

Andrei-Octavian Fărcaș

**MACES IN MEDIEVAL TRANSYLVANIA**  
**BETWEEN THE THIRTEENTH AND SIXTEENTH CENTURIES**

MA Thesis in Comparative History, with a specialization  
in Interdisciplinary Medieval Studies.

Central European University

Budapest

April 2016

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(Romania)

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Accepted in conformance with the standards of the CEU.

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Chair, Examination Committee

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Thesis Supervisor

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Examiner

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External Reader

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External Supervisor

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I, the undersigned, **Andrei-Octavian Fărcaș**, candidate for the MA degree in Comparative History, with a specialization in Interdisciplinary Medieval Studies declare herewith that the present thesis is exclusively my own work, based on my research and only such external information as properly credited in notes and bibliography. I declare that no unidentified and illegitimate use was made of the work of others, and no part of the thesis infringes on any person's or institution's copyright. I also declare that no part of the thesis has been submitted in this form to any other institution of higher education for an academic degree.

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# Abstract

Medieval mace heads have often been ignored by scholars and many artefacts of this type lay unpublished and sometimes unknown in various museums even today. In some countries, such as present-day Hungary, Poland or the former USSR, archaeological research into these weapons has been undertaken to understand their use and their origin. Currently there are two typo-chronologies in use, but both limited to certain geographical areas. A survey of research conducted into maces held in Transylvanian museums revealed that scholarship on this topic is scarce and mace heads are often left in collections with incorrect or no dating.

In the present thesis I created a new typo-chronology for Transylvania, based on existing scholarship and analogies, comparing the results with research from other regions. I conclude that Transylvania was among the few regions with a high number of mace heads which, at least after the twelfth century, includes types that are rare elsewhere in Central and Eastern Europe. Aside from the importance of the typo-chronology in dating new artefacts, the thesis's main contribution to scholarship is the compilation of the first catalogue of almost all presently known mace heads now held in Transylvanian museums.

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# Chapter 1 - Introduction

A large number of studies have been dedicated to the history of weapons in the Middle Ages ever since the beginning of the nineteenth century, when a particular interest in weaponry became more scientific. However, until today, research on edged weapons prevailed, as the sword had for a long time the reputation of being the most honourable and widespread weapon. Other types of weapons received greater attention a little later, more or less thorough depending on the region of study. Even so, blunt weapons such as maces, flails and war hammers received little to almost no attention especially in some areas of Central and Eastern Europe. The mace presents an interesting story, because it is a non-European weapon imported from the East, and it appeared in different areas of Europe in different periods. In this thesis I discuss the multitude of mace heads now found in Transylvanian museums and see how and why Transylvania is different than other areas, by analysing the patterns of distribution and shape, typologies and dating of the artefacts. Additionally, I will investigate if the number of mace heads from countries where analogies are available can be relevant for studying the pattern of geographical distribution of artefacts.

## 1.1 Sources and scholarship

The mace is a weapon which has its roots perhaps deep in prehistory. The European medieval weapon was not directly connected with prehistoric maces and it appeared on this continent from the Asian steppes sometime in the tenth or eleventh century. No homogenous distribution of this type of weapon is known in regions of Central and Eastern Europe: it is found more frequently in certain areas than others. Transylvania is a particularly rich region in terms of number of artefacts of this type. There is an approximate total of forty mace heads in Transylvanian museums, to which I must add the recent discovery of another mace head,

now in a private collection. At the same time, there is no comprehensive study on these objects; many of them are unpublished or hardly accessible for the international scholarship.

The main goal of this thesis is to create a regional survey of the maces and to contextualize them with the research results of other regions of Central and Eastern Europe. Therefore, it was important to study all accessible objects and to offer a new interpretation based on a catalogue of maces in this region. For this purpose I photographed and analysed twenty mace heads from the National Union Museum in Alba Iulia, three from the History Museum of Aiud, two from the Mureş County Museum, and six from the National Brukenthal Museum in Sibiu. Bureaucratic issues prevented me from obtaining access to some artefacts with allegedly known archaeological context from several museums. For two museums I could only receive approximations of the total numbers of mace heads, without being able to record them. The National History Museum of Transylvania, in Cluj-Napoca, is presently under renovation and the collection has been unavailable for several years. According to the estimations provided by the custodians of the collection comprises approximately three mace heads. The Braşov County Museum had a rather protective staff, while their approximations ranged from three maces to five or more. Another mace head known from the literature (discovered in the fortress of Piatra Craivii, in the Alba County) was nowhere to be found.

For some of the maces from Transylvania the discovery place is known, even if the archaeological context is unclear. In total, mace heads were discovered at Bod (Braşov County),<sup>1</sup> Piatra Craivii (Alba County),<sup>2</sup> Simoneşti (Harghita County),<sup>3</sup> Racoşu de Sus

<sup>1</sup> Julius Teutsch, "Die spätneolithischen Ansiedlungen mit bemalter Keramik an oberen Laufe des Altflusses," in *Mittheilungen der prähistorischen Commission der Kais. Akademie der Wissenschaften*, vol 1 (In Commission bei Carl Gerold's Sohn, 1903), 397. However, the author does not give any dating for it and, presuming it was kept in the History Museum of Braşov, access was not possible at this time.

<sup>2</sup> Gheorghe Anghel and Ion Berciu, *Cetăți medievale din sud-vestul Transilvaniei* [Medieval fortresses from South-Western Transylvania] (Bucharest: Meridiane, 1968), 19, fig. 9.

<sup>3</sup> Elek Benkő, *A középkori Keresztúrszék régészeti topográfiája* [The topography of medieval Keresztúrszék] (Budapest: Magyar Tudományos Akadémia Régészeti Intézete, 1992), 143, No. 11, pl. 9.

(Covasna County), Crăciunești (Mureș County), Ghinda (Bistrița-Năsăud County), Sibiu, Miercurea Sibiului and Dupuș (Sibiu County, Fig. 1.)<sup>4</sup>, as well as an unpublished mace from an unidentified village near Blaj (Alba County; stray find, now in a private collection in Mediaș). Although the three finds from the Sibiu County are theoretically stored in the Brukenthal Museum in Sibiu, the museum team was unable to identify these. For this reason their place of discovery will be marked as *uncertain*. In addition, in the case of the Mureș County Museum, one of the two mace heads was a stray find, discovered with the help of a metal detector by a member of the public and handed over to the museum. The archaeological context of the latter artefact has never been published and remained unavailable at the time of my research.

For the interpretation of these finds and objects it is also important to review the existing scholarly literature in Romania as well as in the larger region and to see what aspects of medieval usage were discussed in these studies. Unfortunately, very few publications offer a complex picture on some of the maces. Most of the literature on mace heads is restricted to occasional publication of such finds within the context of systematic excavations or stray finds. I have looked for analogies from Romania in order to understand how maces were diffused in different historical regions bordering Transylvania. The first mention appeared in the study written by Julius Teutsch in 1903, where he merely pointed out the existence of a knobbed mace head without providing any other relevant detail.<sup>5</sup>

In the Romanian historiography the first example for a knobbed mace head was the one discovered at Bâta Doamnei (Neamț county, Moldavia), published in 1965 in the

<sup>4</sup> Adrian Andrei Rusu, “Religios și non-religios în cultura materială a abației Bizere” [Religious and Non-Religious in the Material Culture of the Bizere Abbey], *Annales Universitatis Apulensis*, Series Historica 17, 2 (2013): 143. Some of the mace heads from the Brukenthal Museum in Sibiu have also been published – see Anca Nițoi, *Arme și armuri în colecțiile Muzeului Brukenthal* [Weapons and Armours in the Collections of the Brukenthal Museum] (Sibiu – Alba-Iulia: Altip, 2007), 54.

<sup>5</sup> Teutsch, “Die spätneolithischen Ansiedlungen,” 397.

context of the systematic research of the medieval fortification.<sup>6</sup> Constantin Scorpan makes a distinction between this type of mace head with very small rounded knobs and the ones with larger and pointier knobs. He explains that this weapon *could not have been used by warriors in heavy armours*<sup>7</sup> and fails to make any attempt of a chronological dating.

Two years later a subsequent study mentions another mace head discovered on the archaeological site Bisericuța Garvăn / Dinogetia, also discussed only in the context of the finds from several archaeological excavations.<sup>8</sup> In the following year yet another publication noted a fragmentary flanged mace head, discovered in a *castrum regis*.<sup>9</sup> The author simply illustrates the text with several images, without explaining the dating for any of them. However, in 1515, by the order of King Wladislaw II, the fortification was demolished and it reappeared in documents only in 1603 and 1661, when it was used by the nearby villagers as refuge.<sup>10</sup> The mace head could thus hardly be dated after 1515, which would explain the dating to the fifteenth or the early sixteenth century.

In 1977, in another study, Petre Diaconu and Silvia Baraschi compiled all the archaeological material excavated between 1956 and 1974 on the site of the medieval settlement from Păcuiul lui Soare, including two mace heads, one made of iron and the second one of bronze.<sup>11</sup> Neither find was discussed in the context of medieval maces. The first mace head was too damaged to be dated. However, the dating proposed for the second one was thirteenth century, but based solely on typologies from Dinogetia in Dobrudja

<sup>6</sup> Constantin Scorpan, "L'ensemble archéologique feudal de Bîtca Doamnei", in *Dacia. Revue d'archéologie et d'histoire ancienne*, IX/1965, 447, fig. 5/9.

<sup>7</sup> *Idem*.

<sup>8</sup> Ion Barnea, "Arme și piese de harnașament" [Weapons and riding gear], in *Dinogetia. Așezarea feudală timpurie de la Bisericuța – Garvăn*, vol. 1, ed. Gheorghe Ștefan *et al.* (Bucharest: Editura Academiei Republicii Socialiste România, 1967): 338-340.

<sup>9</sup> Anghel and Berciu, *Cetăți medievale din sud-vestul Transilvaniei*, 19, fig. 9.

<sup>10</sup> *Idem*, 15, 17. In 1603 the villagers were trying unsuccessfully to hide from the mercenaries of Georgio Basta and in 1661 from the Tatars pillaging the area.

<sup>11</sup> Petre Diaconu and Silvia Baraschi, *Păcuiul lui Soare. Așezarea medievală (secolele XIII-XV)* [Păcuiul lui Soare. The Medieval Settlement], vol. 2 (Bucharest: Editura Academiei Republicii Socialiste România, 1977), 137.

(eleventh – twelfth centuries), and the ones from the area of Kiev. There is no mention of an archaeological context.

In 1994 Victor Spinei compiled for the first time the Moldavian mace heads from the eleventh to fourteenth centuries.<sup>12</sup> It is one of the few comprehensive regional studies, which is also crucial for the Transylvanian material. This text gave plenty of information about the diffusion of patterns geographically from East to West. His examples cover the areas of North Bukovina (today in Ukraine), the Chişinău District, as well as the region of Moldavia, today in Romania. His examples range from simple knobbed mace heads with no decoration to richly decorated knobbed mace heads typical mostly for the Kiev region. The only problem with this study is the lack of dating evidence for the mace heads. The only find to which Victor Spinei assigned twelfth – thirteenth century dating comes from the Chişinău District.

In another article dealing with mace heads from neighbouring regions but exclusively relying on other typologies for dating, Răzvan Pinca points out the absence of any archaeological context for the five mace heads in the collection of the History, Ethnology and Fine Art Museum in Lugoj.<sup>13</sup> Another relevant find was that of a fragmented ceramic mace mould, in the archaeological excavation of 2007 at the Bizere Monastery (Frumușeni, Arad County).<sup>14</sup> The analysis of this mould revealed a locally produced mace head which could fit into a certain typology. However, the archaeological context did not yield any element for dating.

The historiography regarding Transylvanian weapons amounts to a few studies on mace heads. Apart from individually published finds, placed into various contexts and never interpreted within the broader framework of Transylvanian maces, the first attempt to

<sup>12</sup> Victor Spinei, *Moldova în secolele XI-XIV* [Moldavia in the Eleventh to Fourteenth Centuries] (Kishinev: Universitas, 1994), 130-131.

<sup>13</sup> Such is the case of the five mace heads from the History Museum of Lugoj: Răzvan Pinca, “Capete de buzduhan din colecția muzeului din Lugoj” [Mace Heads in the Collection of the Museum in Lugoj], *Banatica* 16, no. 1 (2003): 333-38.

<sup>14</sup> Rusu, “Religios și non-religios în cultura materială a abației Bizere,” 136-37.



compile these artefacts appeared in Kurt Horedt's general study about Transylvania in the Early Middle Ages.<sup>15</sup> Twelve years later Nicolae-Marcel Simina and Gheorghe Anghel published two articles about multiple mace heads from specific collections.<sup>16</sup> The chronology set to each type was established in accordance with existing analogies from other regions. A recent study dealing broadly with medieval weaponry focuses on the collections of the Brukenthal Museum in Sibiu, where mace heads are presented in general terms.<sup>17</sup>

## 1.2 Chronological framework

The chronological framework of this thesis starts no earlier than the thirteenth century for several reasons. Firstly, it was a period of important changes in the Kingdom of Hungary, in terms of social, political and military realities. The Mongol invasion of 1241-1242, together with the connected events (such as the Cuman migration and their settlement on the Hungarian Plain), influenced the material culture with a considerable import of new weapons. Maces had been present in the military landscape of this region, but in the thirteenth century their shape underwent a visible change. In addition, this was the last century of Arpadian rule, followed by a long list of kings from different families, each bringing new influences in military equipment. However, many maces are dated to the twelfth and thirteenth centuries, so I will not break the chronology with a sharp caesura at the beginning of the thirteenth century. The twelfth century will be considered only for those mace heads that can be dated in this period.

The upper limit is the middle of the sixteenth century to include the fall of the Hungarian kingdom, when it split in three parts with the centre subject to direct Ottoman

<sup>15</sup> Kurt Horedt, *Siebenbürgen im Frühmittelalterliche* (Bonn: Habelt, 1986), 149.

<sup>16</sup> Nicolae-Marcel Simina and Gheorghe Anghel, "Capete de buzduhan din secolele XI-XIV din colecția Muzeului Național al Unirii Alba Iulia" [Mace Heads from the Collection of the National Museum of the Union, Alba Iulia], *Arheologia Medievală* 2 (1998): 162; Nicolae-Marcel Simina, "Un capăt de buzduhan medieval din colecția Muzeului din Sebeș (jud. Alba)" [A Medieval Mace Head from the Collection of the Museum of Sebeș (Alba County)], *Apulum* 35 (1998): 207-15.

<sup>17</sup> Anca Nițoi, *Arme și armuri în colecțiile Muzeului Brukenthal* [Weapons and armours in the collections of the Brukenthal Museum] (Sibiu – Alba-Iulia: Altip, 2007), 54.

domination, and Transylvania as an autonomous political entity. Similar to the lower chronological limit, some mace heads can be dated to the sixteenth century as well as the seventeenth, for which reason the thesis will occasionally stretch beyond the original chronological limit solely for those specific cases.

### 1.3 Geographical framework

The geographical framework of the thesis is determined by the realities of the Voivodship of Transylvania. It was a distinct region within the Kingdom of Hungary, with its own typical administrative apparatus. This area comprises the present day counties of Cluj, Bistrița-Năsăud, Mureș, Harghita, Covasna, Brașov, Sibiu, Alba, and Hunedoara. A more exact delimitation is to follow the medieval county borders: the Interior Szolnok, Doboka, Kolozs, Torda, Fehér, Küküllő, Hunyad, plus the Saxon and the Szekler Seats.

After considering the similarities and differences between the patterns of evolution and types of shapes in the neighbouring regions, I will conclude that Transylvania has benefited from a multitude of external influences, each affecting the dating of certain artefacts with analogies from elsewhere. These influences come primarily directly from the east and south-east, but also from the west (the Kingdom of Hungary), and from north (Polish territories). This particularity makes the region a unique case study, whose specific distinguishing features will be the subject of further exploration in later chapters of the present thesis.

### 1.4 Methodology

The first step in studying the mace heads from Transylvania was creating a catalogue with detailed images of every artefact, together with the relevant information for each of them. Archaeological finds need to be associated with a dating, which can be obtained either from the archaeological context of the find, or by finding relevant analogies. The

geographical area of the analogies used for dating must be close enough so that chronological delays would not be present. In this respect the most important area of study is present-day Hungary, where some of the artefacts have a known archaeological context, Slovakia, and to a certain extent Croatia. The choice is also underpinned by the relative ease and transparency of material culture exchange in the Middle Ages between different regions of the Kingdom of Hungary. Numerous military conflicts and close political relations with Poland and Moravia can be a reason for using analogies from these areas as well. More distant examples, such as those analysed by Anatoli Kirpichnikov for the Kiev area,<sup>18</sup> will be used as a reference for patterns of evolution in shape.

The most important tool for dating and understanding the evolution of mace heads as weapons and as objects of material culture, especially in correlation with other regions, is creating a typo-chronology and thus enabling contextual overview. This implies a classification of the mace heads based primarily on their shape, which is the only indicator for dating such an artefact in the absence of an archaeological context. Each type will then be assigned a certain date, that will be applicable on the territory of Transylvania. The dating can only be limited to a certain territory due to the gradual diffusion of mace heads through Eastern and then Central Europe. Since typo-chronologies from other (rather distant) regions cannot be accurately applied to Transylvania, dating will reveal temporal delays in the diffusion of various types of maces. Furthermore, this systematic ordering allows me to compare the situation with other regions where such studies were conducted (present-day Hungary and the former USSR<sup>19</sup>) and draw conclusions on the particularity of the Transylvanian case.

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<sup>18</sup> Anatoli Kirpichnikov "Drevnerusskoe oružie, vzp. 2, Kopâ, sulicy, boevye topory, bulavy, kisteni IX-XIII vv." [Old Russian weapons, Vol. 2: Lances, spears, battle axes, maces, kistens in the 9<sup>th</sup> – 13<sup>th</sup> centuries], *Arheologia SSSR. Svod Arheologičeskikh Istočnikov*, E1-36 (1966): 47-57.

<sup>19</sup> I choose to refer to the former political entity because the relevant study for this area was published in 1966 and it conveys results from regions which go beyond the present-day borders.

The terminology used in the present thesis relies on a careful selection of the most commonly used terms in the scholarship, which are precise enough to avoid any possible confusion. Other typo-chronologies will serve as a model, so that the results of this study can be easily compared to the similar endeavours from elsewhere.

## 1.5 Overview of the mace

It is generally considered that the mace was introduced into East-Central Europe by peoples of the Asian steppes during the last stages of the Migrations Period. More specifically, it appears as a close-combat weapon typical for steppe warriors, which was imported to the territory of the Hungarian kingdom by the Pechenegs around the eleventh century.<sup>20</sup> Later, however, the Cumans disseminated a new type of mace head starting with the twelfth century, a slightly improved version of the type already in use in the Russian Principalities.<sup>21</sup> At the same time maces appeared in Western Europe as well. According to Ewart Oakeshott many of the maces used in Western Europe came from the Moors quite early in the eighth century.<sup>22</sup> However, maces resembling the Eastern European types and forms can be found even there, of course, with a certain chronological delay.<sup>23</sup> In such conditions we can say that in Europe the mace arrived from two different main directions. The Eastern, Turkic one, itself split into two branches, which radiated as far as the British Isles through the Scandinavian Peninsula,<sup>24</sup> and the Moorish one, which had influenced only the western part of the continent.

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<sup>20</sup> András Pálóczi Horváth, *Pechenegs, Cumans, Iasians: Steppe people in Medieval Hungary* (Budapest: Corvina, 1989), 18, 34-35.

<sup>21</sup> Idem, 77, 84.

<sup>22</sup> Ewart Oakeshott, *European Weapons and Armour from the Renaissance to the Industrial Revolution*, (Woodbridge: The Boydell Press, 2000), 63.

<sup>23</sup> Such examples can be found on the website of the British Portable Antiquities Scheme: <http://finds.org.uk/database/artefacts/record/id/398122>, <http://finds.org.uk/database/artefacts/record/id/217463> or <http://finds.org.uk/database/artefacts/record/id/151563> (accessed November 23, 2015).

<sup>24</sup> Fred Sanstedt. “Hafdi kylfu stóra i hendi”: Ett bidrag till kunskapen om den tidigmedeltida stridsklubban” [“Had a big bat in his hand”: A contribution to our knowledge of the early medieval mace], *Meddelanden Armémuseum* 52 (1992): 73-103.

The name of this weapon clearly suggests an Eastern influence. The word used in the Central and Eastern European languages has two possible origins. For instance, in Romanian it is called *buzdugan*, in Serbian, Croatian and Bosnian it is *бyздoвaн/buzdovan*, in Bulgarian *бoздyгaн (bozdugan)*, in Polish *buzdygan*, and in Hungarian it is called *buzogány*. This can be traced from the Turkic word *buzdoğan*, which comes from the verb *buz* (meaning *to crush*).<sup>25</sup> The most plausible theory is that from this word two directions emerged – on one hand the Turkish (and later the Ottoman) *buzdoğan*, which gave the term in Romanian, Serbian, Croatian, Bosnian and so on, and on the other hand the Cuman word (or Pecheneg according to Pálóczi Horváth)<sup>26</sup> *buzoğan*, which gave the Hungarian term by losing the *d*.<sup>27</sup>

In medieval documents it is called *baculum*, *clava*, or *pila clavata*, designating both the metal mace and the wooden club.<sup>28</sup> There are several mentions in the fifteenth and sixteenth century documents giving the Hungarian term in connection with the Latin noun or replacing it completely. In a document from 1424 there is a mention of *unum baculum buzgan nominatum*,<sup>29</sup> and from the same year another *arcus cum faretre et buzgan*, in 1430 a document contains the phrase *cum clava wlgo buzogwan vocata*, and in 1434 a Transylvanian document regarding the Romanians from the Dobrei District (today Hunedoara County) specifies *clavas vulgo buzogan*.<sup>30</sup>

An unexpected find from a Hungarian source is the other form of the vernacular word, containing the letter *d*, as in a document from 1491, which enumerates *bicelli*, *dacus*,

<sup>25</sup> László Kovács, “A Magyar Nemzeti Múzeum fegyvertárának XI-XIV. századi csillag alakú buzogányai” [11<sup>th</sup> – 14<sup>th</sup>- century star shaped maces in the weapons collection of the National Hungarian Museum], *Folia archaeologica* 22 (1971): 165; Adrian Andrei Rusu, *Cine turna capede de buzdugan în Ungaria Arpadiană?* [Who Was Smelting Mace Heads in Arpadian Hungary?], [http://medievistica.ro/pagini/arheologie/cercetarea/buzdugane/buzdugan.html#\\_ftnref4](http://medievistica.ro/pagini/arheologie/cercetarea/buzdugane/buzdugan.html#_ftnref4) (accessed May 19, 2015).

<sup>26</sup> Pálóczi Horváth, *Pechenegs, Cumans, Iasians*, 35.

<sup>27</sup> Kovács, “A Magyar Nemzeti Múzeum,” 165.

<sup>28</sup> Arkadiusz Michalak, “Głowica buławy z Trzciela, pow: Międzyrzecz: Wstępne uwagi w kwestii występowania buław na ziemiach polskich w średniowieczu, na tle znalezisk europejskich” [The mace head of Trzciel, Międzyrzecz province: Introductory remarks on the question of the presence of mace in medieval Poland in the context of European finds], *Archeologia Środkowego Nadodrza* 4 (2005): 186.

<sup>29</sup> Loránd Benkő, ed., *A Magyar Nyelv Történeti – Etimológiai Szótára* (Budapest: Akadémiai Kiadó, 1967), 400.

<sup>30</sup> Rusu, “Religios și non-religios în cultura materială a abației Bizere,” 138.

*buzdogan turcales*. Another document from 1518 mentions *unum pileum et unum buzdwgan*.<sup>31</sup> The first mention probably refers to the Turkish name, as it is regarding a weapon described as Turkish, or belonging to the Turks; in the second case the word used might either be a variant of the Hungarian term which was still in use until the first half of the sixteenth century, or the document may have been written by someone more familiar with the Romanian variant of the word.<sup>32</sup> If this version was a coexistent Hungarian form, it eventually died out in favour of the variant without the letter *d*, as it can be seen in a document from 1548: *ket bozgany es eg heges tær*.<sup>33</sup>

The word was sometimes used as given name to children. For instance the Cumans found it appealing at times to name their children after weapons names such as Baltha, Buzkan or Chakan.<sup>34</sup> The name for *mace* appears in Hungarian surnames as well, for instance the name appears in a document from 1482: *Thoma Bwzganyos*, which could mean “the mace bearer” or “the one who fights with a mace”, a person identified by his use of a mace.<sup>35</sup>

The use of maces from moulding to discarding, the interaction that this type of artefact had with human society throughout the centuries, as well as the symbolism and meanings it acquired are all comprised in what Roberta Gilchrist describes as the *biography and agency of an artefact*.<sup>36</sup> The mace is generally seen as a weapon everywhere in the world. At some point in history it also became a symbol of prestige or rank, probably evolving into the sceptre.<sup>37</sup> The origin of this symbolism is difficult to grasp, as exceptionally scant studies have been published regarding this issue. According to the chronicle of King Alfonso XI of

<sup>31</sup> Zolnai Gyula, ed., *Magyar Oklevél-Szótár* (Budapest: Hornyánszky, 1902-1906), 98.

<sup>32</sup> Another word for “mace” used in the Modern Period in Romanian was “topuz”, borrowed from Turkish: August Scriban, *Dicționarul Limbii Românești* [The dictionary of the Romanian language] (Iași: Institutu de Arte Grafice „Presa Bună”, 1939), s.v. “topuz”.

<sup>33</sup> Gyula, ed., *Magyar Oklevél-Szótár*, 98.

<sup>34</sup> Kovács, “A Magyar Nemzeti Múzeum,” 165, n. 2.

<sup>35</sup> Gyula, ed., *Magyar Oklevél-Szótár*, 98.

<sup>36</sup> Roberta Gilchrist, *Medieval Life: Archaeology and the Life Course* (Woodbridge: The Boydell Press, 2012), 11-13.

<sup>37</sup> However, strong evidence for this evolution are evasive, as there are known sceptres from Arab sources as early as the third century AD. This issue is still unclear, because there is no certainty as of why this evolution has happened, how and when.

Castile, during the Battle of Rio Salado, near Tarifa (1340), the king held a mace in his hand to show the prestige and power of his role. In Catalan and Spanish sources the mace symbolises courage.<sup>38</sup> Depictions of soldiers (even foot soldiers) in command positions, holding a mace in their hands, could point towards a symbol of authority and rank.<sup>39</sup> However, examples from earlier periods already feature clubs with a stone end as prestige objects. A spherical stone with an axial orifice discovered in Ukraine, at Tahanca, was initially interpreted as a weapon, but later studies labelled it as a symbol of authority.<sup>40</sup>

Military usage however is far better documented, and its evolution is easier to trace. According to the early sources the mace was first a weapon characteristic for units of horse riders, as shown in the study of Arkadiusz Michalak<sup>41</sup>. András Pálóczi Horváth makes a firm stand stating that the nomad people such as the Pechenegs, the Cumans, the Iasians and to some extent the Khazars, Kavars and the Ghuzz people used maces as a side weapon for close combat.<sup>42</sup> It is not difficult to understand its development as a horse riding and cavalry weapon<sup>43</sup> if considered in its natural context – the battlefield. A mounted soldier could use the force of his descending arm and the speed of his horse when hitting the enemy. The impact thus accumulated three important forces: the power of the swing, the momentum gained due to the centrifugal force (a man's arm with a heavy lump of metal on the end, swinging in a semicircle, from back to front) and the speed of a galloping horse. Csaba László Hidán estimates the speed of a horse at 35 – 40 Km/hour, to which he adds an

<sup>38</sup> Arkadiusz Michalak, "A Fourteenth Century Knobbed Mace Head from the Birów Mountain in Podzamecze in the Polish Jura Chain," in *Cum Arma Per Aeva. Uzbrojenie indywidualne na przestrzeni dziejów*, ed. Paweł Kucypera and Piotr Pudło (Toruń: Wydawnictwo Adam Marszałek, 2011), 173.

<sup>39</sup> Attila Zarnóczy, *Mátyás király katonái* (Budapest: Libra, 1992), 59.

<sup>40</sup> Witold Świątosławski, *Arms and Armour of the Nomads of the Great Steppe in the Times of the Mongol Expansion (12th – 14th Centuries)* (Łódź: Oficyna Naukowa MS, 1999), 56. The author suggests an analogy for such symbols of authority from medieval Chinese sources, leaning towards the assumption of a possible westward diffusion during the Mongol expansion. This, however, does not explain the presence of the same symbolism in the Spanish sources of the fourteenth century. A possible solution would be analysing the Arab sources, to see if this symbolism could have been diffused by the Arabic peoples.

<sup>41</sup> Michalak, "A 14<sup>th</sup> Century Knobbed Mace Head," 187.

<sup>42</sup> Horváth, *Pechenegs, Cumans, Iasians...*, 18-35.

<sup>43</sup> I differentiate between horse riding units and cavalry because the latter implies a more organized and regularized type of unit than the former, which is more typical to the nomad peoples of the Asian steppes.

approximation of 60 – 70 cm for the overall length of the mace.<sup>44</sup> The impact was intended to transmit the shock through light armour and break bones, which is why the shape of maces was becoming more complex. The knobbed mace heads were designed to increase the damage inflicted by concentrating the impact in one of the knobs. It is understandable why the mace slowly lost its utility as a blunt weapon after the development of plate armour by the fifteenth century.<sup>45</sup>

The infantry soon adopted it as a secondary weapon (depictions of foot soldiers carrying a mace appear as early as the thirteenth century) and, although little used, the mace had become an infantry weapon by the end of the fifteenth century.<sup>46</sup> Medieval combat manuals (Johannes Liechtenauer, Hango Doebringer, Fiore dei Liberi, Sigmund Ringeck, Paulus Kal, Peter von Danzig, *Codex Wallerstein*, Hans Wurm, Albrecht Dürer and others) rarely offer depictions of the use of maces by infantry.<sup>47</sup> For instance, Hans Talhoffer depicts in his *Fechtbuch aus dem Jahre 1459* a wooden club that stands as a replacement for mace. It appears on a series of plates describing a combat between a male and a female (Fols. 80r – 84r, as seen in Figs. 2-10), and on several plates describing combat with this sort of club/mace and a large shield resembling a target (Fols. 103r, 110v, 111r, 113r, 114r, 115r, and 116r, as seen in Figs. 11-17),<sup>48</sup> as well as a presentation of this weapon in Fol. 106r (Fig. 18).

<sup>44</sup> Csaba László Hidán, “A XI-XIV századi sztyeppe eredetű buzogányok és használatuk” [11<sup>th</sup>-14<sup>th</sup> century steppe maces and their use], *Studia Caroliensia* 2 (2004): 4.

<sup>45</sup> Alexander Ruttkay, “Waffen und Reiterausrüstung des 9. bis zur ersten Hälfte des 14. Jahrhunderts in der Slowakei (II)” [Weapons and riding gear from the ninth until the first half of the fourteenth century in Slovakia], *Slovenská Archeológia* 24, no. 2 (1976): 316.

<sup>46</sup> Idem, 174. There is however room for debate on whether the mace was a weapon used by troop leaders, thus rarely used and of significant symbolic value, or it was a cheap weapon easy to procure and available to and used by anyone.

<sup>47</sup> A general study about combat manuals, including short explanations for combat with each weapon, in Pierre-Henri Bas, “The True Edge: A Comparison Between Self-Defense Fighting from German ‘Fight-Books’ (*Fechtbücher*) and the Reality of Judicial Sources,” *Acta Periodica Duellatorum* 1 (2013): 181-97.

<sup>48</sup> Hans Talhoffer, *Fechtbuch aus dem Jahre 1459*. Ms.Thott.290.2°, Det Kongelige Bibliotek, Copenhagen, Denmark is available at [http://www.kb.dk/da/nb/materialer/haandskrifter/HA/e-mss/thalhofer/thott-2\\_290.html](http://www.kb.dk/da/nb/materialer/haandskrifter/HA/e-mss/thalhofer/thott-2_290.html) (accessed November 5, 2015).



In this plate Talhoffer presented the weapon in two variants, calling it *lern kolben*,<sup>49</sup> and using it as a training tool that would stand for any mace or similar blunt weapon (such as a simple wooden club). However, these manuals only depict maces (rather “training clubs”) in a certain context, as an ideal use of this weapon, so that a generalisation cannot be made. Other sources depicting foot soldiers holding maces show *at ease* positions.<sup>50</sup>

Much earlier, the Bayeux tapestry depicts a scene where a few flying maces can be seen. Although it is a distant example, it can serve as an illustration for the functionality of a mace. This has been observed by Arkadiusz Michalak as well, who noted that a fourteenth century mace found in Poland is very likely to have been used with great probability for throwing.<sup>51</sup> Ewart Oakeshott analysed them in the context of other Western-European maces and argued that those might have been a sort of missile given their shape and short shaft, like the ones used in New Guinea until the Modern Era, although the latter can hardly be considered a possible analogy, given the huge temporal and geographical distance.<sup>52</sup> However, I consider plausible the possibility of using mace heads with a top knob for throwing.

Another use of mace heads includes its very recycling, especially when it is made of bronze.<sup>53</sup> The material could be reused for various purposes, ranging from weapons and parts of weapons (such as cross guards or other bronze fittings) to clothing accessories, cutlery and other decorations. However, other uses of medieval maces depended on the local need of

<sup>49</sup> This is the only place within the manuscript where this weapon is mentioned specifically, and the description for each of the fighting plates is given schematically and without details regarding the weapon. E.g.: *Hie macht er eim end stuck* [Here he makes an end piece] – description in Ms.Thott.290.2°, fol. 82v (Fig. 5).

<sup>50</sup> A series of them: *Cronicon Pictum Vindobonensis*, in Tibor S. Kovács, *Huszár-fegyverek a 15-17. században* [Hussar weapons from the fifteenth-seventeenth centuries], (Budapest: Martin Opitz Kiadó, 2010), 29, 32; Emil Dragnev, *O capodoperă a miniaturii din Moldova Medievală: Tetraevanghelul de la Elizavetgrad și manuscrisele grupului Parisinus Graecus 74* [A masterpiece of the medieval Moldavian miniature: The Elizavetgrad Tetraevangelary and the manuscripts belonging to the *Parisinus Graecus 74* group] (Civitas: Chișinău, 2004), Pl. 78; An infantry commander, in Zarnóczy, *Mátyás Király katonái*, 59; Caiaphas in the Judgement Scene, in the Schleinig Chapel, St. Michael Church, Cluj-Napoca, Romania (Fig. 19).

<sup>51</sup> His conclusion is that maces designed also for throwing had an additional knob or spike at the top, to increase the chances of inflicting damage: Michalak, “A 14<sup>th</sup> Century Knobbed Mace Head,” 184-186, 185, n. 14.

<sup>52</sup> Oakeshott, *European Weapons and Armour*, 63.

<sup>53</sup> Rusu, “Religios și non-religios în cultura materială a abației Bizere,” 144.

various individuals. A recent discovery, also included in the catalogue (Fig. 2/I.7), is a mace head which was used until now as a bucket weight in a well, in a village in the Alba county.

Another relevant aspect, yet scantily documented, is the economic context. None of the studies I have found provide sufficient information about the production costs of a mace or its standard market price. All I could find is that in the sixteenth century four maces were sold at the Transylvanian border between the Kingdom of Hungary and Wallachia at the price of 4 florins.<sup>54</sup> There must have also been a difference in price between the maces with metal head and wooden handle and those completely cast in metal, or between maces cast in different metals (iron, bronze). An important element to be taken into consideration in this matter is the production method. The ceramic fragments belonging to a bronze mace mould discovered in 2007 at the Bizere monastery reveal that the mould was used to manufacture a knobbed mace, with – probably – five central knobs between two parallel rows of five smaller knobs.<sup>55</sup> Due to the lost-wax casting technique used in this case<sup>56</sup> the mould had to be destroyed after the bronze had cooled down inside it. This resulted in unique pieces, their value probably increasing in proportion with the degree of decoration. This type of discovery is unique in Romanian medieval archaeology. In Hungary, László Kovács proposed a slightly different moulding technique, using a two valve mould, the two halves being held together by a set of nails and wooden frames.<sup>57</sup>

Besides its production, it is still hard to approximate the frequency with which the mace was used. It is also difficult to guess the way people referred to this type of object, as the sources refer to maces only in few instances. However one interesting mention is from a

<sup>54</sup> Ioan Marian Țiplic, *Bresle și arme în Transilvania (secolele XIV-XVI)* [Guilds and weapons in Transylvania (fourteenth to sixteenth centuries)] (Bucharest: Editura militară, 2009), 150. It is hard to approximate what this meant, given the political changes that affected the value of the Hungarian Florin in the sixteenth century.

<sup>55</sup> Andrei Rusu, “Religios și non-religios în cultura materială a abației Bizere,” 136-7.

<sup>56</sup> Creating a wax model and covering it with clay, which would then be fired. The melted bronze would be poured in the resulting ceramic mould and the wax would have melted out at the same time.

<sup>57</sup> Kovács, “A Magyar Nemzeti Múzeum,” 168n27.

document dated 1328, where the expression *ictus fortissimos per clavas bulgaricales*<sup>58</sup> seems to contain a metaphorical use of *clava*. Here, instead of the noun *baculum*, the term *clava* appears to refer to the mace. This source, provided we had more analogies for this kind of reference to maces, could offer a hint at the cultural meaning and symbolism of maces. In a letter sent by Miklós Némethújvári from Sár on May 8, 1313, he says that *predicti Jacobus Thomas et alij pugilem eorum pedestrem et cum baculo pugnaturum, congressum, contra pugilem predictorum filiorum comitis Andree*.<sup>59</sup> The word *baculum* in this paragraph does not necessarily refer to a mace, considering that its most common meaning is rather ‘stick’ or ‘staff’, which would imply that the attackers were armed with sticks or bats, rather than clubs or maces. This is yet another distinction which is significant but necessitates further research mainly because of the scarcity of the relevant information in the sources.

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<sup>58</sup> Imre Nagy, *Codex Diplomaticus Hungaricus Andegavensis*, vol. II (Budapest: A Magyar Tudományos Akadémia, 1878-1881), 382.

<sup>59</sup> Nagy, *Codex Diplomaticus Hungaricus Andegavensis*, vol. I, p. 296.

# Chapter 2 – Typo-chronology of Transylvanian mace heads

## 2.1 Terminology

Creating a standardised typology for a large series of artefacts necessitates the use of their main components, if not all of them. Naming the artefacts, however, created a rich palette of synonyms in the scholarship, of which a few are hilariously original, too general, or downright inappropriate. In addition, the verbal description of an artefact should be made in such a manner that the reader can understand its shape before seeing its picture. This however requires a very clear and strict set of terms, easy to understand and specific enough for a correct and complete description. For clarity's sake in the subsequent analysis I use the most commonly accepted English terms where possible, purposefully avoiding expressions and words such as "metal clubs", "barrel-like shape",<sup>60</sup> or "fangs", "thorns" or "corners"<sup>61</sup> to describe the pyramidal knobs. It is understandable why it is important to avoid often improvised terms, considering the confusion that can be created by obscure or unclear terms. Few studies published originally in English comprise detailed descriptions of mace heads and even fewer are the cases when those artefacts have uncommon elements that would normally bear a distinctive name. One series of articles published by Arkadiusz Michalak is useful in this respect, as he describes the mace heads using commonly accepted English terms, but at the same time remains very specific.

Based on these established lexicons, I developed a common and standardised terminology and applied it to the mace heads on which I based the typo-chronology used in

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<sup>60</sup> Ștefan Pascu and Răzvan Teodorescu (Coord.), *Istoria românilor* [History of Romanians], vol. 3 (Bucharest: Editura Enciclopedică, 2001), 248.

<sup>61</sup> Maria Emilia Crîngaci Țiplic, "Weapons and Military Equipment Found in the German Settlement Area from Southern Transylvania (the 12<sup>th</sup> – 13<sup>th</sup> centuries): Some Aspects and Perspectives", *Studia Universitas Cibiniensis: Series Historica* 8 (2011): 84.

this thesis. In this respect, I structured the terminology based on specific structural parts of the mace, starting from the general shape and ending with the small relevant details. Since the variety of maces found in Transylvania is not very wide I chose not to expand this terminology with terms that are not to be found on the studied artefacts. In the following, I provide a basic summary of the classification to clarify certain salient terminological distinctions.

Structurally, one of the main elements of a mace head is **the body**, which consists of the central part of the object. It can be spherical, cubical, cylindrical, or bifrustal with a round base.<sup>62</sup> With only one exception, no mace heads with a spherical bodies have been recorded in Transylvania, and those with a cubical body seem to have been no longer in use after the end of the twelfth century. All the other structural elements of a mace head are considered to be “attached” to the body of the mace head. According to the typology of László Kovács, cubic and spherical bodies with a cylindrical axial shaft inside are characteristic for earlier types of maces,<sup>63</sup> but as no examples are known in Transylvania thus far, I will not analyse them in detail.

A clear division can be drawn in terms of general shape: mace heads can be divided between the **knobbed** and **flanged**. The knobbed mace heads, also known as “star shaped”,<sup>64</sup> are characterised by pyramidal **knobs** placed radially on the surface of the mace (such as the mace heads M 3882 or M 3883 from the Brukenthal Museum of Sibiu – Fig. II/1.8, and Fig. II/2.2). In contrast, flanged mace heads (such as F 610 from the museum in Alba Iulia – Fig. VII/1.1) have as characteristic feature a radial set of vertical **flanges**.

<sup>62</sup> Bifrustal is the geometrical shape created by two horizontally truncated cones with a joint base.

<sup>63</sup> Kovács, „A Magyar Nemzeti Múzeum,” 170-72.

<sup>64</sup> This term is used in the scholarship to describe the general characteristic of the weapon, often in contrast to the flanged mace. However, for detailed analysis used in a typo-chronology this term can be too vague, as the knobs have important differences upon a closer inspection.

I chose to use the term **knobs** for the projections placed on the surface of the mace head's body instead of the more frequent word 'spike'.<sup>65</sup> The reason for this is the fact that the 'morning star', another type of hafted weapon designed for striking, had sharp pointed spikes fixed into a wooden or sometimes metal cudgel, which could penetrate chainmail or leather armour. This is definitely not the case for the knobbed maces. Arkadiusz Michalak uses a rich and very specific set of terms when describing the mace head of Podzamcze, on Birów Mountain as a 'knobbed mace head', having three rows of seven 'knobs' each.<sup>66</sup> At the same time, when describing Bohemian weapons from 1350 to 1450, Zoroslava Drobná uses the word 'spike' both for knobs on maces and spikes on morning stars,<sup>67</sup> thus losing the distinction between the two.

Knobbed maces can have different types of knobs. Pyramidal ones appear radially on the median part of the mace head's body. Their size seems to be bigger in later periods, which may constitute a relevant element for dating. In addition, most maces also have tetrahedral knobs. These are positioned radially in two parallel rows, on each side of the large knobs, each small tetrahedral

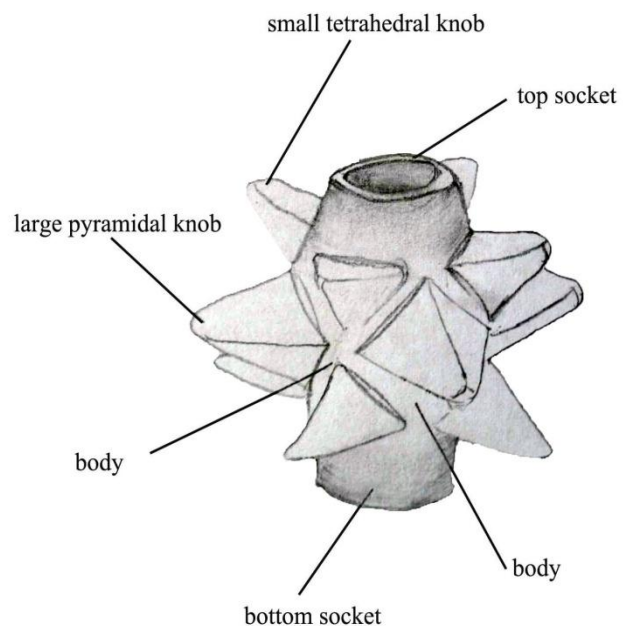


Plate 1: The constitutive elements of a mace head

knob intercalating two pyramidal ones. This kind of arrangement on the body of the mace head is the most frequent in the knobbed mace. A third type is characterised by pyramidal

<sup>65</sup> This term is used widely by authors who do not seem familiar with the standard terminology. Such an example is an article written by Savo Vetnić, who uses the word 'spike' for both the pyramidal protuberances on a knobbed mace and the flanges on a later type of mace: Savo Vetnić, "Medieval Weapons and Implements Deriving from the Middle Morava", *Balkanoslavica* 10 (1983): 42.

<sup>66</sup> Michalak, "A 14<sup>th</sup> Century Knobbed Mace Head," 178.

<sup>67</sup> Eduard Wagner, Zoroslava Drobná and Jan Durdik, *Medieval Costume, Armour and Weapons (1350-1450)* (New York: Dover, 2000), 47-8, 51.

knobs with a rhomboidal base, as is the rare case of the No. 1970/7276 mace head from the History Museum of Aiud (Fig. IV.1). The central knobs of this example have an elongated quadrilateral base, while the peripheral smaller ones are elongated only towards the centre of the artefact. The knobs on this mace head are much smaller than on the others.

The **flanges** of a mace appear in the shape of a series of blunt blades which is the reason why in some works they are called this way,<sup>68</sup> placed radially around the body of the mace head. They are either semi-circular, elongated towards the lower part of the artefact or, in some cases (though not in Transylvania), triangular, with the top sharply pointed. In some cases the sides of the flanges are decorated or have an irregular contour. Here I will use the term ‘flange’ because it seems to prevail in the English language scholarship and it also appears in Ewart Oakeshott’s study on weaponry, which is one of the reference publications for English language terminology.<sup>69</sup>

Scholars dealing with mace heads are almost unanimous in describing the lower extensions of the body of the mace head as a **socket**. Its purpose was to affix the artefact to the wooden handle better, and probably to prevent it from breaking just below the mace head due to strong impact in combat and the force exerted in that area. Perhaps this is the reason why it has also been called, improperly, as a ‘grip tube’.<sup>70</sup> The socket could be either in the shape of a small frustum or cylindrical with or without decorations. An extension of the mace head’s body on the top will also be considered a socket because it often has the same shape as the one in the bottom. The wooden handle of the mace was affixed through the socket into what is universally called a **shaft**, the hole piercing the body of the mace head axially. This

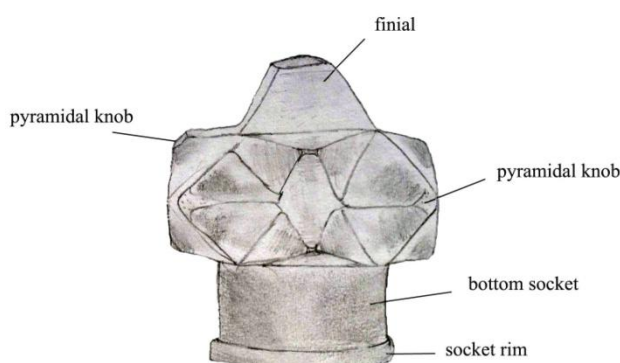
<sup>68</sup> Ibid, 48. Savo Vetnić surprisingly calls them ‘spikes in the form of slices’, in “Medieval Weapons and Implements,” 42.

<sup>69</sup> Oakeshott, *European Weapons and Armour*, 62-68. I also tried to find additional sources for broadly used terms in English, but even in the publications issued by and for creators of replicas the terminology varies from one issue to another.

<sup>70</sup> Crîngaci Țiplic, “Weapons and Military Equipment,” 84. In the same place the author is describing a mace head “with five median corners and a sleeve”. I assume that the “sleeve” is another improvised term for describing the socket.

could be either cylindrical, bifrustal or following the exterior contour of the mace head vaguely.

An additional element of a mace head, also found among Transylvanian examples, is the **finial**,<sup>71</sup> a decorative or functional upper ending, seen for instance on the flanged mace F 608 (Fig. VII/2.1) and F 607 (Fig. V.1) in the collection of the National Museum of the Union in



*Plate 2: The finial of a mace head*

Alba Iulia. As noted previously, it is argued that maces that have a pyramidal finial were intended as throwing weapons.<sup>72</sup> A distant indication in this direction, an analogy only from a strictly functional point of view, is the depiction of a mace in flight on the Bayeux Tapestry.<sup>73</sup> Thus, the finial is supposed to have the purpose of accumulating the momentum gained after the mace was thrown, or at least increasing the chances that a knob would hit the target. However, producing a mace was more costly than any other throwing weapon (javelin, arrow, crossbow bolt and so on), which could be easily replaced. Throwing the mace in battle would most certainly lead to its loss. Consequently, I suggest that throwing it would have been a last resort, or at least a secondary use, for this type of weapon.

In addition to the finial, some flanged mace heads have decorative elements at the top or at the bottom of the flanges, such as mace head F 604 from Alba Iulia (Fig. VII/1.1), while other knobbed maces have similar elements at the intersection of the large knobs. These elements appear like small **studs**, which is the term used in this thesis following the general convention in the relevant scholarship. Few examples of maces published originally in

<sup>71</sup> The only publications describing this element in English is Michalak, "A 14<sup>th</sup> Century Knobbed Mace Head," 178 and Świętosławski, *Arms and Armour of the Nomads*, 57.

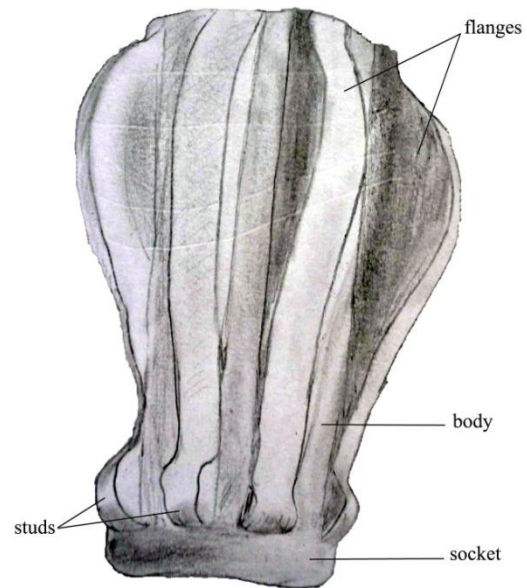
<sup>72</sup> Michalak, "A 14<sup>th</sup> Century Knobbed Mace Head," 184-86.

<sup>73</sup> David Mackenzie Wilson, *The Bayeux Tapestry* (London, Thames & Hudson, 2004), 64.



English note this type of decorative element, and Oakeshott does not include it in his study on knobbed maces either. Goran Jakovljević calls them studs,<sup>74</sup> while Arkadiusz Michalak calls a smaller element on the top of the pyramidal finial on the Podzamcze mace head a ‘button’.

When describing a mace head I will use a specific sequence, which will include all the relevant elements in a logical order. This will



*Plate 3: Flanged mace head*

facilitate comparison among the artefacts and will provide a clearer overview at a glance. First of all the type of mace will be identified: whether it is knobbed or flanged, followed by the type of body and the number of knobs or flanges respectively. The description continues with the shape of the knobs or flanges and any existing decoration on or around them (such as the studs) together with their dimensions. This is followed by a note about the presence or absence of the socket, with a description if present, and the type of finial if present, followed by the general dimensions (length, width, weight). Any further observations are given at the end.

<sup>74</sup> Goran Jakovljević, “Medieval Riding Gear and Weapons from the Bilogora Area”, *Opuscula Archaeologica* 32 (2008): 115.

## 2.2 Typo-chronology

A first distinction among of mace heads can be made between the knobbed and flanged mace heads. Besides the chronological reason for this division, which I will explain further on in this chapter, the structural aspect is the most relevant. The two types are fundamentally different in shape. This division is accepted unanimously in the scholarship, so I will not explain it any further.<sup>75</sup> In terms of knobbed maces the Transylvanian collections contain mace heads with four central knobs and five central pyramidal knobs, between the same number of smaller tetrahedral knobs, respectively. Among all the established classifications of mace heads, the most relevant ones are made by Anatoli Kirpichnikov for the area of Kiev and László Kovács for present-day Hungary, so I when describing each type I propose I will relate to these two authors.

- I. **Mace heads with four central pyramidal knobs and without a socket.** This type appears to be the oldest in the present catalogue. The origin of this shape of mace head seems to be in the Dnieper basin, in the Kiev area and it was diffused as far as Central Europe.<sup>76</sup> They fit into Anatoli Kirpichnikov's Type IV, dated archaeologically to the twelfth century and the beginning of the thirteenth century in the East European context.<sup>77</sup> László Kovács, based on archaeological contexts and the technological delay he observed, proposed a dating for the Hungarian mace heads of the same type between the twelfth and the mid-fourteenth century.<sup>78</sup> I hoped to find a good analogy in Ferenc Temesvári's publication of the mace heads held in the Vak Bottyán Museum in Vác, as here is a good drawing of a mace that fits into this type of

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<sup>75</sup> Several scholars point out this distinction, starting with Anatoli Kirpichnikov, who considered the flanged maces as different categories, in "Drevnerusskoe oružie," 53.

<sup>76</sup> Ruttkay, "Waffen und Reiterausrüstung," 316.

<sup>77</sup> Kirpichnikov, "Drevnerusskoe oružie," 51.

<sup>78</sup> Kovács, "A Magyar Nemzeti Múzeum fegyvertárának," 174-76

mace head, under the inventory number R. 53.58.9.1.<sup>79</sup> However, its dating to the fifteenth century seems too late, as all the other examples of such maces (including the ones from present-day Hungary) are dated much earlier. Another analogy comes from the Town Museum in Bjelovar, but the dating of this type of mace to the fourteenth century also seems contrived.<sup>80</sup> Additionally, Ferenc Temesvári and Goran Jakovljević fail to offer any explanation for their proposed dating. Another example comes from Zagreb, where in 2002 the Croatian History Museum organised an exhibition to commemorate 900 years from the annexation of Croatia by King Coloman. The maces exhibited on this occasion were all labelled in the catalogue as originating from the eleventh to the fourteenth century, without any difference in dating even though there are clear distinctions in shape, characteristic for Types I and III of the present typo-chronology.<sup>81</sup> However, the best analogy with a clear archaeological dating comes from the southern part of present-day Hungary. A broken mace head of this type has been discovered in a destruction layer of a sunken house which also contained a denar minted between 1215 and 1230.<sup>82</sup> This coin appears in many hoards connected to the Mongol invasions of the thirteenth century, some of the hoards dated to 1270s and even 1290s. Given the context of the find, the deposition of the broken mace head from Tiszaug could be dated to the second half of the thirteenth century, without excluding the possibility of it being used before 1250s.

There are five examples of this type in the National Museum of the Union in Alba-Iulia (F 591, F 593, F 597, F 609, and F 595 – Fig. I.1-5), one in the Museum of Aiud (3092 – Fig. I.6), and another one in the Mureş County Museum (inventory no.

<sup>79</sup> Ferenc Temesvári, *A váci Vak Bottyán Múzeum fegyvergyűjteménye* [The Weapons Collection of the Vak Bottyán Museum in Vác] (Vác: Vak Bottyán Múzeum, 1984), 121.

<sup>80</sup> Jakovljević, „Medieval Riding Gear and Weapons from the Bilogora Area,” 115.

<sup>81</sup> Mladen Ančić, *Kolomanov Put* [Coloman's Time] (Zagreb: Hrvatski Povijesni Muzej, 2002), 166-168.

<sup>82</sup> József Laszlovszky, “Árpád-kori leletek Tiszaugon” [Artefacts from the Arpadian Period in Tiszaug], *Múzeumi Levelek* 39-40 (1982): 27-8.

1744 – Fig. I.7). Out of all these, only the mace heads from Alba Iulia have been published, and Marcel Simina and Gheorghe Anghel proposed a dating based mainly on analogies from Hungary and Slovakia.<sup>83</sup> For a reason insufficiently explained, the authors decided to set the lower chronological limit for their dating at the end of the eleventh century, even though all the analogies are dated from the twelfth century onward. Following this, they state that the earlier form of this type appears in the twelfth century, later than László Kovács's Hungarian study from 1996, which clearly sets the dating for this type of mace head in the twelfth through the thirteenth centuries. Kovács's theory seems more plausible accepting the hypothesis that the emergence of the socket was indeed an evolution in shape rather than a coexisting standard element.<sup>84</sup> Consequently, I argue that for the region of Transylvania the chronological frame for this type of mace head is between the twelfth and the thirteenth centuries.

**II. Mace heads with four median pyramidal knobs and a bottom socket.** These mace heads are characteristic for a later development of shape. Similarly to the previous category, these are included in Anatoli Kirpičnikov's Type IV, dated in the Kiev area between the twelfth century and the beginning of the thirteenth century.<sup>85</sup> In the typology proposed by László Kovács they also belong to the same category with the previously discussed mace heads, dated from the twelfth century until the middle of the fourteenth century. János Kalmár, however, suggests that at the end of the fourteenth century the *already existing* mace heads with sockets evolved into a distinct type with a cylindrical body, an influence brought by foreign mercenaries.<sup>86</sup>

<sup>83</sup> Simina and Anghel, "Capete de buzduhan din secolele XI-XIV," 166-67.

<sup>84</sup> Péter Havassy, ed., *Zúduló sasok* [Torrents of eagles], (Gyula: Honfoglalás, 1996), 104-5.

<sup>85</sup> Anatoli N. Kirpičnikov, "Drevnerusskoe oružie," 51.

<sup>86</sup> János Kalmár, *Régi magyar fegyverek* [Old Hungarian weapons] (Budapest: Natura, 1971), 21.

In light of this information, the mace heads from the Gyula exhibition published by Péter Havassy<sup>87</sup> are correctly dated between the thirteenth and the fourteenth centuries.

I divide this type of mace heads in two different subtypes, dated differently on the basis of Kalmár's theory regarding the evolution of the sockets.<sup>88</sup> There is no archaeological context for the Transylvanian maces of this type, so this division is based on analogies found in present-day Hungary, the closest and most relevant area for finding analogies. Thus the **II/1 subtype** corresponds to the **mace heads with a bottom socket**, datable to the thirteenth or fourteenth century. There are five mace heads of this type in the National Museum of the Union, in Alba-Iulia (F 586, F 587, F 590, F 592, and F 594 – Fig. II/1.1-5) and another mace head which has a small rim in the upper part (F 598 – Fig. II/1.6). I consider this last one as a slightly more developed or ornate form of the II/1 subtype, due to its rich decoration on the socket and between the knobs. This subtype is also represented in Transylvania by one mace head from a private collection (Fig. II/1.7)<sup>89</sup>, and two more mace heads in the Brukenthal Museum in Sibiu (M 3883 and M 4925 – Fig. II/1.8-9).

The **II/2 subtype**, from a later period, is the version which has clearly cylindrical body and a set of knobs either longer and more protruding, or small but protruding, sometimes almost looking like spikes. The only examples for this type come from the collection of the Brukenthal Museum (M 3707, M 3882, and M 3891, as the transitional versions - Figs. II/2.1-3; M 4922 and M 10477 as later examples – Fig. II/2.4-5).<sup>90</sup> As demonstrated above, the lower limit for the dating is the middle of the fourteenth century. As for the upper limit the middle of the fifteenth century is a

<sup>87</sup> Havassy, *Zúduló sasok*, 104-5.

<sup>88</sup> Idem.

<sup>89</sup> As mentioned in the Introduction, this mace head was discovered a few months ago by a citizen in a village near Blaj, Alba County. It was being used as a bucket weight for a well.

<sup>90</sup> Also published by Nițoi in "Arme și armuri în colecțiile Muzeului Brukenthal", 54.

reasonable choice, because of the shift in this period towards the flanged maces as a more efficient countermeasure against the evolution of the plate armour.

**III. Mace heads with four median pyramidal knobs and a frustal rim on both extremities.** According to Nicolae-Marcel Simina and Gheorghe Anghel, an intermediary type of mace heads can be identified and placed chronologically between the development phases of Types I and II. It has, on both extremities, a frustal rim of not more than 10 mm. They fail to explain why this form can be dated earlier than the fourteenth century.<sup>91</sup> Neither Anatoli Kirpichnikov nor László Kovács make any distinction between this type and other mace heads with four central knobs (their Type IV). Csaba László Hidán also points out this difference, saying that the upper and lower frustal rims are an evolution from the mace heads classified here as Type I and a predecessor of the mace heads with a longer lower socket, which appeared in the fourteenth century.<sup>92</sup> He gives no reference whatsoever nor does he explain how he determined this delimitation. A mace head of the same type discovered at Nagymaros, in Hungary, was dated to the thirteenth or fourteenth century, thus corresponding to the transition between Type I and Type II.<sup>93</sup> Ferenc Temesvári presents two mace heads of this type held in the museum in Vác: R.53.58.9.2, dated to the thirteenth or fourteenth century, and R.53.58.9.3, dated surprisingly to the fourteenth or fifteenth century.<sup>94</sup> This late dating would make the second mace head a unique artefact of this type. There are only three mace heads from the Transylvanian collections which clearly fit this category. Two are from the

<sup>91</sup> Simina and Anghel, “Capete de buzdugan din secolele XI-XIV,” 166-67.

<sup>92</sup> Hidán, “A 11-14 századi sztyepei eredetű buzogányok és használatuk”, 4.

<sup>93</sup> Torma, ed., *Magyarország régészeti topográfiája* [The Archaeological Topography of Hungary], Vol. 9 (XIII/2, 1993), 227 and Plate 58, fig. 1.

<sup>94</sup> Temesvári, *A váci Vak Bottyán Múzeum fegyvergyűjteménye*, 121.

National Museum of the Union, in Alba Iulia (F 596 and F 589 – Fig. III.1-2), and one from the Museum of Aiud (3091 – Fig. III.3).

The relevant scholarship does not seem to provide sufficient evidence to support the argument that this type represents an individual phase of evolution from Type I to Type II. There seems to be an obvious difference in the presence of the frustal rims, which might suggest a natural evolution in shape. At this point, however, this is impossible to prove, so for the purposes of my analysis this third type constitutes its own distinct class, in order to avoid forcing the typology upon dissimilar artefacts. Like most of the relevant analogies from elsewhere, this type is dated roughly to the thirteenth and beginning of the fourteenth century.

**IV. Mace heads with five central knobs.** This type presents another issue in terms of dating. The first analogy for this type was published in 1967, a mace head dated archaeologically to the eleventh or twelfth century, from an excavation of the medieval settlement from Bisericuța-Garvăn.<sup>95</sup> Other examples are from the Tustań fortress in Ukraine (attributed by Mychailo Rožko to the period between the twelfth and fourteenth century),<sup>96</sup> from Přerovec in the Czech Republic (dated between the second half of the thirteenth century and the beginning of the fourteenth century),<sup>97</sup> from the territory of the Pannonian Plain (dated from the thirteenth century until the middle of the fourteenth century),<sup>98</sup> from Plzeň (without a clear dating, but estimated to be no later than the middle of the fourteenth century),<sup>99</sup> and from the middle Morava Basin in Serbia (attributed without explanation to the fourteenth or fifteenth

<sup>95</sup> Barnea, “Arme și piese de harnășament,” 338-40.

<sup>96</sup> Radosław Liwoch, “Buławy z zachodniej Ukrainy” [Maces from Western Ukraine], *Acta Militaria Mediaevalia* 2 (2006): 74.

<sup>97</sup> Pavel Kouřil, “Bronzová hlavice palčátu z opevněného sídla Přerovce” [The Bronze Mace Head from the Fortified Settlement of Přerovce], *Archaeologia Historica* 28 (2003): 649.

<sup>98</sup> Kovács, “A Magyar Nemzeti Múzeum fegyvertárának,” 178; Torma, ed., *Magyarország régészeti topográfiája*, 346 and Plate 58, fig. 3.

<sup>99</sup> Tomáš Durdík, “Bronzová hlavice palčátu z Plzně” [The Bronze Mace Head from Plzeň], *Archaeologia Historica*, 15, no. 90 (1989): 419-24.

century, although the upper limit seems forced).<sup>100</sup> All these analogies are examples that have a socket of variable length on the lower extremity of the mace head. The mace heads of this type from Transylvania are represented by only two examples, both held in the National Museum of the Union, in Alba Iulia (F 588 and F 605 – Fig. IV.1-2).

These examples should be analysed in light of the theory presented by János Kalmár. According to him, the mace heads with a socket on the lower extremity of the body can be dated to the thirteenth or fourteenth century (and even the first part of the fifteenth century, for mace heads with cylindrical bodies), which might lead to the discovery of a link between the presence of five central knobs instead of four and the socket.<sup>101</sup> In other words, in the light of the theory proposed by János Kalmár one can date the mace heads with five central pyramidal knobs situated in between two rows of five smaller tetrahedral knobs from the mid fourteenth century onwards. As an upper chronological limit I propose the middle of the fifteenth century, for the simple reason that, as I stated in the first chapter, the use of maces decreased drastically in the fifteenth century because of the improvements in armour and the emergence of flanged maces.

**V. Mace heads with four median pyramidal knobs and another pyramidal knob as a finial.** This is a distinct and rather rare type and as demonstrated in the previous subchapter its most probable purpose was throwing. There is only one example of such type in Transylvania (F 607, from the National Museum of the Union, in Alba-Iulia – Fig. V.1) and it also puzzles Simina and Anghel, the authors of the only

<sup>100</sup> Vetnić, “Medieval Weapons and Implements,” 142, 155-57 and fig. T. V – 10.

<sup>101</sup> Kalmár, *Régi magyar fegyverek*, 21.



publication where this mace appears.<sup>102</sup> Lacking any analogy for this mace, they date it to “the fourteenth century, if not even a later period” because of the socket. Additionally, this mace head has a very distinctive feature unique among the mace heads from Transylvania: a socket riveted on the inside. Lacking analogies, I argue that the riveting might have taken place at a much later date, probably to fasten the mace head on a staff, perhaps for purposes other than military. However, this explanation for this unique feature remains speculative.

Although not identical, there is a more complex analogy for this type of mace head in Poland, discovered in Podzamecze in the Birów Mountains, dated archaeologically to the fourteenth century.<sup>103</sup> This mace head has, in contrast with the Transylvanian example above, seven large knobs in between two rows of seven smaller tetrahedral knobs, a decorated socket and a finial in the shape of a pyramid with notched surfaces. The complexity of this mace head can be either due to a more sophisticated manufacture for a more prestigious customer, or a later production than the mace head from Transylvania. There are two more examples of this type in Hungary, but they have no socket attached, and because they are stray finds they have been dated broadly between the thirteenth and the fifteenth century.<sup>104</sup> The analysis of the ceramic mould discovered in 2007 on the site of the Bizere Monastery (Arad County) revealed that the mace head might have had a pyramidal knob as a finial.<sup>105</sup> With regard to the mace from the collection from Alba Iulia, accepting János Kalmár’s theory, the socket cannot be earlier than the thirteenth century. As for the upper dating limit, the lack of analogies with clear context leaves no choice but to leave it roughly estimated to be somewhere in the first half of the fifteenth century.

<sup>102</sup> Simina and Anghel, “Capete de buzduhan din secolele XI-XIV,” 167.

<sup>103</sup> Michalak, “A 14<sup>th</sup> Century Knobbed Mace Head,” 173-200.

<sup>104</sup> Idem., 181; David Nicolle, *Arms and Armour of the Crusading Era 1050-1350*, vol. 2 (London: Greenhill Books, 1999), 317 and fig. 861/F, H.

<sup>105</sup> Rusu, “Religios și non-religios în cultura materială a abației Bizere,” 136-37.

## VI. Mace heads with small, elongated knobs and broad spaces in between. An

evolution towards the flanged maces was observed by János Kalmár, who published the only available analogy for this very rare type of mace head.<sup>106</sup> This mace preserves the central pyramidal knobs situated in between two rows of pyramidal or tetrahedral knobs, but they are all much elongated and have broad spaces between them. So far I have not found any other relevant analogy from nearby regions. In Transylvania there is one solitary mace head belonging to this type, for a long while considered simply atypical. It is kept in the Museum of Aiud and it has seven elongated pyramidal knobs in between two rows of much smaller and irregular elongated pyramidal knobs (1970/7276 – Fig. VI.1). It has a rim of approximately 7 mm on both ends of the body, which has a slightly elongated spherical shape. The shaft is spherical. The mace described by János Kalmár has the same shape as the one in the Museum of Aiud, except that it lacks the top rim, it has a short socket and it has a decorative line surrounding each knob. According to Kalmár, these maces have a direct Turkish origin and they are designed with a large hollow space inside. In addition, they differ structurally from the other knobbed maces for the fact that the body is spherical, not cylindrical. He dates this type of mace head to the end of the fourteenth and the fifteenth century.

Lacking any other analogy from the nearby regions the dating for this specific type of mace head is considerably difficult. The evolution in terms of shape is a plausible explanation for its physical aspect, but there is not enough evidence to support this idea. Based on the only analogy known to me, its possible dating could be

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<sup>106</sup> Kalmár, *Régi magyar fegyverek*, 21, fig. 7/3.

the end of the fourteenth century and the fifteenth century. However, for more certain dating further evidence is necessary.

**VII. Flanged mace heads.** The most evolved form of mace heads is the flanged one. They belong to Type VI in the classification established by Anatoli Kirpichnikov, who is the only scholar to include these in a typology.<sup>107</sup> There are contrary opinions in the scholarship regarding the emergence of the flanged maces. Anatoli Kirpichnikov states that some of them have been dated as early as the twelfth century in the area of Kiev,<sup>108</sup> while Alexander Ruttkay disagrees, saying that the earliest examples only appear two centuries later. Analogies from Central Europe suggest that these mace heads appeared in this area in the second half of the fourteenth century. For example, there are two flanged maces discovered at Tábor, now kept in the Prague National Museum: one with eight flanges, dated to the fourteenth century, and one with six flanges, dated to the first part of the fifteenth century.<sup>109</sup> As mentioned previously, the examples in the Rus' territory are dated on average one century earlier, so they cannot be considered as relevant analogies.<sup>110</sup> In Transylvania there is only one such mace head with a rather clear archaeological context, discovered in the Piatra Craivii fortress, and published on one occasion only.<sup>111</sup> Even though Gheorghe Anghel and Ion Bercu do not explain the fifteen century dating for this artefact, the fact that the fortress was demolished by the order of King Wladislaw II in 1515 and remained uninhabited for at least another century can hardly point towards any later date. Unfortunately, this specific mace head could not be identified in any of the collections inspected for this research.

<sup>107</sup> Anatoli N. Kirpičnikov, "Drevnerusskoe oružie," 53

<sup>108</sup> Idem.

<sup>109</sup> Wagner, Drobná and Durdik *Medieval Costume, Armour and Weapons*, 48 and Plate V/18.

<sup>110</sup> Świątosławski, *Arms and Armour of the Nomads*, 57 and Pl. XVI/3.

<sup>111</sup> Anghel and Bercu, *Cetăți medievale din sud-vestul Transilvaniei*, 19.

Altogether, there are three known flanged mace heads in the Transylvanian collections, all in the National Museum of the Union (F 604, F 608, and F 610 – Fig. VII/1.1, Fig. VII/2.1 and Fig. VII/2.2). F 610 is the only flanged mace cast in bronze, and it fits into the category János Kalmár calls *gothic maces*.<sup>112</sup> It has eight flanges, with their widest parts at approximately one third from the top of the body. Below the flanges there is a corresponding stud for each flange and a socket. Nicolae-Marcel Simina and Gheorghe Anghel present a slightly misleading analogy for this artefact, namely the flanged mace head discovered at the Piatra Craivii fortress.<sup>113</sup> F 604 is made of iron and is very similar to the examples given by János Kalmár for the sixteenth century.<sup>114</sup> F 608, however, seems to be a later variant. In the sixteenth century the socket of mace heads became longer, sometimes the entire handle was made entirely of metal. Kalmár explains that by the beginning of the seventeenth century the flanged mace heads became smaller, similar to mace head F 608 from Alba Iulia.

Given these different chronological limits for the three maces it seems justifiable to divide this type into three distinct chronological subgroups. The first one, **Subtype VII/1**, is typical of the mace heads such as F 610 – an overall pear shape made of bronze, with six or eight flanges. They are characteristic for the late fourteenth and fifteenth centuries, according to Kalmár's observations. **Subtype VII/2**, such as F 604, consists of the later mace heads, with large rounded flanges and very long sockets, typical for the late fifteenth and sixteenth centuries. And the third one, **subtype VII/3**, as it is the case of F 608, belongs to the latest mace heads, with

<sup>112</sup> Kalmár, *Régi magyar fegyverek*, 21.

<sup>113</sup> Simina and Anghel, "Capete de buzduhan din secolele XI-XIV," 167; unfortunately no detail about the dating is given.

<sup>114</sup> János Kalmár, *Régi magyar fegyverek*, 24 and fig. 16.

small dimensions and a high number of crammed flanges as well as a very long socket, from the late sixteenth century onward.

There are a couple of unique cases among the Transylvanian finds. One of them is a peculiar mace head now kept the County Museum Mureş (9714). It was found in May 2014 by a member of the public using a metal detector and subsequently it suffered a very high degree of corrosion from a highly acidic substance. When acquired by the museum its surface was porous and covered with copper oxide. It clearly belongs to Anatoli Kirpičnikov's Type IV, although the lower row of four tetrahedral knobs is missing completely, together with a probable lower element, such as a frustal rim or a socket. On the top it has a small rim, reminiscent of F 598 from Alba Iulia. However, the top part of the rim has the shape of a perforated lid, a detail which does not appear elsewhere. Comparing it to other possible analogies in search of a more precise similarity led me to conclude that the upper limit for the dating cannot exceed the fourteenth century (in case it was a Type II/1), probably not even from mid-century. As for the lower limit I used the rim on the upper extremity of the mace body to date it as early as the thirteenth century (in case it fits into Type III). However, assigning it to any given subtype with certainty is impossible.

Another very damaged mace head is F 585, now in the National Museum of the Union in Alba Iulia. Due to intensive corrosion, and probably other factors that have affected its integrity, it is impossible to fit it into a single category and hence to date it precisely. It still has the four large knobs in the centre, in between two rows of smaller tetrahedral knobs. However the small knobs are very damaged, and any possible element on the extremities of the body is missing completely. The shaft has widened significantly due to corrosion, so it is difficult to classify it into a certain type. Given its size one may speculate that it must have

had either a socket or a pair of frustal rims, which would place it in the thirteenth to fourteenth century, a rather wide date range and not completely certain.

## 2.3 The Transylvanian case in the Central and East European context

Throughout Europe mace heads have clear Eastern origins, regardless of the population that brought them: Pechenegs, Cumans, Mongols or Ottomans (in Eastern Europe) or Moors (in Western Europe). Scholars unanimously agree that maces were disseminated in Central Europe by nomadic peoples dwelling successively at the North of the Black Sea (mainly Pechenegs, Ghuzz tribes, and Cumans).<sup>115</sup> In terms of Eastern European examples I chose to use as analogies the Kievan maces included in Anatoli Kirpichnikov's typology, considering the extent of the Russian Principalities' contacts with the nomadic populations from the north of the Black Sea. The typo-chronologies used so far show that, similarly to the Kievan mace heads, the European ones have the same pattern of evolution: from spherical shapes to cubical, and then the so-called 'star shaped' mace heads followed by the flanged ones. For medieval Hungary András Pálóczi Horváth claims that the mace heads with cubical body were disseminated by the Pechenegs as early as the eleventh century, and only the Cumans brought along the "star shaped" maces with a total of twelve knobs. I have explained in the Introduction how this evolution has a gradual chronology that follows the East-West direction, so that a very clear chronological delay can be observed. Taken into consideration the typological analogies from the areas surrounding Transylvania (especially Moldavia and Dobrudja) it becomes clear that the general influence on mace heads originated and was diffused from the East towards the West and South. However the best analogies, both

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<sup>115</sup> Among the most relevant publications discussing this issue are Kovács, "A Magyar Nemzeti Múzeum fegyvertárának," 165, and Pálóczi Horváth, "Pechenegs, Cumans, Iasians," 34-5, 77.

typologically and chronologically, come from present-day Hungary, which points towards the contemporaneity of use in these two areas.

The studies published by Anatoli Kirpichnikov and László Kovács show that the types of mace heads used in the Middle Ages in these two areas are mostly similar, except for the chronological differentiation. However, while Anatoli Kirpichnikov discusses all kinds of mace heads from the Kiev region from the eleventh to thirteenth centuries, including the flanged ones already in use in this period, László Kovács goes from the eleventh to fourteenth century in the present-day Hungary, where flanged maces appeared a bit later.

Transylvanian mace heads have many correspondents in these two typologies, but because of the chronological delay between the two regions in terms of material culture dating, only László Kovács's typology can be used as chronological analogy. Moreover, some of the Transylvanian typological examples are not to be found in Anatoli Kirpichnikov's collection, but can be identified on the territory of Medieval Hungary. Interestingly, as I will soon explain in detail, specific types of mace heads present both in Anatoli Kirpichnikov's and László Kovács's typologies are completely absent from the Transylvanian corpus of mace finds. After discussing the analogies and the patterns of diffusion of this type of weapon in Europe I concluded that the chronology of the Transylvanian maces can be connected with that in the present-day Hungary, Slovakia or Poland.

Pertaining to the diffusion of maces in the Kingdom of Hungary, I deemed necessary to clarify a common misconception. As József Kálmár noticed as early as the 70's, at a first glance influences coming from the territory of present-day Hungary could have been connected with the appearance of the Cumans<sup>116</sup> who crossed Transylvania in large numbers

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<sup>116</sup> This misconception might have stemmed from the fact that the earlier representations of maces show Cumans using these weapons: Kálmár, *Régi magyar fegyverek*, 20.

in 1239 and eventually settled in the Hungarian Plain.<sup>117</sup> I noticed that neither Gábor Hatházi<sup>118</sup> nor András Pálóczi Horváth<sup>119</sup> mention any discovery of mace heads in archaeological layers attributed to the Cumans. On the other hand, despite the difficulty of archaeology to connect material culture to specific ethnic groups, these publications deal mainly with Cuman graves, and András Pálóczi Horváth clearly states that the steppe people “were only seldom burying their dead with maces.”<sup>120</sup> Apart from the traditional elements of nomad craftsmanship the funerary inventory usually consisted of iron snaffle bits, stirrups, buckles, daggers, tinder sets, arrow-heads, battle-axes and spears, sometimes sabres (typical for the elites), while female graves were characterized by the presence of scissors.<sup>121</sup>

Moreover, because the bronze maces were sometimes recycled, their scarce presence in the urban landscape is understandable. Considering this, it is not surprising that maces are usually stray finds and are not easy to associate with a certain ethnic group. The only argument supporting the Pecheneg mediation is the fact that contemporary with their penetration in the Carpathian basin an entire new import of nomad material culture occurred, which included the first types of maces.

Additionally, pictorial sources fail to be of real use when it comes to ethnic attribution, as careful art historical interpretation must be employed.<sup>122</sup> Probably the most illustrative example in this respect is the frontispiece of the *Chronicon Pictum*, where King Louis I between his retainers. To his right we see warriors with western equipment, with shields and swords, and to his left there are people clad in caftans and with fur caps, armed

<sup>117</sup> András Pálóczi Horváth estimates around 70-80,000 people in “Pechenegs, Cumans, Iasians,” 61.

<sup>118</sup> Gábor Hatházi, *A kunok régészeti emlékei a Kelet-Dunántúlon* (Budapest: Magyar Nemzeti Múzeum, 2004), *passim*.

<sup>119</sup> Pálóczi Horváth, *Pechenegs, Cumans, Iasians, passim*; Idem, *A keleti népek a középkori Magyarországon* [Eastern peoples in medieval Hungary] (Budapest: Pázmány Péter Katolikus Egyetem, Régészeti Tanszék, 2014), *passim*.

<sup>120</sup> András Pálóczi Horváth, *Pechenegs, Cumans, Iasians...*, 35.

<sup>121</sup> Idem, 21.

<sup>122</sup> Ernő Marosi, “Zur Frage des Quellenwertes mittelalterlicher Darstellungen. “Orientalismus” in der Ungarischen Bilderchronik,” in *Alltag und materielle Kultur im mittelalterliche Ungarn*, ed. András Kubinyi and József Laszlovszky, *Medium Aevum Quotidianum* 22 (Krems: Gesellschaft zur Erforschung der materiellen Kultur des Mittelalters, 1991), 74.



with bows, maces and sabres. Focusing on the second group of people, Ernő Marosi warns that this is an intended orientalization and should not be taken at face-value.<sup>123</sup> Hence, this image should not be immediately considered reliable sources for ethnic attribution.

Another source for attributing the mace to the Cumans is the fight between Saint Ladislav and the Cuman, depicted in the *Angevin Legendary*. As Béla Zsolt Szakács points out, the entire series dedicated to the legend of Saint Ladislav lacks consistency when it comes to depicting material culture: the Cuman appears to have different clothes and weapons in each register.<sup>124</sup> In the first scene of his appearance, the mounted Cuman is holding a mace in his hand, most probably a star-shaped one (Fig. 20). This is understandable considering that the depiction of the Cuman seems to have been intended as stereotypical. Similarly to other depictions of Oriental peoples in the Kingdom of Hungary, Cumans are shown with typical attributes: the sharp-pointed fur cap with turned-up brim, the caftan, composite bows and sabres, while other characters are depicted in a similarly encoded manner – Hungarian soldiers or knights bear Byzantine armours, or pilgrims are depicted in a timeless attire.<sup>125</sup> Such depictions follow established patterns and stereotypes, a *reality effect* subject to art historical interpretation, rather than accurate accounts of Cuman equipment.<sup>126</sup>

On the other hand this depiction is rather exceptional, as most representations of the Legend of Saint Ladislav show the Cuman with a bow, but no mace. The Illuminated Chronicle depicts the Legend in six registers. In the third one, the episode of the chase, the Cuman is riding his horse while turning back and firing arrows towards his pursuer. This type of representation is common for the frescoes dedicated to the cult of Saint Ladislav, painted

<sup>123</sup> Idem, 75-6.

<sup>124</sup> Béla Zsolt Szakács, *A Magyar Anjou Legendárium képi rendszerei* [The pictorial systems of the Hungarian Angevin Legendary] (Budapest: Balassi, 2006), 121.

<sup>125</sup> Marosi, “Zur Frage des Quellenwertes mittelalterlicher Darstellungen,” 78-79, 81-82.

<sup>126</sup> A more thorough overview on realism in Late Medieval artwork in Keith Moxey, “Reading the ‘Reality Effect’”, in *Pictura quasi fictura. Die Rolle des Bildes in der Erforschung von Alltag und Sachkultur des Mittelalters und der frühen Neuzeit*, ed. Gerhard Jaritz (Vienna: Verlag der Österreichischen Akademie der Wissenschaften, 1996), 20.

especially in the first half of the fourteenth century.<sup>127</sup> Zsombor Jékely also studied the legend cycle depicted in frescoes during the fourteenth and fifteenth century across the Kingdom of Hungary and realised that most of the representations are simplified versions, only showing three main registers: the chase on horseback, the fight on foot between the king and the Cuman, and the beheading of the latter. There is no identified depiction of the Cuman holding a mace, neither in these frescoes, nor in the detailed cycles that show more the three basic scenes.<sup>128</sup>

Arkadiusz Michalak points out the possible exchange in terms of material culture between the Kingdom of Hungary and Poland, which makes analogies easier to connect.<sup>129</sup> A series of Hungarian – Polish alliances or military conflicts between the two kingdoms or incursions by either of the two in nearby territories could well have left traces of material culture, this having a possible effect on the presence of mace heads in Transylvania. In this region, such traces are strongly related to the Cumans and later the Hungarian military system, the Mongol invasions, and later yet, the Ottoman incursions. Moreover, the establishment of the medieval states of Moldavia and Wallachia in the fourteenth century influenced the diffusion pattern of the material culture. These two regions were trading various objects of material culture, including weapons, with areas such as Poland and Transylvania. At the same time, they were serving as a destination or trade route for export from other regions, as the exchange across the Carpathians was intense. This is also a factor that influences the dating of some artefacts, which makes Transylvania a melting pot in terms of material culture.

In comparison with other regions, Transylvanian finds seem to follow the pattern of the prevalence in the frequency of mace heads classified as Type I, II and III in the present

<sup>127</sup> Gábor Klaniczai, “A Szent László-kultusz kialakulása” [The emergence of the cult of Saint Ladislau], in *Nagyvárad és Bihar a korai középkorban* (Oradea: Varadinum Kulturális Alapítvány, 2014): 34.

<sup>128</sup> Zsombor Jékely, “Narrative Structure of the Painted Cycle of a Hungarian Holy Ruler: The Legend of Saint Ladislau”, in *Hortus Artium Medievalium* 21/2015, *passim*.

<sup>129</sup> Michalak, “A 14<sup>th</sup> Century Knobbed Mace Head,” 187-88.

thesis. Other studies, such as those by László Kovács and Anatoli Kirpichnikov, do not differentiate among these types. I have found a total of 24 mace heads belonging to Types I, II, and III in Transylvanian collections, compared to the 21 held at the Hungarian National Museum published by László Kovács<sup>130</sup> and 3 more published from the museum of Vác.<sup>131</sup> There are no other publications mentioning mace heads held in other Hungarian museums. 16 maces were gathered from the entire Croatia in Zagreb for the exhibition in 2002, without any indication whether these were all the mace heads to be found in the Croatian museums.<sup>132</sup> Additionally, 10 others were published in the former USSR (as Anatoli Kirpichnikov grouped mace heads from the entire European part of the country, including Ukraine, Latvia and Belarus), but this number does not comprise all the currently existing mace heads from this area.<sup>133</sup>

Mace heads belonging to Types IV and V were scarce throughout Central Europe, so analogies for the mace heads of Type IV are rare. Compared to the two examples in Transylvania, there is one published example from Serbia,<sup>134</sup> two from Bohemia,<sup>135</sup> and one from Ukraine.<sup>136</sup> It is worth noting the mace type belonging to Type V, which is also a rather rare case, and that Transylvania is also among the few regions where this can be found. There is one other example from Poland<sup>137</sup> and two examples from present-day Hungary.<sup>138</sup>

In terms of specific mace heads the mace head No. 1970/7276 from the History Museum of Aiud is particularly noteworthy. It is the only example of this type in

<sup>130</sup> Kovács, "A Magyar Nemzeti Múzeum fegyvertárának," 174.

<sup>131</sup> Temesvári, *A váci Vak Bottyán Múzeum fegyvergyűjteménye*, 121.

<sup>132</sup> Ančić, *Kolomanov Put*, 166-168.

<sup>133</sup> Kirpichnikov, "Drevnerusskoe oružie," 51; for a more recent mace head from Latvia: Ain Mäesalu, "A Rare Mace Head from the Village of Tammeküla, Hargla Parish", *Archaeological Fieldwork in Estonia: 2009* (2010), 141-45.

<sup>134</sup> Vetnić, "Medieval Weapons and Implements Deriving from the Middle Morava," 42.

<sup>135</sup> Durdík, "Bronzová hlavice palčátu z Plzně," 419-24; Kouřil, "Bronzováa hlavice palčátu z opevněného sídla Přerovce," 649.

<sup>136</sup> Liwoch, "Buławy z zachodniej Ukrainy," 74.

<sup>137</sup> Michalak, "A 14<sup>th</sup> Century Knobbed Mace Head," 173-200.

<sup>138</sup> Idem, 181.

Transylvania and the only analogy from the neighbouring regions is from Hungary,<sup>139</sup> which suggests that this is a rare type in East-Central Europe. As for the flanged mace heads I could find very few: only three examples, exclusively in the collection of the National Museum of the Union in Alba-Iulia. Analogies from other countries are scarce. There are three published maces from Hungarian museums that fit Type VI<sup>140</sup> and two other published ones from Bohemia.<sup>141</sup>

It is difficult to compare flanged mace heads from Transylvania with those from present-day Hungary, because the studies of medieval maces focus on the knobbed ones and rarely discuss those later than the fifteenth century. In comparison with other regions, there are no maces from early periods, such as Anatoli Kirpichnikov's Type I, II and III, in the Transylvanian collections. It is perhaps of importance that while in Hungary László Kovács recorded several maces fitting these types, there are no recorded examples for them in Transylvania. One possible explanation for the absence of this type of maces is the occasional museum practice of mislabelling these as prehistoric, which is the case for a mace head from the County Museum in Braşov.<sup>142</sup> Regardless of the probability of this practice, it is particularly significant that the mace heads from Anatoli Kirpičnikov's Type III, certifiably in use in thirteenth-century Hungary, are not found in Transylvanian collections at all.

I tried to see if the sheer number of mace heads in the countries where analogies were found can be relevant for the distribution pattern. Unfortunately the published mace heads do not reflect the real total number of existing artefacts in all the museums. Thus, due to the methodological pitfalls of working with potentially non-representative samples, my analysis sidestepped traditional comparison of analogies and concentrated on published finds.

<sup>139</sup> Kalmár, *Régi magyar fegyverek*, 21 and fig. 7.

<sup>140</sup> Idem, 22-23.

<sup>141</sup> Wagner, Drobná and Durdik. *Medieval Costume, Armour and Weapons*, 47-48 and Pl. 18.

<sup>142</sup> The information was provided by one of the curators. However, I could not obtain permission to photograph the mace head.

## Chapter 3 – Conclusion

Mace heads in Transylvanian collections have been scantily published and almost never analysed in context, a complete catalogue has never been compiled. The primary aim of this thesis was to gather all available information on all the mace heads discovered in this region and see if Transylvania was different compared to other geographical areas of the region. The lack of archaeological context for most of the mace heads made dating difficult, so a typo-chronology was the only way to date previously undated artefacts. The typo-chronology was compiled based on the established patterns in the evolution of their shape.

The thesis contains a comprehensive catalogue with all the mace heads available in Transylvanian museums. For these artefacts I discussed patterns of shape, and created a classification with dating for each type using existing typologies for maces from other regions. One of the problems in creating the chronological classification was the lack of clear archaeological milestones which would provide support for the typo-chronology. I compensated this absence by using analogies with clear dating from neighbouring regions, such as the territory of present-day Hungary. Typological analogies from other regions of Romania proved to have slightly different dating, especially the ones from Moldavia, Eastern Wallachia and Dobrudja, so they could only be used as examples for the diffusion of material culture. The intense commercial exchange of the Principalities of Moldavia and Wallachia with Transylvania is likely to have lead to the diminishing of the temporal delay in the chronology of the mace head by the sixteenth century, but given the paucity of studies for the later periods it is difficult to fully grasp this evolution. Further studies on the archaeological material from Moldavia and Wallachia will shed more light on this issue.

The typo-chronology proposed in the present thesis comprises of seven types of mace heads, ranging from the earliest knobbed mace heads, dated in the twelfth or thirteenth

century, to the later flanged ones, from the fifteenth to sixteenth centuries. The typo-chronology revealed some dating issues existing in museum collections. Some of the dating provided were either too wide or completely wrong. This thesis provides a standard baseline, by which new artefacts with unclear or unknown archaeological context can be dated and older misleading dating can be corrected. Besides this practical use, this study answers the most important question regarding the types and diffusion of mace finds in Transylvania. Based on the typo-chronology and the results of comparative analysis, I conclude that Transylvania benefited from influences coming from various neighbouring regions. With respect to dating the different types of mace heads this area corresponds to the pattern in Central Hungary, which offers the best chronological analogies. However, Transylvania is also an area where only a specific set of types from Anatoli Kirpičnikov's and László Kovács's typologies can be found, while other rare types (such as Type VI, from the History Museum of Aiud) are absent. I propose that, based on the particularities explained in the previous chapter, Transylvania can be considered a special region in terms of typo-chronology for mace heads.

Further research will be conducted for completing the catalogue with mace heads currently missing. As an agile system, the typo-chronology will be continuously updated if new results affect the dating of certain types or if new types are identified. Furthermore, as several issues fell beyond the scope of this thesis, a possible future avenue for further research will be the evolution of human perception of the mace, from a weapon to a (sometimes ceremonial) symbol of power and prestige. There is no doubt in my mind that at one point this object started to be associated with a strong sense of power. Additionally, investigating its economic aspect is among the more immediate plans for further research based on this thesis: what were the costs of production and what was the value of various types of maces? In connection, the military importance of the mace can be furthermore

analysed by studying medieval Transylvanian town registrars to see if any maces were present among the weapons enlisted as being part of the defence systems.<sup>143</sup> Regarding the actual use of these artefacts, in order to see to what extent maces were used among the close combat weapons of town defenders, important European collections would provide further comparative material, as they were not so much taken into consideration for the history of maces and for their European distribution. In this respect the collection of the Styrian Armoury of the Universalmuseum Joanneum in Graz, which comprises maces from the later period, can serve as a good comparative material for the Transylvanian maces from the fifteenth and sixteenth centuries, alongside the Leeds Royal Armoury collection.

The evolution of mace heads seen in this typo-chronology was in direct connection with the evolution of weaponry and especially armour. I have highlighted the fact that in the fifteenth century maces suffer an important decline as weapons as a result of the improvements in armour. This evolution could be better understood in the light of experimental archaeology, to examine the effectiveness of different types of maces against various types of armour. Linking maces to other weapons and armours through interdisciplinary studies can reveal many aspects of medieval combat. In combination with this, a relevant issue would be the study of the mace's brute impact on human body, with and without armour. This would necessitate a complex interdisciplinary study, involving experimental archaeology as well as medical investigations.

This study is intended as a springboard for further research around mace heads, by creating a first catalogue with mostly unpublished material, and by clarifying the main issues connected with dating and typology. The further research proposed here would answer many of the open questions raised in this thesis and would expand the context of use and perception around this weapon between the thirteenth and the sixteenth century.

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<sup>143</sup> Which I could already identify in *Quellen zur Geschichte der Stadt Hermannstadt* and *Quellen zur Geschichte der Stadt Kronstadt* (9 volumes, published from 1886 to 1992).

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# Catalogue of Maces in Transylvania

This catalogue comprises artefacts from different sources. Most of them were photographed by me. However, in one instance I did not have the possibility to record them personally and had to receive the pictures from the curator of the exhibition. It is the case of the Brukenthal National Museum in Sibiu, the only mace heads which I did not see myself. This posed the issue of incoherence with the pattern I used for depicting the mace heads, which I was unable to fix. Moreover, in such cases I have no information about the dimensions or the weight of those artefacts.

The only mace heads which I held in my hand and measured at least to a certain extent were the ones from the National Museum of the Union in Alba-Iulia, the Mureş County Museum (where due to technical difficulties I could only use a black-and-white image of the unclassifiable mace head) and the History Museum of Aiud. In the case of the National Museum of the Union weight was impossible to obtain, because the mace heads were in the permanent exhibition. The Mureş County Museum did not have a balance, which was rather unexpected for me; hence I do not have the weight of these maces either. However measuring their size was not a difficulty. The only museum where I had access to the exact dimensions and weight of all the mace heads which I have studied was the History Museum of Aiud. For the mace heads from the National Museum of the Union of Alba Iulia the exact dimensions have been published in most of the cases, for the artefacts dated up to the fourteenth century. Exceptions are few, although I managed to obtain the general dimensions (total height and width).

Moreover, some of the mace heads have been published, as shown in each catalogue entry. In those cases I will write the dating proposed by the authors of the respective articles, followed by the dating resulted from my typo-chronology. I also included in the catalogue

those mace heads which have been published but I did not have the possibility to photograph. In such cases I used images from those specific publications, indicating the respective source.

For giving the dimensions and weight for each mace head present in this catalogue I used specific symbols, in order to reduce space and enhance clarity: the total height= $H$ , the total width= $W$ , the diameter of the shaft at the top=Top Shaft  $\varnothing$ , the diameter of the shaft at the bottom=Bottom Shaft  $\varnothing$ , the height of the large and small knobs=Large/Small knobs  $H$ , the height of the frustal rims=Top/Bottom rim  $H$ , and the total weight= $G$ .

## Type I - Mace heads with four central pyramidal knobs and without a socket

1. **Material:** bronze;  
**Dating:** c. 12<sup>th</sup> - 13<sup>th</sup> centuries;  
**Collection:** National Museum of the Union, Alba-Iulia (Inventory no.: F 591);  
**Discovery place:** unknown.

**Previously published in:**

Nicolae-Marcel Simina, Gheorghe Anghel

“Capete de buzduhan din secolele XI-XIV...”: 161-171.

Dated by the authors to the 12<sup>th</sup> – 14<sup>th</sup> c.

**Dimensions:** H=33 mm, W=55 mm, Top Shaft Ø=19 mm, Bottom Shaft Ø=23 mm, G=172g.



2. **Material:** bronze;  
**Dating:** c. 12<sup>th</sup> - 13<sup>th</sup> centuries;  
**Collection:** National Museum of the Union, Alba-Iulia (Inventory no.: F 593);  
**Discovery place:** unknown.

**Previously published in:**

Nicolae-Marcel Simina, Gheorghe Anghel “Capete de buzduhan din secolele XI-XIV...”: 161-171.

Dated by the authors to the 12<sup>th</sup> – 14<sup>th</sup> c.

**Dimensions:** H=33 mm, W=43 mm, Top Shaft Ø=15 mm, Bottom Shaft Ø=20 mm, G=188 g.



3. **Material:** bronze;  
**Dating:** c. 12<sup>th</sup> - 13<sup>th</sup> centuries;  
**Collection:** National Museum of the Union, Alba-Iulia  
 (Inventory no.: F 597);  
**Discovery place:** unknown.  
**Observations:** On one of the small knobs two perforations have been made.



**Previously published in:** Nicolae-Marcel Simina, Gheorghe Anghel "Capete de buzduhan din secolele XI-XIV...": 161-171.

Dated by the authors to the 12<sup>th</sup> – 14<sup>th</sup> c.

**Dimensions:** H=29 mm, W=48 mm, Top Shaft Ø=11 mm, Bottom Shaft Ø=21 mm, G=160 g.

4. **Material:** bronze;  
**Dating:** c. 12<sup>th</sup> – 13<sup>th</sup> centuries;  
**Collection:** National Museum of the Union, Alba-Iulia  
 (Inventory no.: F 609);  
**Discovery place:** unknown.  
**Previously published in:**  
 Nicolae-Marcel Simina,  
 Gheorghe Anghel "Capete de buzduhan din secolele XI-XIV...": 161-171.



Dated by the authors to the 12<sup>th</sup> – 14<sup>th</sup> c.

**Dimensions:** H=27 mm, W=49 mm, Top Shaft Ø=20 mm, Bottom Shaft Ø=21 mm, G=206 g.



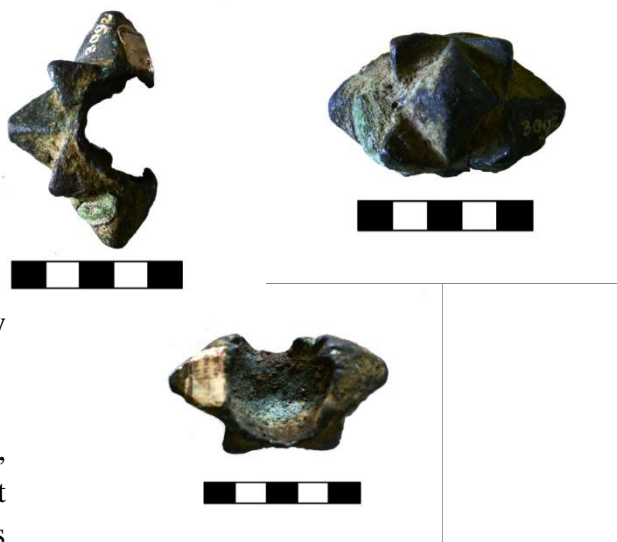
5. **Material:** bronze;  
**Dating:** c. 12<sup>th</sup> – 13<sup>th</sup> centuries;  
**Collection:** National Museum of the Union, Alba-Iulia (Inventory no.: F 595);  
**Discovery place:** unknown.  
**Previously published in:** Nicolae-Marcel Simina, Gheorghe Anghel “Capete de buzduhan din secolele XI-XIV...”: 161-171.

Dated by the authors to the 12<sup>th</sup> – 14<sup>th</sup> c.

**Dimensions:** H=30 mm, W=60 mm, Top Shaft Ø=15 mm, Bottom Shaft Ø=17.5 mm, G=170 g.



6. **Material:** bronze;  
**Dating:** c. 12<sup>th</sup> – 13<sup>th</sup> centuries;  
**Collection:** History Museum of Aiud (Inventory no.: 3092);  
**Place of discovery:** unknown;  
**Observations:** only three central knobs and two pairs of tetrahedral knobs are present; intensely corroded.  
**Unpublished;**  
**Dimensions:** H preserved=42 mm, W=78mm, Top and Bottom shaft preserved Ø=20-25mm, Large knobs H=20mm, Small knobs H=15mm, G=211.45 g.



7. **Material:** bronze;  
**Dating:** c. 12<sup>th</sup> – 13<sup>th</sup> centuries;  
**Collection:** Mureș County Museum (Inventory no.: 1744);  
**Place of discovery:** unknown.

**Observations:** two of the tetrahedral knobs are missing.

**Unpublished;**

**Dimensions:** H= 44 mm, W=68 mm.



## Type II/1 Mace heads with four median pyramidal knobs and a bottom socket.

1. **Material:** bronze;  
**Dating:** c. 13<sup>th</sup> – 14<sup>th</sup> centuries;  
**Collection:** National Museum of the Union, Alba-Iulia (Inventory no.: F 586);  
**Place of discovery:** unknown.  
**Previously published in:** Nicolae-Marcel Simina, Gheorghe Anghel “Capete de buzduhan din secolele XI-XIV...”: 161-171.

Dated by the authors to the 13<sup>th</sup> – 14<sup>th</sup> c.

**Dimensions:** H=60 mm, W=76 mm, Top Shaft Ø=13 mm, Bottom Shaft Ø=15 mm, G=440 g.



2. **Material:** bronze;  
**Dating:** c. 13<sup>th</sup> – 14<sup>th</sup> centuries;  
**Collection:** National Museum of the Union, Alba-Iulia (Inventory no.: F 587);  
**Discovery place:** unknown.



**Observations:** the socket is seriously damaged, one top tetrahedral knob is missing.

**Previously published in:** Nicolae-Marcel Simina, Gheorghe Anghel “Capete de buzduhan din secolele XI-XIV...”: 161-171.

Dated by the authors to the 13<sup>th</sup> – 14<sup>th</sup> c.

**Dimensions:** H=78 mm, W=79mm, Top Shaft Ø=36mm, Bottom Shaft Ø=32 mm, G=300 g.

3. **Material:** bronze;  
**Dating:** c. 13<sup>th</sup> – 14<sup>th</sup> centuries;  
**Collection:** National Museum of the Union, Alba-Iulia (Inventory no.: F 590);  
**Discovery place:** unknown.



**Published in:** Nicolae-Marcel Simina, Gheorghe Anghel “Capete de buzduhan din secolele XI-XIV...”: 161-171.

Dated by the authors to the 13<sup>th</sup> – 14<sup>th</sup> c.

**Dimensions:** H=48 mm, W=57 mm, Top Shaft Ø=18 mm, Bottom Shaft Ø=22 mm, G=218 g.

4. **Material:** bronze;

**Dating:** c. 13<sup>th</sup> – 14<sup>th</sup> centuries;

**Collection:** National Museum of the Union, Alba-Iulia (Inventory no.: F 592);

**Discovery place:** unknown.

**Observations:** The bottom socket is partly damaged.

**Previously published in:** Nicolae-Marcel Simina, Gheorghe Anghel “Capete de buzduhan din secolele XI-XIV...”: 161-171.

Dated by the authors to the 13<sup>th</sup> – 14<sup>th</sup> c.

**Dimensions:** H=53 mm, W=64 mm, Top Shaft Ø=18 mm, Bottom Shaft Ø=23 mm, G=284 g.



5. **Material:** bronze;

**Dating:** c. 13<sup>th</sup> – 14<sup>th</sup> centuries;

**Collection:** National Museum of the Union, Alba-Iulia (Inventory no.: F 594);

**Discovery place:** unknown.

**Observations:** The socket is slightly damaged;

**Previously published in:** Nicolae-Marcel Simina, Gheorghe Anghel “Capete de buzduhan din secolele XI-XIV...”: 161-171.

Dated by the authors to the 13<sup>th</sup> – 14<sup>th</sup> c.

**Dimensions:** H=44 mm, W=48 mm, Top Shaft Ø=19 mm, Bottom Shaft Ø=20 mm, G=165 g.



6. **Material:** bronze;  
**Dating:** c. 13<sup>th</sup> – 14<sup>th</sup> centuries;  
**Collection:** National Museum of the Union, Alba-Iulia (Inventory no.: F 598);  
**Discovery place:** unknown;  
**Observations:** decorative stripes present between the knobs and rhomboidal



decorative engravings present on the socket.

**Previously published in:** Nicolae-Marcel Simina, Gheorghe Anghel “Capete de buzduhan din secolele XI-XIV...”: 161-171. Unfortunately the authors misread the inventory number, labeling it as F 596.

Dated by the authors to the 13<sup>th</sup> – 14<sup>th</sup> c.

**Dimensions:** H=80 mm, W=77 mm, Top Shaft Ø=27 mm, Bottom Shaft Ø=23 mm, G=484 g.

7. **Material:** bronze  
**Dating:** c. 13<sup>th</sup> – 14<sup>th</sup> centuries;  
**Private collection;**  
**Discovery place:** a village close to the town of Blaj, Alba County (bucket weight for a well);  
**Observations:** the socket has two perforations, probably made in modern times for tying the mace head to a bucket.



**Dimensions:** H=51 mm, W=55 mm, Top Shaft Ø=23 mm, Bottom Shaft Ø=24 mm.

8. **Material:** bronze

**Dating:** c. 13<sup>th</sup> – 14<sup>th</sup> centuries;

**Collection:**

National  
Brukenthal  
Museum, Sibiu  
(Inventory no.: M  
3883);

**Discovery place:**  
uncertain.

**Unpublished.**

**Dimensions:** unavailable.



9. **Material:** bronze

**Dating:** c. 13<sup>th</sup> – 14<sup>th</sup> centuries;

**Collection:** National Brukenthal Museum,  
Sibiu (Inventory no.: M 4925);

**Discovery place:** uncertain.

**Observations:** the lower part of the mace head  
is cracked.

**Dimensions:** unavailable.





**Type II/2. Subtype with a set of knobs either longer and more protruding, or small but very protruding (looking sometimes almost like spikes)**

1. **Material:** bronze;  
**Dating:** c. 2<sup>nd</sup> half of the 14<sup>th</sup> century – middle of the 15<sup>th</sup> century;  
**Collection:** National Brukenthal Museum, Sibiu (inventory no.: M 3707);  
Discovery place: uncertain.  
**Unpublished.**  
**Dimensions:** unavailable.



2. **Material:** bronze;  
**Dating:** c. 2<sup>nd</sup> half of the 14<sup>th</sup> century – middle of the 15<sup>th</sup> century;  
**Collection:** National Brukenthal Museum, Sibiu (inventory no.: M 3882);  
**Discovery place:** uncertain.  
**Unpublished.**  
**Dimensions:** unavailable.



3. **Material:** bronze;  
**Dating:** c. 2<sup>nd</sup> half of the 14<sup>th</sup> century – middle of the 15<sup>th</sup> century;  
**Collection:** National Brukenthal Museum, Sibiu (inventory no.: M 3891);  
**Discovery place:** uncertain.  
**Unpublished.**  
**Dimensions:** unavailable.



4. **Material:** bronze;  
**Dating:** c. end of the 14<sup>th</sup> century – middle of the 15<sup>th</sup> century;  
**Collection:** National Brukenthal Museum, Sibiu (inventory no.: M 4922);  
**Discovery place:** uncertain.  
**Unpublished;**  
**Dimensions:** unavailable.





5. **Material:** bronze;  
**Dating:** c. 2<sup>nd</sup> half of the 14<sup>th</sup> century – middle of the 15<sup>th</sup> century;  
**Collection:** National Brukenthal Museum, Sibiu (inventory no.: M 10477)  
**Discovery place:** unknown;  
**Unpublished;**  
**Dimensions:** unavailable.



### Type III. Mace heads with four median pyramidal knobs and a frustal rim on both extremities.

1. **Material:** iron;  
**Dating:** c. 13<sup>th</sup> – beginning of the 14<sup>th</sup> centuries;  
**Collection:** National Museum of the Union, Alba Iulia (Inventory no.: F 596);  
**Discovery place:** unknown.  
**Published in:** Nicolae-Marcel Simina, Gheorghe



Anghel “Capete de buzduhan din secolele XI-XIV...”: 161-171. The authors confused its inventory number, labeling it as F 591);  
Dated by the authors to the 13<sup>th</sup> century;  
**Dimensions:** H= 47 mm, W=81 mm, Top Shaft Ø=27 mm, Bottom Shaft Ø=30 mm, G=265 g.

2. **Material:** bronze;

**Dating:** c. 13<sup>th</sup> – beginning of the 14<sup>th</sup> centuries;

**Collection:** National Museum of the Union, Alba Iulia (Inventory no.: F 589);

**Discovery place:** unknown.

**Published in:** Nicolae-Marcel Simina, Gheorghe Anghel “Capete de buzdugan din secolele XI-XIV...”: 161-171.

Dated by the authors to the thirteenth century;

**Dimensions:** H=33 mm, W=54 mm, Top Shaft Ø=21 mm, Bottom Shaft Ø=23.3 mm, G=136 g.



3. **Material:** bronze;

**Dating:** c. 13<sup>th</sup> – beginning of the 14<sup>th</sup> centuries;

**Collection:** History Museum of Aiud (Inventory no.: 3091);

**Discovery place:** unknown.

**Unpublished;**

**Dimensions:** H=38 mm, W=51 mm,

Top shaft Ø=19 mm, Bottom shaft Ø=25mm, Top rim H=5 – 7 mm, Bottom rim H=2 – 3 mm, Large knobs H= c. 20 mm, G=120.16 g.



## Type IV. Mace heads with five central knobs.

1. **Material:** bronze;

**Dating:** c. middle of the 14<sup>th</sup> century – middle of the 15<sup>th</sup> century;

**Collection:** National Museum of the Union, Alba Iulia (Inventory no.: F 588);

**Discovery place:** unknown.

**Published in:** Nicolae-Marcel Simina, Gheorghe Anghel “Capete de buzduhan din secolele XI-XIV...”: 161-171.

The authors refrained from proposing a clear dating;

**Dimensions:** H=37 mm, W=53 mm, Top Shaft Ø=19 mm, Bottom Shaft Ø=22.5 mm, G=232 g.



2. **Material:** bronze;

**Dating:** c. middle of the 14<sup>th</sup> century – middle of the 15<sup>th</sup> century;

**Collection:** National Museum of the Union, Alba Iulia (Inventory no.: F 605);

**Discovery place:** unknown.

**Published in:** Nicolae-Marcel Simina, Gheorghe Anghel “Capete de buzduhan din secolele XI-XIV...”: 161-171;

The authors refrained from proposing a clear dating;

**Dimensions:** H (as preserved)=54 mm, W=58 mm, Top Shaft Ø=22.5, Bottom Shaft Ø (as preserved)=24.5 mm, G=252.5 g.



## Type V. Mace heads with four median pyramidal knobs and another pyramidal knob as a finial.

1. **Material:** bronze;  
**Dating:** c. 13<sup>th</sup> – 15<sup>th</sup> centuries;

**Collection:** National Museum of the Union, Alba Iulia (Inventory no.: F 607);

**Discovery place:** unknown;

**Observations:** The inside of the socket is riveted;

**Published in:** Nicolae-Marcel Simina, Gheorghe Anghel “Capete de buzdugan din secolele XI-XIV...”: 161-171;

Dated by the authors to the 14<sup>th</sup> century;

**Dimensions:** H=39 mm, W=44 mm, Bottom Shaft Ø=16.6 mm, G=137.5 g.



## Type VI. Mace heads with small, elongated knobs and broad spaces in between.

1. **Material:** bronze;  
**Dating:** c. end of 14<sup>th</sup> through 15<sup>th</sup> century;

**Collection:** History Museum of Aiud (Inventory No. 1970/7276);

**Discovery place:** unknown.

**Unpublished;**

**Dimensions:** H=76 mm, W=81 mm, Top shaft Ø=27 mm, Bottom shaft Ø=34 mm, Large knobs H=9 mm, Top and bottom rim=7 mm, G=358.36 g.



## Type VII/1. Flanged mace heads with an overall pear shape, made of bronze, with six or eight flanges

1. **Material:** bronze;

**Dating:** c. late 14<sup>th</sup> century, through 15<sup>th</sup> century;

**Collection:** National Museum of the Union, Alba Iulia (Inventory no.: F 610);

**Discovery place:** unknown.

**Published in:** Nicolae-Marcel Simina, Gheorghe Anghel

“Capete de buzduhan din secolele XI-XIV...”: 161-171.

The authors refrained from proposing a clear dating;

**Dimensions:** H=39 mm, W=44 mm, Bottom Shaft Ø=16.6 mm, G=137.5 g.



## Type VII/2. Flanged mace heads with large rounded flanges and very long sockets.

1. **Material:** iron;

**Dating:** c. 16<sup>th</sup> – 17<sup>th</sup> centuries;

**Collection:** National Museum of the Union, Alba Iulia (Inventory no.: F 604);

**Discovery place:** unknown.



**Type VII/3. Flanged mace heads with small dimensions, a high number of crammed flanges and a very long socket.**

1. **Material:** iron;  
**Dating:** c. 16<sup>th</sup> – 17<sup>th</sup> centuries;  
**Collection:** National Museum of the Union, Alba Iulia (Inventory no.: F 608);  
**Discovery place:** unknown.



## Unclassifiable mace heads

1. **Material:** bronze;

**Dating:** c. 13<sup>th</sup> – first half of the 14<sup>th</sup> centuries;

**Collection:** Mureș County Museum (Inventory no.: 9714);

**Discovery place:** Village of Crăciunești, Mureș County, precise place unknown.

**Previously published:** Andrei

Fărcaș, “Un nou buzdugan în colecția Muzeului Județean Mureș” [A new mace in the collection of the Mureș County Museum], *Buletinul Cercurilor Științifice Studențești*, 21/2015.



2. **Material:** iron;

**Dating:** c. 13<sup>th</sup> – 14<sup>th</sup> centuries;

**Collection:** National Museum of the Union, Alba Iulia (Inventory no.: F 585);

**Discovery place:** Unknown.





# Appendix

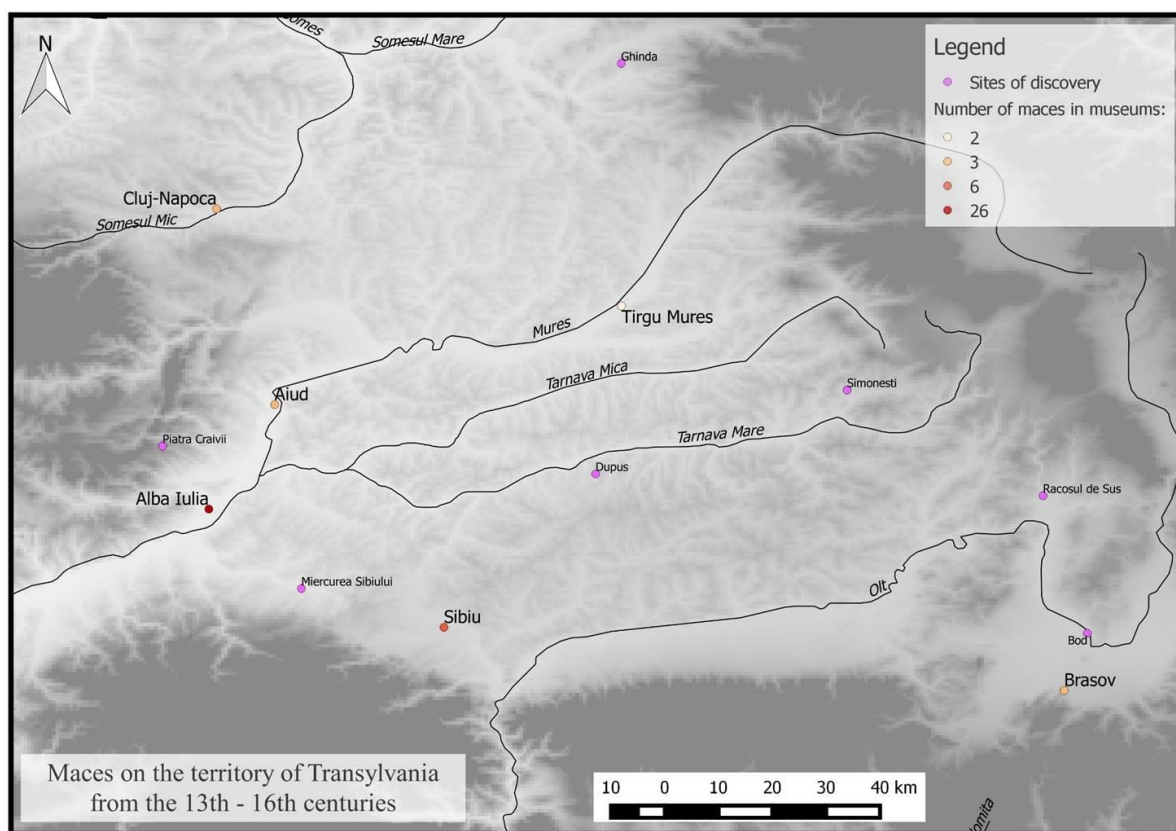


Figure 1: The distribution of mace heads in Transylvanian museums and the known discovery places.



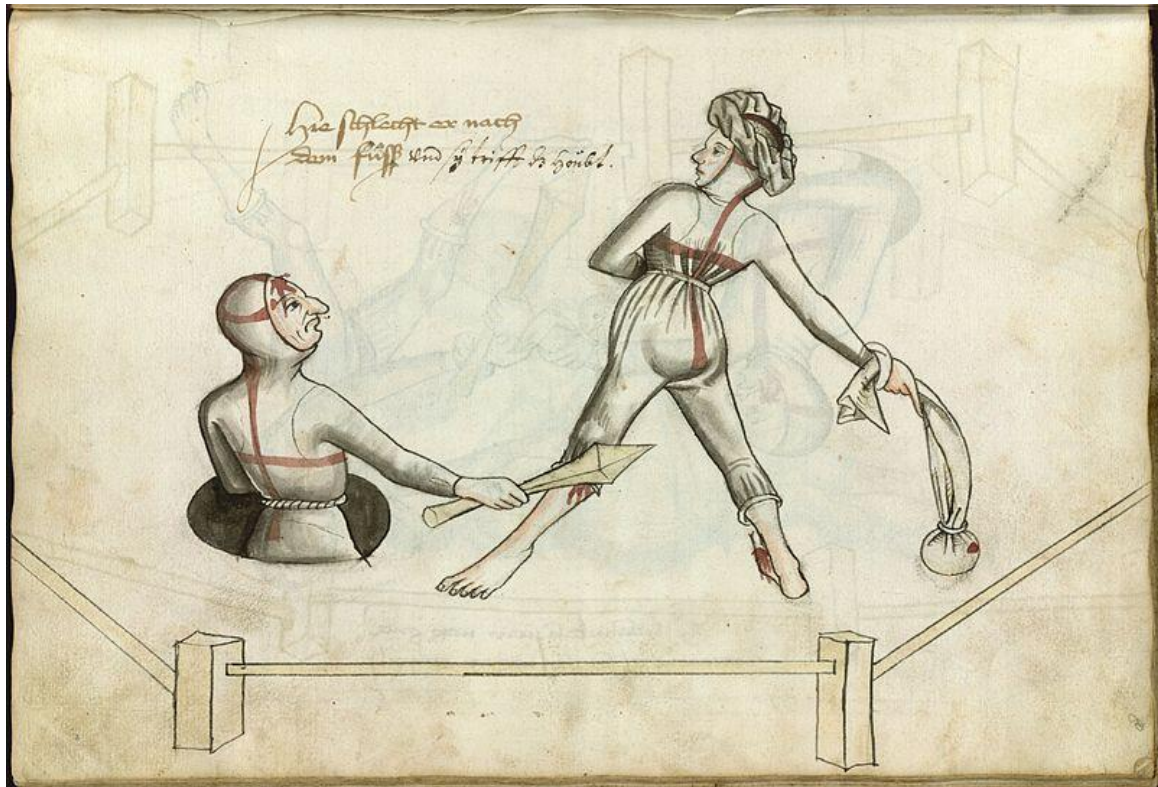


Figure 2: Combat between a man and a woman, using a wooden club (Hans Talhoffer, "Fechtbuch aus dem Jahre 1467", Ms.Thott.290.2°, 080r).

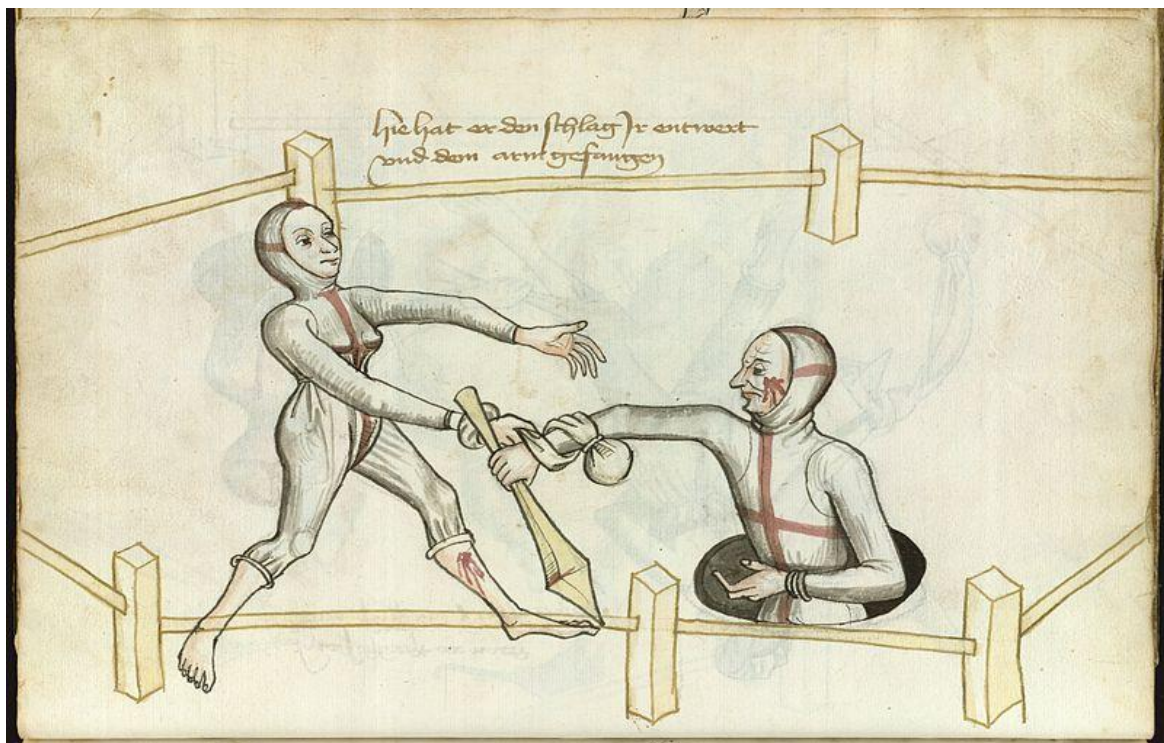


Figure 3: Combat between a man and a woman, using a wooden club (Hans Talhoffer, "Fechtbuch aus dem Jahre 1467", Ms.Thott.290.2°, 080v).



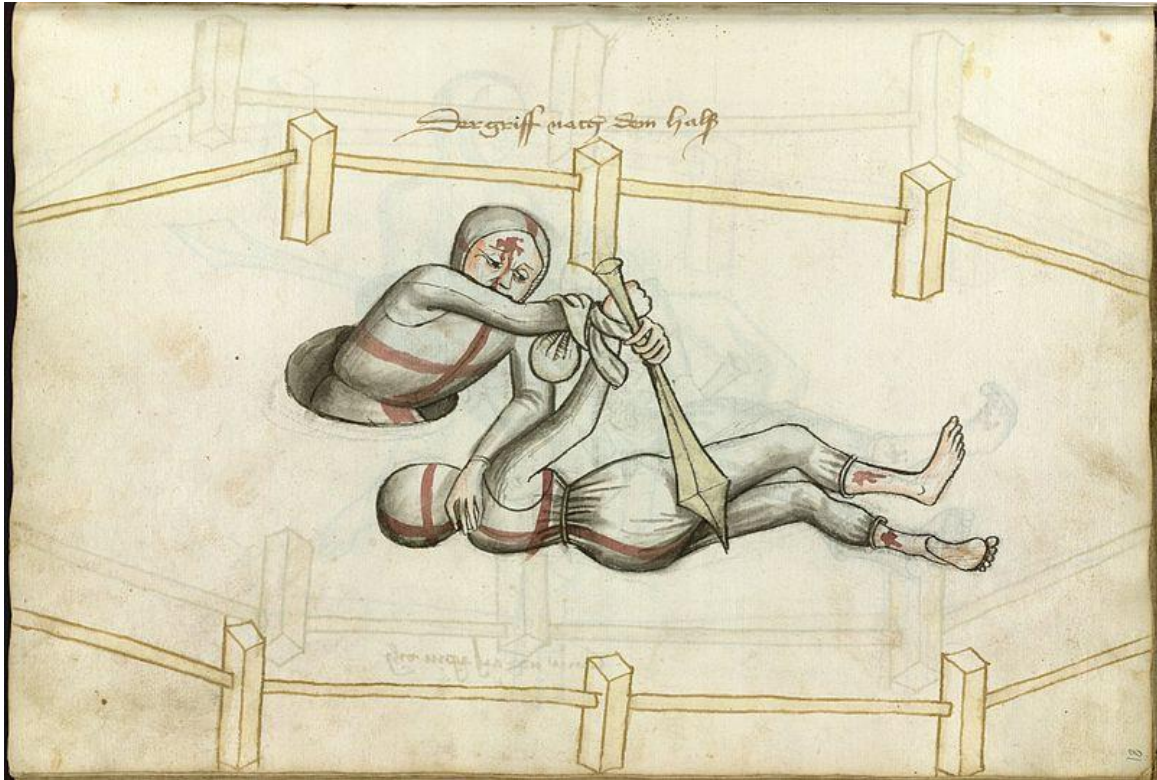


Figure 4: Combat between a man and a woman, using a wooden club (Hans Talhoffer, "Fechtbuch aus dem Jahre 1467", Ms.Thott.290.2°, 081r).

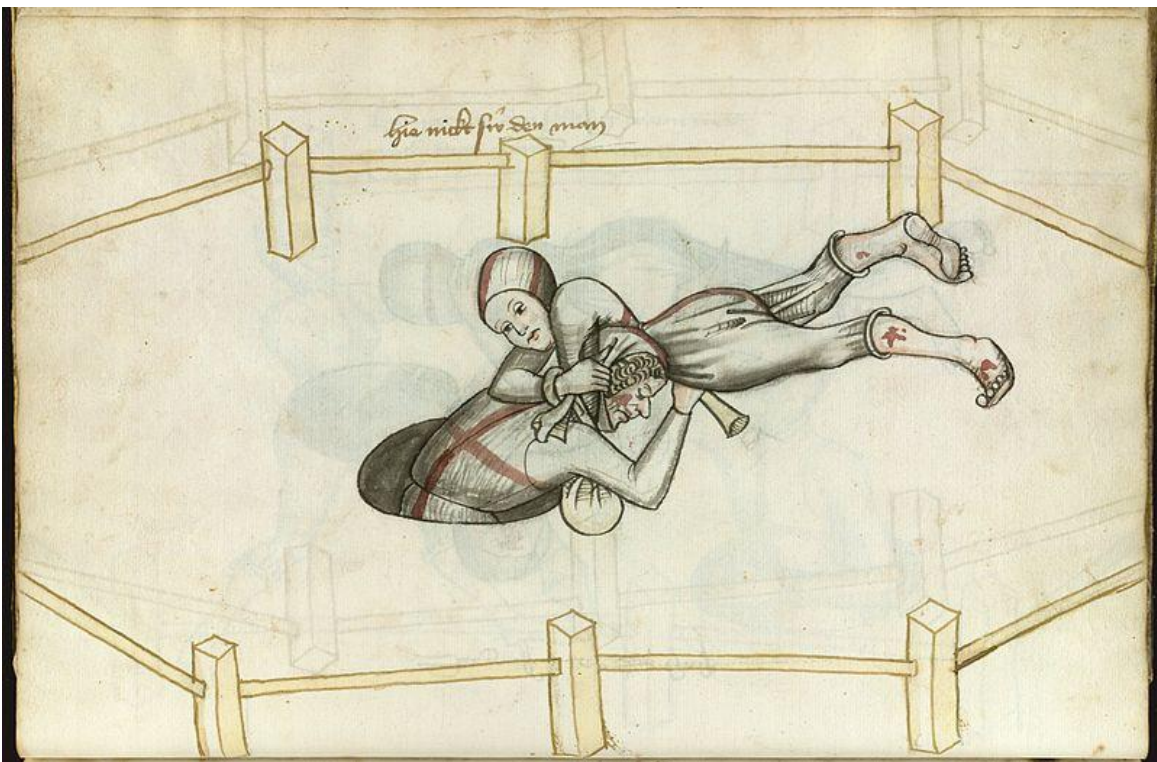


Figure 5: Combat between a man and a woman, using a wooden club (Hans Talhoffer, "Fechtbuch aus dem Jahre 1467", Ms.Thott.290.2°, 081v).



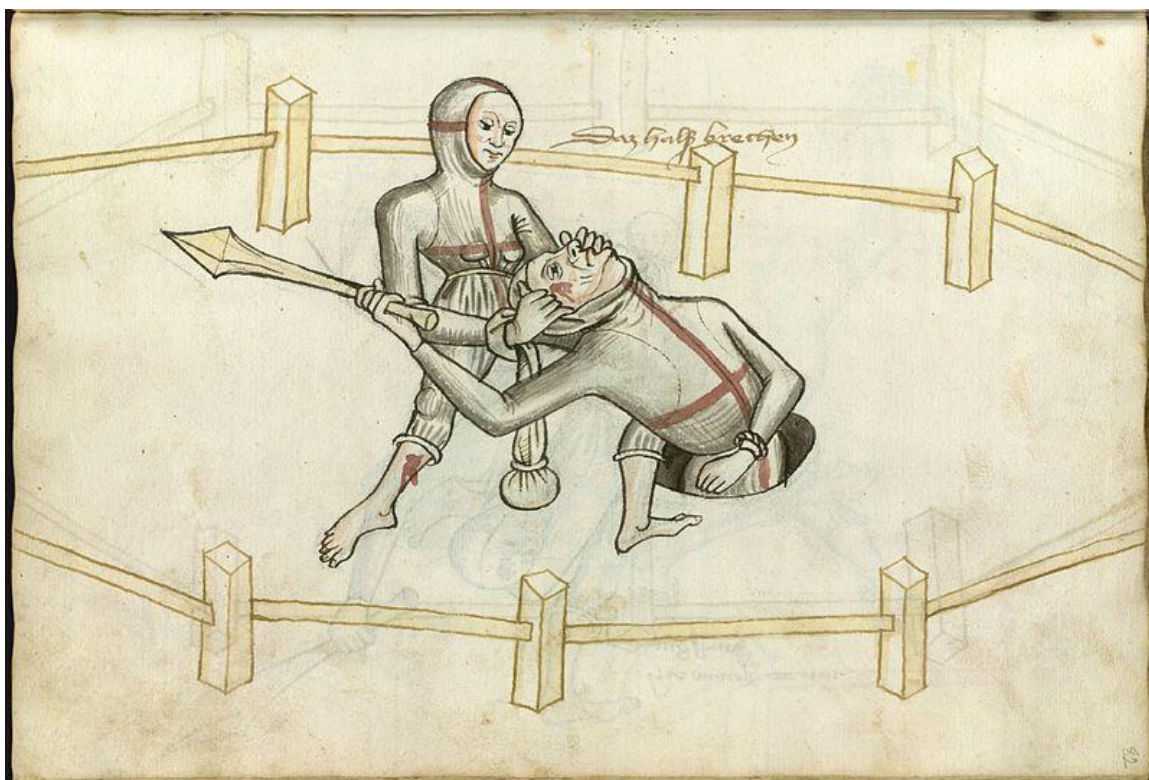


Figure 6: Combat between a man and a woman, using a wooden club (Hans Talhoffer, "Fechtbuch aus dem Jahre 1467", Ms.Thott.290.2°, 082r).

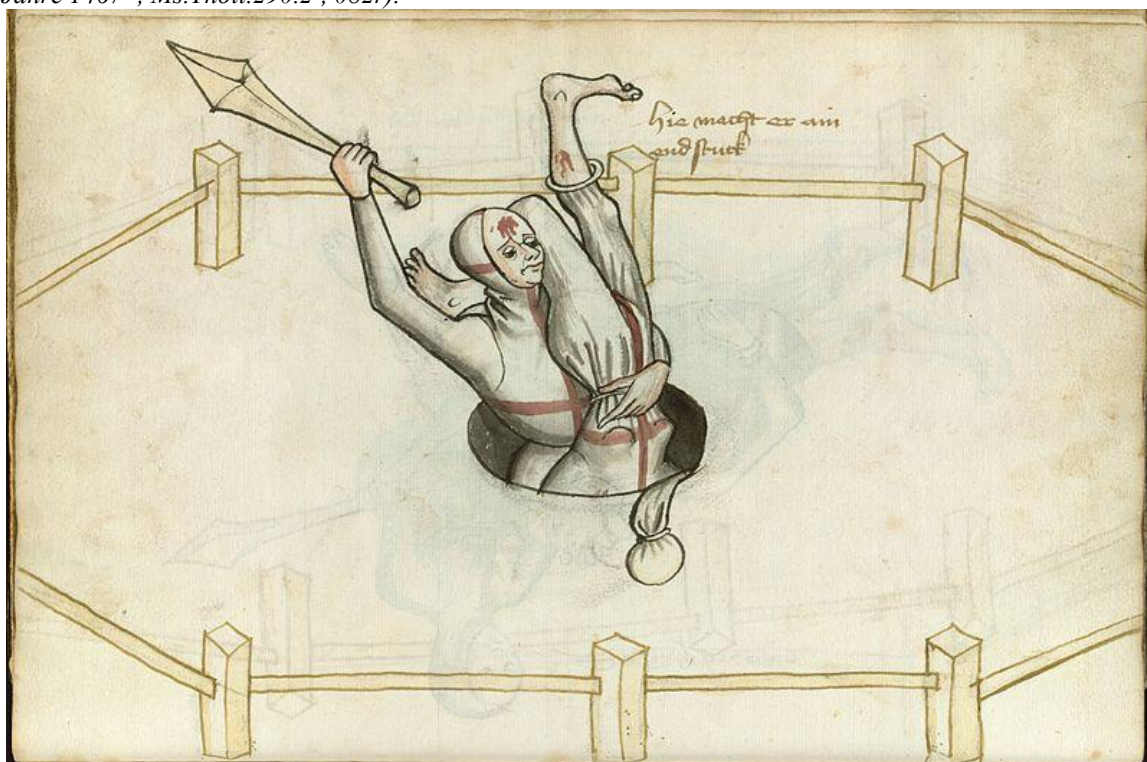


Figure 7: Combat between a man and a woman, using a wooden club (Hans Talhoffer, "Fechtbuch aus dem Jahre 1467", Ms.Thott.290.2°, 082v).



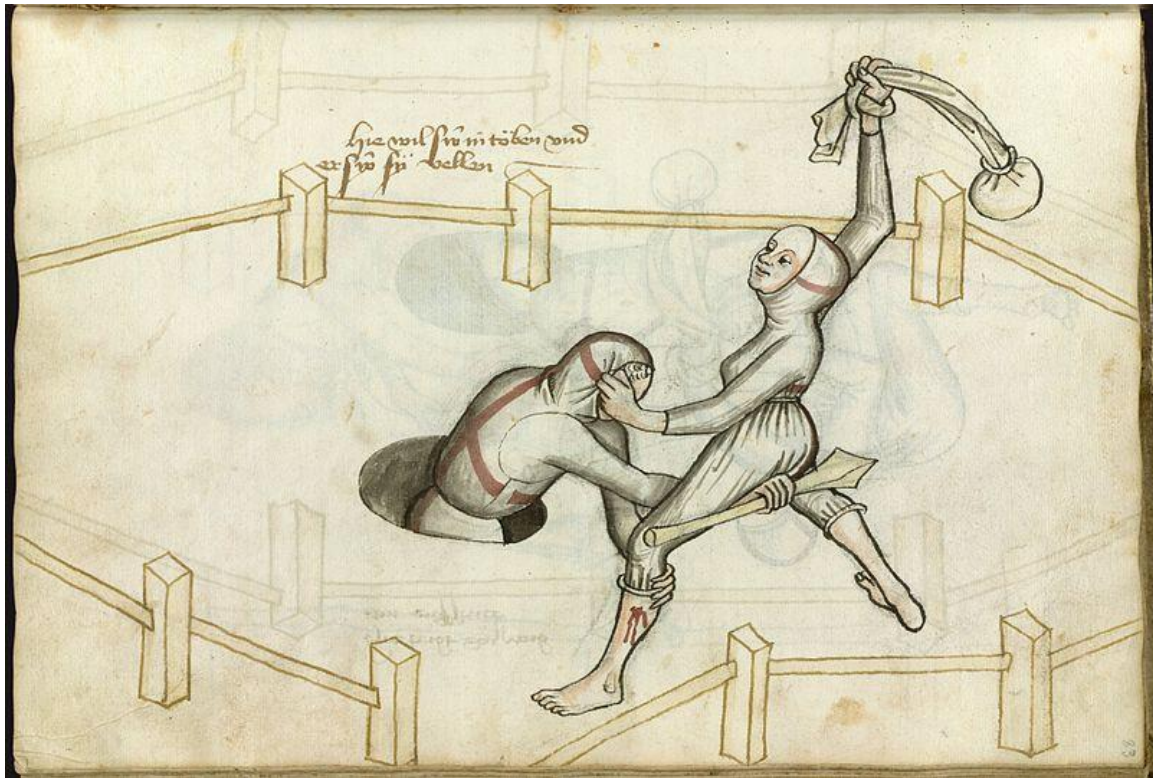


Figure 8: Combat between a man and a woman, using a wooden club (Hans Talhoffer, "Fechtbuch aus dem Jahre 1467", Ms.Thott.290.2°, 083r).

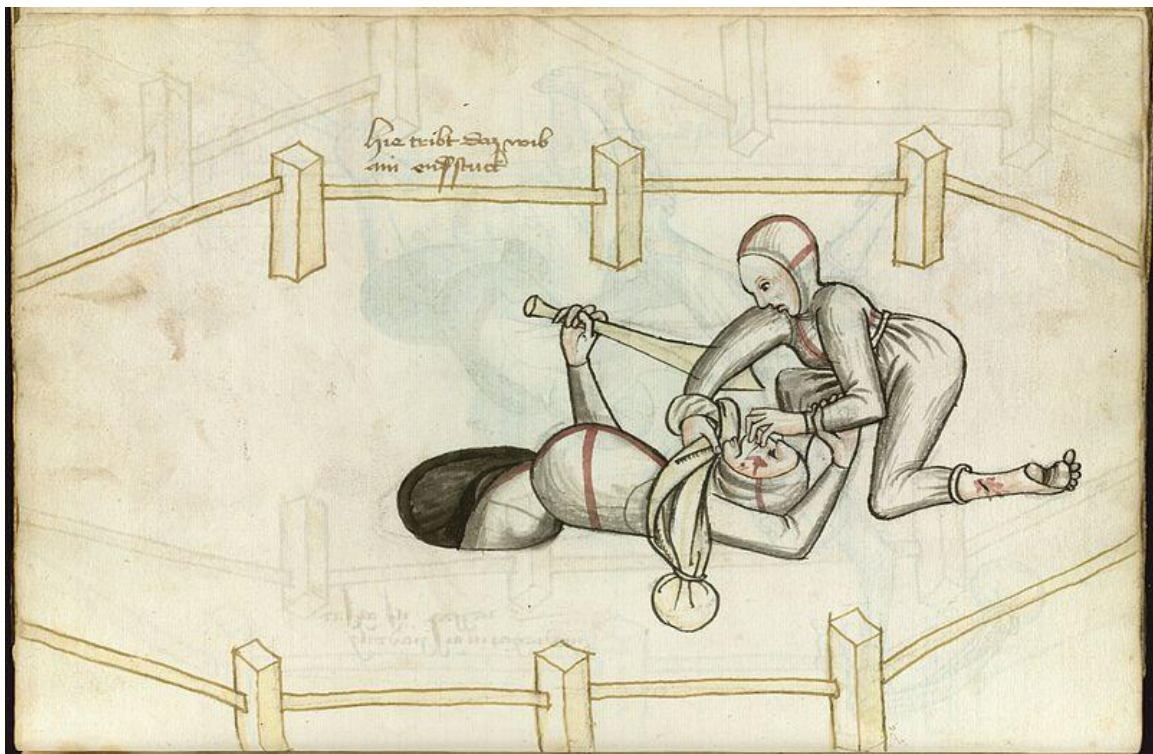


Figure 9: Combat between a man and a woman, using a wooden club (Hans Talhoffer, "Fechtbuch aus dem Jahre 1467", Ms.Thott.290.2°, 083v).



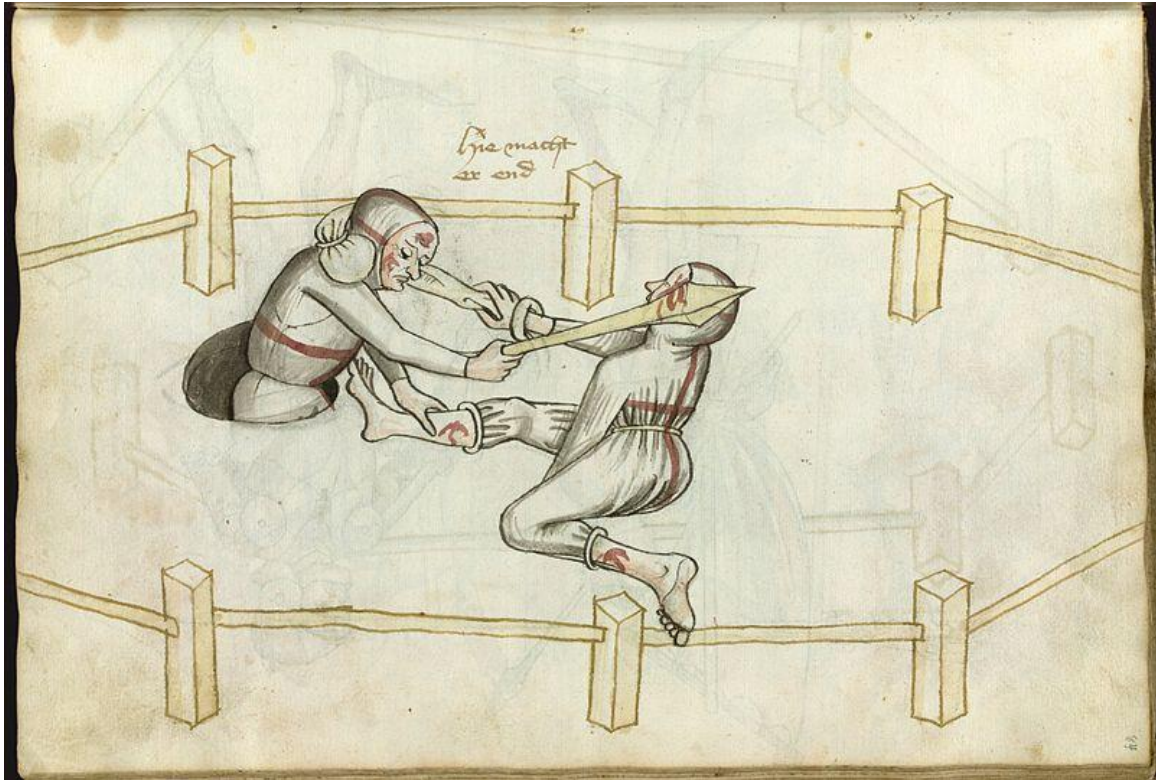


Figure 10: Combat between a man and a woman, using a wooden club (Hans Talhoffer, "Fechtbuch aus dem Jahre 1467", Ms.Thott.290.2°, 084r).

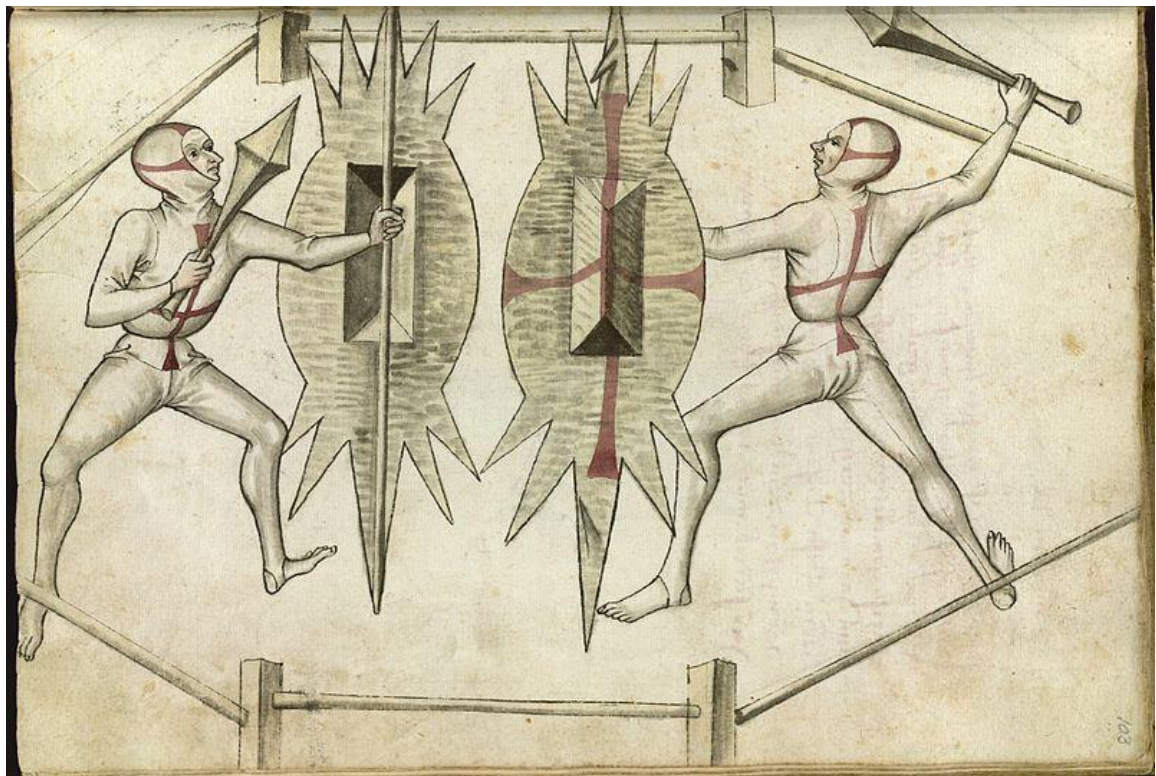


Figure 11: Combat between two people using maces and targes (Hans Talhoffer, "Fechtbuch aus dem Jahre 1467", Ms.Thott.290.2°, 103r).



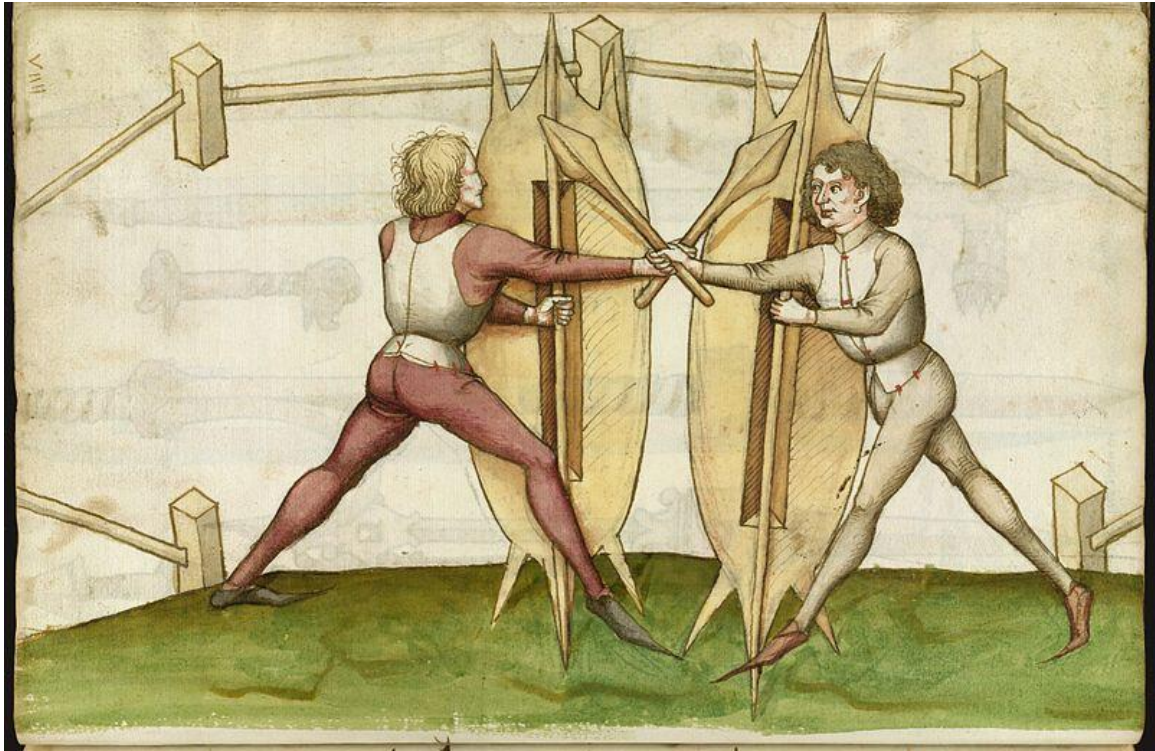


Figure 12: Combat between two people using maces and targes (Hans Talhoffer, "Fechtbuch aus dem Jahre 1467", Ms.Thott.290.2°, 110v).

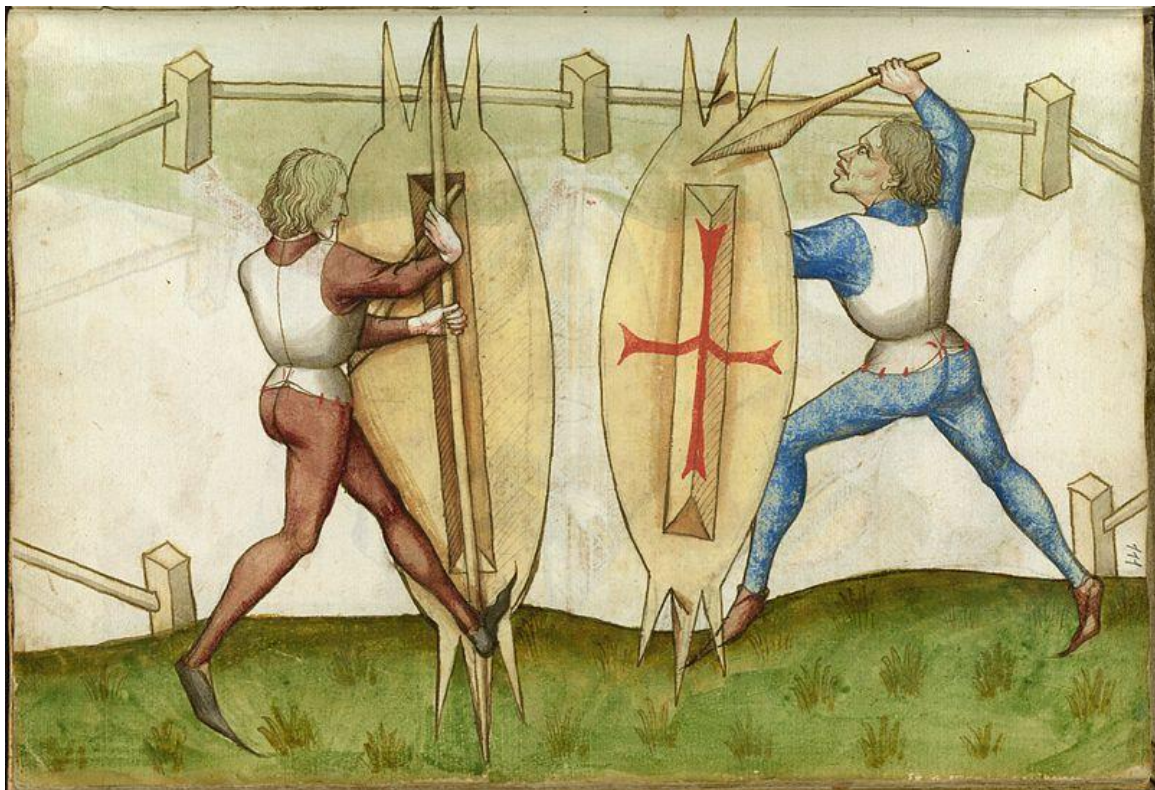


Figure 13: Combat between two people using maces and targes (Hans Talhoffer, "Fechtbuch aus dem Jahre 1467", Ms.Thott.290.2°, 111r).



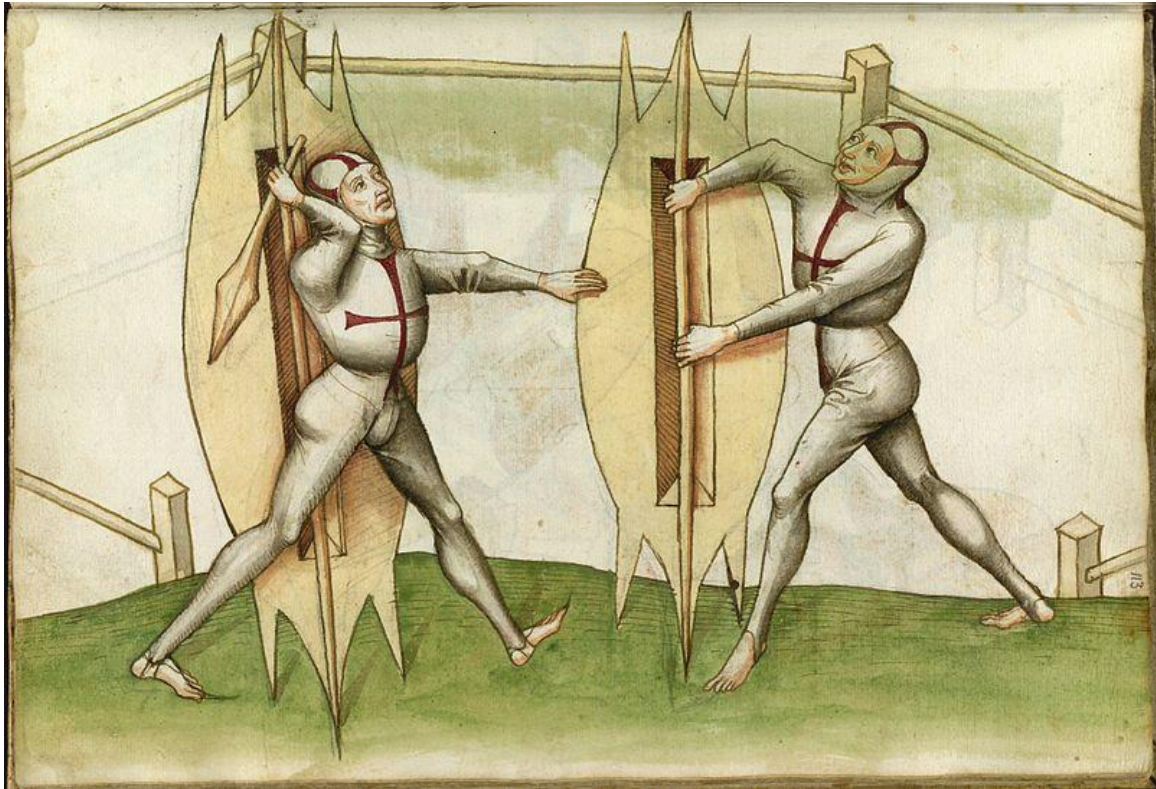


Figure 14: Combat between two people using a mace and two targes (Hans Talhoffer, "Fechtbuch aus dem Jahre 1467", Ms.Thott.290.2°, 113r).

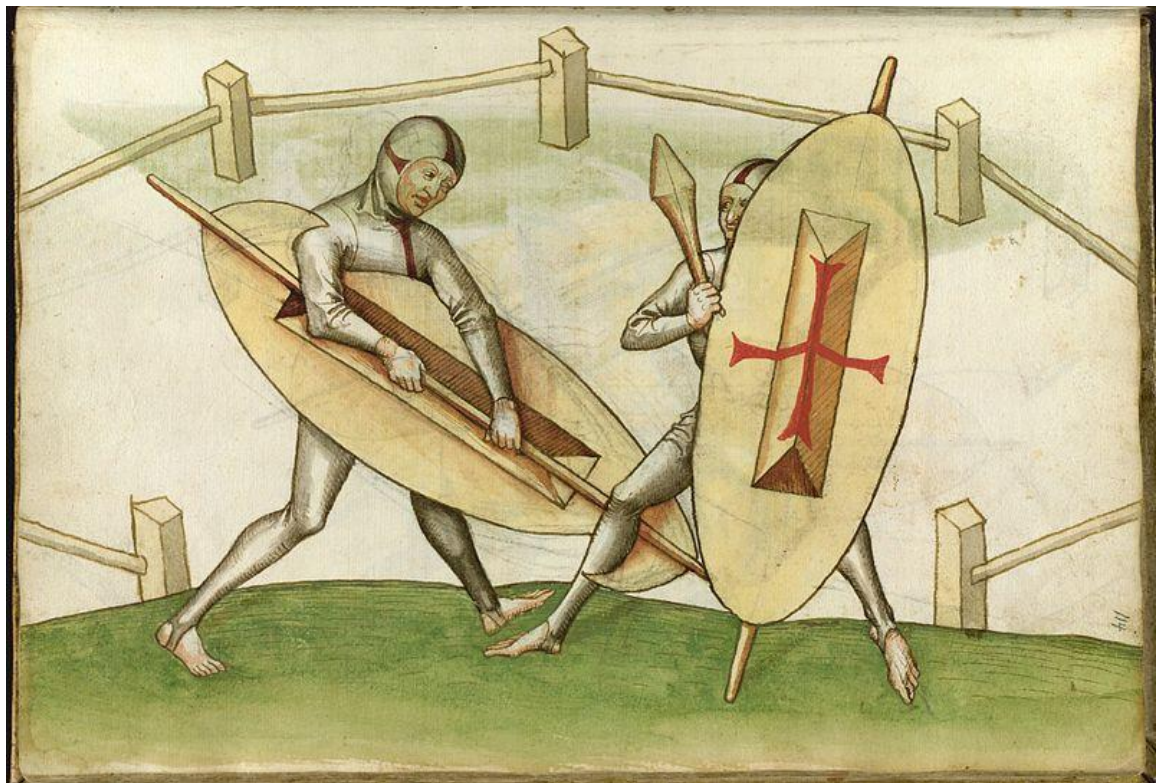


Figure 15: Combat between two people using a mace and two targes (Hans Talhoffer, "Fechtbuch aus dem Jahre 1467", Ms.Thott.290.2°, 114r).





Figure 16: Combat between two people using a mace and two targes (Hans Talhoffer, "Fechtbuch aus dem Jahre 1467", Ms.Thott.290.2°, 115r).

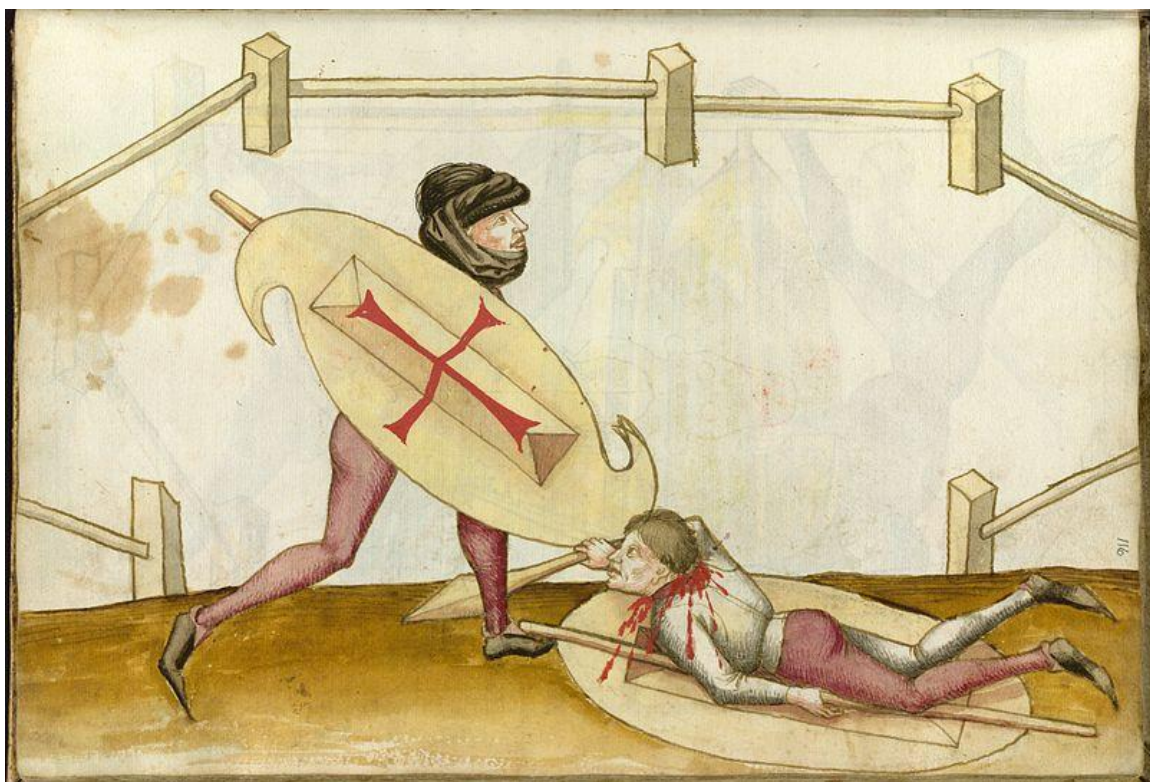


Figure 17: Combat between two people using a mace and two targes (Hans Talhoffer, "Fechtbuch aus dem Jahre 1467", Ms.Thott.290.2°, 116r).



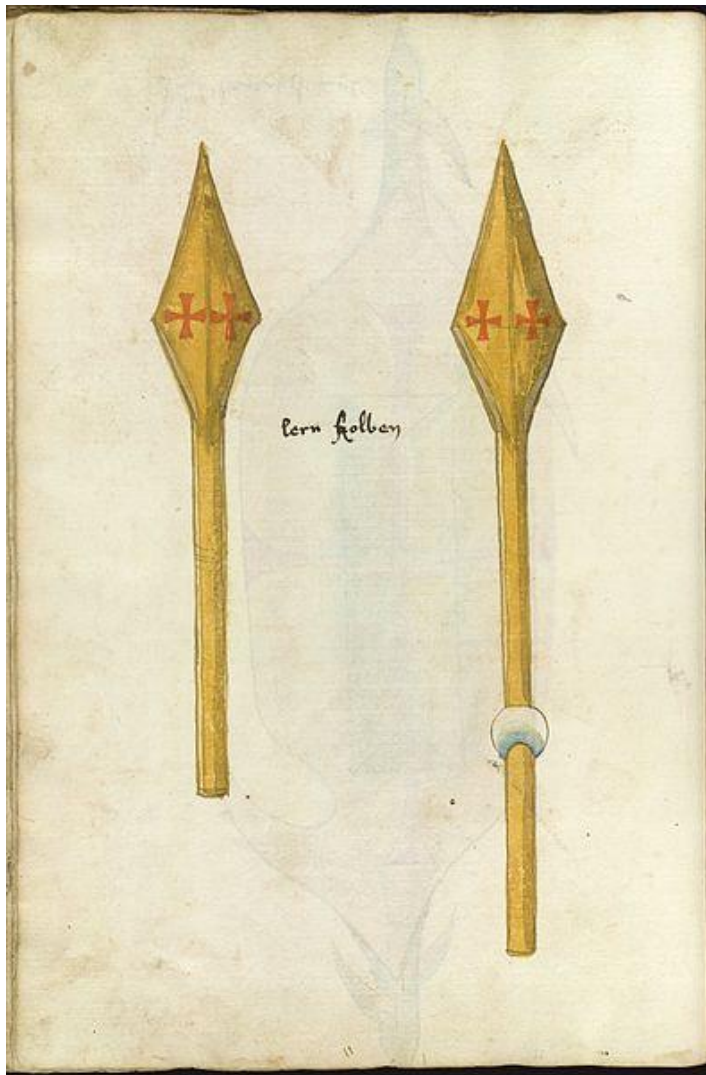


Figure 18: "Lern Kolben" - training tool that would stand for any mace or similar blunt weapon (Hans Talhoffer, "Fechtbuch aus dem Jahre 1459", Ms.Thott.290.2°, 106r).



Figure 19: Caiaphas holding what appears to be a mace in the Judgement Scene, painted in the Schleyinig Chapel, in St. Michael church, Cluj-Napoca, Romania. Photo taken by the author.



Figure 20: Saint Ladislaus fighting the Cuman, *The Angevin Legendary*. Source: [http://www.szentlaszlorend.hu/hu/szent\\_laszlo/szent\\_laszlo\\_cimere\\_-\\_a\\_szent\\_laszlo\\_rend\\_cimere](http://www.szentlaszlorend.hu/hu/szent_laszlo/szent_laszlo_cimere_-_a_szent_laszlo_rend_cimere) (Accessed:10.12.2015)