

# ESSAYS, REVIEWS AND POLEMICS

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## ANCIENT BRIMMED HELMETS AS AN INTRODUCTION TO MEDIEVAL KETTLE HATS?

**Abstract:** In many publications about arms and armour it is argued that kettle hats were known in antiquity or are derived from ancient helmets. This thesis led to the publication of *European Armour circa 1066 to circa 1700* by Cloude Blair, published in 1958. This article aims to argue with Blair's thesis by tracing the history of ancient brimmed helmets, showing that brimmed helmets were used from the 7<sup>th</sup> century BC to the first century AD in many regions and by many troop formations. However, these ancient brimmed helmets disappeared from battlefields at the beginning of the 2<sup>nd</sup> century AD, whereas the first sources concerning medieval brimmed helmets appear many centuries later, in the 11<sup>th</sup> century. Because of this issue of discontinuity, medieval 'iron hats' and 'kettle hats' cannot be identified with ancient forms they are associated with through the brim shape only; ancient helmets are distinct in their provenance and names.

**Keywords:** arms and armour, warfare, ancient helmets, helmets with brim, kettle hats


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Several Polish publications on arms and weaponry state that medieval kettle hats come from ancient helmets.<sup>1</sup> This observation originates from Claude Blair's book *European Armour circa 1066 to circa 1700* published in 1958,<sup>2</sup> in which the author mentions a similar type of helmet that was depicted in Antiquity and its late-Roman form in iconography until the mid-11<sup>th</sup> century. Unfortunately, Claude Blair neither provided a precise description of this helmet nor information about its provenance. Thus, it is worthwhile to look more closely at this theory and analyse possible relationships between kettle hats and ancient helmets.

If a kettle hat is defined as 'a helmet with a brim', then when searching through ancient history for its prototype,

we should look for this specific element in the helmet construction. The first ancient helmets come from the Middle East and are dated to the Iron Age. They are generally divided into five types: conical, hemispherical, conical crested, hemispherical crested, and composite.<sup>3</sup> Helmets from the Bronze Age found in Europe had a similar form, with conical and pointed forms (often with crests) being the prevailing types. However, neither the Iron Age Middle Eastern helmets nor the Bronze Age European helmets had a brim. Such a frequent occurrence of conical versions and crests in the case of the early types of helmets is associated with the elite status of defensive weapons. While offensive weapons were the key element of every warrior's equipment, without which he could not participate in battle, armour or a helmet were usually reserved for commanders and highborn individuals. Therefore, to highlight the high rank of those privileged warriors, the skulls of those helmets were extended and topped with a plume or a crest, which gave them even more grandeur.<sup>4</sup>

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<sup>1</sup> Żygulski Jr. 1975, 34; Nowakowski and Szymczak 1985, 31; Nowakowski 1990, 53; Nowakowski 1991, 88; Nowakowski 1994, 224; Nowakowski 2003, 76; Kwaśniewicz 2005, 52; Bogacki 2009, 172; Gradowski and Żygulski Jr. 2010, 126; Bołdyrew 2011, 255; Kwaśniewicz 2017, 178-179.

<sup>2</sup> Blair 1958, 31-32.

<sup>3</sup> Dezsö 2001, 159-164.

<sup>4</sup> Hencken 1971, 13.



### Italic helmets

A brim as a part of a helmet appeared independently in two different areas of Europe. In terms of chronology, the first recorded appearance was in central Italia, in particular the regions of Picenum and Etruria, from which come four types of helmets with an identifiable brim: bossed helmets, composite helmets, double-crested helmets (with a crest track), and the so-called Negau helmet. Their common feature is the narrowing between the skull and brim which takes the form of a slight groove to a deep indentation, varying in width. Furthermore, most such helmets were crowned with a crest, evidenced by holders placed on the top of their skulls. Even though those helmets come mostly from regions of Etruria and Picenum, some were transported – by trade and military conflicts – to the northern areas inhabited by the Celts and the Illyrians, and sporadically even to the South (Negau helmets were found also in Corsica). There they were adopted by local craftsmen and became culturally distinct from their Italic predecessors, often taking different forms in the process. Sources that provide information about their appearance, due to the nature of the cultures that used such helmets, are generally limited to archaeological finds, and more specifically, mostly finds from warriors' graves. This phenomenon is associated with the common belief in the Mediterranean that a helmet that belonged to a king or a great warrior should accompany its owner even after his death.<sup>5</sup> As a result, the collection of surviving Italic helmets with brims comprises several hundred copies.

The oldest type of the Italic helmet with a brim is the bossed helmet (Germ. *Buckelhelme*), which originates from the Picenum and was used from the first half of the 7<sup>th</sup> century BC until the beginning of the 5<sup>th</sup> century BC.<sup>6</sup> It has a hemispherical skull forged from one piece of bronze, with holders for a crest mounted at the top and at the back. Its most distinctive, eponymous elements are two bosses symmetrically placed on both sides (Fig. 1:a). There are two types: (1) a smooth bossed helmet with a practically non-existent narrowing and the brim being just a lower, slightly extended part of the skull, where the small bosses are located in the upper part of the helmet just under the crest holder and (2) a 'bossed helmet with a brim', where the narrowing is much more clearly defined, taking the form of an indented neck leading to an articulate brim, with much larger bosses located just above the indentation. In addition, some of these helmets have embossed decorations on the skulls (Monteparo variant). Such a helmet is probably depicted on the statue of the Warrior

of Capecstrano. The statue, which is dated to the early 6<sup>th</sup> century BC, is 209 cm high and was discovered in 1934 in the Italian town of Capecstrano. It features a Picene warrior holding a sword, two javelins, a knife, and an axe. His chest and back are covered with an armour called *kardiophylax*, composed of two discs (most probably made of bronze) joined together with belts. On his head, the warrior has a crested helmet with a very wide, exaggerated brim.<sup>7</sup>

The smooth bossed helmet was the precursor of the so-called composite helmet (Germ. *Helme mit zusammengesetzter Kalotte*) dated to the second half of the 7<sup>th</sup> century BC<sup>8</sup> (Fig. 1:b). Just like its predecessor, it also has holders for a crest, but unlike the smooth bossed helmet, its structure consists of four sheets of metal. Three of them make the skull composed of a rectangular strip and two semi-circular halves riveted to it, while the fourth part is the wide and usually rather high brim with the inner edge inverted upwards. Mounted at the top of the helmet are two holders for a crest. Depending on the place of discovery, we can distinguish two types of this helmet: (1) Picene and (2) south-eastern Alpine. It is likely that it was depicted in the Situla della Certosa dated to the beginning of the 5<sup>th</sup> century BC.<sup>9</sup>

Another helmet originates from the latter type of helmets – a double-crested helmet (Germ. *Doppelkammlhelme*)<sup>10</sup> (Fig. 1:c). It was created in the Picenum area in the first half of the 6<sup>th</sup> century BC and later, through trade, spread to the territory occupied by the eastern Hallstatt culture. For this reason, it has the same typology as its predecessor, and depending on the place of origin can be divided into two types: (1) Picene and (2) south-eastern Alpine. Its main features are two ridges on both sides of the top of the skull, between which initially a crest was mounted, as evidenced by its remains in the form of two holders. Unlike the previous type, the skull in this helmet was forged not from three but from one metal sheet. Out of all types of Italic helmets, the brims of such double-crested helmets are the most evident, and therefore they resemble medieval kettle hats most closely.

The last, and probably the most famous helmet with a brim that originated in Italia, is the so-called Negau helmet (Germ. *Negauer Helm*)<sup>11</sup> (Fig. 2:a). It was named after the village of Negau in Duchy of Styria (currently

<sup>7</sup> Holland 1956, 243-247; Connolly 1988, 101-103; Basile 1993, 11-12; Bonfante 2011, 267; Fields 2011, 23.

<sup>8</sup> Egg 1988b, 23-32; Hvala 2012, 151-152.

<sup>9</sup> Ducati 1923; Connolly 1988, 96.

<sup>10</sup> Egg 1986, 33-40; Egg 1988b, 239-243; Hvala 2012, 152-153; Božič 2014, 272-273.

<sup>11</sup> Reinecke 1944, 117-198; Egg 1986, 41-120; Egg 1988b, 243-271; Paddock 1993, 174-264; Nedoma and Urban 2002, 52-61; Hvala 2012, 153-157.

<sup>5</sup> Hencken 1971, 13.

<sup>6</sup> Egg 1986, 6-19; Egg 1988a, 77-78; Egg 1988b, 222-230; Paddock 1993, 174, 185; Sekunda 1995, 35; Cowan 2007, 379-387.



Fig. 1. Helmets: a – bossed helmet with a brim sold by Hermann Historica auctioneers in 2009. Courtesy of Hermann Historica; b – composite helmet sold by Hermann Historica in 2010. Courtesy of Hermann Historica; c – double-crested helmet found in Klenik near Vače, Slovenia. After Božič 2014, Abb. 1.

north-eastern Slovenia), where 26 helmets of this type were discovered in 1811 in the nearby woods. Subsequently, this term was applied to other similar helmets, which currently are represented by around 340 specimens. The helmet has an Etruscan provenance – it was common in Etruria from the mid-6<sup>th</sup> century till the end of the 5<sup>th</sup> century BC – and over time the design spread to southern Campania, western Corsica, and the Po Valley. The latter was at that time inhabited by the Celts, and in the 4<sup>th</sup> century BC the discussed helmet type was brought by the Celts across the Alps to the territory of what is now Slovenia. This is probably the only type of helmet from the period between the 6<sup>th</sup> century BC and the 1<sup>st</sup> century AD that was native to the Italian Peninsula (others derive from Greek or Celtic forms). Negau helmets have high, slightly conical skulls with a distinctive ridge going through the centre and a narrowing in the lower part, which in some cases takes the shape of a deep neck, gradually changing into a quite high, but narrow brim. These helmets were often decorated and inlaid. Historians divide them into three types, depending on their place of discovery: (1) central Italic, (2) south-eastern Alpine, and (3) central Alpine. Then, based on features like the form of the skull, the width of the narrowing, the number of decorations or the clarity of the ridge, these three categories are divided into further variants. It is worth mentioning that several specimens have inscriptions in the Etruscan alphabet, being one of the oldest records of the Proto-Germanic language.<sup>12</sup>

### Greek helmets

A helmet with a brim has a certain advantage over many other helmets because it leaves uncovered the

eyes and ears, which improves hearing and following orders – this is particularly important in the case of armies that base their battle tactics on communication. This advantage was valued not only by infantry troops formed by the Etruscans or the Piceni but primarily by cavalry units that naturally aimed for speed and dynamics. For this reason, ancient Greece (and more specifically the Greek regions famous for horse breeding where cavalry began to develop) was the second region that created and developed brimmed helmets. The Peloponnese Peninsula itself, because of its highland and mountain landscapes, was not a favourable setting for developing cavalry. As a result, most cities in that region didn't have cavalry traditions until the end of the 5<sup>th</sup> century or even the beginning of the 4<sup>th</sup> century BC.<sup>13</sup> Much better conditions for horse breeding existed in central and northern regions of Greece, occupied mostly by lowlands and plains. The most important in this respect was Thessaly, with its dense river network and lowland landscape surrounded by mountain ranges of Pindus, Chasia, Kamvounia, Ossa, and Pelion, creating the perfect conditions for keeping horses. These animals very quickly became the pride and fame of the Thessalonians, who often manifested it by depicting horses on the coins of their poleis.<sup>14</sup>

The inland nature of Thessaly and substantial differences in temperature amplitudes forced its inhabitants to produce clothing appropriate for such weather conditions. In summer, they dealt with heat and dust on the roads by wearing special headwear called *petasos* (πέτασος). It was a hat with a wide, floppy brim and a relatively small, dome-shaped crown. Its characteristic shape provided protection against the sun and dust and thus was commonly worn by farmers and travellers. It

<sup>12</sup> Reichardt 1953, 306-316; Must 1957, 51-59; Markey 2001, 69-172.

<sup>13</sup> Spence 1993, 1.

<sup>14</sup> Kraay 1966, Pl. 148; Kraay 1976, Pl. 21; Martin 1985, Pl. 1.





Fig. 2. Helmets: a – Negau helmet sold in Hermann Historica in 2005. After Hermann Historica. 49. Auktion, lot. 182; b – Boeotian helmet from Ashmolean Museum. Source: [https://en.wikipedia.org/wiki/Boeotian\\_helmet#/media/File:Boeotian\\_helmet,\\_4th\\_century\\_BC.jpg](https://en.wikipedia.org/wiki/Boeotian_helmet#/media/File:Boeotian_helmet,_4th_century_BC.jpg)

gained so much popularity over time that ultimately it became the symbol of Hermes, god of roads and travellers.<sup>15</sup> It was also keenly worn by horsemen, so in the 5<sup>th</sup> century BC its bronze version appeared, designed specifically for cavalry. This helmet had a shape that was very similar to that of the original *petasos*, i.e., a dome-shaped skull and a wide brim with a single fold on each side. The edge of the brim was punched, so the helmet could be covered with felt to protect it from overheating. An original example of such a helmet was found in 1971 in one of the tombs in Athens and is currently kept in the National Archaeological Museum in Athens.<sup>16</sup> Furthermore, such headdresses often appear in paintings and on coins depicting warriors on horses from the 5<sup>th</sup> and 4<sup>th</sup> centuries BC, mostly from regions of Thessaly, Boeotia, and Athens.<sup>17</sup>

Another region famous for its horses was Boeotia.<sup>18</sup> This land, located to the south of Thessaly, just like Thessaly itself, was almost a completely flat area surrounded by mountains, with several big lakes, but without major hills, which enabled it to develop a long cavalry tradition.<sup>19</sup> The

so-called Boeotian helmet is another type of head protection commonly associated with this region. It was probably based on the *petasos* helmet. Like the *petasos* it had a dome-shaped skull and a wide, folded brim. But unlike the *petasos*-helmet, its brim was usually folded in two and not four places, and the skull was much bigger compared to the brim. Due to the similar shapes of these helmets, it is difficult to unequivocally establish the time and place of its creation. A potential transitional form between the *petasos*-helmet and the Boeotian helmet is perhaps depicted on an Attic stele commemorating warriors who fell in 394 BC during the Corinthian War.<sup>20</sup> One example of the original Boeotian helmet was found in River Tigris near Tille in June 1854<sup>21</sup> (Fig. 2:b). Depictions of this helmet appeared early in Thessaly, on several coins from local towns: Farsala (end of the 5<sup>th</sup> century – mid-4<sup>th</sup> century BC),<sup>22</sup> Larissa (380-365 BC),<sup>23</sup> and Pherae (369-358 BC).<sup>24</sup> There are also four known limestone moulds used as models in workshops to produce engraved decorations on helmets

<sup>15</sup> Norris 1999, 50; Bonfante 2003, 68-69.

<sup>16</sup> Alexandrī 1973, 93, Table 52; Dintsis 1986, Tab. 1, Fig. 2; Sekunda 1986, 19; Waurick 1988, 159-160, Fig. 22; Boardman 1995, 181-182.

<sup>17</sup> Babelon 1932, Pl. 258 :21, 22; Dintsis 1986, Tabl. 1, Figs. 1, 3, 4; Sekunda 1986, 12, 19; Bugh 1988, Figs. 1, 4, 10; Spence 1993, Pl. 2-4, 10, 12, 14; Boardman 1995, 181; Nomos. *Auction* 4. Zürich, 10 May 2011, nos. 1081, 1085, 1101, 1151, 1218, 1284, 1286, 1288.

<sup>18</sup> Spence 1993, 19.

<sup>19</sup> Cadmean cavalry (Καδμείοι κέντορες ἵππων) are mentioned already in the *Iliad*; see Hómēros, *Iliás*, IV, 391.

<sup>20</sup> National Archaeological Museum, inv. 2744, Athens, Greece; *The World of Athens...*, 259; Sekunda 1986, 20; Spence 1993, Pl. 13; Fields 2008, 42.

<sup>21</sup> Ashmolean Museum, inv. 1977.256, Oxford, United Kingdom; Rumpf 1943, 10, Fig. 6; Fraser and Rönne 1957, Pl. 18; Connolly 1984, 85; Sekunda 1984, 21; Dintsis 1986, Tab. 3, Figs. 4 and 5; Boardman 1995, 182.

<sup>22</sup> Nomos 2011. *Auction* 4. Zürich, 10 May 2011, no. 1291.

<sup>23</sup> Nomos 2011. *Auction* 4. Zürich, 10 May 2011, no. 1152.

<sup>24</sup> Kraay 1966, no. 471; Kraay 1976, no. 388; Gardner 1883, Pl. 10:11; Nomos 2011. *Auction* 4. Zürich, 10 May 2011, nos. 1307-1309.

of this type, that come from Memphis from the 3<sup>rd</sup> century BC.<sup>25</sup> In addition, depictions of such a helmet are quite often associated with gravestones from Boeotia, which probably belonged to local cavalry warriors. The helmet takes the form of stone sculptures placed at the top of stone pedestals called *cippi*<sup>26</sup> or reliefs like that on the tomb from Tenagra dated to 275-250 BC,<sup>27</sup> or two reliefs from Thespies.<sup>28</sup>

The name of this helmet comes from the sentence in Xenophon's *On Horsemanship* written around 360 BC. According to Xenophon, this helmet was the best protection for a horseman's head 'on the principle, that it covers all the parts exposed above the breastplate without hindering vision'<sup>29</sup> (κράνος γε μὴν κράτιστον εἶναι νομίζομεν τὸ βιωτιουργές: τοῦτο γὰρ αὖ στεγάζει μάλιστα πάντα τὰ ὑπερέχοντα τοῦ θώρακος, ὅρᾱν δὲ οὐ κωλύει<sup>30</sup>).<sup>31</sup> The phrase 'Boeotian helmet' appears also in Demosthenes' 59<sup>th</sup> prosecution speech *Against Neaera*,<sup>32</sup> in which he mentions a painting in the Stoa Poikile located on the north side of the Ancient Agora of Athens, depicting the victory of the Athenians over the Persians in the Battle of Marathon (490 BC). According to Demosthenes the Plataeans depicted in that image go into battle wearing such helmets (τὰς κυνᾶς τὰς **Βιωτίας** ἔχοντες).<sup>33</sup> In spite of appearances, these two remarks make establishing the precise provenance of this helmet more complicated. Based solely on archaeological and iconographic sources its emergence can be dated to the 4<sup>th</sup> century BC. The problem occurs when we take into account the already-mentioned 59<sup>th</sup> speech of Demosthenes. The painting of the Battle of Marathon described in that speech was created by Micon or Panaenus c. 460-450 BC, and the battle itself took place in 490 BC.<sup>34</sup>

The speech was written c. 340 BC and probably at that time author was familiar with the painting in the Stoa Poikile. The helmets he described must have reminded him of Boeotian helmets (or maybe rather 'from Boeotia') that were well-known at that time, hence the use of this phrase. However, probably it was not the same helmet like the one depicted in sources from the 4<sup>th</sup> century BC, but rather some other similar form. In her doctoral thesis, Patricia Ann Hannah pointed out that Plataeans did not have cavalry at that time, so it is highly unlikely they were using helmets for horsemen. She suggested that it could be some sort of pilos helmet- (πῖλος) deriving from felt caps of the same name.<sup>35</sup> She also challenges theses associating Boeotia with the place of origin of the helmet in question. If the Boeotian helmet was derived from the petasos helmet, then it could have been created in any region where petasos helmets were commonly used. She thinks that the phrase *boiwtiourgés* (βιωτιουργές) used by Xenophon means 'manufactured in Boeotia', not 'Boeotian type' (βιωτικός). Later, when production centres spread further, the adjective 'Boeotian' was enough to describe the type of helmet and in this meaning it was used by the author in his 59<sup>th</sup> speech.<sup>36</sup> Taking into account its early appearance in Thessaly, we can draw the conclusion that just like the bronze *petasos*, this helmet also came from Thessaly and later became wide-spread in Boeotia, which became famous for its production.

Thanks to Alexander the Great, the Boeotian helmet left the territory of Ancient Greece. Alexander followed Xenophon's advice and in his cavalry replaced the Phrygian helmet, which was worn by the Macedonians in King Philip's day, with the discussed type of helmet,<sup>37</sup> as evidenced by iconographic sources depicting Alexander's horsemen wearing this kind of head protection: the Alexander Sarcophagus dated to the late 4<sup>th</sup> century BC depicting Battle of Issus<sup>38</sup> and the Alexander Mosaic from around 100 BC, based on a Greek painting from the 4<sup>th</sup> century BC and showing probably the same battle<sup>39</sup> (Fig. 3:a). It is possible that the Boeotian helmet found in the Tigris River also belonged to a warrior from Alexander's army and

<sup>25</sup> Allard Pierson Museum, inv. 7864, Amsterdam, Holland; Louvre, inv. Ma 4901, Paris, France; Ponger 1942, 78-85; Sekunda 1984, 20; Dintsis 1986, Table 3, Fig. 6; Waurick 1988, 161-162, Fig. 29; Gagsteiger 1993, 78-79, Table 1-3; Boardman 1995, 10, Fig. 7.

<sup>26</sup> Ridder 1922, 276; Rumpf 1943, 7-8, Figs. 1-2; Fraser and Rönne 1957, Pl. 18; Dintsis 1986, Table 6, Fig. 3.

<sup>27</sup> Fraser and Rönne 1957, Pl. 1; Rumpf 1943, 9, Fig. 5; Dintsis 1986, Table 4:1; Sekunda 2007, 342; Fields 2008, 41.

<sup>28</sup> Ridder 1922, 270-272; Rumpf 1943, 8-9, Figs. 3-4.

<sup>29</sup> Translation by H. G. Dakyns (2019).

<sup>30</sup> *For the helmet we consider the Boeotian pattern the most satisfactory: for this, again, affords the best protection to all the parts that project above the breastplate without obstructing the sight* (Xenophón, *Peri Hippikês*, 12, 3). Translation by H. G. Dakyns (2019).

<sup>31</sup> Jarva 1991, 33.

<sup>32</sup> Authorship of the 59<sup>th</sup> speech of Demosthenes is often criticised and attributed rather to Pseudo-Demosthenes than Demosthenes himself; see Macurdy 1942, 257-271; Trevett 1990, 407-420.

<sup>33</sup> Dēmōsthēnēs, *Katà Neairas*, 59, 94.

<sup>34</sup> Pausanias, *Description of Greece*, I, 15, 1; Snodgrass 1967, 94.

<sup>35</sup> Hannah 1984, 544-545.

<sup>36</sup> Hannah 1984, 546.

<sup>37</sup> Anderson 1961, 147-148; Sheppard 2008, 90; Millet 2010, 469.

<sup>38</sup> Hamdi Bey and Reinach 1892a, 31, 34; Hamdi Bey and Reinach 1892b, 272-342; Winter 1912; Rumpf 1943, 14, Fig. 12; Schefold and Seidel 1968; Graeve 1970; Dintsis 1986, Tabl. 2, Figs. 6-7; Sekunda 1992, 29-30.

<sup>39</sup> Rumpf 1943, 14, Fig. 11; Andraea 1959; Rumpf 1962, 229-241; Andraea 1977; Dintsis 1986, Tabl. 3, Fig. 2; Connolly 1988, 72; Sekunda 1992, 30-31; Cohen 1997; Dunbabin 1999, 42, Fig. 42; Stähler 1999; Fields 2012, 4.





a



b



c

Fig. 3. a – fragment of the Alexander Mosaic depicting the Battle of Issus, c. 100 BC. After Cohen 1997, Pl. II; b – coin of the Archebius, 90-70 BC. After Egg 1988, Abb. 31; c – relief from the Pergamon Altar, c. 183 BC. After Waurick 1988, Fig. 30.

was lost during the invasion of Persia, whereas the above-mentioned four limestone forms in Memphis could be the result of the expansion of Alexander's empire into Egypt.

This helmet, in a slightly altered form, very often appears on coins of various Indo-Greek rulers: Eucratides I (170-145 BC),<sup>40</sup> Menander (155-130 BC),<sup>41</sup> Agathokleia (130-120 BC),<sup>42</sup> Lysias (120-110 BC),<sup>43</sup> Strato I (120-110 BC),<sup>44</sup> Philoxenus (100-95 BC),<sup>45</sup> Diomedes (95-90 BC),<sup>46</sup> Amyntas (95-90 BC),<sup>47</sup> Artem-

idoros (90-85 BC),<sup>48</sup> Archebius (90-70 BC)<sup>49</sup> (Fig. 3:b), Hermaeus (90-70 BC),<sup>50</sup> Apollophanes (35-25 BC),<sup>51</sup> and one undefined ruler named Sapadbizes.<sup>52</sup> The protective headdress appearing on these coins looks almost always the same – a brim folded in four places, a dome-shaped skull with a plume on top, and bull horns and horse ears on both sides. Also on several of Menander's coins, the skull is covered with panther skin. The use of a Boeotian helmet by some of these rulers was probably related to their high rank in the cavalry, as symbolised by the addition of the plume.<sup>53</sup> Bull horns and horse

<sup>40</sup> Gardner 1886, Pl. 5:7-9, 11, 6: 1-4, 6, 8-11, 30:8.

<sup>41</sup> Gardner 1886, Pl. 1:8-9, 13, 12: 1-4, 31:8.

<sup>42</sup> Gardner 1886, Pl.11:6.

<sup>43</sup> Gardner 1886, Pl. 8: 7.

<sup>44</sup> Gardner 1886, Pl. 10: 10, 12, 31:6.

<sup>45</sup> Gardner 1886, Pl. 13: 6, 8.

<sup>46</sup> Gardner 1886, Pl. 8: 11, 13.

<sup>47</sup> Gardner 1886, Pl. 14: 9.

<sup>48</sup> Gardner 1886, Pl. 32: 3, 4.

<sup>49</sup> Gardner 1886, Pl. 9: 3, 4.

<sup>50</sup> Gardner 1886, Pl. 15: 5.

<sup>51</sup> Gardner 1886, Pl. 13:1.

<sup>52</sup> Gardner 1886, Pl. 24: 14.

<sup>53</sup> Oikonomides 1984, 30-31; Sidky 2000, 218-219.

ears refer to Alexander's favourite stallion – Bucephalus, which in works of art is often depicted with horns because of its name (Βουκέφαλος – 'ox-head'). This symbolism was taken over by Seleucus I, one of the Diadochi, seen on his coins depicting Alexander's head in a helmet covered with panther skin, with horns and ears on both sides.<sup>54</sup> The application of the same elements in the Boeotian helmet could indicate the origin of some of the rulers who used them (William Tarn believes, among other things, that this proves the theory that Eucratides I was a Seleucid sent by Antiochus IV with a mission of retaking the East).<sup>55</sup>

Over time, the Boeotian helmet was 'upgraded' with cheek pieces, creating a form that can be called 'late-Boeotian'. In this new form it can be found on the bronze coin minted in town Scotussa in Thessaly in the 3<sup>rd</sup> century BC,<sup>56</sup> on reliefs from the Pergamon Altar dated to 183 BC<sup>57</sup> (Fig. 3:c), and on jewellery from the end of the 2<sup>nd</sup> century BC.<sup>58</sup> This form is also proven by an archaeological find from the end of the 1<sup>st</sup> century BC kept in the Museum für Kunst und Gewerbe in Hamburg (Museum of Art and Design)<sup>59</sup> (Fig. 4:a), which has a dome-shaped skull, a Boeotian brim with traces of cheek pieces. In this form, the helmet was used by Roman cavalry (as evidenced by its depiction at The Mausoleum of the Julii at Glanum from 40 BC)<sup>60</sup> until at least the 1<sup>st</sup> century AD (as confirmed by a sculpture from this period discovered in Arles).<sup>61</sup>

Over time, the Boeotian brim was merged with other types of helmets, leading to the modification of their forms. From Kishinev comes a well-preserved helmet dated to the turn of the 4<sup>th</sup> and 3<sup>rd</sup> centuries BC, with the skull of a Phrygian helmet and a brim.<sup>62</sup> Over time the Boeotian brim became an element of a completely new type of helmet. In the 5<sup>th</sup> century BC, a helmet based on the Phrygian cap called *pilos* was created in Sparta. It was characterised by a sphero-conical skull and a short, nondistinctive brim (Fig. 4:b). The new type of helmet took from it the shape of the skull, to which later the Boeotian brim was added. The head protection that was created in this manner is called in historiography a *konos* (κωνος) or the Attic-Boeotian helmet.

The term 'konos', just like the 'Boeotian helmet', most likely comes from ancient written sources like the inventory of objects kept in the Temple of the Delians in Delos from 279 BC<sup>63</sup> or the Military Decree of Amphipolis (c. 200 BC),<sup>64</sup> whereas the term 'Attic-Boeotian helmet' was coined by historians because of its look. This helmet has a sphero-conical skull with a plume, a folded brim similar to the Boeotian helmet, and cheek pieces like the Attic helmet. The front of the skull is decorated with a triangular embossed element curling up on the sides. The earliest depiction of this helmet comes from coins of Philip V of Macedon (183-179 BC)<sup>65</sup> and his successor Perseus.<sup>66</sup> Roughly 30 years later it also appears on coins issued by rulers from the Seleucid dynasty – Antiochus VI (148–142 BC)<sup>67</sup> and the usurper Diodotus Tryphon.<sup>68</sup> Its depiction was also found on the relief from Ephesus and jewellery dated to the third quarter of the 2<sup>nd</sup> century BC.<sup>69</sup> It was also used in the Roman Empire, as evidenced by the Altar of Domitius Ahenobarbus from the end of the 2<sup>nd</sup> century BC<sup>70</sup> and coins of the Roman consul Titus Manlius Torquatus.<sup>71</sup> There are also several known archaeological finds of helmets representing this type, kept, i.a. in Oxford<sup>72</sup> (Fig. 4:c), Turin,<sup>73</sup> Kazanlak,<sup>74</sup> and Sankt Petersburg.<sup>75</sup> Taking into consideration the dating of archaeological sites where such helmets were found and the dating of iconographic sources, this head protection can be dated to the beginning of the 3<sup>rd</sup> century BC to the end of the 2<sup>nd</sup> century BC. It is difficult to establish its place of origin. It was used both in Bactria and the Roman Empire and in territories occupied by barbari-

<sup>63</sup> Homolle 1882, 130.

<sup>64</sup> Feyel 1935, 31; Austin 2006, 181.

<sup>65</sup> Dintsis 1986, Table 30, Figs. 7, 8, 10, Table 32, Figs. 2, 4-7; Waurick 1988, 156, Fig. 13: 7-12.

<sup>66</sup> Dintsis 1986, Table 30, Fig. 9.

<sup>67</sup> Dintsis 1986, Table 33, Fig. 1.

<sup>68</sup> Dintsis 1986, Table 5, 6, 33, Figs. 2-6.

<sup>69</sup> Seiterle 1982, 148; Waurick 1988, 157, 159, Fig. 20; Dintsis 1986, Table 35, Figs. 1-4, 6-10.

<sup>70</sup> Louvre, inv. Ma 975, Paris, France; Connolly 1988, 234; Giroire and Roger 2007, 15; Moede 2007, 170; Fields 2012, 42; Travis and Travis 2014, Fig. 5.

<sup>71</sup> Bergemann 1990, 170, Tabl. 89.

<sup>72</sup> Ashmolean Museum, inv. 1971.904, Oxford, United Kingdom; Vickers et al. 1974-1975, 35; Connolly 1984, 85; Dintsis 1986, Table 33, Fig. 8; Waurick 1988, 157-158, Fig. 14; Junkelmann 2000b, 13-14, Fig. 4; Sekunda 2012, 47.

<sup>73</sup> Museo Egizio, inv. 7173, Turin, Italy; Graeve 1970, 89, Tab. 78; Dintsis 1986, Tabl. 32, Fig. 8; Waurick 1988, 157-158, Fig. 15.

<sup>74</sup> Iskra Town History Museum, inv. 767, Kazanlak, Bulgaria; Graeve 1970, 88, Tab. 78; Dintsis 1986, Table 31, Fig. 2; Waurick 1988, 157-158, Fig. 16.

<sup>75</sup> Hermitage Department of the Archaeology of Eastern Europe and Siberia, inv. 2521/1 and 2521/2, St Petersburg, Russia; Hermitage Department of Antiquity, inv. Axt. 31, St Petersburg, Russia; Waurick 1988, 157-158, Figs. 17-19.

<sup>54</sup> Stewart 1993, 435.

<sup>55</sup> Tarn 1951, 209-210.

<sup>56</sup> Rogers 1932, 173; Dintsis 1986, Table 4, Fig. 2; Boardman 1995, 183-184.

<sup>57</sup> Dintsis 1986, Tabl. 4, Figs. 5-7; Waurick 1988, 161-162, Fig. 30.

<sup>58</sup> Dintsis 1986, Tabl. 7-8, Figs. 1-3, 8.

<sup>59</sup> Museum für Kunst und Gewerbe in Hamburg, inv. 1917.173; Dintsis 1986, Tabl. 6, Fig. 2; Waurick 1988, 160, Fig. 24; Junkelmann, 2000a, 36, Fig. 18; D'Amato and Sumner 2009, 51, Fig. 37.

<sup>60</sup> D'Amato and Sumner 2009, 10, Fig. 2; Fields 2012, 41.

<sup>61</sup> Musée départemental de l'Arles antique, inv. FAN.92.00.2620.

<sup>62</sup> Dintsis 1986, Table 12, Fig. 4; Waurick 1988, 165-167, Fig. 39.





Fig. 4. a – late-Boeotian helmet from the Museum of Art and Design Hamburg. After Waurick 1988, Fig. 24; b – Pilos helmet sold in Hermann Historica in 2005. After Hermann Historica. 49. Auktion, lot. 163; c – Attic-Boeotian helmet (*konos*) from the Ashmolean Museum in Oxford. After Waurick 1988, Fig. 14.

ans. Most finds come from Thrace (at least four) and the northern Black Sea coast (about ten). Iconographic sources come from Macedonia, Samos, and Asia Minor. It is assumed that this helmet probably originated, just like the pilos helmet, in the territory of the Balkans.<sup>76</sup>

The Attic-Boeotian helmet, just like its late-Boeotian form, was used in gladiator arenas, where, in a modified shape, it was worn by some categories of warriors who fought there. Most frequently, they were used by gladiators fighting as Thraeces, *hoplomachi*, and *miurmillones*.<sup>77</sup> These gladiators' equipment was based on the weapons and armours used by different nations. A Thraex was equipped like a warrior from Thrace, the military equipment of a *hoplomachus* was based on Greek weapons, and a *mirmillo* represented a Roman. Thus, through duels between different types of gladiators it was possible to re-enact in the arena armed conflicts of that time (the *mirmillo* replaced the Gallus after Gaul made peace with Rome).<sup>78</sup> The helmet used by them in its most perfect form had a wide brim and a closed form of a dome-shaped skull with edge-wise opening visor in shape of a grill. The skull is often crowned with a crest adorned with a gryphon's head. The reminders of its Greek origin were sometimes still visible triangular embossed elements rolling up by the sides. The presence of this ornament is confirmed by iconography such as the relief from the Funerary Monument of Lucius Storax, which shows a contest between a *hoplomachus* and a *mirmillo* (20-50 AD)<sup>79</sup> and finds

of original helmets kept in the National Archaeological Museum of Naples,<sup>80</sup> Louvre,<sup>81</sup> Museo dei Gladiatori (The Gladiator Museum)<sup>82</sup> (Fig. 5), or the British Museum.<sup>83</sup> The shape of this helmet was adjusted against the offensive weapons used by opponents – gladius swords or sica daggers – which suggests that the brim was an effective protection against slicing weapons.

### Celtic helmets

The last and chronologically youngest type of ancient helmet with a brim is a product of the Celtic culture, in historiography called an Agen helmet or a western-Celtic helmet.<sup>84</sup> This helmet is represented by four archaeological finds from Gaul and its name comes from the city of Agen in France, where the first specimen was found<sup>85</sup> (the rest come from Giubiasco in Switzerland<sup>86</sup> (Fig. 6), Alesia in France,<sup>87</sup> and the river

<sup>76</sup> Aleksinskiy 2008, 26.

<sup>77</sup> Jacobelli 2003, 8-10, 15.

<sup>78</sup> Żygulski Jr. 1998, 112-113.

<sup>79</sup> Junkelmann 2000a, 56, Fig. 51; Jacobelli 2003, 8.

<sup>80</sup> National Archaeological Museum, inv. 5649, Naples, Italy; Junkelmann 2000a, 41, Fig. 23; Jacobelli 2003, 10, Fig. 6.

<sup>81</sup> Louvre, inv. Br 1108, Paris, France; Pflug 1989, 96; Wahl 1977, 116.

<sup>82</sup> Museo dei Gladiatori, inv. 5650, Santa Maria Capua Vetere, Italy; la Regina 2001, 373.

<sup>83</sup> British Museum, inv. GR 1946, 5-14.1, London, United Kingdom; Junkelmann 2000a, 42, Fig. 24; Jacobelli 2003, 15, Fig. 12.

<sup>84</sup> Schaaff 1974, 149-204; Robinson 1975, 42-44; Wilcox and McBride 1985, 15-16; Schaaff 1988, 302-303, Fig. 16-18; Gilliver 2002, 48; Gilliver et al. 2005, 145; Allen 2007, 121; D'Amato and Sumner 2009, 35-36; Pernet 2010, 114-115.

<sup>85</sup> Musée des beaux-arts d'Agen, inv. 144 A3, Agen, France.

<sup>86</sup> Swiss National Museum, inv. A-14037, Zürich, Switzerland; Schaaff 1988, 303, Fig. 16; Gilliver et al. 2005, 60, 145.

<sup>87</sup> National Archaeology Museum, inv. MAN 10167, Saint-Germain-en-Laye, France.





Fig. 5. Gladiator helmet from Museo dei Gladiatori, 50-75 AD.  
After La Regina 2001, 373.



Fig. 6. Western-Celtic helmet (Agen helmet) found in Giubiasco,  
1<sup>st</sup> century BC. After Schaaff 1988, Fig. 16.

Thielle in Switzerland).<sup>88</sup> It was forged from one sheet of steel and has a deep, dome-shaped skull transforming into a brim of an irregular width. In its front part, it is two times narrower than in its back part, reinforced by a fold or the so-called ‘step’. Additionally, it has cheek pieces tied under the chin with leather straps and its characteristic feature is a narrow triangular bulge above the brim running around the entire skull.<sup>89</sup> Furthermore, the find from Agen has a plume spire topping the skull. Most experts on ancient weapons allocate to the Agen type two finds from the forests of Rouvray and Louviers in Normandy.<sup>90</sup> These differ from the four other finds primarily because of their conical skulls topped with a plume and brims of the Boeotian shape. Probably this form is a combination of the late-Roman Boeotian helmet used in the Roman army in that period with a newly encountered Celtic form. All these finds are rather precisely dated to the mid- 1<sup>st</sup> century BC.

Helmets with a brim began to vanish after the conquest of Gaul by Julius Caesar. The Agen type was absorbed by the Romans and, in the process of fast evolution during the reign of Augustus, became characteristic legionary helmets, called ‘Imperial-Gallic’

or ‘Imperial-Italic’.<sup>91</sup> The brim in these types of helmets was limited to a broad neck guard (reinforced as in the Agen type), while the bulge remained only in the front part of the skull where it took the form of narrow ‘eyebrows’. It is worth mentioning that in the Carolingian period several works of art were created showing warriors wearing helmets with broadened brims. These are *The First Bible of Charles the Bald* from c. 846<sup>92</sup> (Fig. 7), *The Gospels of Lothair* from 849-851,<sup>93</sup> and *The Golden Psalter of St. Gall* from 880-900.<sup>94</sup> However, as noticed by David Nicolle, their forms are probably a reference to antique art and not a representation of real helmets.<sup>95</sup> This theory seems to be proven by the presentation miniature in *The First Bible of Charles the Bald* (fol. 423r). It is a reference to depictions of Roman emperors<sup>96</sup> and Charles the Bald is surrounded by warriors wearing arms and armour characteristic for Roman officers – muscle cuirasses (*lorica musculata*), round shields (*scutum*), long swords (*spatha*), spears

<sup>91</sup> Robinson 1975, 45-81.

<sup>92</sup> National Library of France, Ms. Lat. 1, fol. 215v, 423r, Paris, France; Skubiszewski 1973, Fig. 13; Skubiszewski 2001, 251.

<sup>93</sup> National Library of France, Ms. Lat. 266, fol. 1v, Paris, France; Skubiszewski 1973, Fig. 19.

<sup>94</sup> Abbey Library of Saint Gall, Cod. Sang. 22, fol. 140v, 141r, Sankt Gallen, Switzerland; Skubiszewski 1973, Fig. 24; Skubiszewski 2001, 261.

<sup>95</sup> Nicolle 1995, 87.

<sup>96</sup> Skubiszewski 1973, 48.

<sup>88</sup> Historical Museum of Bern, inv. BHM 26452, Bern, Switzerland.

<sup>89</sup> Żygulski Jr. 1998, 123, Fig. 123.

<sup>90</sup> Schaaff 1988, 307-309, Figs. 29-33.



Fig. 7. Miniature from *The First Bible of Charles the Bald*, c. 846. After Skubiszewski 2001, 251.

(*hasta*), and cloaks (*paludamentum*). The same equipment (without armour) also appears in *The Gospels of Lothair* and the helmet alone in *The Golden Psalter of St. Gall*. Its design was probably the idea of the illuminators, especially since its form seems to be rather impractical and even quite fantastical.

As can be seen from the discussion presented above, helmets with brims were quite common in Antiquity. They were used both by the Etruscan infantry and the Greek cavalry; they also had their place in the Roman army. However, at the beginning of the new millennium they were replaced by helmets of new types. It is hard to tell if any of the ancient brimmed helmets directly contributed to the creation of helmets in the shape of iron hats in the Middle Ages. However, we certainly cannot call any of these ancient brimmed helmets

a 'kettle hat'. The gradual barbarisation of Europe effectively obliterated many achievements of the ancient world, forcing medieval craftsmen to reinvent the most efficient defensive protection against new offensive weapons. Studies on ancient works of art depicting old arms and armour, which in the Middle Ages still survived in relatively large numbers, was probably helpful in this process. Thus, possibly one of them became an inspiration for smiths trying to create new protection against oriental weapons such as sabres and bows used by the warriors from the Great Steppe that threatened Eastern Europe. The dome shape of these helmets became more sphero-conical to force the curved blades of sabres to slide down the skull. They were also fitted with a brim and a neckguard made of chainmail, leather, or small plates that protected soldiers from arrows.



Such helmets are the oldest medieval brimmed helmets that we can call kettle hats. The earliest source to mention them is the Psalter of Basil II, dated to 1017.<sup>97</sup> They were used in the Balkans, Ruthenia, and the Byzantine Empire until at least the end of the 14<sup>th</sup> century, so we can call them Ruthenian-Byzantine or

‘Eastern’ kettle-hats<sup>98</sup> in contrast to ‘Western’ kettle hats, which had hemispherical domes and were mentioned for the first time by sources from the Iberian Peninsula in the first half of the 12<sup>th</sup> century, and later became the most popular medieval helmets.<sup>99</sup>

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<sup>97</sup> Biblioteca Marciana, Cod. Marc. gr. Z 17, fol. 4v, Venezia, Italy; Heath 1979, 37; Maguire 1997, 188; Nicolle 1996, 20; Grotowski 2011, 321.

<sup>98</sup> Gosk 2018, 104-105.

<sup>99</sup> Gosk, forthcoming.



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