, recent results provided by research on the construction of hoplite shields needs to be discussed. Experimental techniques used in order to examine the potentially functional role of the thin bronze facing covering the surface of the hoplite shield proved that the presence of a thin layer of bronze could protect against splitting the laths comprising the wooden core of the hoplite shield (De Groote 2016, 197–212).

Taking into account the fact that composite shields were presumably relatively expensive, regarding the used materials and certainly required a high skill level of craftsmanship, the changes in Greek warfare consisted of growing need to equip the mass with shields which would be made of easy-accessible materials, capable of providing proper protection. In other words, this ‘democratization’ of warfare could be a factor which forced archaic Greece to find new solutions in regard to defensive weapons trying to emulate already known patterns.

The presence of animal-shield devices on the hoplite shields occurring in Greek vase painting may be also an argument justifying that their adaptation was inspired by the impulses from the area of the Orient. The abundance of depictions perpetuated in Greek vase painting and the finding of bronze devices which were fixed to the shields indicate the long and widespread tradition of using many kinds of shield devices since the beginning of the Archaic Period (Kasas 1980, 108–110; Pedley 1994, 39; Snodgrass 1998, 104–105; Hurwit 2006, 126; Moore and Schwartz 2006, 44–45). Late Geometric and Proto-Attic vase painting provide the oldest known evidence for the presence of shield devices. The Proto-Attic vase stored in Benaki Museum shows warrior bearing the shields with the depiction of a horse (Spier 1990, 114). Pictures of hoplites bearing shields including the depictions of lions, panthers, birds, bulls and Gorgeion are well represented in Proto-Corinthian vase painting (Boardman 2001, 32–33; Hurwit 2002, 8–9). The phenomena of occurring shields with zoomorphic

motifs in areas influenced by the Near East and the presence of animal protome on Urartian shields in some ways allow us to incline towards the idea that using of shields devices was, at least in some part, adopted from the Near East. Thus, representations of shield devices in Greek vase painting could be schematic depictions of realistically occurring protome and different zoomorphic motifs known from Orientalizing shields.

Considerations regarding the Eastern impact on the field of development of Greek war tactics and combat style in the Archaic Period deserve a distinct discussion. An attempt to give an answer demands reflection on the shape of the Near Eastern warfare of the mentioned time and the nature of Archaic Greek warfare as well. The reconstruction of the latter may prove complicated and moreover is closely connected with the problem of phalanx's emergence. Recent research casts doubt on the orthodox view setting the beginning of close-order formation in the 7th or even in the 8th century BC. The crucial argument that was supposed to support thesis about the relatively early emergence of the phalanx were descriptions of long ranks included in the Iliad which, as Latacz argued, should be interpreted as evidence for the occurrence of the proto-phalanx formation in the early archaic period, simultaneously marginalizing numerous descriptions of heroic duels (Wees 1994, 9; Snodgrass 2013, 85–86). Meanwhile, the philological analysis of the text of Homer's poems rather indicate the lack of determined close-order formations such as classical phalanx in the mentioned times. The term φαλαγξ, frequently occurring in the Homeric epos, in its basic meaning refers to the long and massive part of some material. Thus, it seems legitimate to claim that this word used in battle context should rather be understood as a descriptive exposure of the masses of soldiers characterized by a bigger or smaller degree of order. It must be added that the set of terms on the basis of which it is possible to infer the presence of features specific for the close-order formation does not appear until the Classical Period (Echeverría 2012, 304–311). Strikingly, iconographic material does not provide unequivocal proof of the relatively early origins of phalanx either. Depictions showing masses of hoplites dated back to the 7th century BC disappear comparatively quickly and emerge again in 600-450 BC, in addition, occuring very rarely (Echeverría 2015, 47–48). The dissemination of specified types of weaponry such as the Corinthian helmet which was supposed to have restricted sight on the battlefield thereby extorting the denser deployment of soldiers and the introduction of round hoplite shield allegedly confining the warrior's maneuverability did not have as an essential impact on the development of phalanx as it was widely believed

(Kagan and Viggiano 2013, 24–25). In consideration of the shortened 'orthodox' point of view, it is tempting to claim that in the early archaic period looser battle formations were widely prevalent.

In trying to assess the range of influences exerted by Near Eastern area on evolution of Greek warfare, it is necessary to take Neo-Assyrian sources into account. An analysis of written and iconographical evidence dating back from the 9th to 7th century BC allows for a reconstruction of the tactics used by the Neo-Assyrian army during pitched battles. Based on the reliefs we may surmise that some specific kind of mutual deployment of archers and infantryman wielding spears and shields was particularly frequent. An Archer's underlying and offensive force was protected by infantryman with their shields bearing frontwards, ensuring protection for infantryman as well, and allowing archers to release their arrows from one side (Backer 2007, 75–78; Dezsö 2012, 31). Iconographical sources on the basis of which it is possible to discern potential correlations between the Greek mainland and the Near East in terms of tactic appear only in the Orientalizing style. Although geometric vase painting contains many scenes of single combats which have counterparts in Assyrian art, they do not portray deployments of soldiers which could be interpreted as a specific battle formations (Gudrun Ahlberg 1971, 72–82). In the case of Archaic Greece, the Protocorinthian vase painting provides evidence of the presence of tactics which were similar to those known from Assyrian iconography. Lechaion aryballos dated back to the *c.* 690 BC represents an encounter between two armies (Viggiano and Wees 2013, 63). A heavily-armed warrior shown on the left-side steps in the first line bearing a shield in the lateral position, giving opportunity to the archers behind him to take a shot towards the enemies. It might seem that such an arrangement of shields could be an outcome of artistic convention or perspective obstacles but this interpretation must be refused with regard to the fact that troops depicted on the right side had their shields aligned frontally to the opposite line. Thus, we have to deal with a deliberate juxtaposition of distinct combat styles. Depictions of archers located behind the heavily-armed infantryman are also known from the mid-Protocorinthian aryballos from Perachora dated *c.* 675-650 BC and the mid-Corinthian pyxis from Perachora dated *c.* 600-575 BC (Wees 2004, 171). Excavations conducted in the Spartan Artemis-Orthia Sanctuary provided an abundance of materials as votive figurines out of which two groups: dated *c.* 700-635 BC and 635-600 BC were selected. Both include representations of heavily-armed foot soldiers and light-armed archers as well (Dawkins 1929, 251–278). Interestingly, a majority of archers figurines from

the Artemis-Orthia Sanctuary are on bended knee which clearly coincides with depictions of this group of warriors known from Protocorinthian and Corinthian vase painting. Certainly, this position was easier when hiding behind the hoplite shield, otherwise susceptible body parts like the head, would protrude over the upper edge of the shield.

Despite the fact that Archaic Greek warfare has been the subject of discussion for more than a century, we are still not able to scrutinize its development comprehensively. Nevertheless, it must be noticed, that even incomplete archeological and textual materials allow us to draw certain conclusions. Greek warfare, although in its specifically Classical reveal was a peculiar figment, owes much to innovations originated in the Near East. Those influences could have a considerable impact on the development of weaponry, notably the protective weapons and the initial form of tactics in the Archaic Period as well. Considering what reasons the mentioned solutions have been adopted for, it is tempting to presuppose that it was the reflection of the tendency consisting of fitting into trends spreading from Near East westward. It seems to be a plausible explanation, especially taking the fact of Greek mercenary service in area of the Oriental into account. Obviously, we also should not exclude that the adoption of foreign military solutions was caused by their superiority in reference to the part of those 'genuinely Greek' weaponry. Further investigations are an undoubtedly necessary term for the fuller understanding of particular phases comprising the development of Greek warfare.

References:

Ahlberg G. 1971. *Fighting on Land and Sea in Greek geometric Art*. Athens.

Backer D. F. 2007. Some basic tactics of Neo-Assyrian warfare. *Ugarit-Forschungen* 1, 69-115.

Baitinger H. 2011. *Waffenweihungen in griechischen Heiligtümern.* (*Monographien des des Römisch-Germanischen Zentralmuseums* 94). Mainz.

Batmaz A. 2013. A lion-headed shield from Ayanis: An identifier of the Urartian culture?. In L. Bombardieri, A. D'Agostino, G. Guarducci, V. Orsi and S. Valentini (eds.), *SOMA 2012. Identity and Connectivity*. *Proceedings of the 16th Symposium on Mediterranean Archaeology, Florence, Italy,* March *1-3*, *2012*. vol. 1, 243-252. (*BAR-IS* 2581, 1). Oxford.

Benton S. 1938. The date of the Cretan shields. *The Annual of the British School at Athens* 39, 52-64.

Blecić Kavur M. 2017. Illyrian helmets from Montenegro. In D. Radovic (ed.), *Nova Anticka Duklja VIII. Museum and Galleries of Podgorica*, 31-57. Podgorica.

Boardman J. 1970. *Greek Gems and Finger Rings, Early Bronze Age to Late Classical*. London.

Boardman J. 2000. *The Greeks Overseas. Their Early Colonies and Trade*. London.

Boardman J. 2001. *The History of Greek Vases.* London.

Born H. and Hansen S. 1994. *Frühgriechische Bronzehelme*. Berlin.

Brown R. B. 1984. Greeks in Assyria: some overlooked evidence. *Classical World* 77, 300-303. https://doi.org/10.2307/4349596.

Cifarelli M. 1998. Gesture and alterity in the art of Ashurnasirpal II of Assyria. *The Art Bulletin* 80, 210-228. https://doi.org/10.2307/3051230.

Curtis J. 1994. Mesopotamian bronzes from Greek sites: the workshops of origin. *Iraq* 56, 1-25. https://doi.org/10.1017/S0021088900002771.

Dawkins R. M. 1929. *The Sanctuary of Artemis Orthia at Sparta*. London.

De Groote K. R. 2016. "Twas when my shield turned traitor"! Establishing the combat effectivness of the Greek hoplite shield. *Oxford Journal of Archeology* 35, 197-212. https://doi.org/10.1111/ojoa.12085.

Dezsö T. 1998. *Oriental Influence in the Aegean and Eastern Mediterranean Helmet Traditions in the 9th-7th Centuries B.C.: The Patterns of Orientalization*. (*BAR-IS* 691). Oxford.

Dezsö T. 2001. *Near Eastern Helmets of the Iron Age.* (*BAR-IS* 992). Oxford.

Dezsö T. 2012. *The Assyrian Army. I. The Structure of the Neo-Assyrian Army. 1. Infantry*. Budapest.

Dezsö T. and Curtis J. 1991. Assyrian iron helmets from Nimrud now in the British Museum. *Iraq* 53, 105-126. https://doi.org/10.2307/4200341.

Echeverría F. 2012. Hoplite and phalanx in Archaic and Classical Greece: A Reassessment. *Classical Philology* 107, 291-318. https://doi.org/10.1086/666924.

Echeverría F. 2015. Heroic fiction, combat scenes, and the scholarly reconstruction of Archaic Greek warfare. *Bulletin of the Institute of Classical Studies* 58, 33-60. https://doi.org/10.1111/j.2041-5370.2015.12001.x.

Frielinghaus H. 2011. *Die Helme von Olympia: Ein Beitrag zu Waffenweihungen in griechischen Heiligtümern*. Berlin–New York.

Frothingham A. L. 1888. Early Bronzes brecently discovered on Mount Ida in Krete. *The American Journal of Archaeology and of the History of the Fine Arts* 4, 431-449. https://doi.org/10.2307/496130.

Hale J. R. 2013. Not Patriots, Not Farmers, Not Amateurs: Greek Soldiers of Fortune and the Origins of Hoplite Warfare. In D. Kagan, G. F. Viggiano (eds.), *Men of Bronze. Hoplite Warfare in Ancient Greece*, I. Princeton, 176-193.

Hall J. M. 2011. *Historia Grecji archaicznej ok. 1200-479 p.n.e.* Kraków.

Hencken H. 1950. Herzsprung shields and Greek trade. *AJA* 54, 294-309. https://doi.org/10.2307/501002.

Hockey M., Johnston A., Niece L. S., Middleton A. and Swaddling J. 1992. An Illyrian helmet in the British Museum. *The Annual of the British School at Athens* 87, 281-291.

Hurwit J. M. 1985. *The Art and Culture of Early Greece, 1100–480 B.C.* New York.

Hurwit J. M. 2002. Reading the Chigi vase. *Hesperia: The Journal of the American School of Classical Studies at Athens* 71, 1-22. https://doi.org/10.2307/3182058.

Hurwit J. M. 2006. Lizards, lions, and the uncanny in early Greek art. *Hesperia: The Journal of the American School of Classical Studies at Athens* 75, 121-136.

Jaeger W. 2007. *Teologia wczesnych filozofów greckich*. Kraków.

Kagan D. and Viggiano G. F. 2013. The Hoplite debate. In D. Kagan and G. F. Viggiano (eds.), *Men of Bronze. Hoplite Debate in Ancient Greece*, 1-56. Princeton.

Kasas V. S. 1980. *Die Funde aus Olympia*. Athens.

Luraghi N. 2006. Traders, pirates, warriors: the proto-history of Greek mercenary soldiers in the Eastern Mediterranean. *Phoenix* 60, 21-47.

Molloy B. 2009. For Gods or men? A reappraisal of the function of European Bronze Age shields. *Antiquity* 83, 1052-1064. https://doi.org/10.1017/S0003598X00099348.

Molloy B. 2010. Swords and swordmanship in the Aegean Bronze Age. *AJA* 114, 403-428. https://doi.org/10.3764/aja.114.3.403.

Molloy B. 2012. Martial Minoans? War as social process, practice and event in Bronze Age Crete. *The Annual of the British School at Athens* 107, 87-142. https://doi.org/10.1017/S0068245412000044.

Moore M. B. and Schwartz J. H. 2006. Hoplites, horses, and a comic chorus. *Metropolitan Museum Journal* 41, 33-57. https://doi.org/10.1086/met.41.20320659.

Niemeier W.-D. 2001. Archaic Greeks in the Orient: textual and archaeological evidence. *BASOR* 322, 11-32. https://doi.org/10.2307/1357513.

Paipetis S. A. and Kostopoulos V. 2008. Defensive weapons in Homer. In S. A. Paipetis (ed.), *Science and Technology in Homeric Epics*, 181-203. Dordrecht.

Pantermalis D. 2016. *Dodoni to manteio ton ichon [Δωδώνη το μαντείο των ηχων]*. Athens.

Pedley J. G. 1994. Greek art. *Ancient Art at The Art Institute of Chicago* 20, 32-53.

Rollinger R. 2006. The Eastern Mediterranean and Beyond: The relations between the Worlds of the "Greek" and "Non-Greek" civilizations. In K. H. Kinzl, *A Companion to the Classical Greek World*, 197-226. Oxford.

Snodgrass A. 1964. *Early Greek Armour and Weapons*. Edinburg.

Snodgrass A. 1998. *Homer and the Artists. Text and Picture in Early Greek Art*. Cambridge.

Snodgrass A. 2013. Setting the Frame Chronologically. In D. Kagan and G. F. Viggiano (eds.), *Men of Bronze. Hoplite Warfare in Ancient Greece*, 85-93. Princeton.

Sourvinou-Inwood C. 1993. Early Sanctuaries, the eighth Century and ritual Space Fragments of a Discourse. In N. Marinatos and R. Hägg (eds.), *Greek Sanctuaries. New Approaches*, 1-13. London−New York.

Spier J. 1990. Emblems in Archaic Greece. *Bulletin of the Institute of Classical Studies* 37, 107-129. https://doi.org/10.1111/j.2041-5370.1990.tb00222.x.

Stevenson Smith W. 1960. Two Assyrian reliefs. *Bulletin of the Museum of Fine Arts* 58, 44-56.

Taracha P. 2007. Warriors of the Mycenaean "Age of Plate". In B. Molloy (ed.), *The Cutting Edge. Studies in Ancient and Medieval Combat*, 144-152. Stroud.

Uckelmann M. 2016. The function of Bronze Age shields. In M. Uckelmann and M. Mödlinger (eds.), *Bronze Age Warfare: Manufacture and Use of Weaponry*, I, 187-199. (*BAR-IS* 2255). Oxford.

Viggiano G. F. and Wees H. van 2013. The arms, armor, and iconography of Early Greek Hoplite Warfare. In D. Kagan and G. F. Viggiano (eds.), *Men of Bronze. Hoplite Warfare in Ancient Greece*, 57-73. Princeton.

Wees H. van 1992. *Status Warriors. War, Violence and Society in Homer and History*. Amsterdam.

Wees H. van 1994. The Homeric way of war: the "Iliad" and the hoplite phalanx (I). *Greece & Rome* 41, 1-18.

Wees H. van 2004. *Greek Warfare: Myths and Realities*. London−New York.

Winter I. 1988. North Syria as a Bronzeworking centre in the Early First Millennium BC: Luxury commodities at home and abroad. In J. E. Curtis (ed.), *Bronzeworking Centres of Western Asia c. 1000–539 B.C*. London−New York.

Woolley L. 1921. *Carchemish. Report on the Excavations at Jerablus on Behalf of the British Museum*, I. London.

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Pl. 1: 1. Conical helmet from Argos, c. 720 BC, Archeological Museum in Argos. Reproduced from https://pl.pinterest.com/sphinxfitz/armour-and-weapons/, 19.06.2017, 15:17

Pl. 1: 2. Fresco from Til Basrip, 8th century BC. Reproduced from Luraghi 2006, pl. 4

Pl. 1: 3. Reindell, I. 2001a. Observations on the Bronze Shield GPM 1628, inv. Ay.39.01, Found during the 2001 Archaelogical Campagin in Ayanis, SMEA, vol. 43/2., p. 282. © SMEA N

Pl. 1: 4. Schematic depiction of Assyrian Combat Group. Reproduced from Backer, D.F. 2007, p. 105, fig. B1

Pl. 1: 5. Aryballos from Lechaion, c. 690 BC. Reproduced from https://velopeia.blogspot.com/2014/05/hellenic-velovolia-bce-database.html, 09.05.2018/ 11:50