



BRILL

ANCIENT CIVILIZATIONS  
FROM SCYTHIA TO SIBERIA 26 (2020) 275-295



brill.com/acss

# New Cultural Elements of European Origin in the Dark Ages of Attica

*Dmitri Panchenko\**

St. Petersburg State University, St. Petersburg, Russia

Higher School of Economics, St. Petersburg Campus, St. Petersburg, Russia

*dmpanchenko@yahoo.com; dmpanchenko@mail.ru*

## Abstract

The transformation of burial customs in Protogeometric Athens is to be related to the ancient tradition concerning the coming of the Ionians. The newcomers constituted a new elite in Athens and introduced several new institutions. Burial customs of the newcomers, as well as the types of their swords and their political and military institutions point to their European, especially Scandinavian, affiliation.

## Keywords

Athens – Protogeometric period – the Ionians – cremation – bent swords – Scandinavia

According to a standard view, one finds in the Dark Ages of Attica more continuity with the Mycenaean epoch than in any other part of Greece. This view may be correct, but I wish to supplement it by drawing attention to the presence of some new cultural elements in the Dark Ages of Attica for which there is no plausible account in terms of the decline and disintegration of the Mycenaean civilization and which are better explained in terms of their arrival from outside.

---

\* St. Petersburg State University, 7/9, Universitetskaya naberezhnaya, 199034, St. Petersburg, Russia; Higher School of Economics, St. Petersburg Campus, 3A-1, Kantemirovskaya naberezhnaya, 194100, St. Petersburg, Russia.

The most important case pertains to the introduction of cremation. The elements of this burial custom being practiced in both Protogeometric Greece and elsewhere in Europe display remarkable similarities. In the words of Jan Bouzek, “Greek Protogeometric, Homeric and Central European burial customs connected with the cremation in urns under barrows have many other ritual phenomena in common. The *prothesis* of the dead and the mourning, the four-wheeled wagons carrying the dead to the grave, the distinction between the shapes of urns for male and female burials, and later offerings (libations) on the grave, are all traits in common and are too numerous to be merely the result of chance, especially when the best European parallels come from the territory just east of the Alps, where many parallels for 12th-11th century BC Aegean weapons, armour and personal ornaments were found”.<sup>1</sup>

Although it was repeatedly proposed that the cremation was brought to Greece by the intruders, the proposal was met with the objection that cremation is prominent in the areas that display particular continuity with the Mycenaean past. In the words of Chester Starr, “Why should the one area, Attica, where we can be sure of continuous settlement, take up the new fashion most completely?”<sup>2</sup> Very late arrival of cremation in northern Greece seemed also to have not agreed with its arrival from Central Europe.

But these objections are in no way cogent. The cremation habit spread gradually. Eighteen cremations were found at the LH IIIC cemetery at Perati on the eastern coast of Attica. The earliest known cremations in Athens, from the Kerameikos, belong to the Submycenaean period; cremations became predominant in Athens in the Protogeometric (PG) period. The proportion of the earliest cremations among the burials is insignificant at both the Perati cemetery and the Kerameikos.<sup>3</sup> It seems that the people who practiced cremation arrived in relatively small groups and shared settlement with the local people. They could easily adopt both the elements of local culture and the language of local people, that is, the Greek. They became to a certain extent the heirs and the bearers of local, that is, Mycenaean cultural traditions. We may further observe that early cremation burials in the Aegean are almost invariably found close to the sea, which is true for both the LH IIIC/LM IIIC and PG periods.<sup>4</sup> If the people who brought cremation to Attica came by sea, early cremation does

1 Bouzek 1985, 207.

2 Starr 1961, 86.

3 Snodgrass 2000, 144-149.

4 See maps in Ruppenstein 2013, 186, fig. 1, 187, fig. 2; Snodgrass 2000, 188, fig. 68, 191, fig. 69 and Bouzek 1985, 208, fig. 101 (the places which are rather remote from the sea, like Elateia and Palaiokastros, are located near rivers). The emerging pattern seems to have been overlooked in previous discussions.

not necessarily need to be found in Greece north of Attica, on the land route from Central Europe.<sup>5</sup>

The PG period,<sup>6</sup> treated by many scholars as a kind of new beginning in the formation of Greek civilization, commands our special attention. “A marked change in the preference for cremations occurred during the Submycenaean/Protogeometric transitional phase. 16 out of 28 burials in the Kerameikos are cremations in this phase. This corresponds to a ratio of 57.1% and a growth rate of more than 50% compared to the Submycenaean period”.<sup>7</sup> Thus, the burial practice of a tiny minority turned into the predominant rite, and in the Protogeometric period adults seem to have been cremated without exception.<sup>8</sup>

There also came some modifications. Amphorae became the type of urn nearly exclusively used in the PG period, while four out of six urns are jugs at the Submycenaean (SM) cemetery at Perati and the cremation urn is also a jug in the LH IIIC grave from the Kerameikos cemetery.<sup>9</sup> “Scholars have stressed the absence of weapons in SM burials and their reappearance in PG, which suggests a clear-cut break in funerary customs”.<sup>10</sup> On the other hand, the helmet and body-armour disappeared from graves in PG,<sup>11</sup> and while “arrowheads are present in a series of Athenian and Attic graves of the LBA ... the only known arrowhead from an EIA funerary context comes from PG 28, datable to EPG”.<sup>12</sup> The PG burials in Athens display no great difference in wealth, “especially when compared with the SM burials”.<sup>13</sup>

How should one account for such novelties? Let me cite a recent assessment by Florian Ruppenstein: “The reasons for the sudden shift to cremation as the

5 Cf. Ruppenstein 2013, 188 observes that swords of Naue II type and cremation burials are concentrated in the same regions during the LH/LM IIIC period (the northwestern Peloponnese and eastern Crete). “This means, he concludes, that the same communities who had particular interest in or access to a new weapon of a foreign ancestry were also particularly receptive to the introduction of a new burial rite of foreign ancestry”. Foreign ancestry is in both cases European.

6 At the present state of research, one should accept the second half of the eleventh century BC for the beginning of the period. See Weninger, Jung 2009 for the synchronism with Italian and larger European chronology with its dendrodates (esp. pp. 390-391) and Toffolo *et alii* 2013 for radiocarbon dating; see also Fantalkin 2011 for the difficulties and illusions concerning the synchronism with the data from the Levant.

7 Ruppenstein 2013, 192.

8 Styrenius 1967, 91; Lemos 2002, 152.

9 Ruppenstein 2013, 190-191.

10 D’Onofrio 2011, 647.

11 D’Onofrio 2011, 646.

12 D’Onofrio 2011, 648.

13 Lemos 2002, 156.

preferred burial custom in the Submycenaean/Protogeometric transitional phase are not obvious. External stimuli are nor recognizable and therefore intra-societal developments may be assumed. It seems that the Athenian society of the time was ready for a change and innovations in various fields. It is also the time of the introduction of iron weapons and thus corresponds to the beginning of the Iron Age".<sup>14</sup> We shall, however, suggest to take external stimuli into account.

### The So-Called "Killed" Swords in Attica and Euboea

Another novelty in respect to PG cremations in Attica is that they are repeatedly associated with the so-called "killed" swords. All the swords in question are iron swords, all are bent and some are wrapped around the urn.<sup>15</sup>

- 1) In the PG burial Kerameikos G 6 north of the Eridanus, a sword girded an amphora with ashes at its largest part.<sup>16</sup>
- 2) In the PG burial Kerameikos G 6 south of the Eridanus, a burned sword encircled the shoulder of an amphora with ashes. The hilt of the sword was put inside the amphora.<sup>17</sup>
- 3) In the PG burial Kerameikos G 28, both burned sword and knife were bent around the neck and shoulder of an amphora with ashes. An arrowhead was put inside the amphora.<sup>18</sup>
- 4) In the PG burial near the Cathedral, a sword was S-like wrapped around a spearhead.<sup>19</sup>
- 5) In the burial Agora No. 27, transitional from PG to EG, a sword girded an urn.<sup>20</sup>
- 6) In the EG burial Kerameikos G 38, a sword was U-like bent around the shoulder of an amphora with ashes.<sup>21</sup>
- 7) In a Geometric burial, a sword girded the shoulder of an urn with ashes.<sup>22</sup>
- 8) An analogous case in one more Geometric burial in Athens.<sup>23</sup>

14 Ruppenstein 2013, 192.

15 For illustrations see D'Onofrio 2011, 669-671 figs. 5-7, 9.

16 Kraiker & Kübler 1939, 99, Taf. 76; Kilian-Dirlmeier 1993, No. 316.

17 Kraiker & Kübler 1939, 183.

18 Kübler 1943, 34-35. Taf. 38; Kilian-Dirlmeier 1993, No. 274.

19 Dontas 1953-1954, 92; Kilian-Dirlmeier 1993, No. 339.

20 Blegen 1952; Kilian-Dirlmeier 1993, No. 278.

21 Kübler 1954, 234, Taf. 165; Kilian-Dirlmeier 1993, No. 275.

22 Kilian-Dirlmeier 1993, No. 276.

23 Kilian-Dirlmeier 1993, No. 338.

There is one more problematic case related to the inhumation burial rite. A sword put in Kerameikos G 2 was contorted, but it is difficult to see from the account what was the reason for that.<sup>24</sup>

About half of all swords found in the Early Iron Age Athenian cremations are bent. We are dealing thus with a typical, rather than unusual, burial custom. But that is evident for Athens. For Early Iron Age (EIA) Greece, one bent sword is known from Crete – among dozens found there in graves;<sup>25</sup> one bent sword was found in Macedonian Vergina – among more than a dozen of unbent examples;<sup>26</sup> one slightly bent sword appeared at Halos, in Thessaly – among eleven unbent ones.<sup>27</sup> One finds, however, in Euboea the situation similar to that at Athens. In Lefkandi, three bent swords associated with the PG cremation burials were found<sup>28</sup> and also one or two dated to EG,<sup>29</sup> and the total is about half of all iron swords from the site. Bent swords from Eretria are even more numerous, and some of them, as in Athens, gird the urns (in this case bronze cauldrons).<sup>30</sup>

Now, if Lefkandi and Eretria display the same specific novelty in respect to burial customs as Athens, then Athenian “intra-societal developments” can hardly be the key factor. One has to consider external stimuli, and this is the first thing to note: if we are dealing with an intrusive rite there are all reasons to think about its coming by sea.

What further do Athens, Lefkandi and Eretria have in common? One may say that they belong within a common region,<sup>31</sup> but the ritually destroyed swords appeared neither in Boeotia nor in Phocis. However, both Attica and Euboea are the areas populated by the people who spoke a West Ionic dialect.<sup>32</sup>

In Dark Age Athens, further, the cremation became a burial practice for all adults including the elite, and these elite certainly practiced the specific

24 Kübler 1943, 47: “Vom rechten Ellbogen schräg über das Becken hinweg ein eisernes Griffzungenschwert”; Kilian-Dirlmeier 1993, No. 273.

25 Kilian-Dirlmeier 1993, No. 302.

26 Kilian-Dirlmeier 1993, No. 371.

27 Wace & Thompson 1911-1912, 14, 27, fig. 15, 3.

28 Toumba, Tombs 14 (Popham & Sacket 1980, 176; Kilian-Dirlmeier 1993, No. 318; D’Onofrio 2011, 370, fig. 8a-b), 50 (Kilian-Dirlmeier 1993, No. 339A; D’Onofrio 2011, 370, fig. 8c-d), 79 (cf. Lemos 2002, 118, No. 123).

29 Pyre 8 (Popham & Sacket 1980, 195; Kilian-Dirlmeier 1993, No. 280: slightly bent), Pyre 13 (Kilian-Dirlmeier 1993, No. 339F).

30 Kilian-Dirlmeier 1993, Nos. 377, 378, 379, 380, 382, 383. Eretrian bent swords are dated to the LG period.

31 Crielaard 2006.

32 A sword bent around an amphora came also from EAI cemetery in Salamis (D’Onofrio 2011, 652), that is, from the area with the same linguistic characteristics.

custom of bending swords. Is it likely that the Athenian elite adopted a new burial rite from small groups of intruders through imitation? It is by far more plausible that this was the burial practice of intruders who constituted the new elite in Athens. Now, (1) cremation is the burial practice of the elite in the *Iliad* and the *Odyssey*, while (2) Homeric dialect is not only predominantly Ionic, but it also has essential characteristics of West Ionic, as Martin West has shown,<sup>33</sup> and (3) West Ionic was the dialect of Attica and Euboea – the only parts of the Greek world for which we can confidently say that cremation dominated there for centuries, beginning with the Protogeometric period. The conclusion seems unavoidable that the intruders who established cremation in Athens as the dominant burial practice and who constituted a new elite there were the Ionians.

### The Coming of the Ionians

Our conclusion agrees with the ancient tradition. Aristotle in his *Athenian Constitution* gives a list of eleven major reforms in Athenian history. The list begins with “the settlement at Athens of Ion and his companions, for it was then that the people were first divided into the four Tribes and appointed the Tribal Kings” (*Ath. Pol.* 41.2; H. Rackham’s transl.). Earlier in his text, Aristotle speaks of three “greatest and oldest offices” which were the King, the War-lord (*polemarchos*) and the Archon: “Of these the office of King was the oldest, for it was ancestral. The second established was the office of War-lord, which was added because some of the Kings proved cowardly in warfare (which was the reason why the Athenians had summoned Ion to their aid in an emergency)” (*Ath. Pol.* 3.2. H. Rackham’s transl.). According to a fragment from the lost part of the *Athenian Constitution*, “when Ion came to dwell in Attica, the Athenians came to be called Ionians, and Apollo was named their Ancestral god” (*Ath. Pol.* Fr. I; H. Rackham’s transl.).

One may safely assume that Aristotle who spent many years in Athens knew local traditions very well and at the same time did not depend on local democratic patriotism for which Theseus and not Ion was the major figure of the past<sup>34</sup> and for which the stability of the population in Attica was its distinctive feature. Aristotle relies, then, on good sources, and the echoes of the tradition he presents appear elsewhere. “The Athenians, Herodotus says, while the Pelasgians ruled what is now called Hellas, were Pelasgians, bearing the name

33 West 1988, 166.

34 Hansen 1991, 298 *f.*

of Cranai. When Cecrops was their king they were called Cecropidae, and when Erechtheus succeeded to the rule, they changed their name and became Athenians. When, however, Ion son of Xuthus was commander of the Athenian army, they were called after him Ionians” (8.44.2; A.D. Godley’s transl.). When Herodotus speaks of introducing ten tribes by Cleisthenes (5.69), he clearly “regards four ancient tribes of the Athenians as generically Ionic, not specifically Attic”.<sup>35</sup> According to Strabo, Ion because of the victory over the Thracians under Eumolpus gained such a high repute that the Athenians entrusted the government to him; and Ion divided the people into four tribes (8.7.1).

To be sure, Solon names Attica “the oldest land of Ionia,” but this need not imply that he denies the idea that Ion and his companions came to Attica from some other place. Indeed, Aristotle who cites the line and who knows that it belongs to the beginning of Solon’s elegy (*Ath. Pol.* 5.2), holds nevertheless this idea. Solon clearly refers to the common belief of the Athenians that their city led the colonization of Ionia. His words may also indicate that there was no tradition, or at least no well-established tradition, concerning the original home of the Ionians. It seems, however, that there was one popular idea as to from where the Ionians came to Athens, and this idea pointed to the north-western Peloponnese, to Achaea.<sup>36</sup>

Since we are dealing with the tradition that reports the events of a distant past and goes back to an apparently illiterate epoch, caution is necessary, but I cannot remember any good reason for rejecting the tradition in question. Our observations concerning the use of cremation seem to provide a strong support to its veracity,<sup>37</sup> and there are some further points. The transition to the Protogeometric Period marks not only novelties related to burial customs,

35 Munro 1934, 116.

36 Paus. 5.1.1: “When the Achaeans were driven from their land by the Dorians, they did not retire from the Peloponnese, but they cast out the Ionians and occupied the land called of old Aegialus, but now called Achaea from these Achaeans.” Strabo presents the version according to which Attica was the original home of the Ionians from where they conquered Achaea, but after the return of the Heracleidae they were driven out by the Achaeans and went back again to Athens (Strabo 8.1.2; 8.7.1). I take this version as an artificial construction (*cf.* Hdt. 7.94 who also maintains that “the Ionians dwelt in what is now called Achaea”, but does not say that they came from Attica). The synchronism with the return of the Heracleidae implies that the ancient chronographic tradition placed the coming of the Ionians to Attica two generations after the Trojan war (Panchenko 2000, 34-35).

37 It can be objected that significant novelties in respect to burial practice took place in Attica also around or after 700 BC without any intrusion from the outside (Alexandridou 2013). However, changes of that time seem to have been specifically Attic, while the burial practice that became dominant in PG Athens was spreading for centuries over many parts of Europe.

but also the shift of the political centre in Attica: Perati and not Athens was the major centre in the Submycenaean period. Again, the ancient sources neither assert nor imply Ionian conquest of Attica in a strict sense, and there is nothing in the excavation data to think otherwise. Even the novelties in respect to burial practice come together with elements of continuity. The characteristic for the PG type of grave, the so-called ‘trench-and-hole type’ (the urn was placed in a hole dug at the bottom of a rectangular shaft), appears already in the latest phase of SM,<sup>38</sup> and “during the PG period Athenians continue to bury their dead in the Kerameikos and in the Agora as in the previous SM period”.<sup>39</sup> One does not think about comprehensive substitution of old customs and institutions for new ones, but rather about adaptation of new elements and cultural cross-fertilization. An obvious sign of it is that Athens had remained the city of Athena; moreover, a popular tale about the contest for Athens involved Athena and Poseidon rather than Athena and Apollo, the alleged father of Ion.

Archaeology provides some indirect support even for the tradition associating the coming of the Ionians with the division of the Athenians into four tribes. Such an administrative activity may seem surprising in the early Dark Age, but excavation revealed a striking formalization in respect to Athenian PG graves – nearly all of them are of ‘trench-and-hole’ type.<sup>40</sup>

### Distant Connections of the Ionians

The Ionians were sea-people. Both the southern extension of the Adriatic Sea and a distant land on the eastern coast of the Aegean Sea bear their name, and all the East used their name to designate the Greeks. Some scholars relate their name (to be restored as *yawones*) with that of the Chaones, a people on the Adriatic east coast, north of Epirus. The Ionians seem to appear on a LM IIIA2 tablet from Knossos, possibly as mercenaries.<sup>41</sup> Unlike the Danaioi and Achaeans, they do not figure, however, in Egyptian sources, and unlike the Achaeans they are not mentioned in the Hittite texts either. More importantly, they have nothing to do with the Greek world of the *Iliad*, centered

38 Styrenius 1967, 66, 91.

39 Lemos 2002, 156.

40 Lemos 2006, 516. ‘Trench-and-hole’ type burials became visible also in PG Euboea, in Lefkandi and Chalkis (Lemos 2002, 163, 168), but graves there display much more variety than in Athens.

41 Driessen & Macdonald 1984, 49-56. For the name ‘Ionians’ see Chadwick 1977.



around Mycenae.<sup>42</sup> It seems the Ionians appeared on the stage only at the very end of the palatial period or even later. Yet before the Dorian conquest of the Peloponnesus, we are told that they dwelt not only in Achaea, but also in some parts of the north-eastern Peloponnese and in Megaris.<sup>43</sup> Of these areas, LH IIC Achaea (from where a part of the tradition brings the Ionians to Athens) is remarkable in respect to its relative prosperity and the concentration of warrior graves.<sup>44</sup> Local traditions of various cities of Ionia claimed the link with Neleus and his realm at Pylos. Those scholars who associate this realm with the coastal area near Triphylian rather than Messenian Pylos are probably right.<sup>45</sup>

There is a component in the Greek epic tradition, known to us mostly as Ionian, which also points to the people essentially connected with the sea and with the distant sea-raids in particular. For lost friends, they heap up a mound on the shore of the sea – σῆμα ἐπὶ Θαλάσσης (*Il.* 7.86; *Od.* 11.75, 24.80-84). Odysseus and his companions plant on the top of Elpenor's mound his oar (12.15). Odysseus himself, Teiresias says, will wander till he will meet someone who will take the oar on his shoulder for a spade (11.121-130). Achilles, while remembering Patroclus, thinks of how they together passed "through the wars of men and the grievous waves" (*Il.* 24.8). At Troy, Achilles wondered how his father is doing at home and his son in Skyros (*Il.* 19.326-337). The actual distance involved is just a few days of navigation. One may guess that the poet takes the liberty of forgetting about this because a glorious expedition meant, in the epic tradition, one that brought its participants really far from home.

New cultural elements that appeared in Dark Age Athens were of distant provenance. Jan Bouzek compared PG Attic and central Balkan dolls with similar decoration and argued for a central Balkan origin of the type.<sup>46</sup> This fits well with his cautiously expressed suggestion concerning the origin of PG cremation in Central Europe. Stephen Foltiny systematically compared grave goods from the burial Agora No. 27 (with its sword bent around the urn) and similar Central European objects, especially flat axes with lateral projections (winged axes) to argue the existence of cultural interrelations between Athens and Central Europe.<sup>47</sup> One may assume then that the novelties reached Attica via the Adriatic and Ionian Seas.

42 The Ionians appear only once in the *Iliad* (13.685) – to designate the Athenians according to the context.

43 Evidence is conveniently assembled in Finkelberg 2005, 128, No. 42.

44 Deger-Jalkotzy 2006.

45 See Nilsson 1972, 81-85.

46 Bouzek 1985.

47 Foltiny 1961.

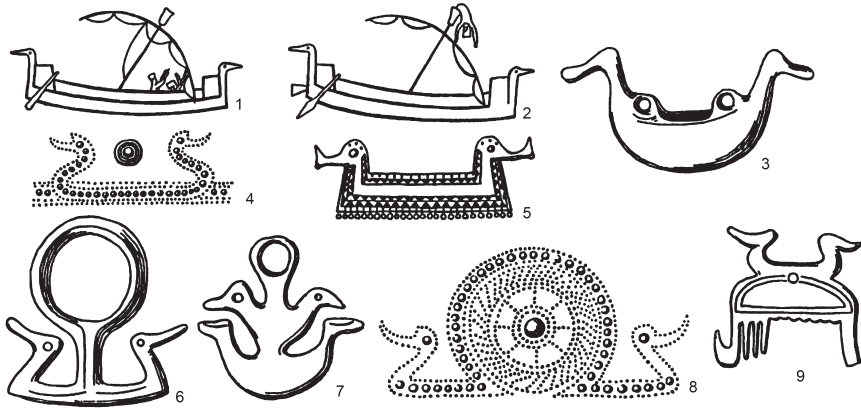


FIGURE 1 The ships of the Sea Peoples and European *Vogelbarken* (after Kimmig 1964, 224, fig. 1)

However, one may consider even more distant connections. It has been shown in my other studies<sup>48</sup> that the ships of the Sea Peoples display Scandinavian affiliation (figs. 1-2), while a number of LH III C representations of the ships are of related types (e.g. a *Vogelbarke* painted on a krater sherd from Tiryns, fig. 3, 1) and I also suggested that Scandinavian influence, whether direct or indirect, had reached the Aegean in several waves. There are reasons to think that the Ionians and Athens were particularly affected. One finds on an Attic cup (fig. 3, 3), supposedly of the late ninth century BC, a representation of a ship that has neither mast nor sail, and the team is indicated by vertical strokes – all elements characteristic of the representation of ships on Scandinavian monuments. The object above the ship is in all probability a star. This must be either the sun or the polar star (also Venus can be singularly selected out of the rest of the stars, but only in a particular context). The ship, then, is meant to either transport the sun or symbolize celestial rotation round the celestial pole. Ships with a wheel (a disc divided in sectors) and ships with a disc or a wheel on a stand repeatedly appear on the Bronze Age Scandinavian razors and rock carvings (fig. 3, 4). Such representations are commonly understood as showing a ship transporting the sun. This view was also accepted by myself. Moreover, I indicated that Scandinavian monuments provide a plausible parallel to the poetic account of the sun's daily journey by the Ionian poet Mimnermus of Colophon that presents a highly nontrivial idea of the sun's changing vehicle, and I argued for its likely Scandinavian origin. Somewhat later, I suggested, however, that discs and wheels on a stand refer to the rotating sky rather than

48 Panchenko 2010/2011; 2012, 85-87, 107.

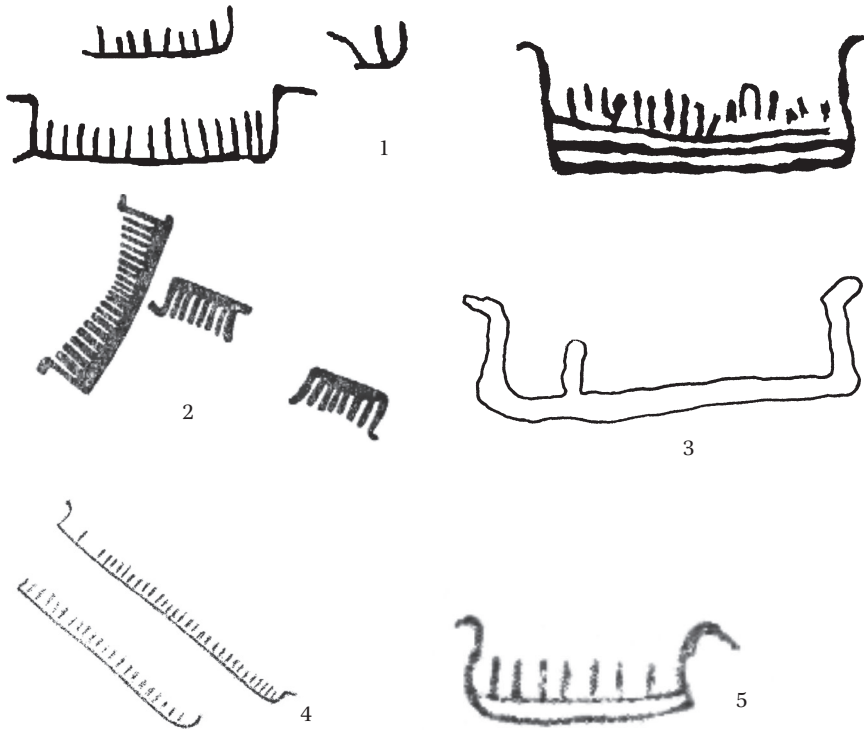


FIGURE 2 Ships on carvings from Norway and Sweden. 1: Rogaland, Norway (after Fett & Fett 1941, pl. 39 D); 2: Tanum, Bohuslän (after Gelling & Davidson 1969, fig. 16); 3: Kville, Bohuslän (after Fredsjö 1981, pl. 111); 4-5: Östergötland (after Nordén 1923, pls. 54, 43)

the sun. Whatever particular interpretation, the ship seems to belong together with a cosmological context on both the Attic cup and Scandinavian monuments. A small Attic hydria roughly contemporary with the cup in question also has the ship as the central and even self-sufficient subject matter. There are various further parallels between Scandinavian carvings and Greek geometric art, but this issue requires special treatment.

In the late second and early first millennia BC, southern Scandinavia was just a part (probably the core part) of the area covered by the Nordic culture<sup>49</sup> which also included the eastern Netherlands, northern Germany (stretching to northern Poland), major islands of the Baltic Sea and some outposts in southern Finland and the Eastern Baltic countries. The custom of accompanying a burial by a bent or otherwise damaged sword and especially the association of

49 German scholars usually speak about 'Nordischer Kreis'.

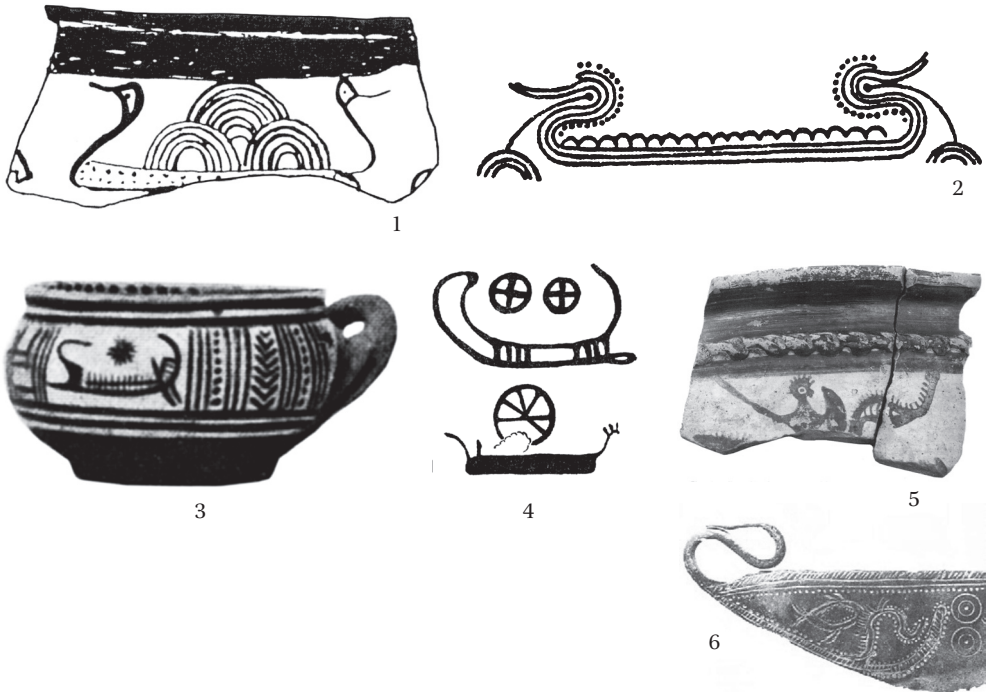


FIGURE 3 Aegean and Nordic representations of ships. 1: *Vogelbarke* painted on a krater sherd from Tiryns (after Wachsmann 1998, fig. 8, 32); 2: *Vogelbarke* from Emden (after Bouzek 1985, fig. 90, 1); 3: Attic geometric vase (after Morrison & Williams 1968, pl. 6c); 4: Carvings from Bohuslän and Östergötland (after Gelling & Davidson 1969, fig. 4); 5: Sherd from Kynos (after Wachsmann 1998, fig. 7, 15); 6: Bronze razor from Denmark (after Kaul 1998, No. 387)

such a custom with cremation also point to the Nordic culture as a likely place of origin. Although ritually damaged weapons from Cyprus<sup>50</sup> and Syria,<sup>51</sup> dated to the Middle Bronze Age, may be earlier than their European counterparts, it is only in Europe where the custom in question appears as a widely spread tradition which also lasted for many centuries. To my knowledge, this tradition began within the area of the Nordic culture in the period II of Montelius<sup>52</sup> (c. 1500-1300 BC).<sup>53</sup> At early stages, ritually damaged weapons appear in conjunction with both inhumation and cremation, but the tendency in favour of

50 Åström 1957, 274-275; Åström 1987, 213-217.

51 A dagger of Cypriote (probably) provenance found in Ugarit (Schaeffer 1938, 219, pl. xxii).

52 Olshausen 1892, 167-175.

53 Olsen *et alii* 2011; Randsborg & Christiansen 2006.

the latter version is visible. By the Late Bronze Age, the habit had spread over many parts of Europe.<sup>54</sup> There are also a few examples of bent swords from the Aegean. With the coming of the Iron Age, the custom is found among various Celtic peoples and typically with cremation burials;<sup>55</sup> within the area of the Nordic culture, its popularity essentially increases and it displays a very strong association with cremation.<sup>56</sup> The PG examples from Athens fit this pattern very well.

Further, to bend an iron sword, it was necessary to expose it to the heat of fire – just as the body of his dead owner. The sword is not completely destroyed, it changes its shape, but it still exists – just like burning of his owner's body does not mean the absolute end of existence, but rather the promise of its continuation in a new form.<sup>57</sup> If our explanation<sup>58</sup> is correct it accords well with the world of ideas of northern Germanic peoples and its Valhalla (to be sure attested in much more later sources).

The idea of the influence upon PG Athens from the (very) far distance finds a further confirmation. Irene Lemos observes: "Apart from one warrior burial in Athens which was given one *fibula*, only at Lefkandi were there *fibulae* found together with weapons".<sup>59</sup> Interestingly, such a combination was quite usual in Bronze Age Denmark over centuries, from periods II to IV of Montelius (c. 1500–900 BC).<sup>60</sup> A sword and a *fibula* appear together also in the Late Bronze Age burials in Hungary, Slovakia, and Germany<sup>61</sup> as well as at Madonna del

54 Wüstemann 2004, tab. 9, No. 64, tab. 85, No. 523; Kemenczei 1988, tab. 9, No. 104 (dagger), tab. 25, No. 245; 1991, tab. 12, No. 59A, tab. 64, No. 297, tab. 72, No. 486; Harding 1995, tab. 28, No. 230.

55 Jahn 1916, 16–21; Pleiner 1993, 161, fig. 1; Măndescu 2012, 344, fig. 1; 346, fig. 2; 347: "in Transylvania bent weapons are never present in inhumation graves ... around Bononia inhumation graves with bent weapons as grave goods are not at all a rarity".

56 Olshausen 1892, 173: "In der Eisenzeit nahm die Sitte ... außerordentlich zu, und das Wichtigste ist, dass sie nun fast ausschließlich bei Leichenbrand auftritt. Hierin stimmen die nordischen Forscher völlig überein." See also Shetelig, Falk 1937, 185.

57 Girding an urn with a sword is the chic version of the rite. Its execution was difficult and required a smith (D'Onofrio 2011, 651). It is rare – I am aware of only one instance outside Athens and Euboea dating to the Viking Age: Duczko 2004, 244.

58 For various explanations see Olshausen 1892, 174 f.; Jahn 1916, 16–21 (adopted by Dantas 1953–1954, 94); Grinsel 1961, 475–491; 1973, 111–114; Åström 1987; Karvonen 1998; D'Onofrio 2011, 652 f.; Lloyd 2015, 21–25.

59 Lemos 2002, 125.

60 Here is a partial list of the finds made in Denmark: Broholm 1943, 65 (Gr. 504), 66 (Gr. 533), 71 (Gr. 570), 86 (Gr. 742); 131 (Gr. 1245), 134 (Gr. 1277), 162 (Gr. 1773), 195 (Gr. 2330); 1946, 15 (Gr. 42), 18 (Gr. 101), 28 (Gr. 226), 67 (Gr. 729).

61 Kristiansen & Suchowska-Duche 2015, 373–374.

Piano, in Sicily.<sup>62</sup> At Verona, an Early Iron Age grave contained an iron sword with two *fibulae*.<sup>63</sup> Swords and *fibulae* were repeatedly found together in Celtic burials. Thus, the combination that seems specific in the Aegean context appears typical when seen in European one.<sup>64</sup> Within this European context, the Nordic component proves again prominent. This invites us to consider striking similarities between early Attica and Scandinavia in respect to naval organization and administrative division.

According to the description of early Attica by Aristotle, “there were four Tribes, as before, and four Tribal Kings. And from each Tribe there had been assigned three thirds and twelve ship-boards (*ναυκραρία*) to each, and over the ship-boards there was established an office of ship-commissioners (*ναύκαραροι*), appointed for the levies and the expenditures that were made” (*Ath. Pol.* 8.3; H. Rackham’s transl.).

Additional information comes from Pollux: “A *ναυκραρία* was, for a time, the twelfth part of a tribe, and there were twelve *ναύκαραροι*, four to each *τριττύς*. Each *ναυκραρία* supplied two horsemen and one ship, from which it perhaps acquired its name” (*Onom.* 8.108).<sup>65</sup>

Since there were twelve *naukrariai* (or ship-boards) in each of the so-called tribe (Greek *φυλή*), it is clear that each *φυλή* supplied twelve ships. Let us compare this with what we know about traditional naval organization in Norway. The land was divided in Norway into *fylki*, and each *fylki* supplied twelve ships (*The Saga of Olaf Tryggvason*, p. 45).<sup>66</sup> Moreover, each Scandinavian country was divided into ship districts (Old Norse *skipreiða*, Old Danish *skipæn*, Old Swedish *skiplagh*).

Thus, we see the common idea for both Attica and Scandinavia of dividing the territory into districts in accordance with the task of organizing the navy,

62 Pare 2008, 86, fig. 5, 8. It is worth noting that an object from the grave 197 at Madonna del Piano interpreted as the bar of a pectoral has the shape that perfectly corresponds to the outline of the Sea Peoples’ ships and the ships of Swedish rock carvings. See Giumlia-Mair, Albanese Procelli & Lo Schiavo 2010, 469-488, 470, fig. 2.

63 Ridgeway 1901, 451.

64 Actually there is at least one more case of the combination in question in Attica: an inhumation grave at Marathon contained both a long iron sword and a bronze *fibula* (D’Onofrio 2011, 662).

65 Scholars repeatedly expressed partial or more radical distrust of the ancient tradition concerning *naukrariai*, but see a recent excellent treatment of the subject: Van Wees 2013, 44-61 (I am grateful to Peter Rhodes for drawing my attention to this work). Van Wees 2013, 56 also refers to Scandinavian parallels, though without going into any detail.

66 Andersson 2003, 95 (explaining *fylki*): “The Norwegians call ‘district’ that territory which can man twelve ships fully equipped with men and arms, with sixty or seventy men on each ship, as was then the custom”.

the same type of naming such districts (but this is just natural) and the same ratio, twelve to one, between the number of ships supplied by a larger and a smaller districts respectively.<sup>67</sup> Moreover, the names for the larger units, *phule* and *fylki* are hardly unrelated though etymological dictionaries are silent on this point. Furthermore, both Athenian *phule* and Norwegian *fylki*, were divided into three ‘thirds’; the division of a territorial unit into three parts was also common in Sweden. Related evidence comes, of course, from Mediaeval times. In a traditional society, however, traditions can last for very long. Surprising as it is, a historical link between Scandinavia and Dark Age Attica is not to be ruled out.

But when was the system of *naukrariai* established? Since we are told that “the chiefs of *naukraroi*” intervened into Cylon’s affair (Hdt. 5.71.2) it is clear that the system is Pre-Solonian. It might seem that this is all we can say, but the case is not that hopeless in fact. Many scholars found the report by Pollux implausible according to which “each *naukraria* supplied two horsemen and one ship”. For if there were twelve *naukrariai* in each tribe, and there were four tribes, then there were just ninety six horsemen in Attic cavalry, which was hardly sufficient for the defense of the country.<sup>68</sup> One has to realize, however, that the horsemen supplied by *ship* districts were intended not for the defense of Attica, but for offensive oversea raids!<sup>69</sup>

We have no tradition of sea-raids activity of Athens in such an early epoch. A law by Solon spoke of private ones,<sup>70</sup> and one may argue that the return of the cremation in the seventh century<sup>71</sup> fits with such sea-raids well. Yet sea-raids organized by the government in Athens hardly find any room in the seventh century, for there is no echo of such in the sources. According to Coldstream, after c. 730 BC Athenian maritime activity suffered general decline.<sup>72</sup> The Middle-Geometric II (c. 800-750 BC) was on the contrary the time of Attic trade activity in the Levant, and about the same time “the circulation of Athenian pottery within the Aegean reaches its highest point before the sixth century”.<sup>73</sup> Again, this is the time of ship-scenes on figured Geometric pottery, and in the scenes of land-sea fighting “the ships usually seem to be

67 Is it just co-incident that there are precisely twelve ships under the command of Odysseus in Homer?

68 For instance Figueira 2011, 192-193.

69 A naval expedition was called *leiðangr* in Scandinavia. In 12th century’s Denmark it was demanded to bring a horse and a crossbow on a *leiðangr* ship (Malmros 1993, 389-390).

70 See Van Wees 2013, 59-60.

71 Alexandridou 2013.

72 Coldstream 2003, 110-113.

73 Coldstream 2003, 86.

on the winning side”.<sup>74</sup> The Protogeometric period also comes into consideration. In this period, Athens participates in the colonization of Ionia and its pottery is exported to Argolis, Euboea, the Cycladic islands, Crete and Asia Minor. One thus concludes that the system of *naukrariai* emerged no later than the first half of the eighth century BC<sup>75</sup> and possibly existed already in the Protogeometric period.

This brings us back to the epoch of burials with bent swords. And since the system of *naukrariai* included mobilization of horsemen, it is appropriate to note that the bent swords from Athens were among the longest and were probably “the weapons of elite warriors who fight on horseback or chariots”.<sup>76</sup> While, further, the system of *naukrariai* is correlated to the system of four tribes which is connected in the tradition with the coming of Ion and his companions and while there are independent reasons for dating both systems to the same epoch, the Protogeometric period, it is natural to suggest that both systems were introduced simultaneously.

The evidence suggests that *naukraroi* were subordinated to *polemarchos* (*Anecd. Bekk.* 1. 283.20), while another administrative novelty associated in the tradition with the coming of Ion and his companions is introducing the office of *polemarchos* (War-lord) without abolishing the office of the King (*Arist. Ath. Pol.* 3.2). This is to be compared with Tacitus’ report on the Germanic peoples: “They choose their kings by birth, their war-lords for merit” (*reges ex nobilitate, duces ex virtute sumunt* – *Germ.* 7). One would say that this is just a curious coincidence. But in view of what has been shown above, is it not better to think of shared political traditions? It is also worth noting that the similar dualism of leadership was suggested for Bronze Age Scandinavia on the basis of studying swords,<sup>77</sup> though the presence of such a dualism in Mycenaean Greece complicates the whole issue.<sup>78</sup>

### Conclusion

I propose, thus, that the tradition of the coming of the Ionians to Athens has a basis in history and that this event is to be connected with the transition to the Protogeometric period. I also propose that this event was significant.

74 Kirk 1949, 145.

75 Cf. Coldstream 2003, 109-110; Haas 1985, 29, note 2.

76 D’Onofrio 2011, 652-653.

77 Kristianssen 1984.

78 Kristiansen & Suchowska-Ducke 2015, 371.



Even Fritz Schachermeyr, who justly emphasized that the new start of what would later be classical civilization constitutes an important problem, did not envisage any role of the intruders in that process. The new development that originated in Athens he explains mainly in terms of personal characteristics of Athenian leaders.<sup>79</sup> Yet the intruders were not simply dissolved among more numerous local people, but rather here and there, as in Athens, replaced the old elite, and substituted several local institutions with new ones.

I do not maintain that the Ionians came to the Aegean ultimately from Scandinavia. Nor do I completely deny such a possibility, however strange it would seem. We do not know how the social body called the Ionians was formed, how many different and initially heterogeneous groups it could have included and absorbed. We may possibly discern two fractions of the Ionians – the worshipers of Apollo and worshipers of Poseidon Helikonios. What we can safely infer about the Ionians from Herodotus' account (1.146) (however biased) and from the state of affairs in historical Athens is that this social body was very much capable of assimilating various components. Dark Age Attica appears thus to have been one of the European contact zones – minor in terms of territory and major in terms of historical consequences.

### Bibliography

- Alexandridou, A. (2013). Destructions at the Grave. Ritual Burning and Breaking in 7th Century BC Attica. In: J. Driessen, ed., *Destruction. Archaeological, Philological and Historical Perspectives*. Louvain: Presses Universitaires de Louvain, pp. 271-286.
- Andersson, T.M. (2003). Oddr Snorrason. *The Saga of Olaf Tryggvason. Transl. with introd. and notes*. Ithaca and London: Cornell University Press.
- Åström, P. (1957). *The Middle Cypriote Bronze Age*. Lund: Swedish Cyprus Expedition.
- Åström, P. (1987). Intentional Destruction of Grave Goods. In: R. Laffineur, ed., *Thanatos – Les coutumes funéraires en Égée à l'Âge du Bronze. Actes du Colloque de Liège (21-23 avril 1986)*. Liège: Université de Liège, pp. 213-217.
- Blegen, C.W. (1952). Two Athenian Grave Groups of about 900 B.C. *Hesperia* 21, pp. 279-294.
- Bouzek, J. (1985). *The Aegean, Anatolia and Europe: Cultural Interrelations in the Second Millennium B.C.* Prague: Academia.
- Broholm, H.C. (1943). *Danmarks Bronzealder*. Volume 1. Copenhagen: Nyt Nordisk Forlag.

---

79 Schachermeyr 1984, 245.

- Broholm, H.C. (1946). *Danmarks Bronzealder*. Volume III. Copenhagen: Nyt Nordisk Forlag.
- Chadwick, J. (1977). The Ionian Name. In: K.H. Kinzl, ed., *Greece and Eastern Mediterranean in Ancient History and Prehistory: Studies Presented to Fritz Schachermeyer on the Occasion of his 80. Birthday*. Berlin; New York: Walter de Gruyter, pp. 106-109.
- Coldstream, J.N. (2003). *Geometric Greece: 900-700 BC*. 2nd ed. London; New York: Routledge.
- Crielaard, J.P. (2006). Basileis at Sea: Elites and External Contacts in the Euboean Gulf Region from the End of the Bronze Age to the Beginning of the Iron Age. In: S. Deger-Jalkotzy and I.S. Lemos, eds., *Ancient Greece. From the Mycenaean Palaces to the Age of Homer*. Edinburg: Edinburg University Press, pp. 271-297.
- Deger-Jalkotzy, S. (2006). Late Mycenaean Warrior Tombs 151-79. In: S. Deger-Jalkotzy and I.S. Lemos, eds., *Ancient Greece: From the Mycenaean Palaces to the Age of Homer*. Edinburg: Edinburg University Press, pp. 151-79.
- D'Onofrio, A.M. (2011). Athenian Burials with Weapons: The Athenian Warrior Graves Revisited. In: A. Mazarakis Ainian, ed., *The "Dark Ages" Revisited. Acts of an International Symposium in Memory of William D.E. Coulson, University of Thessaly, Volos, 14-17 June 2007*. Vol. II. Volos: University of Thessaly Press, pp. 645-673.
- Dontas, G.S. (1953-1954). Anaskaphe hypo ton Hieron Naon Metropoleos ton Athenon. *Archaiologike Ephemeris* 3, pp. 89-97.
- Driessen, J. and Macdonald, C. (1984). Some Military Aspects of the Aegean in the Late Fifteenth and Early Fourteenth Centuries B.C. *The Annual of the British School at Athens* 79, pp. 49-74.
- Duczko, W. (2004). *Viking Rus: Studies on the Presence of Scandinavians in Eastern Europe*. Leiden: Brill.
- Fantalkin, A. (2011). Low Chronology and Greek Protogeometric and Geometric Pottery in the Southern Levant. *Levant* 33, pp. 117-125.
- Fett, E. and Fet, P. (1941). *Sydvestnorske Helleristninger*. Stavanger: Stavanger museum.
- Figueira, T.J. (2011). The Athenian Naukraroi and Archaic Naval Warfare. *Cadmo. Revista de História Antiga* 21, pp. 183-210.
- Finkelberg, M. (2005). *Greeks and Pre-Greeks: Aegean Prehistory and Greek Heroic Tradition*. Cambridge: Cambridge University Press.
- Foltiny, S. (1961). Athens and East Halstatt Region: Cultural Interrelations at the Dawn of the Iron Age. *American Journal of Archaeology* 65, pp. 283-297.
- Fredsjö, Å. (1981). *Hällristingar i Kville härad, Kville socken (Studier i nordisk arkeologi 14/15)*. Göteborg: Fornminnesföreningen.
- Gelling, P. and Davidson, H.E. (1969). *The Chariot of the Sun*. London: Phoenix House.

- Giunlia-Mair, A., Albanese Procelli, R.M. and Lo Schiavo, F. (2010). The Metallurgy of the Sicilian Final Bronze/Early Iron Age Necropolis of Madonna del Piano (Catania, Sicily). *Trabajos de prehistoria* 67, pp. 469-488.
- Grinsel, V.L. (1961). The Breaking of Objects as a Funerary Rite. *Folklore* 72, pp. 475-491.
- Grinsel, V.L. (1973). The Breaking of Objects as a Funerary Rite: Supplementary Notes. *Folklore* 84, pp. 111-114.
- Haas, J. (1985). Athenian Naval Power before Themistocles. *Historia* 34, pp. 29-46.
- Hansen, M.H. (1991). *The Athenian Democracy in the Age of Demosthenes*. Oxford, Cambridge MA: Blackwell Publishers.
- Harding, A. (1995). *Die Schwerter in ehemaligen Jugoslawien* (Prähistorische Bronzefunde IV,14). Stuttgart: Franz Steiner Verlag.
- Jahn, M. (1916). *Die Bewaffnung der Germanen in der älteren Eisenzeit*. Würzburg: C. Kabitzsch.
- Kaul, F. (1998). *Ships on Bronzes. A Study in Bronze Age Religion and Iconography. Catalogue of Danish Finds*. Copenhagen: Publications from the National Museum.
- Karvonen, J. (1998). Deliberately Damaged Objects in Iron Age Cremation Cemeteries. *Fennoscandia archaeologica* 15, pp. 3-13.
- Kemenczei, T. (1988). *Die Schwerter in Ungarn*. Volume I (Prähistorische Bronzefunde IV,6). Stuttgart: Franz Steiner Verlag.
- Kemenczei, T. (1991). *Die Schwerter in Ungarn*. Volume II (Prähistorische Bronzefunde IV,9). Stuttgart: Franz Steiner Verlag.
- Kilian-Dirlmeier, I. (1993). *Die Schwerter in Griechenland (außerhalb der Peloponnes), Bulgarien und Albanien* (Prähistorische Bronzefunde IV,12). Stuttgart: Franz Steiner Verlag.
- Kimmig, W. (1964). Seevölkerbewegung und Urnenfelderkultur. In: R.V. Uslar and K. Narr, eds., *Studien aus Alteuropa*. Volume I. Cologne: Böhlau, pp. 220-283.
- Kirk, G.S. (1949). Ships on Geometric Vases. *The Annual of the British School at Athens* 44, pp. 93-153.
- Kraiker, W. and Kübler, K. (1939). *Kerameikos. Ergebnisse der Ausgrabungen. Volume I. Die Nekropole des 12. bis 10. Jahrhunderts*. Berlin: Walter de Gruyter.
- Kristiansen, K. (1984). Krieger und Häuptlinge in der Bronzezeit Dänemarks. *Jahrbuch des Römisch-Germanischen Zentralmuseums* 31, pp. 187-208.
- Kristiansen, K. and Suchowska-Duche, P. (2015). Connected Histories: the Dynamics of Bronze Age Interaction and Trade 1500-1100 BC. *Proceedings of the Prehistoric Society* 81, pp. 361-392.
- Kübler, K. (1943). *Kerameikos. Ergebnisse der Ausgrabungen. Volume IV. Neufunde aus der Nekropole II. und 10. Jahrhunderts*. Berlin: Walter de Gruyter.
- Kübler, K. (1954). *Kerameikos. Ergebnisse der Ausgrabungen. Volume V. Die Nekropole des 10. bis 8. Jahrhunderts*. Berlin: Walter de Gruyter.

- Lemos, I.S. (2002). *The Protoegeometric Aegean*. Oxford: Oxford University Press.
- Lemos, I.S. (2006). Athens and Lefkandi: A Tale of Two Sites. In: S. Deger-Jalkotzy and I.S. Lemos, eds., *Ancient Greece: From the Mycenaean Palaces to the Age of Homer*. Edinburg: Edinburg University Press, pp. 505-530.
- Lloyd, M. (2015). Death of a Swordsman, Death of a Sword: The Killing of Swords in the Early Iron Age Aegean (ca. 1050 to ca. 690 B.C.E.). In: G. Lee, H. Whittaker and G. Wrightson, eds., *Ancient Warfare: Introducing Current Research*. Cambridge: Cambridge Scholars, pp. 14-30.
- Malmros, R. (1993). Leiðangr. In: P. Pulsiano, ed., *Medieval Scandinavia. An Encyclopedia*, New York; London: Garland, pp. 389-390.
- Măndescu, D. (2012). Killing the Weapons. An Insight on Graves with Destroyed Weapons in Late Iron Age Transylvania. In: S. Berecki, ed., *Iron Age Rites and Rituals in the Carpathian Basin*, Târgu Mureş: Mega, pp. 343-356.
- Morrison, J.S. and Williams, R.T. (1968). *Greek Oared Ships*. Cambridge: Cambridge University Press.
- Munro, J.A.R. (1934). Pelasgians and Ionians. *The Journal of Hellenic Studies* 54, pp. 109-128.
- Nilsson, M.P. (1972). *The Mycenaean Origin of Greek Mythology*. London, Berkeley: University of California Press.
- Nordén, A. (1923). *Felsbilder der Provinz Ostgotland*. Hagen: Folkwand Verlag.
- Olsen, J., Hornstrup, K.M., Heinemeier, J., Bennike, P. and Thrane, H. (2011). Chronology of the Danish Bronze Age Based on 14 C Dating of Cremated Bones Remains. *Radiocarbon* 53, pp. 261-275.
- Olshausen, O. (1892). Leichenverbrennung. *Vorhandlungen der Berliner Gesellschaft für Anthropologie, Ethnologie und Urgeschichte*, pp. 129-175.
- Panchenko, D. (2000). Democritus' Trojan Era and the Foundations of Early Greek Chronology. *Hyperboreus* 6 (1), pp. 31-38.
- Panchenko, D. (2010/2011). Mice Destroying an Army (Hdt. 2.141) and a Solution of the Tocharian Problem. *Hyperboreus* 16/17, pp. 32-45.
- Panchenko, D. (2012). The Vikings of the Bronze Age and their Legacy. *Stratum plus* 2, pp. 79-143 (in Russian).
- Pare, C. (2008). Italian Metalwork of the 11th-9th Centuries BC and the Absolute Chronology of the Dark Age Mediterranean. In: D. Brandherm and M. Trachsel, eds., *A New Dawn for the Dark Age? Shifting Paradigms in Mediterranean Iron Age Chronology* (BAR International Series 1871), Oxford: Archaeopress, pp. 77-101.
- Pleiner, R. (1993). *The Celtic Sword*. Oxford: Clarendon.
- Popham, M.R., Sackett, L.H. and Themelis, P.G. (1980). *Lefkandi I. The Iron Age Settlement*. London: Thames and Hudson.
- Randsborg, K. and Christiansen, K. (2006). *Bronze Age Oak-Coffin Graves: Archaeology and Dendro-Dating* (Acta Archaeologica 77). Copenhagen: Blackweel Munksgaard.

- Ridgeway, W. (1901). *The Early Age of Greece*. Volume I. Cambridge: Cambridge University Press.
- Ruppenstein, F. (2013). Cremation Burials in Greece from LBA to EIA: Continuity or Change? In: M. Lochner and F. Ruppenstein, eds., *Brandbestattungen von der mitteleuropäischen Donau bis zur Ägäis zwischen 1300 und 750 v. Chr. Akten des internationalen Symposiums an der Österreichischen Akademie der Wissenschaften in Wien, 11.-12. Februar 2010 = Cremation Burials in the Region between the Middle Danube and the Aegean, 1300-750 BC*. Vienna: Österreichische Akademie der Wissenschaften, pp. 185-196.
- Schachermeyr, F. (1984). *Griechische Frühgeschichte: Ein Versuch, frühe Geschichte wenigstens im Umrissen verständlich zu machen*. Vienna: Österreichische Akademie der Wissenschaften.
- Schaeffer, C.F.-A. (1938). Les fouilles de Ras Shamra-Ugarit. *Syria* 19, pp. 193-255.
- Shetelig, H. and Falk, H. (1937). *Scandinavian Archaeology*. Oxford: Oxford University Press.
- Snodgrass, A.M. (2000). *The Dark Age of Greece. An Archaeological Survey of the Eleventh to the Eighth Centuries BC*. Edinburgh: Edinburgh University Press.
- Starr, Ch.G. (1961). *The Origins of Greek Civilization: 1100-650 B.C.* New York: Alfred A. Knopf.
- Styrenius, C.-G. (1967). *Submycenaean Studies: Examination of Finds from Mainland Greece, with a Chapter on Attic Protogeometric Graves*. Lund: C.W.K. Gleerup.
- Toffolo, M.B., Fantalkin, A., Lemos, I.S., Felsch, R.C.S., Niemeier, W.-D., Sanders, G.D.R., Finkelstein, I. and Boaretto (2013). Towards an Absolute Chronology for the Aegean Iron Age: New Radiocarbon Dates from Lefkandi, Kalapodi and Corinth. *PLOS ONE* 8 (12) e83117. <https://doi.org/10.1371/journal.pone.0083117>.
- Van Wees, H. (2013). *Ships and Silver, Taxes and Tribute*. London: I.B. Tauris.
- Wace, J.B. and Thompson, M.S. (1911-1912). Excavations at Halos. *The Annual of the British School at Athens* 18, pp. 1-29.
- Wachsmann, S. (1998). *Seagoing Ships and Seamanship in the Bronze Age*. London: Texas A&M University Press.
- Weninger, B. and Jung, R. (2009). Absolute Chronology of the End of the Aegean Bronze Age. In: S. Deger-Jalkotzy and A.E. Bächle, eds., *LH IIIC Chronology and Synchronisms III: LH IIIC Late and the Transition to Early Iron Age*, Vienna: Österreichische Akademie der Wissenschaften, pp. 373-416.
- West, M.L. (1988). The Rise of the Greek Epic. *The Journal of Hellenic Studies* 108, pp. 151-172.
- Wüstemann, H. (2004). *Die Schwerter in Ostdeutschland (Prähistorische Bronzefunde IV,15)*. Stuttgart: Franz Steiner Verlag.