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INSCRIBED LEAD SLING PROJECTILES FROM THE REPUBLIC OF NORTH MACEDONIA

Abstract. – Slingers using lead projectiles formed part of the tactical auxiliary units of the armies of early antiquity. Although their role may appear marginal, in certain circumstances it could be of decisive importance. As archaeological material recovered in the field, inscribed lead projectiles, especially when found in intact contexts, can constitute a highly significant body of evidence, allowing the reconstruction of particular events, battles, and military campaigns conducted within a given period. In this respect, 34 inscribed lead projectiles have been discovered in the territory of the Republic of North Macedonia, mostly in its south-western parts and most often at fortified sites, which usually served as military strongholds and watchposts. On the basis of analogies with inscriptions from the immediate surrounding region, they may be placed within a chronological framework extending from the middle to the end of the fourth century B.C., with the exception of the lead projectile from Gradište Knežje, the presumed city of Bylazora, whose date is shifted to the first decades of the third century B.C. Given the limited character of the historical sources, these lead projectiles cannot be connected with any specific battle fought in the territory of the Republic of North Macedonia during the period in question. They may, however, be set within the framework of a broader sequence of events, namely the military campaigns of Philip II directed towards securing the northern frontier of the Macedonian kingdom: towards Paeonia in the north and against the Illyrians to the north-west, in the area of the Pelagonian plain. To these events may also be added the military campaign of Alexander III of Macedon, likewise directed against the Illyrians, with the aim of securing the kingdom before his campaign against Persia. The inscribed lead projectile from Gradište Knežje, which is also the latest chronologically, may be connected with greater certainty to the Gallic incursion of 279/8 B.C., since it was discovered in an intact destruction layer.

Key words. – inscribed lead projectiles, Philip II, Alexander III of Macedon, antiquity, sieges, military campaigns.

Slingers using lead projectiles formed part of the auxiliary tactical units of the armies of early antiquity. In terms of status, Xenophon's account of the army's composition places them at the bottom of the infan-

try.[1] Their involvement in battle is reported by Polybius and Livy, according to whom slingers were deployed in front of the phalanx: they began the engagement and then withdrew in order to cover the two wings. At the Battle of Callinicus in the Third Macedonian War, the engagement was begun by the light-armed troops, slingers, and javelin-throwers.[2] Polybius' account of the clash between Molon, the satrap of Media, and Antiochus points in the same direction: Molon placed the light-armed troops, slingers, and archers behind the cavalry on both wings.[3] Onasander, in his *Strategikos*, states that, if armies fight on level ground which also includes hilly areas, the light-armed troops, among them the slingers, should be positioned on the higher ground. Vegetius likewise places the light-armed troops behind the heavy infantry, stressing that, if the heavy infantry fights successfully and prevails, the pursuit of the enemy once it has been put to flight should be left to the cavalry and the light-armed troops, among whom were the slingers.[4]

With regard to skill in warfare with this type of weapon, the historical sources mention the Achaeans, Aetolians, the inhabitants of the Balearic Islands, the Cretans, Libyans, Persians, Thessalians, and Thracians. According to Hammond and Griffith, however, the slingers in the army of Alexander III of Macedon during the campaign against Persia were Macedonians. They support this thesis by observing that the sources do not mention any of the peoples listed above, all of them skilled in the use of this weapon, as mercenaries in the Macedonian army.[5] Asclepiodotus, in his *Tactica*, states in his description of the Macedonian army that the light-armed units were equipped with spears and long-range projectiles.[6]

In addition to their military utility in direct battle, archaeological finds suggest that lead projectiles were a particularly effective weapon in the siege of cities. In this connection, a large number of projectiles have been discovered at Olynthus, associated both with the siege of the Olynthian port of Mecyberna in 421 B.C. and with Philip II's siege of Olynthus in 348 B.C. In 219 B.C., when Philip V set out to capture the Epirote city of Ambracus, he employed Achaean slingers in his army.[7] A characteristic feature of the Macedonian projectiles discovered at Olynthus is their weight, which was 10 grams greater than that of the Olynthian examples, that is, 30 grams. Their greater weight increased the force of im-

[1] Pritchett 1991, 53; Angelovski 2012, 255–261, 255; Angelovski 2018, 46.

[2] Polyb. 10.25.1; Livy 8.8.9; Pritchett 1991, 61–62; Angelovski 2012, 255–261, 256–257. In footnote 9, Livy has been omitted before the reference 8.8.9.

[3] Polyb. 5.53.9.

[4] Onasander, *Strategikos*, 18; Veget. 2.15, 2.17; Pritchett 1991, 61–2.

[5] Hammond and Griffith 1991, 54; Angelovski 2012, 255–261, 256.

[6] Asclepiodotus, Tactics 1.2; Campbell 2004, 31.

[7] Pritchett 1991, 57; Angelovski 2012, 255–261, 257; Angelovski 2018, 46–47.

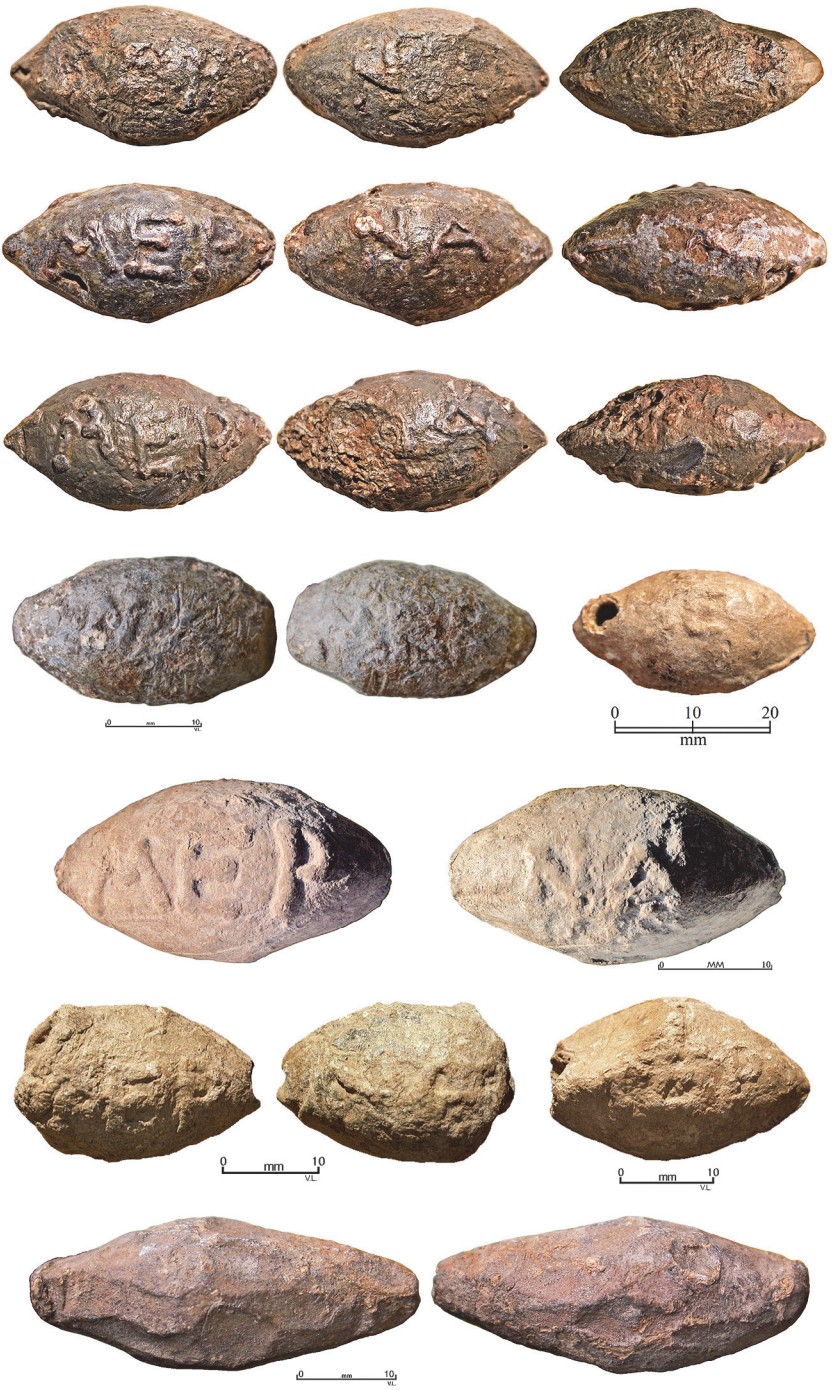


Fig. 1a

pact, which was of primary importance in sieges; in direct engagements, by contrast, range was also important, and such projectiles were consequently lighter.[8]

Of the thirty-four inscribed lead projectiles discovered, twenty-three come from the south-western parts of the Republic of North Macedonia: Gradište Bryanion, Kula Bistrica, Styberra, Lokveni, Kale Bučin, and Kruševica Visoka. Two projectiles come from the Skopje region, namely from Skopje Kale and Gradište Brazda, eight from Carevi Kuli, Strumica, and one from Gradište Knežje, Sveti Nikole.

The largest group comprises twenty-one lead projectiles: three from Gradište Bryanion, one from Kula Bistrica, seven from Styberra, one from Kale Bučin, two from Lokveni, one from Kruševica Visoka, and six from Carevi Kuli, Strumica. These bear the inscription "MEP" on the obverse and "NA" on the reverse (Fig. 1).[9] The projectile from Kruševica Visoka is perforated on one side and was therefore most probably used as a pendant functioning as a trophy.[10] On three lead projectiles from Gradište Bryanion, despite their poor state of preservation, the inscription "ΚΛΕΟ" can be identified (Fig. 2). Three projectiles from Gradište Bryanion[11] and one from Carevi Kuli, Strumica, preserve the inscription "ΙΠΠΙΟ" on the obverse and "NIKOY" on the reverse (Fig. 3). One projectile from Carevi Kuli bears the inscription "ΚΛΕΟ" "ΒΟΥΛΟΣ" (Fig. 4). As with the projectile from Kruševica Visoka, this example is also perforated, suggesting that it too was used as a pendant functioning as a trophy. On two projectiles from Skopje Fortress[12] and Gradište Brazda[13] the inscription "ΚΛΕΟΜΑΧΟΥ" has been identified (Fig. 5). One projectile from Gradište Bryanion bears the inscription "ΑΡΧΙΟΥ" on the obverse and "YOIXꟻA" on the reverse, inverted in relation to the obverse (Fig. 6). Another projectile from Gradište Bryanion bears the inscription "NEO" (Fig. 7), while the projectile from Gradište Knežje, Sveti Nikole, bears on the obverse the inscription "MIKINA", or, when inverted, "ANIKIM" (Fig. 8).

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[8] Robinson 1941, 418–438; Snodgrass 1967, 117; Pritchett 1991, 45; Campbell 2006, 60; Angelovski 2012, 255–261, 257; Angelovski 2018, 48.

[9] I am grateful to my colleague Zoran Rujak, MA, for the photographs.

[10] I am grateful to Prof. Dr Viktor Lilčić Adams for the photographs of the sites mentioned above.

[11] I am grateful to Prof. Dr Viktor Lilčić Adams for the photographs from the site of Gradište Bryanion.

[12] The photograph is reproduced from D. Mitrevski, *Skopsko Kale* [*The Skopje Fortress*], 2016, 22.

[13] The photograph is reproduced from I. Mikulčić and V. Sokolovska, "Grobnica vo Brazda kaj Skopje", *MAA* 11, 1990, 88, fig. 11.



Fig. 1b

The inscriptions on the projectiles may be divided into several categories. Some refer to the belligerent state and are always given in the genitive; others refer to the names of generals or of the rulers themselves, usually in the genitive and more rarely in the nominative. A further type consists of exhortations, appeals to the gods, and jocular or abusive messages addressed to the enemy.[14]

[14] Pritchett 1991, 48–9.



Fig. 1c

The most common inscription on the projectiles from the Republic of North Macedonia is "MEP" on the obverse and "NA" on the reverse, attested on twenty-one examples.[15] No firm or well-argued explanation of its meaning has yet been offered. The same inscription appears on several lead projectiles from Olynthus, while projectiles bearing the inscription "MEPNA", according to Hammond, were discovered at Pydna; he associates them with Cassander's siege of the city in 317/6 B.C.[16] One insufficiently substantiated suggestion is that the inscription may refer to a Macedonian military unit of slingers active in this area between 349 and 317 B.C.[17]

A different order of reading has also been proposed for this inscription: not "MEP"/"NA", but "NA"/"MEP", linking it with the name of a soldier in the army of Philip II.[18]

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[15] Angelovski, 2012, 255–261, 258; Angelovski 2018, 49; Lilčić Adams and Treneski 2024, 149–166.

[16] Hammond 1984, 31–47, 32, n.6; Pritchett 1991, 51–2.

[17] Pritchett 1991, 52.

[18] Rihll 2009, 147–169, 153, nn. 45–46; Avram, Chiriac and Matei 2013, 227–303, 281–282; Avram 2014, 131–138, 134; Nankov 2015, 1–13, 3.



Fig. 2

In both cases, however, these names cannot be connected with certainty to any historically attested individual in Philip II's army. A further objection to reading the inscription as "NA"/"MEP" is provided by Hammond's reports, according to which the lead projectiles from Pydna bore the inscription "MEPNA".[19] This clearly indicates that the order of reading "NA"/"MEP", with the proposed interpretation Ναμέρτας or Ναμερτίδας, cannot be accepted as correct: had that reading been right, the continuous inscription would have been "NAMEP", and no such lead projectile has so far been discovered.

The second most frequent inscription is "ΙΠΠΟ" on the obverse and "NIKOY" on the reverse. Three lead projectiles bearing this inscription have been discovered at Gradište Bryanion; on the third, only "ΙΠΠΟ" is preserved on the obverse, the reverse being damaged.[20] One further example comes from Carevi Kuli, Strumica. The inscription undoubtedly denotes the name of Hipponicus, one of Philip II's generals, who, according to Demosthenes, was sent to Eretria with a contingent of 1,000 mercenaries to capture the harbour town of Porthmus. Sixteen lead projectiles bearing the name of the general Hipponicus have been discovered at Olynthus and are associated with the siege of the city by the Macedonian army under Philip II in 348 B.C.[21] Lead projectiles bearing the name of

[19] Hammond 1984 31–47, 32, n.6.

[20] Lilčić Adams and Treneski 2024, 165, n.43.

[21] Dem. 9.58; Diod. 16.52.2–3; Robinson 1941, 431–433; Lee 2001, 11–22, 13; Worthington 2008, 125; Nankov 2015, 1–13, 1, 3; Knoepfler 2015, 158–178; Laursen 2019, 102–108; Nankov 2020, 143–148, 143; Angelovski 2012, 255–261, 258; Avram,

Hipponicus have also been discovered at Apollonia in Chalcidice; these are associated with Philip II's sieges of Amphipolis and Torone in 357 and 349 B.C.[22]



Fig. 3

One lead projectile bearing the inscription 'ΚΛΕΟ'/'ΒΟΥΛΟΣ' was discovered at the archaeological site of Carevi Kuli, Strumica,[23] while three further examples come from Gradište Bryanion; on these, the inscription 'ΚΛΕΟ' can be recognised on the obverse, whereas the inscriptions on the reverse are damaged and illegible.[24] Direct analogies for this inscription occur on fifteen lead projectiles from Olynthus, which Robinson connects with a high-ranking military officer in the army of Philip II

Chiriac and Matei 2013, 227–303, 275; Angelovski 2018, 49; Lilčić Adams and Treneski Скопје, 2024, 149–155, 163, 165.

[22] Diod. 16.8.2; 16.53.2; SEG 59.650bis; Hatzopoulos 1994, 159–188, 177–178; Nankov 2015, 1–13, 3; Nankov 2020, 143–148, 143.

[23] Angelovski 2012, 255–261, 258, fig. 1; Angelovski 2018, 49.

[24] Lilčić Adams and Treneski 2024, 150, 163.

who, unlike Hipponicus, is not historically attested. One lead projectile with the same inscription was discovered at Torone and one at Amphipolis. Several projectiles bearing this inscription have been discovered at Apollonia in Chalcidice, while six further examples come from the site of Kozi Gramadi in the Republic of Bulgaria.[25] A further four projectiles bearing the same inscription are held in the Regional History Museum in Sliven, Republic of Bulgaria. The presence of lead projectiles inscribed 'ΚΛΕΟ'/'ΒΟΥΛΟΣ' from Kozi Gramadi and from the museum in Sliven has been associated with Philip II's military campaign in Thrace in 342/1 B.C.[26]



Fig. 4



Fig. 5

Two lead projectiles inscribed 'ΚΛΕΟΜΑΧ(ΟΥ)' come from the Skopje region: one from the site of Brazda, in the immediate vicinity of Skopje,[27] and the other from the Skopje Fortress. The projectile from the Skopje Fortress carries a representation of a thunderbolt on the reverse.[28] The name itself is unknown from the sources that describe the Macedonian army. It has been assigned a Hellenic origin, and some authors associ-

[25] Robinson 1941, 427–428; Pritchett 1991, 52; Cambitoglou, Papadopoulos and Jones 2001, nos 18.3, 724–726, fig. 171, pl. 96; SEG 52.647; Kosmidou and Malamidou 2006, 133–147, 136, fig. 11, n. 19; SEG 59.650bis; Hristov and Manov 2011, 119–132, cat. nos 1–6; Nankov 2015, 1–13, 2; Avram, Chiriac and Matei 2013, 227–303, 277.

[26] Hammond and Griffith 1979, 554–566; Badian 1983, 51–71, 66–70; Delev 2015, 48–58, 50–51; Nankov 2015, 1–13, 3.

[27] Mikulčić and Sokolovska 1991, 79–92, 79; Avram, Chiriac and Matei 2013, 227–303, 277.

[28] Mitrevski 2016, 22; Mitrevski 2016, 158–159.

ate it with a Greek mercenary; alternatively, and more plausibly, it has been interpreted as a military trophy discovered within the monumental tomb at Brazda.[29] It must be stressed, however, that the projectile from Brazda was not discovered in a funerary context, as the cited authors state, but within a building identified as a workshop, with a hearth for smelting ore and a stone mill for crushing it. This building was discovered at the Gradište above the monumental tomb, where a settlement of the Early Antique period existed during the fifth and fourth centuries B.C.[30] The name may also be analysed differently, since 'ΚΛΕΟΣ' means 'glory', while 'ΜΑΧΗ' means 'battle'.

The second projectile from the Skopje Fortress was discovered in an Early Antique levelling layer, in association with bronze jewellery. Since it is a single example, it has been connected with a cultic or votive function.[31]



Fig. 6

One lead projectile from Gradište Bryanion bears the inscription 'APXIOY' on the obverse and, inverted on the reverse, 'YOIXꟻA'.[32] An inscription of this kind, together with a representation of a sword below, occurs on a projectile from Smyrna bearing the inscription APX[...]OY, and has been connected with the name 'Ἀρχ[έλα]ος'.[33]

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[29] Mikulčić and Sokolovska 1990, 79–92, 79; Paunov and Dimitrov 2000, 44–57, 52; Avram, Chiriac and Matei 2013, 227–303, 277.

[30] Mikulčić and Sokolovska 1991, 79–92, 79.

[31] Mitrevski 2016, 22; Mitrevski 2016, 158–159.

[32] Lilčić Adams and Treneski 2024, 163.

[33] Empereur 1981, 537–568, 537, no. 6; SEG 31.1608; De Ridder 1915, 15, no. 1332; Avram, Chiriac and Matei 2013, 227–303, 264–265.

Another lead projectile from Gradište Bryanion bears the inscription ‘NEO’ on the obverse, while the reverse is damaged.[34] No analogies for this inscription are known in the available literature.

The final example of an inscribed lead projectile was discovered at the archaeological site of Gradište Knežje, the presumed city of Bylazora. It was found in the destruction layer of the palace, which is associated with the Gallic incursion of 279/8 B.C.[35]



Fig. 7

On the obverse, the projectile bears the inscription ‘ANIKIM’, inverted from ‘MIKINA’, while the reverse carries a representation of a fork with four curved tines.[36] This projectile has analogies with an example of unknown provenance bearing the inscription ‘MIKINA’ on the obverse and a representation of a four-tined fork on the reverse. On the basis of the analogous representation of a four-tined fork on the lead projectiles inscribed ‘ΕΥΒΟΥΛΙΔΑΣ’ and ‘ΘΕΑΡΟΣ’, discovered at Camirus on Rhodes and dated to 305 B.C. in connection with the siege of Demetrius Poliorcetes, and on the lead projectile from Cyprus inscribed ‘ΘΑΡΥΨΟΣ’, dated to 306 or 294 B.C., the latest chronological limit for these projectiles is the end of the fourth century B.C.[37] The lead projectile from Bylazora departs from this pattern.

Two further projectiles may be added to this group bearing the inscription ‘MIKINA’: one from Torone, inscribed ‘MIKI/ΝΑΣ’, and another of unknown provenance, inscribed MIK/?IN, though neither has drawings or a representation of a fork with four curved tines on the reverse. The name has in this case been connected with central Greece, namely Boeotia, Locris, and Thessaly.[38]

The chronological framework rests on analogies for inscriptions that can be linked to a secure historical context, that is, to a battle. On this basis, the lead projectiles from the territory of the Republic of North Ma-

[34] Lilčić Adams and Treneski 2024, 155.

[35] Mitrevski 2016, 48, fig. 42.

[36] I am grateful to my colleagues from the National Museum in Sveti Nikole, Aleksandar Nacev and Aleksandar Danev.

[37] Weiss 2010, 123–153, 135, no. 15; Avram, Chiriac and Matei 2013, 227–303, 280.

[38] Joyner, Cambitoglou, Tudor Jones and McLoughlin 2001, 723–726, 725, no. 18.2; SEG 52.647B; Vischer 1878, 265, no. 38; Avram, Chiriac and Matei 2013, 227–303, 280.

cedonia belong to the period of Philip II's reign, or perhaps to the first years of the reign of Alexander III of Macedon. It is difficult to place them within a specific historical context or battle, because the historical sources for the military campaigns and individual battles of Philip II and Alexander III in the area of present-day North Macedonia are limited.

After his accession, Philip II, seeking to secure the northern frontier of the kingdom – and, according to some authors, to demonstrate the effectiveness of his military reform and of the Macedonian phalanx, first against a weaker opponent – organised a campaign against Paeonia in 358 B.C. Having learned that its king had died, he succeeded in subduing it relatively easily. With the northern frontier secured, he turned west to confront the Illyrians under Bardylis and to recover the territories previously lost in Upper Macedonia. According to Hammond, the battle most probably took place west of the Kirli Derven pass, near Lyncus,[39] likely in the Pelagonian plain, in the Bitola region.



Fig. 8

In the first year of his reign, Alexander III of Macedon sought both to strengthen and confirm his position as successor to the throne and to secure the northern frontier. After his campaign against Thrace, he organised a military campaign against Cleitus, king of the Dardanian Illyrians, and Glaucias, king of the Taulantii. At that point they posed a threat to the security of the kingdom, especially since Alexander had begun to plan his campaign against Persia. On returning from Thrace, and in order to reach the territory of the Paeonians and Agrianes, he chose the route through Pautalia, from where he could either proceed to northern Paeonia, in the area of present-day Skopje, or turn south towards Astibus and from there towards Stobi, at the confluence of the Erigon and the Axios, continuing through Prilep and Manastir to enter Lyncus. From Orestis, through the Vatochorion pass, he entered Dassaretia, from where he continued his advance towards Pelion, where the enemy army was stationed.[40] The sources mention no events connected with specific battles along this route towards Pelion.

[39] Diod. 16.4.2–3; Hammond and Griffith 1979, 212–214; Hammond 1994, 26; Ray Jr. 2012, 93–95; Worthington 2014, 38–39; Lilčić Adams and Treneski 2024, 96.

[40] Arr. *Anab.* 1.5.3; Hammond and Walbank 2001, 39–41; Vujčić 2021, 496–526.

In this context, the lead projectiles discovered mainly at fortified sites in the south-western parts of the Republic of North Macedonia[41] may be connected with the campaigns of Philip II or Alexander III of Macedon against the Illyrians. Alternatively, they may belong to the time of Philip II, when, probably in order to secure the territories recovered in Upper Macedonia after the victory over the Illyrians, a larger number of fortifications and watchposts were erected; numismatic material corresponding to the period of their reigns has been discovered at these sites.[42]

The two projectiles from the Skopje region cannot be connected with any specific event, especially if one takes into account the fact that, on his return from the Thracian campaign, Alexander III of Macedon proceeded towards Paeonia, since the Agrianes were his allies. As noted above, a votive function has been attributed to one projectile from the Skopje Fortress, whereas the other, from Brazda, was discovered in a building used as a workshop for smelting ore and was therefore perhaps more probably intended to be melted down, but remained preserved through some combination of circumstances.

The presence of inscribed lead projectiles at Carevi Kuli, Strumica, is attested in one of the cult pits, in a context that also included, among other material, coins of Philip II and Alexander III of Macedon. Some of the projectiles were also discovered in the area of the acropolis, especially along the line of the south-eastern rampart, with a smaller number by the north-western rampart, as well as several uninscribed projectiles in the necropolis in the southern hill sector.[43] Although they cannot be linked to a specific historical event, and especially since some of them were found in a cult pit, the chronological framework provided by the numismatic material points to the presence of a Macedonian army, as well as to a possible siege of the town at Carevi Kuli led by the generals Hipponicus and Cleobulus.[44]

The lead projectile from Gradište Knežje, discovered together with another uninscribed projectile in the destruction layer of the palace, in primary context, and associated with the Gallic attack of 279/8 B.C.,[45] may point to street fighting during the battle, as in the case of the siege and fighting at Olynthus led by Philip II in 348 B.C. At the same time, on the basis of the analogies for the inscription, this projectile is also the latest of all the inscribed projectiles so far discovered in the territory of the Republic of North Macedonia.

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[41] Lilčić (Adams) 2009; Lilčić Adams and Treneski 2024.

[42] Mikulčić 1966, 66; Lilčić (Adams) 2009, 78, 140, 148–157, 158, 161, 162–169; Lilčić Adams and Jakimovski 2015, 15; Lilčić Adams and Treneski 2024, 31.

[43] Angelovski 2012, 255–261, 261; Rujak 2020, 164.

[44] Nankov 2015, 7–35, 25.

[45] Mitrevski 2016, 47–48.

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