

## APPENDIX

### *A prismatic mace-head from Dunaföldvár from the time of the Mongol Invasion*

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**Abstract:** A fragment of a village that perished in 1242 during the Mongol Invasion was uncovered by excavations at the Dunaföldvár–Ló-hegy site (RM 09). The filling of one of the pits (109OBJ, 126 SNR) contained human skeletons and body parts, remains of wood and grains, iron rivets and an iron object, which proved to be an elongated prismatic iron mace head, a rare object in the Carpathian Basin.<sup>1</sup> This weapon type has eastern analogues, especially in Iran, and the similar items found in Hungary can be dated from the time of the Mongol Invasion.

**Keywords:** mace, weapons, Árpádian Period, Mongol Invasion, Near East

Description of the object: A pipe-like open iron mace head, which upwards slightly widens. The sides are hammered flat to an octagonal shape, the interior is cylindrical and smooth, the outside is angular octagonal in cross-section. Under and above the thicker body hammered to an angular shape, the rings of a thinner cylindrical socket can be observed, the rims of which are damaged at a few places. It weighs 434 gramm, its length is 116 mm, the width is 8 mm in average, the diameter of the shaft hole is 22 mm. Traces of the wooden shaft have been preserved inside it. Inv. no.: 01.30726.138.047.<sup>2</sup> (*Figs 1. 1–2*)

Only three closer analogues of the prismatic mace found at Dunaföldvár is known from Hungary while a large number of another type of the contemporary Árpádian Period maces, the star-shaped or knobbed mace-heads have been uncovered in the Carpathian Basin.

Before the detailed discussion of the prismatic mace-head, I will shortly review the characteristics of the other, well-known type of the period, the so-called knobbed mace-heads.

The knobbed mace-heads of the Árpádian Period found in Hungary can be grouped in the same type as the weapons used in the South Russian steppe in the same period. L. Kovács analysed them and composed their typology based on the Russian technical literature and the museum collections in Budapest. They have five morphological subgroups, even spherical items can be found among them although the cube with spikes arranged in a star shape dominates. Their raw material is generally cast bronze but the same form can be found of iron, with or without

<sup>1</sup> 30736 Dunaföldvár–Ló-hegy, RM 09 archaeological excavation preceding the construction of M6 highway – 2009, excavation licence no.: 440/1516/008/2009, site identity no.: 30736. Excavation report, page 2. Excavation: Gábor Serlegi.

<sup>2</sup> This rare shape does not have a typological name in the Hungarian archaeological literature. In the medieval Arabic sources it is called a cucumber-shaped mace („*khyara-t al-dabbus*”), in the modern weapon history literature in English language it is called an „elongated mace-head”: AL-SARRAF 2002, 160.



Fig. 1. 1–2: Iron mace-head, 13<sup>th</sup> century, Dunaföldvár–Ló-hegy (109/138). Inv. No. 01.30726.138.047

out a socket with smaller or larger proportional divergences yet they can easily be categorized due to the large number of the finds. They were no longer used in the 14<sup>th</sup> century: a new and heavier type replaced them.<sup>3</sup>

The appearance of knobbed maces can be linked with the continuous settling in of the steppe populations, especially the Pechenegs and the Cumans. It certainly got into the weaponry of the Hungarian and the Byzantine armies from the steppe but it cannot be determined when and in what chronological order. It cannot really be followed in the Hungarian army in this period. It could easily get integrated into the weaponry of the Hungarian light cavalry that included steppe elements and ethnic groups yet its appearance in the heavy cavalry can be documented very late, only around 1239.<sup>4</sup> At the same time, it can be learned from the detailed military writings of the Byzantine Empire (the *Praecepta Militaria* from around 965 ascribed to Nikephoros Phokas II and the *Taktika* by Nikephoros Oranos written around 1000, partly based on the former) that the four- or six-cornered iron maces were generally used by almost every troop type of the Byzantine army, apart from the archers, from the 10<sup>th</sup>–11<sup>th</sup> centuries. Heavy infantry used it just like the medium cavalry and the heavy-armoured elite cavalry. This latter unit had to carry a mace hanged from the saddle as a spare weapon if they broke or let drop the main weapon.<sup>5</sup> According to the descriptions, the mace types of the Byzantine soldiers were similar to the knobbed maces found in the steppe or in Hungary. Although these maces had come from the steppe, they soon became a mass weapon. Hungarian research has already questioned the role of knobbed mace-heads coming from the steppe as an ethnic indicator.<sup>6</sup> The iron

<sup>3</sup> KOVÁCS 1971, 165–180.

<sup>4</sup> KOVÁCS 2003, 386.

<sup>5</sup> *Praecepta Militaria* I.3; III.7; IV.1; *Taktika* 56.3; 60.7; 61.1,13 published in McGEE 1995; DAWSON 2009, 4, 37.

<sup>6</sup> PETKES 2006, 108; HATHÁZI 1990, 45.

maces of the Byzantine soldiers proved very effective against the armoured Hungarian cavalry in the battle on the Sava in 1167, who did not yet have such a weapon.<sup>7</sup>

The advantages of a mace of any kind are that they are effective and easy and cheap to produce. Only the wealthier had sword or sabre and reliable armour even in the eastern European nomadic armies, or the ones having nomadic elements (like e.g. the Hungarians or the Russians), while an average mounted archer without strong armour (probably also the light cavalry of the Hungarian Kingdom composed of various ethnicities) had be satisfied with a mace, an axe or a short spear in the case of a close combat. Maces, despite their simplicity were not to be underrated. Exactitude was an important factor at the use of a sabre and even light axe because the edges of these weapons could turn away or slip off from the helmet or the armour of the opponent. Maces were symmetrical so it did not matter how it hit the opponent since it smashed by the force of the blow and not with the edge, and it could be effective even through the helmet or the armour. As it had neither an edge nor a point, it could not get stuck in the body or the shield of the opponent even at an exact hit leaving the attacker without his weapon.

This generally used knobbed weapon and all its versions are morphologically completely different from the elongated, prismatic mace found at Dunaföldvár.

#### Prismatic mace-head

Three analogues of the Dunaföldvár mace-head are known in Hungary. One of the iron mace-heads came from a grave (the only authentic warrior's grave of the Muhi battle with Béla IV coins, it is excavated by T. Puszta, his publication is in press, another one is known from the area of Eger and a bronze mace-head was found as a stray find. They can be found in the Armoury of the Hungarian National Museum.<sup>8</sup> (Fig. 2)

One of the Hungarian finds was made of bronze and three were made of iron. Their special basic shape is obviously identical although the Dunaföldvár item barely flares upwards, its walls are nearly parallel. Regarding the context, two of the Hungarian items, the ones from Muhi and Dunaföldvár can be dated from the first half of the 13<sup>th</sup> century and they are linked with the Mongol Invasion. A similar prismatic, eight-faceted iron mace-head was found in New-Sarai in the steppe in the Volga region from the 13<sup>th</sup>–14<sup>th</sup> centuries, the time of the Golden Horde, but as its shape is uncommon in the region, it is regarded an imported type.<sup>9</sup> (Fig. 3)

The shape itself is simple. Actually, it is an elongated iron cylinder flattened at several sides. This type is extremely rare in the area of the Carpathian Basin but it has a number of analogues in the Near East. Despite the large geographical distance and smaller morphological differences, I find that they are very close analogues to the Dunaföldvár mace-head.

There are numerous analogous finds and depictions of this form in Anatolia and Iran, the areas of the contemporary Muslim world where the steppe, first of all the Seljuk impacts were the strongest. They show only smaller morphological differences from the Hungarian items and they were often made of bronze and sometimes even decorated.<sup>10</sup> The long, prismatic shape is obviously identical.

Maces played an important role in the weaponry of the Seljuk Turks, which was a weapon and also the symbol of the commander, the ruler; they even had an office called mace-bearer. The Seljuk sultans coming from the steppe, liked to be depicted on the coins they emitted, usually as a mounted warrior, an archer, with a spear or the most frequently with a prismatic mace in the hand. So weapons similar to the Dunaföldvár item can be found, among others, on the coins of the 12<sup>th</sup>–13<sup>th</sup> century Seljuk rulers.<sup>11</sup> (Fig. 4) Turkish soldiers got to many territories within the Muslim world; there is an 11<sup>th</sup> century wall painting in the present Afghanistan of the bodyguards of the Ghaznavida rulers equipped with maces,<sup>12</sup> but most of the data and finds concerning this object type came from Iran from the Seljuk and the Mongolian periods. A number of 12<sup>th</sup> century mace-head finds and depictions are known from the Seljuk period of Iraq and Iran.<sup>13</sup> (Figs 5–10) Contemporary Arabic sources also mention prismatic maces

<sup>7</sup> Publ.: MORAVCSIK 1984, 242–245. The Byzantines probably used all-iron maces, iron staffs (?).

<sup>8</sup> Octagonal iron mace head, HNM Armoury, inv. no. 54.2182; height 92 mm, width 43 mm, found in Eger castle. Its analogue, made of bronze: HNM Armoury, inv. no. 55.3210; height 100 mm, width: 37 mm. Kovács S, 2010, 172, note 537.

<sup>9</sup> GALKIN 1963, 239; SWIETOSLAWSKI 1999, 57.

<sup>10</sup> It is worth mentioning that a few of the contemporary depictions are sketchy, and more decorated and inscribed items got in to the museum collections and are published in the literature.

<sup>11</sup> NICOLLE 1999, 526.

<sup>12</sup> NICOLLE 1999, 673a–b.



Fig. 2. Iron mace-head, 13<sup>th</sup> century. Armoury of the Hungarian National Museum. Inv. no. 54.2182. (KOVÁCS S. 2010, 172)

by the name *dabbus* or “cucumber-shaped mace” (*khyara-t al-dabbus*) referring to the shape. Maces of many shapes (iron club, asymmetrical with an animal head, round, prismatic, knobbed) were known in the region for centuries, the elongated, prismatic shape, which was frequent at the Seljuk Turks, became very common and, beside the oval form, it became dominant in the 13<sup>th</sup> century as the forerunner of the soon appearing flanged maces.<sup>14</sup>

The fighting abilities of the Seljuk Turks, who were new-comers in the Muslim world, were acknowledged by the Persians and the Arabs as well. The ghulams, the slave soldiers coming from the ranks of the Seljuk Turks, made the elite of the contemporary Near Eastern armies and they made their traditional weapons, among them the maces, widespread. The ghulams carried this weapon stuck into their belts or hanged from the saddle not only in wartime but also while giving service in the palace.<sup>15</sup> There are no data about their weight in the source. As compared to the earlier heavier maces, the *dabbus* must have belonged to the lighter type.

A somewhat sketchy representation of a prismatic mace, which could also be seen at the Mamluks, can be found for example on the famous early 14<sup>th</sup> century Mamluk silver dish known by the name “Saint Louis’ baptismal

<sup>13</sup> NICOLLE 1999, 655, 665, 675; AL-SARRAF 2002, XII–53, XII–55, XII–58, XII–66, XII–67, XII–70b, XII–71; BASHIR 2008, 231, 232, 233.

<sup>14</sup> AL-SARRAF 2002, 159–161. It can be seen on certain items that the edges of the prism were strengthened with applied ribs. Later these ribs were replaced with larger and longer flanges leading to the well known form of flanged maces.

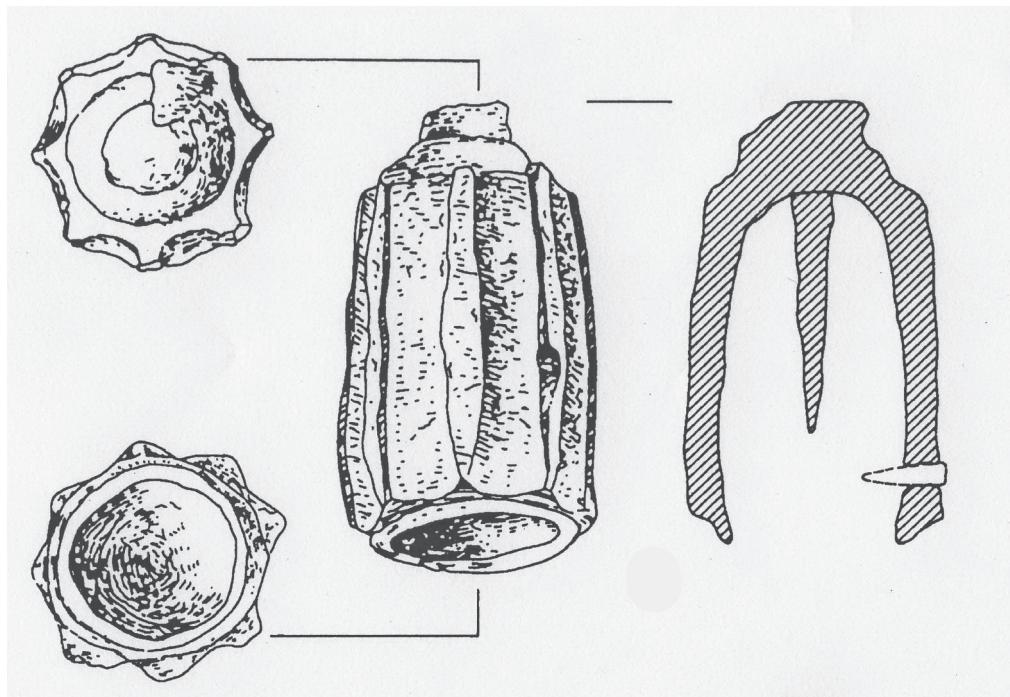


Fig. 3. Iron mace-head, 14<sup>th</sup> century, New Sarai. (ŚWIĘTOSŁAWSKI 1999, Pl. XVI. 1)



Fig. 4. A coin of Rukn al-Din II. Suleiman, Seljuq Sultan of Rûm (1196–1201), a rider with a mace. British Museum, London, BMC 103.  
(ROXBURGH 2005, 78)

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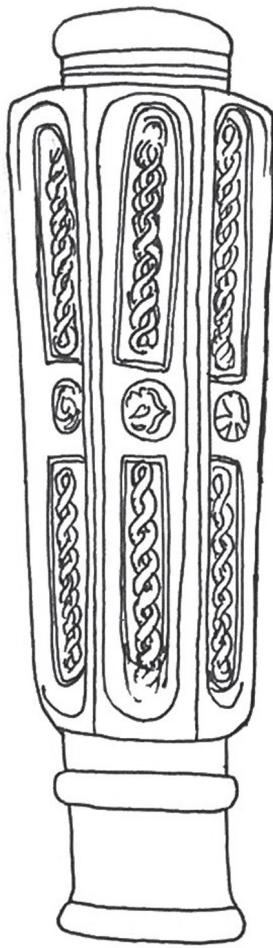


Fig. 5. Seljuq bronze mace-head from Iran, 11<sup>th</sup> century. Furissiya Art Collection, Inv. No. R-87. (BASHIR 2008, 232)



Fig. 6. Seljuq bronze mace-head from Iran, 12<sup>th</sup> century. Furissiya Art Collection, Inv. No. R-91. (BASHIR 2008, 234)

basin” (Fig. 11) but it cannot be decided how it got to the Mamluks who used various fighting techniques and weapons of the steppe, the Seljuk and the Arab world for their uniform training.

The contemporary reports mention maces in the equipment of the Mongol army but not even the sharp-eyed chroniclers describe their shapes. The Mongol army and its equipment became unbelievably varied as they conquered more and more territories since they united all the nations of the steppe and made use of various equipments of the peoples and territories they had occupied. After their victory, the warriors of the Mongol army looted many weapons, which they took to the next campaigns so it cannot be told how many people had used the objects until they got to the place where we later found them. According to the testimony of the miniatures, prismatic maces were also used in the 14<sup>th</sup> century Iranian Mongol Ilkanida court and army after the Mongol conquest. They were

<sup>15</sup> AL-SARRAF 2003, 160–161. The training of a *ghulam* took years in the mid-11<sup>th</sup> century, when he continuously practised with the weapons but he was given the complete equipment only step by step. The first year the draftee served a trained warrior on foot, the second year he got a small Turkish horse and a horse whip, the third year a belt, the fourth year a bow and a quiver, the fifth year an orna-

mented bridle, a better saddle, a finer coat and a *dabbus* mace, which he carried hanged from the saddle. He could be a commander after seven or eight years when he was given a black felt hat embroidered with silver threads and a decorated coat. Nizam al-Mulk after a source from an 11<sup>th</sup> century Seljuk period official of the court, cited in BASHIR 2008, 246 and NICOLLE 2007b, 164–165.

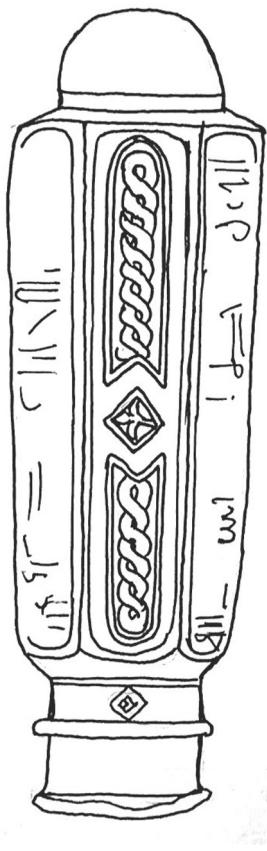


Fig. 7. Seljuq bronze mace-head from Iran, 12–13<sup>th</sup> century.  
Furissiya Art Collection, Inv. No. R-85. (BASHIR 2008, 231)

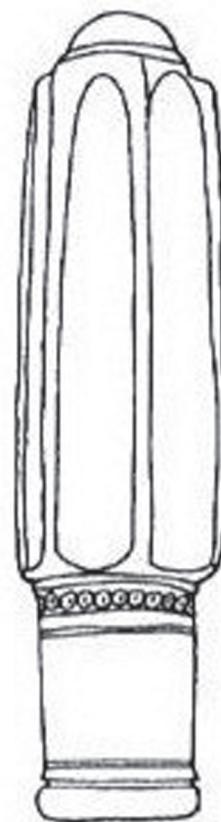


Fig. 8. Small symbolic or ceremonial bronze mace-head, Iran,  
12–13<sup>th</sup> century. Museum of Islamic Art, Cairo, Inv. No. 15207.  
(NICOLLE 1999, 665)

common weapons and insignia in depictions from the early 14<sup>th</sup> century, so they can be seen in battle scenes as well as in the depictions of court ceremonies.<sup>16</sup> (Figs 12–14)

Maces or clubs were present as accessory weapons in West Europe in the 11<sup>th</sup> century but the maces with metal heads that appeared there later are considered to have come from the Crusade. It should be added that knobbed items can also be found beside the cylindrical spiked form among the West European mace find.<sup>17</sup> The maces in the hands of the Muslim warriors fighting against the Crusaders are evidently cylindrical ones numerous illustrations of the *Histoire d'Outremer*, the chronicle of the crusade written in Acre sometime around 1230–1260. (Fig. 15) The depiction of a prismatic mace (?) also appears in the multicultural Levantine art of the time of the Crusade: it is held by a mounted warrior on a painted Antiochian pottery from the early 13<sup>th</sup> century.<sup>18</sup> (Fig. 16)

<sup>16</sup> RÜHRDANZ 1997, 252–274; NICOLLE 1999, 626p, 626y, 626ac, 631a.

<sup>17</sup> GRAVETT 2005, 14–15, 19, 63; GRAVETT 2008, 22, 54.

<sup>18</sup> Art historians conditionally determined the object in the hand of the mounted person depicted on the dish as a „falcon lure” or feather puppet and the rider as a falconer. MAQUIRE 1997, 401. How-

ever, feathered falcon lures are different because they consist of a piece of meat with bird wings attached to it fastened to a string. In this case, a long stick is in the hand of the rider with an angular head at its end, which cannot be a perch either, because the latter one is T-shaped. I would rather say that this picture represents this rare mace type. (Fig. 16).



Fig. 9. Bronze mace-head, Iran, 12–13<sup>th</sup> century. Rifaat Seikh al-Ard  
Private Collection. (NICOLLE 1999, 675)



Fig. 10. Bronze mace-head, 11–12<sup>th</sup> century. Nishapur, Iran, Mu-  
seum of Archaeology, Tehran. (NICOLLE 1999, 663)

From the Christian military orders, which were the permanent armies of the Crusader states, the “Turkish mace” is often mentioned in the 12<sup>th</sup> century ancient French regulations of the Knights Templar. The source does not give a description yet the adjective evidently marks its origin. It should be added that the Seljuk-Turkish mace was adopted but it never belonged to the elite weapons of a knight. In the list it is mentioned after the armour, the spear, the sword and the shield but it stood before the crossbow and the dagger.<sup>19</sup> Perhaps it belonged to the weaponry of the Christian light cavalry of Turcopole archers who were locally recruited by the crusaders and so also the Templars.<sup>20</sup>

In the contemporary European iconography, the “pagan warriors” who fought against the Crusaders were depicted with distinguishing, consequent attributes in the pages of the chronicles and on the frescos of churches. Such were the traditional “pagan weapons” of the contemporary depictions: the round cavalry shield, the pointed helmet, the lamellar or scale armour, the composite bow and, for a long time, the mace.<sup>21</sup> It was correct in general but the details of the eastern equipment, which were often schematically depicted by the medieval western artist, have been the objects of debates.

<sup>19</sup> UPTON-WARD 1992, 425, 558; NICOLLE 2007a, 80.

<sup>20</sup> „Turkish sword” (perhaps sabre?) is also mentioned among the afforded weapons that the Order had taken from the enemy. Turcopoles were a light cavalry of archers in the army of the Crusaders, similar to the Muslims. They were composed of converted Turks,

Syrian Christians, Greeks and Armenians and their role was to counterbalance the predominance of the light cavalry of the enemy. Both their equipment and tactics followed the Muslim pattern.

<sup>21</sup> NICOLLE 2007, 84.



Fig. 11. Mamluk macebearer on a silver bowl (the so-called “Baptistery of St. Louis”), 14<sup>th</sup> century (Louvre, LP. 16)

Prismatic maces reappeared in Italy, within the authentic context of European knights, although not really frequently. The city-states of Italy maintained a permanent contact with the Levantine region even during the Crusades.<sup>22</sup> There are also two depictions: on the sepulchral monument of a knight from the 14<sup>th</sup> century (*Fig. 17*) and in a picture in a 14<sup>th</sup> century codex from Venetia that depicts the fourth Crusade. (*Fig. 18*)

It can be seen in the more proportionate contemporary depictions that the shafts of the prismatic maces were relatively long, 70–80 cm.

Although a single item is known from the Volga region and three items in Hungary, due to the numerous analogues in the Near East, I will sum up the probable explanations of its appearance in the followings.

The fact that it is extremely rare as compared to knobbed maces and the fact that the items found within context can be dated from the same, very short period (the Mongol Invasion) refute that the form was the result of a “local evolution” either in The Carpathian Basin or in the South Russian steppe.

<sup>22</sup> Although the Italian city-states had an interest in the occupation of territories by the Crusaders due to the vital maintenance commerce, they also arranged profiting businesses, even though sometimes of dubious articles, with the Muslims. The merchants of Genova took the Cumalian slave soldiers of the Mamluk army, who

finally defeated the Crusaders, to Egypt from the Crimean. We also have data of Christian mercenaries, mainly heavy cavalry and crossbowmen who fought on the Muslim side, who theoretically took part only on in fights between the Muslims. NICOLLE 1996, 32–33; NICOLLE 2007a, 28–29.



Fig. 12. 1–4: Mongolian court nobles with maces. 14<sup>th</sup> century, Iran, Tebriz, Diez Album fol. 70, S. 22, fol. 71, S. 49., fol. 70, S. 22, fol. 71, S. 54.  
(RÜHRDANZ 2005, 288, 283, 288, 302)

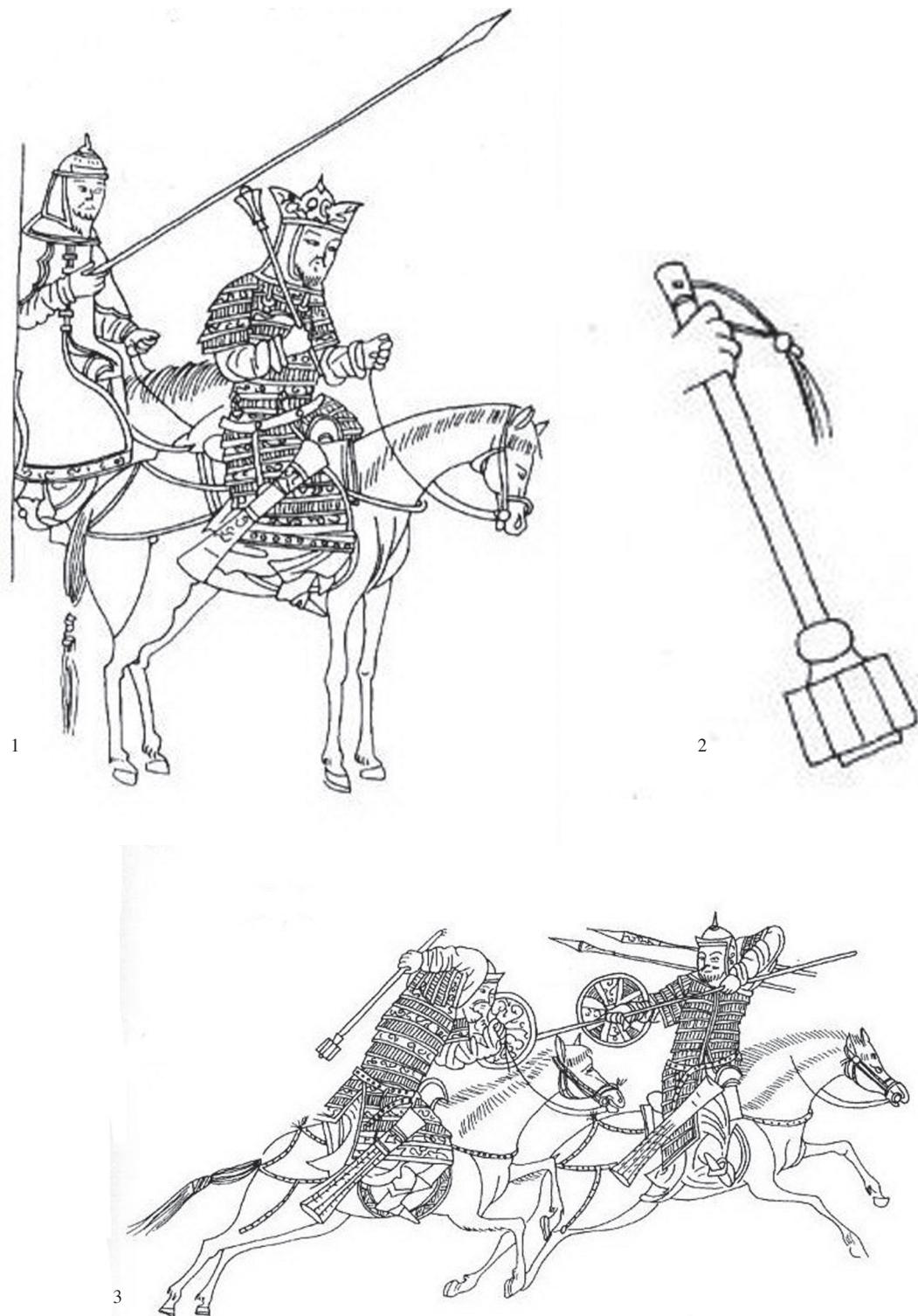


Fig. 13. 1–3: Mongolian warriors with maces. *Jam al-tawarikh*, Iran, Tebriz, 1306–1314 (University Library MS 20, Edinburgh).  
(NICOLLE 1999, 626p, 626y, 626ac)



Fig. 14. Mongolian guard with mace, Fatih Album, early 14<sup>th</sup> century, Azerbaijan, Topkapi Library MS MS. Haz. 2153 f. 148 v, Istanbul.  
(NICOLLE 1999, 631a)

Most of the analogues I could find to the prismatic mace-heads came from the Seljuk-Turks. In our region, it can be connected with the time of the Mongol Invasion in larger numbers: they could get to the areas affected by the Invasions and from there to the border zones at that time or just prior to it, either by the attackers or by those who had fled from them. This shape could arrive in Europe and Italy from the Near East perhaps as a result of the Crusades.

The rare find can also be a relic of the connections between the Holy Land and the Hungarian Kingdom.<sup>23</sup> It is also possible that it arrived in Hungary during the Mongol Invasion in an already unknown way, maybe through a series of owners, or it came with the Mongol attackers, their allies or the people who had fled from them (who could come from as far as the steppe and the Central Asian border of the Muslim world).

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<sup>23</sup> King András II. established good contacts with the Armenians who had long been fighting in the region against the Muslims and so also against the Seljuk and later the Mongols, during his campaign in the Holy Land in 1218. He had his son become engaged with the daughter of the Armenian king. The Christian military orders that fought in the Holy Land also had estates in Hungary and we should not forget about commerce, and the merchants and their attendants.

Weapon finds of a Near Eastern origin from the time of the Crusades are rare in Europe but they exist. A gilded iron mace-head with an Arabic inscription from the 13<sup>th</sup>-14<sup>th</sup> centuries was found in Moldavia in the nomadic cemetery of Balaban (POSTICĂ-SAVA 1996, 66-68, Fig 6-13; SPINEI 2009, Fig.25.9), and a curved dagger from the Near East dated from the 13<sup>th</sup> century was found in the Thames in England, on which a western European type crossbar was later mounted: BASHIR 2008, 158.

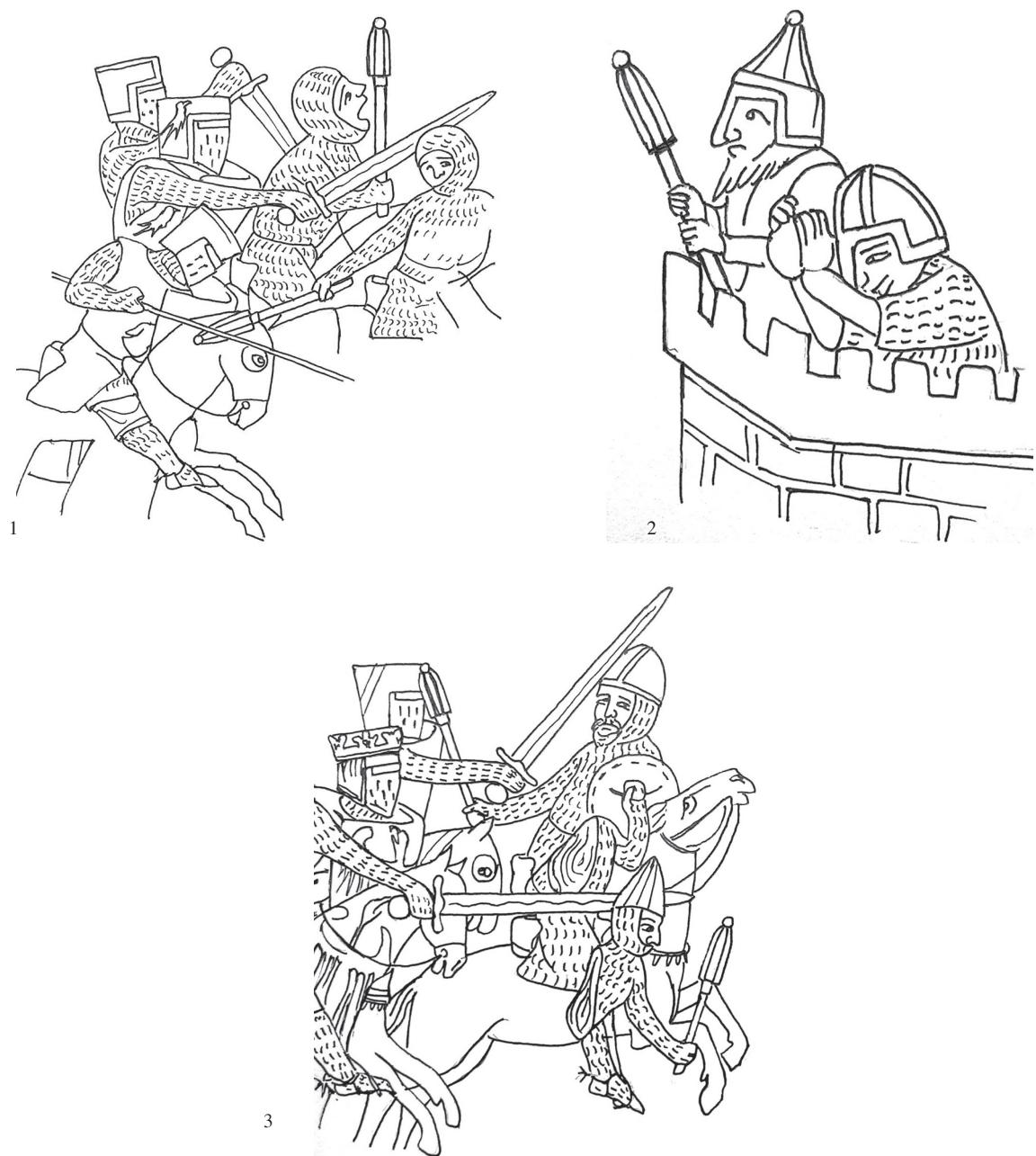


Fig. 15. 1–3: Maces with prismatic heads held by Muslim warriors in the battle scenes of the *Histoire d'Outremer*, around 1232–1261, (British Library Yates Thompson 12) f109v., f75, f29.



Fig. 16. Painted ceramic bowl, rider with mace, Antiochia, the beginnig of 13<sup>th</sup> century, The Metropolitan Museum of Art, New York, 1984. 181, (MAQUIRE 1997, 401(268)).



Fig. 17. Effigy of the Italian Knight Colaccio Beccadelli (?-1341), Imola, Convento dei Santi Niccolò e Domenico. (BOCCIA-COELHO 1973, 12)



Fig. 18. Crusaders marching against Byzantium, 14<sup>th</sup>-century Italian manuscript, Bodleian Library, University of Oxford, Ms. Laud. Misc 587, fol. 1.

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