

Ante MILOŠEVIĆ

Muzej hrvatskih arheoloških spomenika  
S. Gunjače 3  
HR – 21000 Split  
ante.milosevic@st.t-com.hr

## Iz armatorija srednjovjekovnog Bribira

### From the Armoury of Medieval Bribir

*U tekstu se raspravlja nekoliko primjeraka oružja i ratničke opreme s Bribirske glavice. Prema mome mišljenju, značajni su za razumijevanje ukupne bribirske prošlosti, a riječ je o željeznom križolikom okovu i ukrašenom stremenu s konjske orme te o ostacima četiriju željeznih buzdovana. Na žalost, ni za jednoga od njih nemamo pobližih podataka o okolnostima nalaza.*

*Navedeni primjerci oružja i konjaničke opreme u mnogome dopunjavaju sliku bribirske prošlosti od 9. do 12. stoljeća, no svojim kulturološkim pokazateljima nisu izišli iz okvira kakav nam je za taj lokalitet poznat od ranije i prema drugim nalazima ranoga srednjeg vijeka. Tipološko-kronološkom analizom pokušao sam pokazati različite utjecaje pod kojima su ti predmeti nastajali ili su izravno importirani iz tadašnjih većih radioničkih centara u srednjoj Europi i Bizantskome Carstvu. Njihova kvaliteta i vrsnoća izrade vrlo dokumentarno svjedoči visoku razinu života na Bribiru u stoljećima u kojima su nobiles Breberiensenses započeli svoj gospodarski, vojni i politički uspon.*

**Ključne riječi:** *Bribirska glavica, konjska orma, stremen, buzdovani, rani srednji vijek, Bizant, karolinško doba*

*The text discusses several items of weaponry and combat equipment from Bribirska Glavica. In our opinion, they are significant for the understanding of the overall past of Bribir. They comprise an iron cross-shaped mounting and an ornamented stirrup from horse tack as well as the remains of four iron maces. Unfortunately, we have no very detailed information about the circumstances of the finds for any of them.*

*These items of weaponry and harness do add a great deal to the picture of the Bribir past, from the 9<sup>th</sup> to the 12<sup>th</sup> century, and yet in their fundamental cultural indicators they do not depart from the framework that we know of for this site, from earlier work, and from other finds of the early medieval period. Analysis in terms of typology and chronology was used to try to show the different influences on the making of these objects or their direct import from the then bigger workshop centres in Central Europe and the Byzantine Empire. Their quality and excellence of workmanship tellingly documents the high level of life in Bribir in the centuries in which the nobles Brberiensenses started their economic, military and political rise.*

**Key words:** *Bribirska Glavica, harness, stirrup, maces, Early Middle Age, Byzantium, Carolingian period*



Bribirska glavica, 1958. godine  
Bribirska glavica, 1958. godine

Bribirska Glavica (ancient *Varvaria* and medieval *Breberium*) is well known to be a prolific archaeological site with a long period of existence, from the prehistoric Liburni to the modern age. It has been excavated with varying degrees of intensity for more than a century, but the pick and trowel have not been blessed by fortune. First of all, after the ending of World War I, when, in the new Kingdom of the Serbs, Croats and Slovenes, the aim was to put a stop to the research of all finds that had anything Croatian about them. The second time came in World War II, when, in the same key, the museum building on Bribir was burned and the heritage objects from it were tipped down to the foot of the hill. The third time, in the War of Independence, (1991-1995) again for the same reasons, the archaeological heritage from the museum builds were dumped over the surrounding meadows, with anything that was recognisable in form or appearance having been previously stolen. Such experience from the past occasionally led to archaeological finds being moved from Glavica to safer places, firstly to the *Museum of Croatian Archaeological Monuments* in Split, and then to *Šibenik Municipal Museum*. Since these transfers were almost always made in a hurry because of some impending threat, not enough care was always taken about the information that should have accompanied given finds. Thus during

Dobro je poznato da je Bribirska glavica (antička *Varvaria* i srednjovjekovni *Breberium*) vrlo izdašno arheološko nalazište s dugačkim kontinuitetom trajanja, od prapovijesnih Liburna do novoga vijeka. Različitom intenzitetom istražuje se već više od stotinu godina, no „sretni mašklin”, tijekom tog vremena nije joj uvijek bio naklonjen. Najprije po završetku Prvoga svjetskog rata nakon čega se, u novonastaloj državi, nastojalo onemogućiti istraživanja svih nalazišta s hrvatskim predmetkom; drugi put u Drugome svjetskom ratu kada je po istom ključu spaljena muzejska kuća na Bribiru i kada su spomenici iz nje sunovraćeni u podnožje Glavice i treći put u Domovinskom ratu kada je, opet po istom ključu, prikupljena arheološka baština iz muzejskih kuća izbačena na okolne livade, s tim da je prethodno otuđeno sve što je formom ili izgledom bilo prepoznatljivo. Takvo iskustvo iz prošlosti povremeno je poticalo premještanje arheoloških nalaza s Glavice na sigurnija mjesta, najprije u *Muzej hrvatskih arheoloških spomenika* u Splitu, a potom i u *Muzej grada Šibenika*. Kako su se ta premještanja gotovo u pravilu odvijala ubrzano zbog nadolazećih prijetnji, nije se uvijek vodilo dovoljno računa o podacima koji su trebali pratiti određene nalaze. Tako su tijekom vremena u spomenutim muzejima formirane kolekcije čiji predmeti nemaju osnovne prateće arheološke podatke, osim onoga da potječu

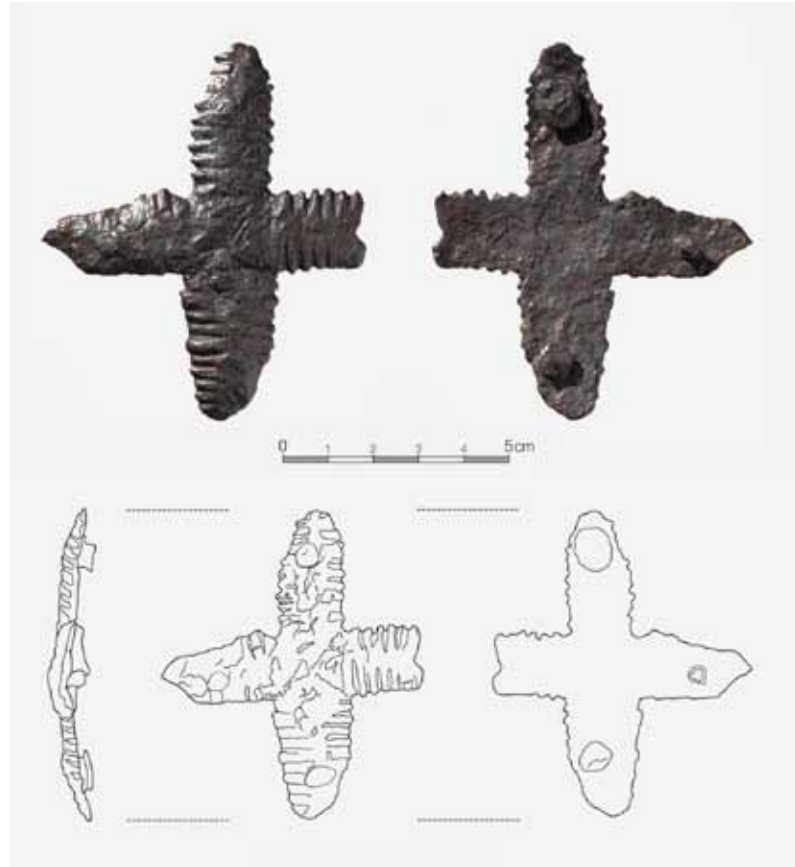


sl. 1. Metalni nalazi s Bribira i križoliki okov prije konzervacije (foto: M. Rogošić).  
fig. 1 Metal finds from Bribir and the cruciform mounting before conservation (photograph: M. Rogošić).

s Bribira. Iz takvoga fundusa koji je nastao u *Muzeju HAS*, izdvojeno je nekoliko primjeraka oružja i ratničke opreme koje ovdje objavljujem, a koji su, prema mom mišljenju, značajni za razumijevanje ukupne bribirske prošlosti. Riječ je o željeznom križolikom okovu i ukrašenom stremenu s konjske orme te o ostacima četiriju željeznih buzdovana<sup>1</sup>.

1. Križoliki okov nađen je u hrpi metalnih predmeta koji su, 2013. godine, zatečeni u jednoj

<sup>1</sup> Na nalaze srednjovjekovnih buzdovana s Bribira u literaturi je do sada tek ovlaš upozoreno, jednom sasvim kratkom tekstualnom opaskom u: M. DRAGIČEVIĆ, Metalni proizvodi, u: *Bribir u srednjem vijeku*, (ur. A. Milošević), Split, 1995, str. 77 i drugi put slikom u: A. MILOŠEVIĆ, *Varvaria - Breberium - Bribir. Prošlost i spomenici*. Split, 2016, str. 21.



sl. 2. Križoliki okov konjske orme s Bribira (foto: A. Z. Alajbeg, crtež: N. Šimundić Bendić).  
fig. 2 Cruciform mounting of horse's harness from Bribir (photograph: A. Z. Alajbeg, drawing: N. Šimundić Bendić).

the course of time in these museums, collections were formed in which the objects wanted the basic accompanying data, save for the fact that they derived from Bribir. From such holdings that came into being in the *Museum of Croatian Archaeological Monuments* (MCAM), a few items of weaponry and combat equipment have been picked out and are here published, items that in our opinion are important for an understanding of the Bribir past as a whole. One is an iron cruciform fastening and a decorated stirrup from horse harness, and the others are remains of four iron maces<sup>1</sup>.

1. The iron mounting was found in a pile of metal objects that were discovered in 2013 in a card-

<sup>1</sup> There have only been passing references to the medieval maces in Bribir in the literature, once with a short textual remark in: M. DRAGIČEVIĆ, Metalni proizvodi: in *Bribir u srednjem vijeku*, (ed. A. Milošević), Split, 1995, p. 77 and a second time with a picture in: A. MILOŠEVIĆ, *Varvaria - Breberium - Bribir. The Past and the Monuments*. Split, 2016, p. 21.



sl. 3. Ukrašeni željezni stremen s Bribira:

1. prije konzervacije (foto: N. Uroda);
2. poslije konzervacije (foto: A. Z. Alajbeg).

fig. 3 Ornamented iron stirrup from Bribir:

1. before conservation (photographi: N. Uroda);
2. after conservation (photographi: A. Z. Alajbeg).

board box from what was called Marun's House (fig. 1). We can assume with a fair degree of confidence that it was acquired by Mate Zekan, between 2006 and 23012, from the private collectors who use metal detectors to search many of the finding sites in Dalmatia, including Bribirska Glavica. It is made of iron and is slightly convex. One of the arms is partially broken off, while the rivets are still on the other arms (fig. 2), which, in their cruciform arrangement, joined the leather straps of the harness. On the front the mounting is decorated with series of parallel grooves that are placed vertically to the arms. In the centre there is a hint of a decoration in the shape of a shallow four-sided pyramid. The size of this piece is 6.6 x 5.8 cm, inv. no. 18.201 MHAS – collection of medieval armour and equestrian equipment.

2. An iron stirrup was noticed quite recently among non-inventoried items kept in a box in the Museum on which the word "Bribir" was written, with no additional data. It has a markedly triangular shape (fig. 3.1). On the upper end it finishes with a plate of a flat pentagonal shape on which there is an elongated rectangular slot through which to pull the strap. In the place where the strap plate joins with the arms of the stirrup are two expansions with circular perforations. We assume that these have no practical purpose, but are there merely to balance the thickening at the end of the arms aesthetically.

kartonskoj kutiji u tzv. Marunovoj kući (sl. 1). S velikom vjerojatnošću pretpostavljamo da ih je prikupio Mate Zekan, između 2006. i 2012. godine, od privatnih kolekcionara koji detektorima za metal pretražuju brojna dalmatinska nalazišta, pa tako i Bribirsku glavicu. Okov je izrađen od željeza i lagano je konveksan. Jedan krak mu je djelomično odlomljen, a na ostalima su sačuvane zakovice (sl. 2) koje su, u križnom rasporedu, spajale kožno remenje. Okov je s prednje strane ukrašen nizovima usporednih ureza koji su postavljeni okomito na krakove. U sredini se naslućuje ukras u obliku plitke četverostrane piramide. Veličina sačuvanog okova je 6,6 x 5,8 cm. Inv. br.: 18.201 MHAS – Zbirka srednjovjekovnog oružja i konjaničke opreme.

2. Željezni stremen uočen je nedavno među neinventiranim predmetima pohranjenima u jednoj kutiji u Muzeju na kojoj je pisalo: „Bribir“, bez dodatnih podataka (sl. 3.1). Naglašenog je trokutastog oblika. Na gornjem kraju završava pločicom spljoštenoga peterokutnog oblika na kojoj je izdužena pravokutna rupa za provlačenje remena. Na mjestu gdje se pločica za remen spaja s krakovima stremena dva su proširenja s kružnim perforacijama. Pretpostavljamo da nemaju praktičnu namjenu, nego su ondje postavljene tek kao estetski balans zadebljanju pri dnu krakova. Desni krak mu je prelomljen po sredini. Gazište stremena je pravokutno raskovano i blago izvinuto. Cijela vanjska strana stremena ukrašena je tauširanom, tankom, zlatnom i srebrnom žicom (sl. 3.2). Tragovi ukrašavanja srebrnom žicom na krakovima su minimalno i samo mjestimično sačuvani, dok je finim, mrežastim, dijagonalno postavljenim ornamentom u istom materijalu ukrašena vanjska strana raskovanoga gazišta. Najslabiji ukras nalazi se na vanjskoj strani pločice za remen<sup>2</sup>. Središnji motiv izveden je u srebru, a sastavljen je od trokutaste forme koju tvore dva stilizirana ptičja tijela bez glava. Na vrhu takvoga trokuta je okrunjena muška glava. Dio ukrasne kompozicije trokutaste forme na pločici za remen su i dva nasuprotno postavljena dugačka pruta s izvinutom volutom na vrhu. I ti su izvedeni tauširanom srebrnom žicom, jednako kao i rubovi na svim perforacijama pločice. Ostatak pločice ispunjen je biljnim i vitičastim ornamentima izvedenim tehnikom tauširane zlatne žice. Ukupna visina stremena je 21,8 cm, najveća širina 14,6 cm, a gazište je raskovano u širini od 3,1

<sup>2</sup> Znalackim i strpljivim trudom očistio ga je i uredio muzejski restaurator/konzervator Dalibor Popović.





sl. 4. Polovica ukrašenoga željeznog buzdovana s Bribira (foto: A. Z. Alajbeg).

fig. 4 Half of an ornamented iron mace from Bribir (photograph: A. Z. Alajbeg).

cm. Visina ukrašene pločice je 6,5 cm, a širina 6,3 cm. Inv. br.: 18.202 MHAS – Zbirka srednjovjekovnog oružja i konjaničke opreme.

3. Polovica željeznog buzdovana bez podataka o okolnostima nalaza (sl. 4)<sup>3</sup>. Rupa za nasad drška je

<sup>3</sup> Kratku obavijest o tome nalazu donosi M. Sijarić i navodi da je riječ o brončanom primjerku uz pretpostavku da je mlađi od 11. stoljeća (usp. M. SIJARIĆ, *Hladno oružje iz Bosne i Hercegovine u arheologiji razvijenog i kasnog srednjeg vijeka*. Sarajevo, 2014, str. 257).

The right arm is broken in the centre. The tread of the stirrup is hammered out so as to be rectangular and slightly curved. The whole of the outside of the stirrup is decorated with damascene work, with fine gold and silver wire (sl. 3.2). Traces of decoration with silver wire on the arms are minimal and are only preserved in a few places, while the external side of the wrought iron tread is decorated with a fine, reticular, diagonally placed ornament in the same material. The most complex decoration is found on the outer side of the strap plate<sup>2</sup>. The central motif is made in silver, and composed of a triangular shape created by two stylised (headless) bird bodies. At the top of this triangle is a crowned male head. Part of the decorative composition of the triangular shape on the strap plate consists of two long bands with a twisted volute at the top placed opposite to each other. These two are done in damascene work with silver wire, just like the edges on all the perforations of the plate. The rest of the plate is filled with plant and tendril ornaments done in damascene work with gold wire. The overall height of the stirrup is 21.8 cm, the maximum breadth is 14.6 cm, and the tread is wrought to a depth of 3.1 cm. The height of the decorated plate is 6.5 cm, and its width is 6.3 cm. Inv. no. 18.202 MHAS, Collection of Medieval Weaponry and Cavalry Equipment. .

3. Half of an iron mace without any indication of the circumstances of the find (fig. 4, 28.1)<sup>3</sup>. There is a hole into which to insert the handle in the middle of a regular, cuboid, hollow body, from which extrude four pyramidal peaks or knobs, one on each side of the surface of the cube. All the outer surfaces of it are decorated with incised and gilt tendril and plant ornaments. The damage to the pyramidal points shows that it was used in martial combat. It is sized 4.7 x 7.1 cm, and the reconstructed diameters of the top and lower openings for the insertion of the handle are 2.9 and 2.7 cm. Inv. no. 5632 MHAS – Collection of Medieval Weaponry and Cavalry Equipment.

4. Half of an iron mace without any data about the circumstances of the find (fig. 5). The annular

<sup>2</sup> Značajkim i strpljivim trudom očistio ga je i uredio muzejski restaurator/konzervator Dalibor Popović.

<sup>3</sup> A short note about this find is given by M. Sijarić who states that it is a bronze specimen, assumed to be later than the 11th century (cf. M. SIJARIĆ, *Hladno oružje iz Bosne i Hercegovine u arheologiji razvijenog i kasnog srednjeg vijeka*. Sarajevo, 2014, p. 257).



sl. 5. Polovica željeznog buzdovana s Bribira  
(foto: A. Z. Alajbeg).

fig. 5 Half an iron mace from Bribir  
(photograph: A. Z. Alajbeg).

rimmed hole for fitting in the handle is in the middle of a hollow cuboid body that is attenuated on the outer side at half the height. From the lateral surfaces so formed spike pyramidal peaks, one on each face. The considerable damaging of the tips on all sides suggest it was frequently used in combat. It is 3.9 x 6.4 cm in size, and the reconstructed diameters of the top and bottom openings for the



sl. 6. Željezni buzdovan s Bribira (foto: A. Z. Alajbeg).

fig. 6 Iron mace from Bribir  
(photograph: A. Z. Alajbeg).

u sredini pravilnog, kubičnog, šupljeg tijela iz kojega strše četiri piramidalna vrha, sa svake bočne plohe kubusa po jedan. Sve vanjske površine su mu ukrašene rovašenim i potom pozlaćenim viticama i biljnim ornamentima. Oštećenost piramidnih vrhova pokazuje da je korišten u borbenim sukobima. Veličina mu je 4,7 x 7,1 cm, a rekonstruirani promjeri gornjega i donjega otvora za nasad drška 2,9 odnosno 2,7 cm. Inv. br.: 5632 MHAS – Zbirka srednjovjekovnog oružja i konjaničke opreme.

4. Polovica željeznog buzdovana bez podataka o okolnostima nalaza (sl. 5). Prstenasto obrubljena rupa za nasad drška je u sredini šupljeg kubičnog tijela koje se na pola visine, s vanjske strane sužava. Iz tako oblikovanih bočnih površina strše piramidni vrhovi, sa svake plohe po jedan. Znatna oštećenost vrhova na svim stranama ukazuje na to da je često korišten u borbenim sukobima. Veličina mu je 3,9 x 6,4 cm, a rekonstruirani promjeri gornjega i donjega otvora za nasad drška iznose 2,1 odnosno 2,2 cm. Inv. br.: 8890 MHAS – Zbirka srednjovjekovnog oružja i konjaničke opreme.

5. Željezni buzdovan bez podataka o okolnostima nalaza (sl. 6). U sredini bačvastoga tijela je

rupa za nasad drška, a iz njegovoga vanjskoga plašta strši osam pera (rebara) koja se protežu cijelom visinom tijela. Pera su u bazi šira nego na zaobljenom vrhu i blago su zarotirana u lijevo. Veličina buzdovana je 3,8 x 5,6 cm, promjer gornje rupe za nasad drška je 2,2 cm, a donje 2,1 cm. Inv. br.: 6457 MHAS – Zbirka srednjovjekovnog oružja i konjaničke opreme.

6. Ulomak željeznog buzdovana bez podataka o okolnostima nalaza (sl. 7). Sačuvano mu je nešto manje od polovine bačvastoga tijela na kojemu su dva masivna pera, približno jednako široka u bazi i pri vrhu. Ne protežu se cijelom visinom tijela nego završavaju oko pola centimetra prije donjega ruba. Sudeći prema sačuvanom ulomku, može se pretpostaviti da je buzdovan imao šest pera. Veličina ulomka je 5,9 x 3,6 cm. Promjer rupa za nasad drška teško je odrediti. Inv. br.: 18.203 MHAS – Zbirka srednjovjekovnog oružja i konjaničke opreme.

#### Križoliki okov

Ranosrednjovjekovnim križolikim okovima od konjske orme nedavno sam posvetio opširniju raspravu<sup>4</sup>. Tada iznijete pretpostavke i izvedene zaključke i dalje u cijelosti podržavam. Dapače, kada je riječ o ninskom križolikom okovu s nasuprotnim glavama – o kojem sam tada raspravljao – danas ih je moguće potkrijepiti novim podacima koji mi tada nisu bili dostupni, a nedavno su valorizirani na izložbi i u pratećem katalogu *CREDO – Christianisierung Europas im Mittelalter*<sup>5</sup>. Takvi su, primjerice, brončani, posrebreni okov 9. stoljeća iz Borkena u Sjevernorajnskoj Vestfaliji (sl. 8.1) i zlatni privjesak 7. stoljeća iz Kenta u Engleskoj (sl. 8.2). Autori kataloških jedinica pretpostavljaju da je ovdje riječ o predmetima na kojima su motivi inspirirani ranim kršćanstvom<sup>6</sup>, no ja mislim da ih ikonografski ipak

<sup>4</sup> A. MILOŠEVIĆ, O izvornoj funkciji križolikoga okova sa Ždrijaca u Ninu, u: *Munuscula in honorem Željko Rapanić*, (ur. M. Jurković, A. Milošević), Zagreb - Motovun - Split, 2012, str. 191-211. – A. MILOŠEVIĆ, *Tragovi starih vjerovanja u kršćanstvu ranoga srednjeg vijeka. / Traces of Ancient Beliefs in Early Medieval Christianity*. Split, 2013, str. 90-120.

<sup>5</sup> *CREDO - Christianisierung Europas im Mittelalter*, (ur. Ch. Stigemann, M. Kroker, W. Walter), Bd. I-II, Paderborn, 2013. Zbog nerazumijevanja teme i stručne nekompetencije voditelja, u hrvatskome bloku na toj izložbi rezultat je potpuno izostao.

<sup>6</sup> CH. BEHR, Goldanhänger aus Ash, u: *CREDO*, kat. jed. 149, str. 198. – E. DICKMANN, Kreuzbeschlag, u: *CREDO*, kat. jed. 379, str. 437.



sl. 7. Ulomak željeznog buzdovana s Bribira (foto: A. Z. Alajbeg).

fig. 7 Fragment of an iron mace from Bribir (photograph: A. Z. Alajbeg).

handle to fit in come to 2.1 and 2.2 cm. Inv. no, 8890 MHAS – Collection of Medieval Weaponry and Cavalry Equipment.

5. An iron mace without data about the circumstances of the find (fig. 6). In the centre of the barrel-shaped body is a hole for the handle, and from the outer edge rise eight ribs that stretch the whole height of the body. The ribs are wider at the base than at the rounded top, and are slightly left-rotated. The dimensions of the mace are 2.8 x 5.6 cm, the diameter of the upper hole for the handle is 21.2 cm and of the lower 2.1 cm. Inv. no. 6457 MHAS – Collection of Medieval Weaponry and Cavalry Equipment.



6. Fragment of an iron mace without data about the circumstances of the find (fig. 7). A little less than half of the barrel shaped body is preserved; on the body are two very solid flanges, approximately equally wide at the base and the top. They do not extend the whole height of the body, but end around half a centimetre before the bottom edge. Judging from the extant fragment, it can be supposed that it would have had six flanges. The size of the fragment is 5.9 x 3.6 cm. The size of the hole for the handle is hard to determine. Inv. no. 18.203 MHAS – Collection of Medieval Weaponry and Cavalry Equipment.

### The cruciform mounting

We recently devoted a lengthy discussion to the early medieval cruciform fastenings from horse harness<sup>4</sup>. We stand by the premises and the assumptions made at that time in their entirety. Indeed, as far as the Nin cruciform mounting with opposite heads is concerned, which was discussed at that time, today they can be supported with new data that were not then accessible, and have been recently evaluated at the exhibition and in the accompanying catalogue of *CREDO – Christianisierung Europas im Mittelalter*<sup>5</sup>. Such are, for example, the bronze, silvered mounting of the 9<sup>th</sup> century from Borken in north Rhine Westphalia (fig. 8.1) and a gold pendant of the 7<sup>th</sup> century from Kent in England (fig. 8.2). The authors of the catalogue entries assume that these are objects in which the motifs are inspired by Early Christianity<sup>6</sup>. However, we are of the opinion that in terms of iconography they should be interpreted in the same way as in our discussion of the cruciform mounting from Nin. This particularly refers to the depiction of the opposed heads on the Ash pendant



sl. 8. Ranosrednjovjekovni predmeti s nasuprotnim ljudskim licima: 1. Borken; 2. Ash (prema: *CREDO*).  
fig. 8 Early medieval objects with opposed human faces: 1. Borken; 2. Ash (after: *CREDO*).

treba protumačiti na način kako sam to već napravio obrađujući križoliki okov iz Nina. To se posebno odnosi na prikaz nasuprotnih glava na privjesku iz Asha na kojemu su bradate glave s izrazito naglašenim brkovima, što je čest likovni i ikonografski predložak za prikazivanje pretkršćanskih bogova u europskom ranom srednjem vijeku, o čemu sam već pisao<sup>7</sup>. U katalogu izložbe *CREDO* još su dva primjera iz Norfolka, koji to dobro potvrđuju<sup>8</sup>.

Križoliki okov s Bribira, kojega ovdje objavljujem, toj problematici ne donosi novosti, no vrijedno ga je zabilježiti jer doprinosi razumijevanju ranosrednjovjekovnog horizonta na tome lokalitetu, i to u onome njegovom dijelu koji nam je vrlo slabo poznat. Oblikom i načinom ukrašavanja blizak je sličnim predmetima pronađenim na nekoliko srednjoeuropskih nalazišta, a najbliže analogije su mu predmeti s dvaju lokaliteta u današnjoj Sloveniji. Na visinskom utvrđenom naselju Gradec kod Velike Strmice pronađen je jedan oštećeni brončani okov s tragovima pozlate (sl. 9.5), a četiri željezna primjerka potječu s Gradišća kod Bašlja (sl. 9.1-4)<sup>9</sup>.

Ove nalaze iz Slovenije autori tumače kao visokokvalitetne, pokositrene, željezne proizvode, a u funkcionalnom smislu pretpostavljaju da su dio

<sup>4</sup> A. MILOŠEVIĆ, O izvornoj funkciji križolikoga okova sa Ždrijaca u Ninu, in: *Munuscula in honorem Željko Rapanić*, (ed. M. Jurković, A. Milošević), Zagreb - Motovun - Split, 2012, pp. 191-211. – A. MILOŠEVIĆ, *Tragovi starih vjerovanja u kršćanstvu ranoga srednjeg vijeka. / Traces of Ancient Beliefs in Early Medieval Christianity*. Split, 2013, pp. 90-120.

<sup>5</sup> *CREDO - Christianisierung Europas im Mittelalter*, (ed. Ch. Stigemann, M. Kroker, W. Walter), Bd. I-II, Paderborn, 2013. Because of the failure to understand and the professional incompetence of the person in charge, the Croatian section at this exhibition was completely ineffectual.

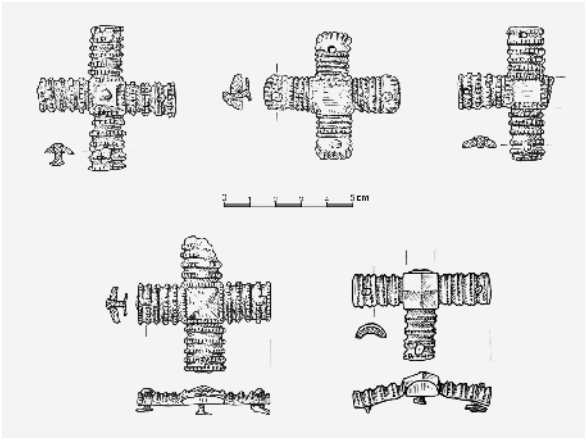
<sup>6</sup> CH. BEHR, Goldanhänger aus Ash, in: *CREDO*, cat. entry 149, p. 198. – E. DICKMANN, Kreuzbeschlagn, in: *CREDO*, cat. entry 379, p. 437.

<sup>7</sup> A. MILOŠEVIĆ, *Tragovi starih vjerovanja*, pogl. III. O motivu obrazina na ninskom „križiću”, str. 122-133.

<sup>8</sup> *CREDO*, kat. jed. 140a-b, str. 190-191.

<sup>9</sup> Publicirani su u više navrata, a posljednji put sa starijom literaturom u: Š. KARO - T. KNIFIC, Cross-shaped Strap Dividers from Gradišće hill above Bašelj (Slovenia), u: *Bojná, 2: Nové výsledky výskumov včasnostredovekých hradísk*, (ur. K. Pieta, Y. Robak), *Archaeologica Slovaca monographiae: Fontes* 20, Nitra, 2015, str. 219-232.





sl. 9. Križoliki okovi konjske orme: 1-4. Gradišće kod Bašlje; 5. Gradec kod Velike Strmice (prema: Š. Karo, T. Knific).

fig. 9 Cruciform mountings from horse's harness: 1-4, Gradišće by Bašlje; 5. Gradec by Velika Strmica (after: Š. Karo, T. Knific).

oglavlja konjske orme. Veliki broj željeznih artefakata koji su dio konjske orme i ratničke opreme – pronađeni na Gradišću iznad Bašlje – vjerojatno podrazumijeva relativno jaki konjanički vojni logor koji se nalazio na toj utvrdi u ranosrednjovjekovnoj Kranjskoj, u vrijeme franačke dominacije, u 9. i početkom 10. stoljeća.

Analogije za križoliki okov s Bribira – doduše više prema obliku, nego prema načinu ukrašavanja – imaju i neki nalazi s područja današnje Češke i Slovačke, odnosno s teritorija ranosrednjovjekovne Moravske. I ti primjerci su većinom datirani u 9. stoljeće i dovode se u vezu s franačkim utjecajima (sl. 10)<sup>10</sup>. Usporednim rebrima ukrašeni su i krakovi križolikoga okova konjske orme 8. stoljeća iz groba u Karllingu (sl. 11)<sup>11</sup>, dok je primjerak iz ranofranačke vile u Karlburgu bribirskome okovu sličan samo oblikom, ali ne i načinom ukrašavanja (sl. 12)<sup>12</sup>.

<sup>10</sup> *Great Moravia and the Beginnings of Christianity*. (Ur. P. Kouřil), Brno, 2014, str. 392-393. Prema tipologiji koju je za velikomoravske primjerce razradila Z. Měchurová, bribirski okov bi pripadao tipu 1A (usp.: Z. MĚCHUROVÁ, Součásti uzdění koně ve velkomoravském období, *Archaeologia historica* 9, Brno, 1984, str. 280-283, T. I.).

<sup>11</sup> F. STEIN, *Adelsgraber des Achten Jahrhunderts in Deutschland*. Berlin, 1967, str. 235, Taf. 12.8-9.

<sup>12</sup> *Eine Welt in Bewegung: Unterwegs zu Zentren des frühen Mittelalters*. (Ur. G. Eggenstein, N. Börste, H. Zöllner, E. Zahn Biemüller), Paderborn - Würzburg, 2008, str. 186-187, kat. jed. 36.3. Primjerak iz Karlburga datiran je u 7. – 8./9. stoljeće.



sl. 10. Križoliki okovi konjske orme:

1-2. Olomouc; 3-5. Bojná (prema: *Great Moravia and the Beginnings of Christianity*).

fig. 10 Cruciform mountings from horse's harness: 1-2. Olomouc; 3-5. Bojná (after: *Great Moravia and the Beginnings of Christianity*).

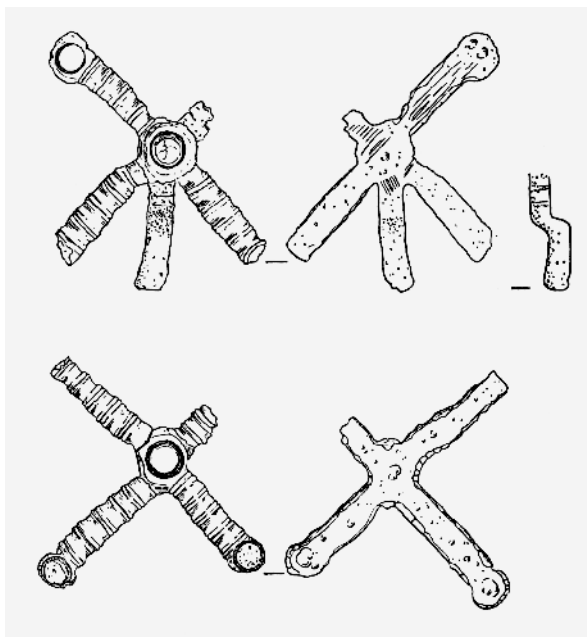
on which there are bearded heads with markedly emphasised whiskers, which is a frequent artistic and iconographic model for the depiction of the pre-Christian gods in the European Early Middle Age, concerning which we have already written<sup>7</sup>. In the *CREDO* catalogue there are two examples from Norfolk that give ample confirmation of this<sup>8</sup>.

The cruciform mounting from Bribir that is discussed in this publication brings no new information for this problem area, but it is worth mentioning it for it contributes to the understanding of the early medieval horizon at this site, indeed, in that part of it which is very poorly known. In the shape and manner of decoration it is close to similar objects found in a number of central European sites, the closest analogy to it being objects from two sites in what is today Slovenia. At a hill fort called Gradec by Veilka Strmica a damaged bronze fitting with traces of gilding was found (fig. 9.5), and four iron specimens derive from Gradišće by Bašlje (fig. 9.1-4)<sup>9</sup>.

<sup>7</sup> A. MILOŠEVIĆ, *Tragovi starih vjerovanja*, ch. III. O motivu obrazina na ninskome „križiću”, pp. 122-133.

<sup>8</sup> *CREDO*, cat. entry 140a-b, pp. 190-191.

<sup>9</sup> Published several times, the last time with the older literature in: Š. KARO - T. KNIFIC, Cross-shaped Strap Dividers from Gradišće hill above Bašelj (Slovenia), in: *Bojná, 2: Nové výsledky výskumu včasnostredovekých hradísk*, (ed. K. Pieta, Y. Robak), *Archaeologica Slovaca monographiae: Fontes* 20, Nitra, 2015, pp. 219-232.



sl. 11. Križoliki okov konjske orme iz Karlinga (prema: F. Stein).

fig. 11 Cruciform mounting of horse's harness from Karling (after: F. Stein).

The authors interpret the finds from Slovenia as high quality, tinned iron products, and hypothesise that functionally they might be parts of the head-piece of a horse's accoutrements. The large number of iron artefacts that are parts of harnesses and warrior equipment found at Gradišće above Bašlje probably imply a relatively strong cavalry camp that once lay in this fort in early medieval Carniola at the time of Frankish domination, in the 9<sup>th</sup> and early 10<sup>th</sup> century.

Analogies for the cruciform mounting from Bribir – although more with respect to the shape and less for the manner of ornamentation – are found in some finds from the area of today's Czechia and Slovakia, that is, from the lands of early medieval Moravia. These examples too are mainly to be dated to the 9<sup>th</sup> century and are connected with Frankish influences (fig. 10)<sup>10</sup>. And the arms of a cruciform mounting from harness of the 8<sup>th</sup> century from a grave in Karlling are also decorated with paral-

<sup>10</sup> *Great Moravia and the Beginnings of Christianity*. (Ed. P. Kouřil), Brno, 2014, pp. 392-393. According to the typology worked out for Moravian examples by Z. Měchurová, the Bribir mounting would belong to Type 1A (cf.: Z. MĚCHUROVÁ, Součásti uzdění koně ve velkomoravském období, *Archaeologia historica* 9, Brno, 1984, pp. 280-283, T. I.).



sl. 12. Križoliki okov konjske orme iz Karlburga (prema: *Eine Welt in Bewegung*).

fig. 12 Cruciform mounting of horse's harness from Karlburg (after: *Eine Welt in Bewegung*).

Rasprava o funkciji ovakvih križolikih okova još nije zaključena. Diskusija se uglavnom vodi oko toga jesu li ovakvi okovi dio pojasnje garniture za nošenje mačeva ili su dio oglavlja konjske orme<sup>13</sup>. Analizirajući već spomenuti križoliki okov iz Nina,

<sup>13</sup> Slovenski arheolozi zastupaju mišljenje da su ovakvi nalazi dio konjske orme (Š. KARO, Oprema jahača i konja s Gradišća nad Bašljem, u: *Dani Stjepana Gunjače 2*, (ur. T. Šeparović, N. Uroda), Split, 2012, str. 307-309. – Š. KARO - T. KNIFIC, Cross-shaped Strap, str. 229-230), dok je mišljenje slovačkih i čeških arheologa promjenjivo. Za konjsku ormu zalažu se npr. K. BENDA, Karolinská složka blatnického nálezu, *Slovenská archeológia* 11, 1963, str. 199-222. – Z. MĚCHUROVÁ, Součásti uzdění koně, str. 280-281. – Š. UNGERMAN, Průvlečka s prodlouženým krčkem z Dolních Věstonic „Na pískách“. Původ, funkce a datování jednoho typu kování z raného středověku, *Sborník prací Filozofické fakulty brněnské univerzity* 10-11, Brně, 2006, str. 117-141. D. Bialeková tumači da je tu riječ o dijelu pojasnje garniture (usp. D. BIALEKOVÁ, Sporen von slawischen Fundplätzen in Pobedim (Typologie und Datierung), *Slovenská archeológia* 25/1, Bratislava, 1977, str. 148-149. – D. BIALEKOVÁ, Dávne slovanské kováčstvo, *Dávnoevé umenie Slovenska* 11, Bratislava, 1981, str. 70. – D. BIALEKOVÁ, Zur Datierung archäologischer Quellen vom Ende des 8. bis Mitte des 9. Jh. im nördlichen Teil des Karpatenbeckens. u: *Etnische und kulturelle Verhältnisse an der mittleren Donau vom 6. bis 11. Jahrhundert*, (ur. D. Bialeková, J. Zábojník), Bratislava, 1996, str. 254. Kao dio pojasnje garniture mača, doduše s upitnikom, križoliki okovi su protumačeni i nedavno u: *Great Moravia and the Beginnings of Christianity*, str. 392-393.



sl. 13. Mogući način korištenja križolikog okova na konjskoj ormi.

fig. 13 A possible manner of using the cruciform mounting on horse's harness.

ja sam se, kao i većina autora, opredijelio za drugu mogućnost, pa pretpostavljam da je i u bribirskom slučaju riječ o dijelu oglavlja konjske orme, približno kako sam to pokušao rekonstruirati crtežom na sl. 13<sup>14</sup>.

Iz svega što sam ovdje iznio realno je pretpostaviti da bribirski križoliki okov kronološki pripada ranosrednjovjekovnoj baštini te da svjedoči vrijeme u kojemu su Bribir i tadašnja Hrvatska živjeli i razvijali se na obodu Karolinškoga Carstva. To razdoblje i ti utjecaji na Bribirskoj glavici do sada su se tek naslućivali nalazom fragmentarnog srebrnog denara Karla Velikoga<sup>15</sup> i ponekog ulomka kamene skulpture iz opreme tadašnjih crkava.

## Stremen

Željezni ukrašeni stremen je vrlo osebujan nalaz. U zbirku Muzeja HAS prenijet je bez podataka o kontekstu nalaza, a jedino što je zapisano jest da potječe s Bribira. U primorskom dijelu ranosrednjovjekovne Hrvatske, stremeni su vrlo rijetki nalazi, a uz ovaj bribirski primjerak, meni je poznat još jedan s Bribira kao i dva željezna stremena pronađena na

lel ribs (fig. 11)<sup>11</sup>, while an example from an early Frankish villa in Karlburg is similar to the Bribir mounting only in the shape, and not in the decorative style (fig. 12)<sup>12</sup>.

The debate about the function of suchlike cruciform fittings is not yet concluded. The discussion has on the whole being directed to whether such fittings are part of belt furniture for buckling on swords or whether they are part of the headgear of horse harness<sup>13</sup>. In an analysis of the already mentioned cruciform fitting from Nin, like most authors, we plumped for the second possibility, and assume that in the Bribir case this is also part of the headgear of a horse's harness, more or less as we have attempted to reconstruct it in the drawing in fig. 13<sup>14</sup>.

From everything we have put forward here, it is realistic to conjecture that the Bribir cruciform

<sup>11</sup> F. STEIN, *Adelsgraber des Achten Jahrhunderts in Deutschland*. Berlin, 1967, p. 235, Taf. 12.8-9.

<sup>12</sup> *Eine Welt in Bewegung: Unterwegs zu Zentren des frühen Mittelalters*. (Ed. G. Eggenstein, N. Börste, H. Zöllner, E. Zahn Biemüller), Paderborn - Würzburg, 2008, pp. 186-187, cat. entry 36.3. The Karlburg example is dated to the 7<sup>th</sup> to 8<sup>th</sup> /9<sup>th</sup> century.

<sup>13</sup> Slovene archaeologists represent the opinion that such finds are part of the harness (Š. KARO, Oprema jahača i konja s Gradišča nad Bašljem, in: *Dani Stjepana Gunjače 2*, (ed. T. Šeparović, N. Uroda), Split, 2012, pp. 307-309. – Š. KARO - T. KNIFIC, Cross-shaped Strap, pp. 229-230), while the thinking of Slovak and Czech archaeologists is variable. For harness, the following opt. K. BENDA, Karolinská složka blatnického nálezu, *Slovenská archeológia* 11, 1963, pp. 199-222. – Z. MĚCHUROVÁ, Součásti uzdeň koně, pp. 280-281. – Š. UNGERMAN, Průvlečka s prodlouženým krčkem z Dolních Věstonic „Na pískách“. Původ, funkce a datování jednoho typu kování z raného středověku, *Sborník prací Filozofické fakulty brněnské univerzity* 10-11, Brně, 2006, pp. 117-141. D. BIALEKOVÁ says that it is part of the furniture of a belt (cf. D. BIALEKOVÁ, Sporen von slawischen Fundplätzen in Pobedim (Typologie und Datierung), *Slovenská archeológia* 25/1, Bratislava, 1977, pp. 148-149. – D. BIALEKOVÁ, Dávne slovanské kováčstvo, *Dávnoveké umenie Slovenska* 11, Bratislava, 1981, p. 70. – D. BIALEKOVÁ, Zur Datierung archäologischer Quellen vom Ende des 8. bis Mitte des 9. Jh. im nördlichen Teil des Karpatenbeckens. in: *Etnische und kulturelle Verhältnisse an der mittleren Donau vom 6. bis 11. Jahrhundert*, (ed. D. Bialeková, J. Zábajník), Bratislava, 1996, p. 254. Recently, cruciform mountings were interpreted, although with a question mark, as part of the sword belt furniture in: *Great Moravia and the Beginnings of Christianity*, pp. 392-393.

<sup>14</sup> A. MILOŠEVIĆ, *Tragovi starih vjerovanja*, pp. 99-109, fig. 128.

<sup>14</sup> A. MILOŠEVIĆ, *Tragovi starih vjerovanja*, str. 99-109, sl. 128.

<sup>15</sup> T. ŠEPAROVIĆ, Nove spoznaje o nalazima ranosrednjovjekovnog novca u južnoj Hrvatskoj, *Starohrvatska prosvjeta*, ser. 3, sv. 30, Split, 2003, str. 127-129.

mounting belongs chronologically to the early medieval heritage and tells of the time in which Bribir and the Croatia of that time developed at the rim of the Carolingian Empire. There have been only slight hints of this period and these influences at Bribirska Glavica so far, with the finding of a silver denarius of Charlemagne<sup>15</sup> and the occasional fragment of stone sculpture from the furnishing of the churches of the time.

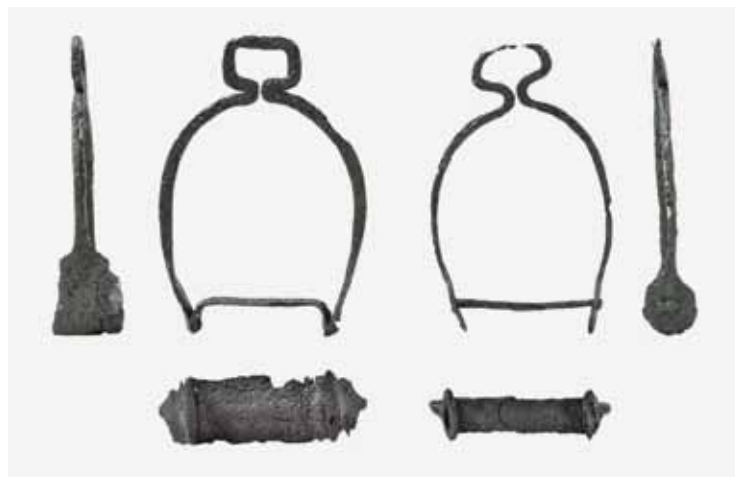
### The stirrup

The decorated iron stirrup is a very particular find. It was put into the collection of the MCAM without any data about the context of the find; all that was written was that it derived from Bribir. In the coastal area of early medieval Croatia, stirrups are a very rare find, and apart from this Bribir example, we know of just one more from Bribir while two iron stirrups were found at an early medieval castrum in Podgradina, on the western edge of Buško Blato [lake]<sup>16</sup>. And the other Bribir find too is unaccompanied by any ancillary archaeological information. It was published in a short and general text some thirty years ago<sup>17</sup>, and from the photographs appended it can be seen that it belonged to the form of round stirrup with a rectangular lug and a wrought circular plate for the tread. The publication assumed justly that it belonged to types characteristic of the 10<sup>th</sup> century (fig. 14)<sup>18</sup>. In the case



sl. 14. Željezni stremen kružnoga oblika s Bribira (foto: A. Z. Alajbeg).

fig. 14 Circular iron stirrup from Bribir (photograph: A. Z. Alajbeg).



sl. 15. Željezni stremeni iz Podgradine kod Livna (foto: A. Z. Alajbeg).

fig. 15 Iron stirrup from Podgradina near Livno (photograph: A. Z. Alajbeg)

<sup>15</sup> T. ŠEPAROVIĆ, Nove spoznaje o nalazima ranosrednjovjekovnog novca u južnoj Hrvatskoj, *Starohrvatska prosvjeta*, ser. 3, vol. 30, Split, 2003, pp. 127-129.

<sup>16</sup> These are accidental finds uncovered as a result of metal-detector searches. They were bought for the MCAM in 2011, and a given as inv. no. 18.000 and 18.001 in the Collection of Weaponry and Military Equipment. The size of the complete example is 16,3 x 11,3 cm, and that with a broken lug is 15,8 x 9,9 cm.

<sup>17</sup> M. DRAGIČEVIĆ, Metalni proizvodi, in: *Bribir u srednjem vijeku*, (ed. A. Milošević), Split, 1995, p. 76 with figure (inv. br. 9124 – Collection of Medieval Weaponry and Cavalry Equipment, size 16,9 x 15,6 cm). In the inventory of MCAM, n. 8906 in the same collection, it says that another stirrup was found in Bribir, but in fact it was the hilt of a Gothic dagger.

<sup>18</sup> A form that was more common in central and eastern Europe (J. HAMPEL, *Alterthümer des frühen Mittelalters in Ungarn*. Vol. 1, Braunschweig, 1905, pp. 235-237. – A. RUTTKAY, *Waffen und Reiterausrüstung des 9. bis zur ersten Hälfte des 14. Jahrhunderts in der Slowakei*, II, *Slovenska Archeologia* 24/2, Bratislava, 1976, pp. 354-355, fig. 74, tip IV, 10. stoljeće. – A. Н. КИРПИЧНИКОВ, *Снаряжение всадника и верхового коня на Руси IX- XIII вв.* Москва,

ranosrednjovjekovnom kastrumu u Podgradini, na zapadnom rubu Buškoga blata<sup>16</sup>. O drugom bribirskom nalazu također nemamo pratećih arheoloških podataka. Kratkim i općenitim tekstom objavljen je

<sup>16</sup> Riječ je o slučajnim nalazima kao rezultat pretraživanja lokaliteta detektorom za metal. Za Muzej HAS su otkupljeni 2011. godine, a u Zbirku oružja i ratničke opreme zavedeni su pod inv. br. 18.000 i 18.001. Veličina cjelovitijeg primjerka je 16,3 x 11,3 cm, a onoga s prelomljenom ušicom 15,8 x 9,9 cm.



prije tridesetak godina<sup>17</sup>, a iz priložene fotografije vidljivo je da pripada obliku okrugloga stremena s pravokutnom ušicom i kružno raskovanom pločicom za gazište. Prilikom objave dobro je pretpostavljeno da pripada tipovima karakterističnim za 10. stoljeće (sl. 14)<sup>18</sup>. U slučaju stremena iz Buško-ga blata (sl. 15), riječ je o jednostavnim, željeznim, ovalnim stremenima kakvi su pronađeni na više nalazišta u srednjoj Europi, prvenstveno u Karpatskoj kotlini<sup>19</sup>. Uglavnom se pripisuju kasnoavarskom kulturnom horizontu i datiraju na kraj 8. ili početak 9. stoljeća. S prostora današnje Hrvatske izravne analogije imaju u primjercima iz uništenih grobova u Bogojevacima nedaleko od Dalja kod Osijeka<sup>20</sup> i iz šljunčare u Prelogu (sl. 16)<sup>21</sup>. U savsko-dravskom međurječju pronađeno je još nekoliko istovremenih grobova u kojima su kao prilog također bili kasnoavarski stremeni, no ti nemaju ušice za remen

of the stirrup from Buško Blato (fig. 15), we are confronted with a simple, iron, oval stirrup of the kind found in several sites in central Europe, primarily in the Carpathian basin<sup>19</sup>. On the whole they are ascribed to the late Avar cultural horizon and are dated to the end of the 8<sup>th</sup> and the beginning of the 9<sup>th</sup> century. There are direct analogies from today's Croatia in examples from devastated graves in Bogojevci not far from Dalj near Osijek<sup>20</sup> and from gravel in Prelog (fig. 16)<sup>21</sup>. In the Sava-Drava inter-riverine area there are several other graves of the same time that have been found in which there are goods of late Avar stirrups, but these have no lugs for the leathers at the top, but a rectangular plate with a hole<sup>22</sup>, rather like the Bribir example. An exception among the stirrups of this area is a find from the site of Diven by Cirkovljani not far from Prelog. During dredging for sand in the river at this site, a grave was destroyed from which an

<sup>17</sup> M. DRAGIČEVIĆ, Metalni proizvodi, u: *Bribir u srednjem vijeku*, (ur. A. Milošević), Split, 1995, str. 76 sa slikom (inv. br. 9124 – Zbirka srednjovjekovnog oružja i konjaničke opreme, veličina mu je 16,9 x 15,6 cm). U inventaru Muzeja HAS, pod brojem 8906, u istoj zbirci stoji da je na Bribiru nađen još jedan stremen, no tu je riječ o štitniku rukohvata gotičkog bodeža.

<sup>18</sup> Riječ je o obliku koji je češći u srednjoj i istočnoj Europi (J. HAMPEL, *Alterthümer des frühen Mittelalters in Ungarn*, Vol. 1, Braunschweig, 1905, str. 235-237. – A. RUTTKAY, *Waffen und Reiterausrüstung des 9. bis zur ersten Hälfte des 14. Jahrhunderts in der Slowakei*, II, *Slovenska Archeologia* 24/2, Bratislava, 1976, str. 354-355, sl. 74, tip IV, 10. stoljeće. – A. H. КИРПИЧНИКОВ, *Снаряжение всадника и верхового коня на Руси IX- XIII вв.* Москва, 1973, str. 92, sl. 29, tip 1, 10. stoljeće. – В. ЙОТОВ, Стремената на прабългарите, *Добруджа* 24-25, Добрич-Силистра, 2013, str. 125-134, gdje su datirani u drugu polovinu 10. i prvu polovinu 11. stoljeća.

<sup>19</sup> J. HAMPEL, *Alterthümer des frühen Mittelalters* 1, str. 217-242. – N. PROFANTOVÁ, *Awarische Funde aus den Gebieten nördlich der awarischen Siedlungsgrenzen*, u: *Awarwen Forschungen*, vol. II, (ur. F. Daim), Wien, 1992, str. 636-637.

<sup>20</sup> Z. BOJČIĆ, Pregled istraživanja i rasprostranjenost ranosrednjovjekovnih nalaza u istočnoj Slavoniji i Baranji, u: *Arheološka istraživanja u istočnoj Slavoniji i Baranji* (Izd. HAD-a 9), (ur. N. Majnarić-Pandžić), Zagreb, 1984, str. 216, sl. 2.

<sup>21</sup> Ž. TOMIČIĆ, Rezultati ranosrednjovjekovnih arheoloških istraživanja u Međimurju i varaždinskoj regiji, u: *Arheološka istraživanja u sjeverozapadnoj Hrvatskoj* (Izd. HAD-a 2), (ur. Ž. Rapanić), Zagreb, 1978, str. 212, sl. 4.

1973, p. 92, fig. 29, tip 1, 10<sup>th</sup> century. – В. ЙОТОВ, Стремената на прабългарите, *Добруджа* 24-25, Добрич-Силистра, 2013, pp. 125-134, they are dated to the second half of the 10<sup>th</sup> and the first half of the 11<sup>th</sup> century.

<sup>19</sup> J. HAMPEL, *Alterthümer des frühen Mittelalters* 1, pp. 217-242. – N. PROFANTOVÁ, *Awarische Funde aus den Gebieten nördlich der awarischen Siedlungsgrenzen*, in: *Awarwen Forschungen*, vol. II, (ed. F. Daim), Vienna, 1992, pp. 636-637.

<sup>20</sup> Z. BOJČIĆ, Pregled istraživanja i rasprostranjenost ranosrednjovjekovnih nalaza u istočnoj Slavoniji i Baranji, in: *Arheološka istraživanja u istočnoj Slavoniji i Baranji* (Izd. HAD-a 9), (ed. N. Majnarić-Pandžić), Zagreb, 1984, p. 216, fig. 2.

<sup>21</sup> Ž. TOMIČIĆ, Rezultati ranosrednjovjekovnih arheoloških istraživanja u Međimurju i varaždinskoj regiji, in: *Arheološka istraživanja u sjeverozapadnoj Hrvatskoj* (Izd. HAD-a 2), (ed. Ž. Rapanić), Zagreb, 1978, p. 212, fig. 4.

<sup>22</sup> K. VINSKI GASPARINI - S. ERCEGOVIĆ, Ranosrednjovjekovno groblje u Brodskom Drenovcu, *Vjesnik Arheološkog muzeja u Zagrebu*, ser. 3, vol. 1, Zagreb, 1958, pp. 146, 155-156, T. IX/1-2, XII/1-2, XII/1-2. – *Hrvati i Karolinzi. Katalog*, (Ed. A. Milošević), Split, 2000, pp. 84-86, cat. entry II.2b-c, II. 3b-c, II. 4b-c (graves 1, 3 and 14 from Brodski Drenovac, early 9<sup>th</sup> century), p. 89, cat. entry II. 8a (from a ruined grave in Bogojevci by Dalj, end of the 8<sup>th</sup> – early 9<sup>th</sup> century), p. 110, cat. entry II. 56c (grave 4 from Kruge site in Zagreb, end of the 8<sup>th</sup> – early 9<sup>th</sup> century). For finds from Kruge, Zagreb, cf. also K, SIMONI, Zagreb i okolica u ranom srednjem vijeku in: *Arheološka istraživanja u Zagrebu i njegovoj okolici* (Izd. HAD-a 6), (ed. Ž. Rapanić), Zagreb, 1981, pp. 157-160, fig. 4/4.



sl. 16. Kasnoavarski željezni stremeni: 1-2. Bogojevci kod Dalja; 3. Prelog (prema: *Hrvati i Karolinzi*).  
fig. 16 Late Avar iron stirrups: 1-2. Bogojevci by Dalj; 3. Prelog (after: *Hrvati i Karolinzi*).

early Carolingian *K*-type sword and one damaged iron egg-shaped stirrup with a wrought tread and a loop for the leather, placed at right angles to the arc of the stirrup (fig. 17)<sup>23</sup>. This example, from the end of the 8<sup>th</sup> and early 9<sup>th</sup> century, like the sword, belongs in the early Carolingian cultural circle, with many analogies in the Germanic and Viking areas<sup>24</sup>.

A find of a pair of iron silver-damascened stirrups from the Sava-Drava inter-riverine area is in-

<sup>23</sup> Ž. TOMIČIĆ, Rezultati ranosrednjovjekovnih arheoloških istraživanja u Međimurju, p. 212. – Ž. TOMIČIĆ, Prilog istraživanju karolinškog oružja u Međimurju i varaždinskoj regiji, *Starohrvatska prosvjeta*, ser. 3, vol. 14, Zagreb, 1984, pp. 216-223, fig. 6. – *Hrvati i Karolinzi. Katalog*, p. 100, cat. entry II. 28.

<sup>24</sup> Cf for instance: F. STEIN, *Adelsgraber des Achten Jahrhunderts*, p. 85. – A. RUTTKAY, *Waffen und Reiterausrüstung des 9. bis zur ersten Hälfte des 14. Jahrhunderts in der Slowakei II*, *Slovenská archeológia* 24/2, Bratislava, 1976, pp. 353-356. – W. A. SEABY - P. WOODFIELD, Viking Stirrups from England and their Background, *Medieval Archaeology* 24, London, 1980, pp. 87-122. – M. SCHULZE DÖRRLAMM, Untersuchungen zur Herkunft der Ungarn und zum Beginn ihrer Landnahme im Karpatenbecken, *Jahrbuch des Römisch-Germanischen Zentralmuseums Mainz* 35/2, Mainz, 1991, pp. 425-438. – Š. KARO, Die Typologie der frühmittelalterlichen Steigbügel aus slowenischen Fundorten, in: *Zbornik na počest' Dariny Bialekovej*, (ed. G. Fusek), Nitra, 2004, pp. 165-173. – N. GOSSLER, Die mittelalterlichen Steigbügel aus dem Berliner Bestand der Prussia-Sammlung (ehemals Königsberg/Ostpreußen) - Studien zu Typologie, Chronologie und Kulturgeschichte, *Acta Praehistorica et Archaeologica* 45, Berlin, 2013, pp. 109-215.



sl. 17. Nalazi iz ranosrednjovjekovnoga groba s položaja Diven nedaleko od Preloga (prema: *Hrvati i Karolinzi*).

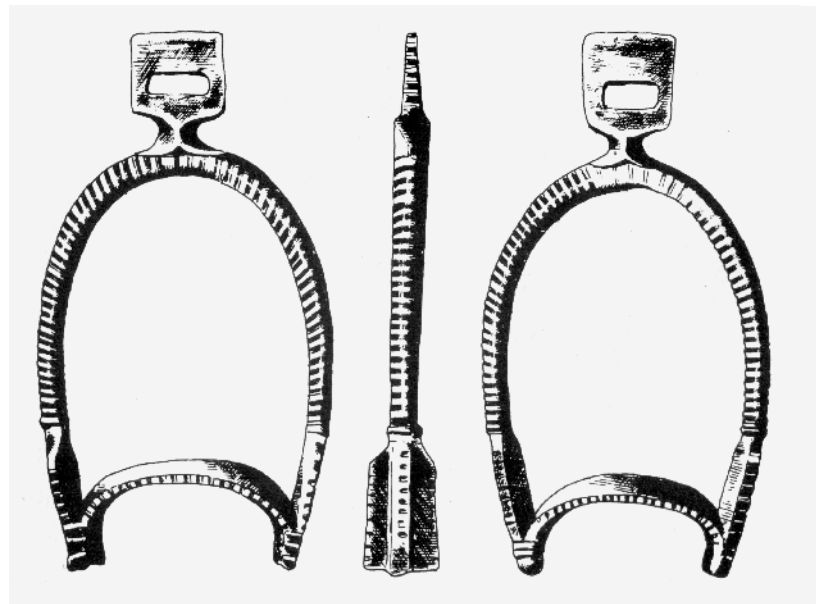
fig. 17 Diven near Prelog, finds from the early medieval grave (after: *Hrvati i Karolinzi*)

na vrhu, nego pravokutne pločice s rupom<sup>22</sup>, slično kao i na bibrirskom primjerku. Iznimka među stremenima s toga prostora je nalaz s položaja Diven kraj Cirkovljana nedaleko od Preloga. Prilikom eksploatacije riječnog pijeska na tome lokalitetu uništen je grob iz kojega je spašen ranokarolinški mač *tipa K* i jedan oštećeni željezni stremen jajolikog oblika s raskovanim gazištem i omčom za remen,

<sup>22</sup> K. VINSKI GASPARINI - S. ERCEGOVIĆ, Ranosrednjovjekovno groblje u Brodskom Drenovcu, *Vjesnik Arheološkog muzeja u Zagrebu*, ser. 3, sv. 1, Zagreb, 1958, str. 146, 155-156, T. IX/1-2, XII/1-2, XII/1-2. – *Hrvati i Karolinzi. Katalog*. (Ur. A. Milošević), Split, 2000, str. 84-86, kat. jed. II. 2b-c, II. 3b-c, II. 4b-c (grobovi 1, 3 i 14 iz Brodskoga Drenovca, početak 9. stoljeća), str. 89, kat. jed. II. 8a (stremen iz uništenog groba u Bogojevcima kod Dalja, kraj 8. – poč. 9. stoljeća), str. 110, kat. jed. II. 56c (grob 4 s položaja Kruge u Zagrebu, kraj 8. – poč. 9. stoljeća). Za nalaze s položaja Kruge u Zagrebu usp. i K. SIMONI, Zagreb i okolica u ranom srednjem vijeku, u: *Arheološka istraživanja u Zagrebu i njegovoj okolini* (Izd. HAD-a 6), (ur. Ž. Rapanić), Zagreb, 1981, str. 157-160, sl. 4/4.

okomito postavljenom na lûk stremena (sl. 17)<sup>23</sup>. Taj primjerak, s kraja 8. ili početka 9. stoljeća, kao i mač, pripada ranokarolinškom kulturnom krugu s brojnim analogijama na germanskom i vikinškom području<sup>24</sup>.

Zanimljiv nalaz iz savsko-dravskog međurječja je i par željeznih stremena tauširanih srebrom (sl. 18). S još desetak luksuznih predmeta, bili su dio inventara iz jednoga ili dvaju konjaničkih grobova, uništenih oko 1900. godine. Danas se nalaze u muzeju u Budimpešti<sup>25</sup>. Z. Vinski pretpostavlja da ih treba datirati najranije u sredinu ili u drugu polovinu 7. stoljeća, odnosno u „srednju fazu avarske dominacije“<sup>26</sup>. Upozoravajući na izuzetnu rijetkost načina ukrašavanja baranjskih stremena tauširanim srebrom, raspravu o tom nalazu Vinski je ostavio nedovršenom. Upozorava da je riječ o tehnici koja se u Karpatskoj kotlini vrlo rijetko upotrebljava, no



sl. 18. Par željeznih stremena tauširanih srebrom iz Zmajevca u Baranji (crtež: K. Rončević, prema: Ž. Tomičić)

fig. 18 Pair of iron stirrups damascened with silver from Zmajevac in Baranya (drawing: K. Rončević, after: Ž. Tomičić).

<sup>23</sup> Ž. TOMIČIĆ, Rezultati ranosrednjovjekovnih arheoloških istraživanja u Međimurju, str. 212. – Ž. TOMIČIĆ, Prilog istraživanju karolinškog oružja u Međimurju i varaždinskoj regiji, *Starohrvatska prosvjeta*, ser. 3, sv. 14, Zagreb, 1984, str. 216-223, sl. 6. – *Hrvati i Karolinzi. Katalog*, str. 100, kat. jed. II. 28.

<sup>24</sup> Usp. npr.: F. STEIN, *Adelsgraber des Achten Jahrhunderts*, str. 85. – A. RUTTKAY, *Waffen und Reiterausrüstung des 9. bis zur ersten Hälfte des 14. Jahrhunderts in der Slowakei II*, *Slovenská archeológia* 24/2, Bratislava, 1976, str. 353-356. – W. A. SEABY - P. WOODFIELD, *Viking Stirrups from England and their Background*, *Medieval Archaeology* 24, London, 1980, str. 87-122. – M. SCHULZE DÖRRLAMM, Untersuchungen zur Herkunft der Ungarn und zum Beginn ihrer Landnahme im Karpatenbecken, *Jahrbuch des Römisch-Germanischen Zentralmuseums Mainz* 35/2, Mainz, 1991, str. 425-438. – Š. KARO, Die Typologie der frühmittelalterlichen Steigbügel aus slowenischen Fundorten, u: *Zbornik na počest' Dariny Bialekovej*, (ur. G. Fusek), Nitra, 2004, str. 165-173. – N. GOSSLER, Die mittelalterlichen Steigbügel aus dem Berliner Bestand der Prussia-Sammlung (ehemals Königsberg/Ostpreußen) - Studien zu Typologie, Chronologie und Kulturgeschichte, *Acta Praehistorica et Archaeologica* 45, Berlin, 2013, str. 109-215.

<sup>25</sup> J. HAMPEL, *Alterthümer des frühen Mittelalters* 2, str. 844-846. – J. HAMPEL, *Alterthümer des frühen Mittelalters* 3, Taf. 498-500 (cijeli nalaz), stremeni na tabli 499/1-2. Pitanje je radi li se ovdje o grobnoj cjelini ili o nalazima iz nekoliko uništenih grobova. Kvalitetni crteži u: Ž. TOMIČIĆ, *Panonski periplus. Arheološka topografija kontinentalne Hrvatske*. Zagreb, 1999, str. 227.

<sup>26</sup> Z. VINSKI, O nalazima 6. i 7. stoljeća u Jugoslaviji s posebnim obzirom na arheološku ostavštinu iz vremena prvog avarskog kaganata, *Opuscula archaeologica* 3/1, Zagreb, 1958, str. 26, 30-31, T. XI/9-10.

teresting (fig. 18). With ten more luxury items, they were part of an inventory from one of two equestrian graves destroyed around 1900. Today they are in a museum in Budapest<sup>25</sup>. Z. Vinski hypothesises a date for them of, at the earliest, the middle or the second half of the 7<sup>th</sup> century, that is, the “central phase of Avar domination”<sup>26</sup>. Having drawn attention to the exceptional rarity of the manner in which these Baranya stirrups were damascened with silver, Vinski nevertheless left the discussion of the find unfinished. He stated that this was a technique that was used very seldom in the Carpathian basin, but that it was very common in central Europe and Scandinavia, mainly among equestrian requisites

<sup>25</sup> J. HAMPEL, *Alterthümer des frühen Mittelalters* 2, pp. 844-846. – J. HAMPEL, *Alterthümer des frühen Mittelalters* 3, Taf. 498-500 (whole find), stirrups on plate 499/1-2, It is questionable whether this is a grave unit or finds from several ruined graves. Good quality drawings in: Ž. TOMIČIĆ, *Panonski periplus. Arheološka topografija kontinentalne Hrvatske*. Zagreb, 1999, p. 227.

<sup>26</sup> Z. VINSKI, O nalazima 6. i 7. stoljeća u Jugoslaviji s posebnim obzirom na arheološku ostavštinu iz vremena prvog avarskog kaganata, *Opuscula archaeologica* 3/1, Zagreb, 1958, pp. 26, 30-31, T. XI/9-10.

of the 7<sup>th</sup> century, on bits and spurs<sup>27</sup>. The find was then discussed in greater detail and at greater length by E. Garam, who on the whole supported Vinski's determination and dating of the culture and time<sup>28</sup>. We would nevertheless observe that the technique of damascening with silver and gold wire is not typical only of the 7<sup>th</sup> century for – primarily in cavalry equipment – it was used in the later centuries of the Middle Ages, as shown by finds from other parts of Europe, and also from Dalmatia<sup>29</sup> and from what was once the Duchy of Greater Moravia<sup>30</sup>. It is our opinion then that the stirrups from Zmajevci, typologically, can be compared with examples found in the late Avar equestrian grave at the site of Kruge, Zagreb, which puts them chronologically in the last quarter of the 8<sup>th</sup> or in the early 9<sup>th</sup> century, but we shall leave this debate for some other occasion.

On the whole, there is a widespread opinion that the use of metal stirrups<sup>31</sup>, with a reflex (composite) arch, is the most important achievement in the development of military strategy and warfare on the medieval battlefield<sup>32</sup>. An opposite opinion is given by P. P. Azbelev, who assumes that in the earliest phase of the existence of stirrups – which at the beginning were created as a simple and practical seating for the feet of the rider – had no kind of connections with pushing the state-of-the-art in warfare. He thinks that they were originally just rid-

da je vrlo česta u srednjoj Europi i Skandinaviji, i to poglavito na jahaćim rekvizitima 7. stoljeća, na žvalama i ostrugama<sup>27</sup>. Nalaz je potom detaljnije i opširnije obradila E. Garam koja uglavnom podržava kulturno i vremensko određenje i dataciju Z. Vinskoga<sup>28</sup>. Ja bih ga ipak primijetio da tehnika ukrašavanja tauširanom zlatnom i srebrnom žicom nije svojstvena samo za 7. stoljeće jer se – prvenstveno na konjaničkoj opremi – koristi i u mlađim stoljećima srednjega vijeka, kako to pokazuju nalazi iz drugih dijelova Europa, a također iz Dalmacije<sup>29</sup> te s prostora nekadašnje Velikomoravske Kneževine<sup>30</sup>. Stoga je moje mišljenje da se stremeni iz Zmajevca, u tipološkom smislu, mogu uspoređivati i s primjercima pronađenim u kasnoavarskom konjaničkom grobu na lokalitetu Kruge u Zagrebu, što ih kronološki smješta u zadnju četvrtinu 8. i početak 9. stoljeća, no tu raspravu ostavljam za neku drugu prigodu.

Općenito se drži da je upotreba metalnih stremena<sup>31</sup>, uz refleksni (kompozitni) lûk, najvažnije postignuće u razvoju vojne strategije i tehnike ratovanja na srednjovjekovnom bojištu<sup>32</sup>. Oprečno mišljenje iznosi P. P. Azbelev koji pretpostavlja da su u najranijoj fazi svog postojanja stremeni – koji su u početku nastali kao jednostavno i praktično ležište za nogu konjanika – nisu imali nikakve veze

<sup>27</sup> Z. VINSKI, O nalazima 6. i 7. stoljeća, p. 50, n. 157a.

<sup>28</sup> É. Š. GARAM, De Fund von Vörösmart im archäologischen Nachlaß der Awarenzeit, *Folia archaeologica* 33, Budapest, 1982, pp. 187-212.

<sup>29</sup> *Hrvati i Karolinzi. Katalog*, pp. 216-217, cat. no. IV. 45 (iron spurs from grave 7 at Crkvinia in Biskupija), p. 356-357, cat. no. IV. 260 (Žeževica sword). – A. MILOŠEVIĆ, Novi mač iz Koljana u svjetlu kontakata s nordijskim zemljama u ranom srednjem vijeku, *Histria Antiqua* 21, Pula, 2012, pp. 459-470.

<sup>30</sup> *Great Moravia and the Beginnings of Christianity*, p. 344 (Mikulčice, K-swords), p. 369 (Mikulčice, spurs with set), p. 373 (Ducove, spur), p. 374 (Preostějov stirrup with damascened arms) and other finds, mostly from the 9<sup>th</sup> century.

<sup>31</sup> It is assumed that the prototypes of the metal spurs might be similar artefacts made of organic material, of wood, leather or rope; however, these materials by their very nature could not have survived. This idea is backed up by the fact that in many European languages the concept of stirrup contains the original form of this riding aid (cf. W. A. SEABY - P. WOODFIELD, Viking Stirrups, 89. – Ž. TOMIČIĆ, Prilog istraživanju karolinškog oružja u Međimurju, p. 218, n. 36).

<sup>32</sup> L. WHITE Jr., *Medieval Technology and Social Change*. Oxford, 1962, p. 14-28.

<sup>27</sup> Z. VINSKI, O nalazima 6. i 7. stoljeća, str. 50, bilj. 157a.

<sup>28</sup> É. SZ. GARAM, De Fund von Vörösmart im archäologischen Nachlaß der Awarenzeit, *Folia archaeologica* 33, Budapest, 1982, str. 187-212.

<sup>29</sup> *Hrvati i Karolinzi. Katalog*, str. 216-217, kat. br. IV. 45 (željezne ostruge iz groba 7 na Crkvinu u Biskupiji), str. 356-357, kat. br. IV. 260 (mač iz Žeževice). – A. MILOŠEVIĆ, Novi mač iz Koljana u svjetlu kontakata s nordijskim zemljama u ranom srednjem vijeku, *Histria Antiqua* 21, Pula, 2012, str. 459-470.

<sup>30</sup> *Great Moravia and the Beginnings of Christianity*, str. 344 (Mikulčice, K-mačevi), str. 369 (Mikulčice, ostruga s garniturom), str. 373 (Ducove, ostruga), str. 374 (Preostějov, stremen s tauširanim krakovima) i drugi nalazi, sve uglavnom iz 9. stoljeća.

<sup>31</sup> Pretpostavlja se da su prototipovi metalnih stremena mogli biti slične izradevine od organskih materijala, drva, kože ili užeta, no zbog trošnosti tih materijala nisu se mogli sačuvati. Ovo se mišljenje potkrjepljuje činjenicom da se u mnogim europskim jezicima pod pojmom stremena krije upravo izvorni oblik ovog jahaćeg pomagla (usp. W. A. SEABY - P. WOODFIELD, Viking Stirrups, 89. – Ž. TOMIČIĆ, Prilog istraživanju karolinškog oružja u Međimurju, str. 218, bilj. 36).

<sup>32</sup> L. WHITE Jr., *Medieval Technology and Social Change*. Oxford, 1962, str. 14-28.





sl. 19. Stremeni na spomenicima prvoga milenija: 1. Pakistan (prema: П. П. Азбелев); 2. Indija (prema: П. П. Азбелев); 3. Xi'ana u pokrajini Shaanxi u Kini (prema: W. Menghin); 4. Sargatka u Rusiji (prema: G. László); 5. oblast Perm u Rusiji (prema: A. Milošević); 6. Valencija – *Bibliothèque municipale* (crtež: N. Šimundić Bendić, prema: M. Schulze Dörrlamm); 7. S. Ambrogio u Milanu (prema: <https://piccolenote.ilgiornale.it>); 8. *Zlatni psaltir* iz S. Gallena (prema: A. Н. Кирпичников).

fig. 19 Stirrups on monuments from the first millennium: 1. Pakistan (after: П. П. Азбелев); 2. India (after: П. П. Азбелев); 3. Xi'ana in the province of Shaanxi in China (after: W. Menghin); 4. Sargatka in Russia (after: G. László); 5. district of Perm in Russia (after: A. Milošević); 6. Valencia – *Bibliothèque municipale* (drawing: N. Šimundić Bendić, after: M. Schulze Dörrlamm); 7. S. Ambrogio in Milan (after: <https://piccolenote.ilgiornale.it>); 8. *Golden Psalter* of S. Gallen (after: A. Н. Кирпичников).

s unaprjeđenjem ratovanja. On pretpostavlja da su oni izvorno bili samo jahački pribor za aristokraciju, tj. da je riječ o konjaničkoj opremi koja je bila strana nomadskoj tradiciji<sup>33</sup>. Navodi primjere *proto-stremena* koji sežu u prva stoljeća nove ere, npr. na pečatu iz Pakistana iz 1. stoljeća ili na brončanoj vazi iz doline Kullu na sjeveru Indije iz 3. stoljeća (sl. 19.1-2)<sup>34</sup>.

ing tack for the aristocracy, i.e., that this was equestrian equipment that was foreign to the nomad tradition<sup>33</sup>. He gives examples of *proto-stirrups* that go back to the first century CE, for example, on a seal from Pakistan of the 1<sup>st</sup> century, or on a bronze vase from the valley of Kullu in northern India of the 3<sup>rd</sup> century (fig. 19.1-2)<sup>34</sup>.

<sup>33</sup> П. П. АЗБЕЛЕВ, Еще раз о ранних стременах, у: *Российский археологический ежегодник 4*, Санкт-Петербург, 2014, str. 297-322, donosi nekoliko spomenika na kojima je vidljiva vrlo rana upotreba stremena među azijskim narodima. Navodi primjere „proto-stremena“ koji sežu u prva stoljeća nove ere (npr. na pečatu iz Pakistana iz 1. stoljeća, str. 304, sl. 6 ili na brončanoj vazi iz doline Kullu na sjeveru Indije iz 3. stoljeća, str. 305, sl. 7).

<sup>34</sup> Oba predmeta nalaze se u British Museumu. Usp. П. П. АЗБЕЛЕВ, Еще раз о ранних стременах, за речат из Pakistana str. 304, sl. 6, a za vazu iz Indije str. 305, sl. 7. – L. WHITE Jr., *Medieval Technology*, str. 15. bilj. 1, sumnja u autentičnost vaze iz Indije.

<sup>33</sup> П. П. АЗБЕЛЕВ, Еще раз о ранних стременах, in: *Российский археологический ежегодник 4*, Санкт-Петербург, 2014, pp. 297-322, gives several monuments on which it is possible to see the very early use of stirrups among the Asian peoples. Reference is made to examples of “proto-stirrups” that go back to the first century CE (for example, from a seal from Pakistan of the 1<sup>st</sup> century, p. 304, fig. 6 or from a bronze vase from the Kullu valley in northern India of the 3<sup>rd</sup> century, p. 305, fig. 7).

<sup>34</sup> Both objects are in the British Museum. Cf. П. П. АЗБЕЛЕВ, Еще раз о ранних стременах, for the seal from Pakistan p. 304, fig. 6, and for the vase from India p. 305, fig. 7. – L. WHITE Jr., *Medieval Technology*, p. 15. n. 1 doubts the authenticity of the Indian vase.

Archaeologists and historians have long debated and wondered about its origin. On the whole, the opinion prevails that the stirrup was first used by the Chinese and other nomadic nations in the Asian steppes as early as the 5<sup>th</sup> century (fig. 19, 3-5)<sup>35</sup> and that it was brought to Europe by the Avars in the last decades of the 6<sup>th</sup> and early 7<sup>th</sup> century<sup>36</sup>. Proponents of the Avar theory build this assumption on the fact that in several cases stirrups were found in the Avar graves along with coins from the Byzantine emperors Justinian (518-527) and Phocas (602-610). After the Avars had conquered the Carpathian basin, for some time, a new territorial unity was created, a certain social and economic coherence and stability

Arheolozi i povjesničari dugo raspravljaju i dvoje o njegovom podrijetlu. Uglavnom prevladava mišljenje da su stremen prvi upotrebljavali Kinezi i drugi nomadski narodi u azijskim stepama već u 5. stoljeću (sl. 19.3-5)<sup>35</sup> te da su ga na europsko tlo donijeli Avari u zadnjim desetljećima 6. i početkom 7. stoljeća<sup>36</sup>. Pobornici avarske teorije tu pretpostavku grade na činjenici da su u nekoliko slučajeva stremeni u avarskim grobovima nađeni uz novac bizantskih careva Justinijana (518. – 527.) i Foke (602. – 610.). Naime, avarskim osvajanjem Karpatske kotline stvoreno je, za neko vrijeme, novo teritorijalno jedinstvo i određena društveno-ekonomska koherentnost i stabilnost koja je periodički pogodovala njihovim intenzivnijim kontaktima sa

<sup>35</sup> The oldest note of the use of stirrups in Chinese sources goes back to 477 (cf. L. WHITE Jr., *Medieval Technology*, p. 15. – А. Н. КИРПИЧНИКОВ, *Снаряжение всадника и верхового коня*, p. 83-84). Also coming from Asia are very old depictions of a war horse with stirrups. On a relief from the mausoleum of Emperor T'ai Cong, from the 7<sup>th</sup> century (not far from Xi'ana in the Shaanxi province) a nomad warrior is carved, with a well equipped horse; cf. W. MENGHIN, *Die Langobarden - Archäologie und Geschichte*. Stuttgart, 1985, pp. 86-87, fig. 77. – I. BÓNA, Ungars Völker im 5. und 6. Jahrhundert, in: *Germanen, Hunen und Awaren. Schätze der Völkerwanderungszeit*, (ed. W. Menghin, T. Springer, E. Wamers), Nürnberg, 1987, pp. 126-129. In this very realistic depiction it is easy to recognise a deep saddle with ring and stirrups, harness for the sapi and the beast part of the horse and metal-fitted harness with bit and reins on his head. Comparing this depiction with data obtained from archaeological excavations – primarily in the Carpathian basin – Menghin ventures that this is a depiction that might be very close to the appearance of an Avar cavalryman. J. Hampel thought something similar when several decades ago he discussed the equipment of the nomadic cavalry and as an illustration provided a relief from a silvered post-Sassanid bowl of the 7<sup>th</sup> century, which was found in the pre-Ural Russian district of Perm (see: J. HAMPEL, *Altertümer des frühen Mittelalters* 1, 272-273, fig. 646). – G. LAŠLO, *Stepenvölker und Germanen. Kunst der Völkerwanderungszeit*. Budapest, 1970, p. 73, fig. 34. For more of this see in: A. MILOŠEVIĆ, *Tragovi starih vjerovanja*, pp. 44-45, fig. 52, pp. 106-107, fig. 113.

<sup>36</sup> F. CURTA, Three earliest Avar-age stirrups, or the “stirrup controversy“ revisited, in: *The Other Europe in the Middle Ages. Avars, Bulgars, Khazars, and Cumans*, (ed. F. Curta, R. Kovalev), Leiden - Boston, 2008, pp. 297-326. – F. CURTA, Horsemen in Fronts or Peasants in Villages? Remarks on the Archaeology of Warfare in the 6<sup>th</sup> to 7<sup>th</sup> c. Balkans, in: *War and Warfare in Late Antiquity*, (ed. A. Sarantis, N. Christie), Leiden - Boston, 2013, pp. 809-850.

<sup>35</sup> Najstarija bilješka o upotrebi stremena u kineskim izvorima seže u 477. godinu (usp. L. WHITE Jr., *Medieval Technology*, str. 15. – А. Н. КИРПИЧНИКОВ, *Снаряжение всадника и верхового коня*, str. 83-84). Iz azijskih prostora potječu i vrlo stari likovni prikazi ratničkoga konja sa stremenima. Na reljefu s mauzoleja kineskog cara T'ai Conga, iz sredine 7. stoljeća (nalazi se nedaleko Xi'ana u pokrajini Shaanxi), isklesan je nomadski ratnik s dobro opremljenim konjem, usp. W. MENGHIN, *Die Langobarden - Archäologie und Geschichte*. Stuttgart, 1985, str. 86-87, sl. 77. – I. BÓNA, Ungars Völker im 5. und 6. Jahrhundert, u: *Germanen, Hunen und Awaren. Schätze der Völkerwanderungszeit*, (ur. W. Menghin, T. Springer, E. Wamers), Nürnberg, 1987, str. 126-129. Na tome vrlo realističnom prikazu jasno je raspoznatljivo duboko sedlo s kolanom i stremenima, orma za sapi i prsni dio konja te okovano remenje sa žvalama i uzdama na njegovoj glavi. Uspoređujući taj prikaz s podacima dobivenim arheološkim istraživanjima – prvenstveno u Karpatskom bazenu – Menghin pretpostavlja da je riječ o prikazu koji bi mogao biti vrlo blizak izgledu avarskog konjanika. Slično je razmišljao i J. Hampel kada je prije više desetljeća raspravljao o opremi nomadskih konjanika te je kao ilustraciju donio reljef s jedne posrebrene postsasanidske zdjele 7. stoljeća, koja je pronađena u preduralskoj ruskoj oblasti Perm (vidi: J. HAMPEL, *Altertümer des frühen Mittelalters* 1, 272-273, sl. 646). – G. LASZLO, *Stepenvölker und Germanen. Kunst der Völkerwanderungszeit*. Budapest, 1970, str. 73, sl. 34. O tome vidi i u: A. MILOŠEVIĆ, *Tragovi starih vjerovanja*, str. 44-45, sl. 52, str. 106-107, sl. 113.

<sup>36</sup> F. CURTA, Thee earliest Avar-age stirrups, or the “stirrup controversy“ revisited, u: *The Other Europe in the Middle Ages. Avars, Bulgars, Khazars, and Cumans*, (ur. F. Curta, R. Kovalev), Leiden - Boston, 2008, str. 297-326. – F. CURTA, Horsmen in Fronts or Peasants in Villages? Remarks on the Archaeologz of Warfare in the 6<sup>th</sup> to 7<sup>th</sup> c. Balkans, u: *War and Warfare in Late Antiquity*, (ur. A. Sarantis, N. Christie), Leiden - Boston, 2013, str. 809-850.

susjedima<sup>37</sup>. Također se pretpostavlja da su ta osvajanja pokrenula novu seobu Langobarda prema zapadu, tako i prijenos stremena kao važnoga dijela konjaničke ratničke opreme, što je potvrđeno nalazima stremena u langobardskim grobovima u Italiji i istovremenim bajuvarskim nalazima u južnoj Njemačkoj<sup>38</sup>.

Druga grupa stručnjaka, inspirirana tekstem L. Whitea<sup>39</sup>, ističe značaj bizantskog miljea kao posrednika koji je praktičnu upotrebu stremena iz Azije, preko Arapa, najprije integrirao u svoje konjaništvo, a potom ju je, preko oblasti sjeverno od Crnoga mora, prenio u konjaničku opremu europskih ratnika<sup>40</sup>. No arheološki argumenti, koji se

that from time to time favoured them having more vigorous contacts with their neighbours<sup>37</sup>.

It is also supposed that these conquests set off a new migration of the Langobards to the west, and thus the transfer of the stirrup as an important part of the accoutrements of the cavalry, as confirmed by finds of stirrups in Langobard graves in Italy and contemporaneous Bavarian finds in southern Germany<sup>38</sup>.

A different group of experts, inspired by the book of L. White<sup>39</sup>, point to the importance of the Byzantine milieu as a mediator that first of all integrated the practical use of the stirrup – from Asia via the Arabs – into its own cavalry, and then, via

<sup>37</sup> I. BÓNA, Neue Nachbarn im Osten. Die Awaren, u: *Die Bajuwaren. Von Severin zu Tassilo 488-788*, (ur. H. Dannaheimer, H. Dopsch), München - Salzburg, 1988, str. 108. Upravo stremeni ukazuju na mogućnost prožimanja kultura u širokoj zoni od istočnomerovinskih područja pa do Karpatske kotline, na kraju 6. i u 7. stoljeću. Također, izmiješanost drugih arheoloških nalaza u objema tim zonama, pretpostavlja i zaključak da su u to vrijeme robe i ljudi slobodnije cirkulirali. U nekim područjima to je rezultiralo gotovo potpunim restrukturiranjem gospodarskih sustava, a djelomično (na regionalnoj razini) i izmjenom autohtonoga genoma lokalnog stanovništva, pogotovo nakon (ne uvijek mirne) integracije različitih kultura i etničkih skupina. O tome vidi u: V. LA SALVIA, Germanic populations and Steppe people (An example of the integration of material cultures. The diffusion of the Stirrup in the eastern Merovingian area), *Chronica* 11, Szeged, 2012, str. 88-95. Ovakvim generalnim zaključcima možda se može objasniti i neobični nalaz srebrom tauširanog para stremena u Zmajevcu u Baranji (vidi bilj. 24-27).

<sup>38</sup> L. WHITE Jr., *Medieval Technology*, str. 23. – D. CSALLÁNY, *Archäologische Denkmäler der Awarenzeit in Mitteleuropa: Schriftum und Fundorte*. Budapest, 1956, str. 77-220. – V. LA SALVIA Germanic populations, str. 78-95 (opširnija lit. u bilj. 3).

<sup>39</sup> L. WHITE Jr., *Medieval Technology*, str. 14-28.

<sup>40</sup> Cs. BÁLINT, Byzantinisches zur Herkunftsfrage des vielteigen Gürtels, u: *Kontakte zwischen Iran, Byzanz und der Steppe im 6.-7. Jahrhundert*, (ur. Cs. Bálint), *Varia Archaeologica Hungarica* 10, Budapest, 2000, str. 99, 101-104, 120-21, 136-38, bilj. 117-127. – Cs. BÁLINT, Zur Geschichte und Archäologie der osteuropäischen Reiterhirten im Frühmittelalter, u: *Reitervölker aus dem Osten. Hunnen und Awaren*, (ur. F. Daim), Bad Vöslau, 1996, str. 202-204. – Cs. BÁLINT, Über die Datierung der osteuropäischen Steppenfunde des frühen Mittelalters (Schwierigkeiten und Möglichkeiten), *Mitteilungen des archäologische Insitut der Ungarische Akadamie des Wissenschaften* 14, Budapest, 1985, str. 137-47. – Cs. BÁLINT, *Die Archäologie der Steppe. Steppenvölker zwischen Wolga und Donau von 6. bis 9. Jahrhunderts*. Wien - Köln, 1989.

<sup>37</sup> I. BÓNA, Neue Nachbarn im Osten. Die Awaren, in: *Die Bajuwaren. Von Severin zu Tassilo 488-788*, (ed. H. Dannaheimer, H. Dopsch), München - Salzburg, 1988, p. 108. It is stirrups that indicate the ability for cultures to have been mutually assimilated over a wide area from the eastern Merovingian areas to the Carpathian basin at the end of the 6<sup>th</sup> and in the 7<sup>th</sup> century, Also, the mingling of other archaeological finds in both of these zones suggests the conclusion that at that time there was a free circulation of goods nad people. In some areas this resulted in an almost total restructuring of economic systems, and partially (at the regional level) in the modification of the indigenous genome of the local people after the not always peaceful integration of various cultures and ethnic groups. For more see in: V. LA SALVIA, Germanic populations and Steppe people (An example of the integration of material cultures. The diffusion of the Stirrup in the eastern Merovingian area), *Chronica* 11, Šeged, 2012, pp. 88-95. Suchlike general conclusions may serve to explain the uncommon find of a silver damascened pair of stirrups in Zmajevac in Baranya. See n. 24-27).

<sup>38</sup> L. WHITE Jr., *Medieval Technology*, p. 23. – D. CSALLÁNY, *Archäologische Denkmäler der Awarenzeit in Mitteleuropa: Schriftum und Fundorte*. Budapest, 1956, pp. 77-220. – V. LA SALVIA Germanic populations, pp. 78-95 (more extensive lit. in n. 3).

<sup>39</sup> L. WHITE Jr., *Medieval Technology*, pp. 14-28.

<sup>40</sup> Cs. BÁLINT, Byzantinisches zur Herkunftsfrage des vielteigen Gürtels, in: *Kontakte zwischen Iran, Byzanz und der Steppe im 6.-7. Jahrhundert*, (ed. Cs. Bálint), *Varia Archaeologica Hungarica* 10, Budapest, 2000, pp. 99, 101-104, 120-21, 136-38, n. 117-127. – Cs. BÁLINT, Zur Geschichte und Archäologie der osteuropäischen Reiterhirten im Frühmittelalter, in: *Reitervölker aus dem Osten. Hunnen und Awaren*, (ed. F. Daim), Bad Vöslau, 1996, pp. 202-204. – Cs. BÁLINT, Über die Datierung der osteuropäischen Steppenfunde des frühen Mittelalters (Schwierigkeiten und Möglichkeiten), *Mitteilungen des archäologische Insitut der Ungarische Akadamie des Wissenschaften* 14, Budapest, 1985, pp. 137-47. – Cs. BÁLINT, *Die Archäologie der Steppe. Steppenvölker zwischen Wolga und*

the themes north of the Black Sea, transmitted it to the cavalry equipment of European men-at-arms<sup>40</sup>. But the archaeological support put forward as confirmation of such an opinion is not entirely convincing, for the earliest, and key, finds, on which such assumptions can be built, come from mixed archaeological contexts that do not permit any simple classification and identification, because of the diverse cultural influences present in these units<sup>41</sup>. The hypothesis of a Byzantine origin for the stirrup would tend to be supported by the fact that from that milieu came the oldest information about this part of horse tack, and in two places it is mentioned in the *Strategikon*, the authorship of which is ascribed to Emperor Maurice (582-602). According to the writing of Emperor Leo VI (886-911) we know that in his age the stirrup was part of the standard equipment of Byzantine heavy cavalry<sup>42</sup>.

On the basis of available data, it is still difficult to draw a generally acceptable conclusion about the origin of the stirrup in Europe. Both theories, the Avar and the Byzantine, rely on indirect or dubious evidence, because of which their conclusions are untrustworthy. Most probably, as already stated in the literature, the introduction of the stirrup into Europe should be explained as the result of a long process in which new technologies in military equipment were applied, and, as a result, in the techniques of warfare. It is also completely certain that the process started in the 4<sup>th</sup> or 5<sup>th</sup> century, in distant Asia, and that through the several ages, not only the Avars might have taken part in it, but also the Byzantines and the Arabs<sup>43</sup>.

Whatever the case may be, it seems incontestable today that stirrups came into wide use in Europe at the turn of the 7<sup>th</sup> / 8<sup>th</sup> century. Such an opinion is based on findings of several cavalry graves from the Germanic area, but it is still unsettled whether they were plunder or gifts from the Avar Khanate,

*Donau von 6. bis 9. Jahrhunderts*. Vienna-Cologne, 1989.

<sup>41</sup> V. LA SALVIA, Germanic populations, pp. 78-79.

<sup>42</sup> L. WHITE Jr., *Medieval Technology*, pp. 20, 26.

<sup>43</sup> B. S. BACHARACH, A picture of Avar-Frankish Warfare from a Carolingian Psalter of the Early Ninth Century in Light of the *Strategikon*, *Archivum Eurasie Medii Aevi* 4, Wiesbaden, 1984, pp. 5-27. – B. GENITO, Sepolture con cavallo da Vicenne (CB): un rituale nomadico di origine centroasiatica, in: *I Congresso Nazionale di Archeologia Medievale*, Pisa, 29-31 maggio 1997, (ed. S. Gelichi), Florence, 1997, p. 287.

iznose kao potvrda takvom mišljenju, nisu u potpunosti uvjerljivi jer najraniji i ključni nalazi, na kojima se mogu graditi takve pretpostavke, dolaze iz mješovitih arheoloških konteksta koji ne dopuštaju jednostavnu klasifikaciju i identifikaciju zbog različitih kulturnih utjecaja prisutnih u tim cjelinama<sup>41</sup>. Pretpostavci o bizantskom podrijetlu stremena ide na ruku i činjenica da upravo iz te sredine dolazi i najstariji podatak o tom dijelu konjske opreme, a na dvama mjestima je zabilježen u *Strategikonu*, čije se autorstvo pripisuje bizantskom caru Mauriciju (582. – 602.). Prema pisanju cara Lava VI. (886. – 911.) znamo da stremeni u njegovo doba ulaze u standardnu opremu teškoga bizantskog konjaništva<sup>42</sup>.

Na temelju dostupnih podataka, još uvijek je, dakle teško izvući općeprihvatljiv zaključak o podrijetlu stremena u Europi. Obje teorije, i avarska i bizantska, oslanjaju se na neizravne ili upitne dokaze, zbog čega su im i zaključci nevjerodostojni. Najvjerojatnije bi, kako je već iznijeto u literaturi, uvođenje i razvoj stremena u Europi trebalo tumačiti kao rezultat dugog procesa u kojemu su primjenjivane nove tehnologije u vojnoj opremi, pa posljedično i u načinu ratovanja. Uz to je sasvim izvjesno da je taj proces započeo u 4. ili 5. stoljeću, u dalekoj Aziji te da su u njemu kroz nekoliko vjekova, osim Avara, mogli sudjelovati drugi narodi i kulture, pa tako i Bizantinci i Arapi<sup>43</sup>.

Bilo kako bilo, danas se čini nespornim da stremeni u širu upotrebu u Europi ulaze na prijelazu iz 7. u 8. stoljeće, a takvo mišljenje oslanja se na nalaze nekoliko konjaničkih grobova s germanskog područja, no i dalje stoji otvoreno pitanje je li tu riječ o plijenu ili poklonu iz Avarskoga Kaganata, ili pak o imitacijama koje su nastale kao posljedica čestih kontakata s Avarima<sup>44</sup>. Napokon, L. White Jr.,

<sup>41</sup> V. LA SALVIA, Germanic populations, str. 78-79.

<sup>42</sup> L. WHITE Jr., *Medieval Technology*, str. 20, 26.

<sup>43</sup> B. S. BACHARACH, A picture of Avar-Frankish Warfare from a Carolingian Psalter of the Early Ninth Century in Light of the *Strategikon*, *Archivum Eurasie Medii Aevi* 4, Wiesbaden, 1984, str. 5-27. – B. GENITO, Sepolture con cavallo da Vicenne (CB): un rituale nomadico di origine centroasiatica, u: *I Congresso Nazionale di Archeologia Medievale*, Pisa, 29-31 maggio 1997, (ur. S. Gelichi), Florence, 1997, str. 287.

<sup>44</sup> W. WECK, Die Alamannen in Württemberg, *Germanische Denkmäler der Völkerwanderungszeit* 1, Berlin, 1931, str. 75. – H. MÜLLER KARPE, Gräber der Urnenfelder - und Frühhallstattkultur aus der Gegend von Marburg, u: *Hessische Funde von der Altsteinzeit*



nakon kraće analize, zaključuje da stremeni u širu upotrebu u zapadnoj Europi ulaze u prvoj polovini 8. stoljeća, u doba Karla Martela (718. – 741.)<sup>45</sup>, što djelomično potvrđuju i arheološki nalazi<sup>46</sup>. Reorganizacijom franačkog konjaništva u ranokarolinško doba, a pod utjecajem Vikinga od kraja 8. stoljeća<sup>47</sup>, stremeni postupno ulaze u opću upotrebu što je dokazivo brojnim arheološkim nalazima u raznim europskim zemljama, a također i prvim likovnim izvedbama. Kao najraniji takvi prikazi u europskoj umjetnosti najčešće se navode dva konjanička motiva na zlatnom oltaru crkve S. Ambrogio u Milanu iz oko 840. godine (sl. 19.7) i nekoliko sitnoslikarskih izvedbi u *Zlatnom psaltiru* iz samostana S. Gallen iz druge polovine 9. stoljeća (sl. 19.8)<sup>48</sup>. Ovim likovnim izvedbama može se dodati i minijatura iz jedne ranosrednjovjekovne *Apokalypse*, iz prve trećine 9. stoljeća, koja prikazuje ratnika koji, s nogama umetnutim u stremene, jaše fantastičnu životinju (sl. 19.6). S obzirom na to da je taj rukopis je iz prve trećine 9. stoljeća, to je, za sada, ujedno i najraniji prikaz upotrebe stremena u europskoj umjetnosti<sup>49</sup>.

*bis zum frühen Mittelalter, Schriften zur Urgeschichte. Hessisches Landesmuseum Kassel 2*, (ur. H. Müller Karpe), Marburg, 1949, str. 29-45. – L. WHITE Jr., *Medieval Technology*, str. 23-25.

- <sup>45</sup> L. WHITE Jr., *Medieval Technology*, str. 27. – W. A. SEABY - P. WOODFIELD, Viking Stirrups, str. 89. Iznose se arheološki dokazi da je stremen prvi put u velikoj mjeri i usvojen u opsežnoj reorganizaciji merovinške vojske u prvoj polovini 8. stoljeća te da je upotreba stremena doprinijela pobjedi Karla Martela nad muslimanskim snagama u Poitiersu.
- <sup>46</sup> W. A. SEABY - P. WOODFIELD, Viking Stirrups, str. 89. – F. STEIN, *Adelsgraber des Achten Jahrhunderts*, str. 85.
- <sup>47</sup> W. A. SEABY - P. WOODFIELD, Viking Stirrups, str. 89-94.
- <sup>48</sup> L. WHITE Jr., *Medieval Technology*, str. 26. – C. HAHN, Narrative on the Golden Altar of Sant' Ambrogio in Milan: Presentation and Reception, *Dumbarton Oaks Papers* 53, Washington, 1999, str. 167-187. – J. HUBERT - J. PORCHER - W. F. VOLBACH, *L'Empire carolingien*. Paris, 1968, str. 240-246.
- <sup>49</sup> Valencija - *Bibliothèque municipale*, Ms. 99, fol. 19r za što usp.: M. SCHULZE DÖRRLAMM, Zwei ungewöhnliche Bronzeschlüssel der Karolingerzeit - ein Amulettsschlüssel aus Mainz und ein „Petrußchlüssel“ aus Alzey, u: *Grosso Modo - Quellen und Funde aus Spätantike und Mittelalter: Festschrift für Gerhard Fingerlin zum 75. Geburtstag*, (ur. N. Krohn, U. Koch), *Forschungen zu Spätantike und Mittelalter* 1, Weinstadt, 2012, str. 193-194, sl. 3.

or perhaps imitations, which were created as a result of frequent contacts with the Avars<sup>44</sup>. Finally, L. White, after a brief analysis, concludes that stirrups came into wide use in Western Europe in the first half of the 8<sup>th</sup> century, in the Charles Martel period (718-741)<sup>45</sup>, which is partially confirmed by archaeological finds<sup>46</sup>. When the French cavalry was reorganised in the early Carolingian period, under the impact of the Vikings, from the end of the 8<sup>th</sup> century<sup>47</sup>, stirrups gradually came into general use, as shown by many archaeological finds in various European countries, and also in the first visual performances. The earliest such depictions in European art, it is often said, are two equestrian motifs on the golden altar of St Ambrose's in Milan, from about 840 (fig. 19.7) and several miniatures in the *Golden Psalter* from the monastery of St Gallen of the second half of the 9<sup>th</sup> century (fig. 19.8)<sup>48</sup>. To these visual productions we can add a miniature from an early medieval *Apocalypse* from the first third of the 9<sup>th</sup> century, showing a warrior who was riding a fantastic animal, his feet in stirrups (fig. 19.6). Since this manuscript is from the first third of the 9<sup>th</sup> century, it is also one of the earliest depictions of the use of the stirrup in European art<sup>49</sup>.

- <sup>44</sup> W. WECK, Die Alamannen in Württemberg, *Germanische Denkmäler der Völkerwanderungszeit* 1, Berlin, 1931, p. 75. – H. MÜLLER KARPE, Gräber der Urnenfelder - und Frühhallstattkultur aus der Gegend von Marburg, in: *Hessische Funde von der Altsteinzeit bis zum frühen Mittelalter, Schriften zur Urgeschichte. Hessisches Landesmuseum Kassel 2*, (ed. H. Müller Karpe), Marburg, 1949, pp. 29-45. – L. WHITE Jr., *Medieval Technology*, pp. 23-25.
- <sup>45</sup> L. WHITE Jr., *Medieval Technology*, p. 27. – W. A. SEABY - P. WOODFIELD, Viking Stirrups, p. 89. Archaeological evidence is adduced for stirrups first being used on a large scale and adopted in a big reorganisation of the Merovingian army in the first half of the 8<sup>th</sup> century and that the use of the stirrup contributed to the victory of Charles Martel over the Muslim forces at the Battle of Poitiers (Tours).
- <sup>46</sup> W. A. SEABY - P. WOODFIELD, Viking Stirrups, p. 89. – F. STEIN, *Adelsgraber des Achten Jahrhunderts*, p. 85.
- <sup>47</sup> W. A. SEABY - P. WOODFIELD, Viking Stirrups, pp. 89-94.
- <sup>48</sup> L. WHITE Jr., *Medieval Technology*, p. 26. – C. HAHN, Narrative on the Golden Altar of Sant' Ambrogio in Milan: Presentation and Reception, *Dumbarton Oaks Papers* 53, Washington, 1999, pp. 167-187. – J. HUBERT - J. PORCHER - W. F. VOLBACH, *L'Empire carolingien*. Paris, 1968, pp. 240-246.
- <sup>49</sup> Valencija - *Bibliothèque municipale*, Ms. 99, fol. 19r for which cf.: M. SCHULZE-DÖRRLAMM, Zwei

The numbers of stirrups found in European and Central Asian sites and their diversity long ago inclined experts to deal with their typological classification and chronological determination, and on some occasions with an attempt to group them culturally and regionally. Sometimes there has been an attempt, by the study of this kind of find, to explain possible cultural and mercantile contacts, as well frequent military clashes to which were connected the displacements of different ethnic groups that were associated with a given type of stirrup.

A key contribution to these endeavours was made by great experts and honoured precursors of the turn of the 19<sup>th</sup> and 20<sup>th</sup> centuries, A. Schlieben, Z. Schile, R. Forrer and J. Hampel<sup>50</sup> and on the basis of their work by P. Reinecke, E. M. Jope and L. T. White Jr.<sup>51</sup>. From the second half of the 20<sup>th</sup> century the literature about these issues has increased enormously, on the whole respecting the regional principle as the beginning of the debate. Thus, along with a large number of discussions published about individual finds, there have been studies of examples of stirrups from England<sup>52</sup>, from the Germanic and Scandinavian area<sup>53</sup>, from Transylvania<sup>54</sup>, from

ungewöhnliche Bronzeschlüssel der Karolingerzeit - ein Amulettschlüssel aus Mainz und ein „Petrußchlüssel“ aus Alzey, in: *Grosso Modo - Quellen und Funde aus Spätantike und Mittelalter: Festschrift für Gerhard Fingerlin zum 75. Geburtstag*, (ed. N. Krohn, U. Koch), *Forschungen zu Spätantike und Mittelalter* 1, Weinstadt, 2012, pp. 193-194, fig. 3.

- <sup>50</sup> A. SCHLIEBEN, Geschichte des Steigbügel, *Annalen des Vereins für Nassauische Altertumskunde und Geschichtsforschung* 24, Wiesbaden, 1892. – R. ZSCHILLE - R. FORRER, *Die Steigbügel in ihrer Formen-Entwicklung. Characterisierung und Datierung der Steigbügel unserer Culturvölker*. Berlin, 1896, (reprint). – J. HAMPEL, *Alterthümer des frühen Mittelalters*, Vol. I, pp. 217-242.
- <sup>51</sup> P. REINECKE, Zur Geschichte des Steigbügels, *Germania* 17/3, Berlin, 1933. pp. 220-222. – E. M. JOPE, Agricultural Implements, in: *The Mediterranean Civilizations and the Middle Ages*, (ed. Ch. Singer, E. J. Holmyard, A. R. Hall, T. I. Williams), *A History of Technology* 2, Oxford, 1956, pp. 81-102. – L. WHITE Jr., *Medieval Technology*, pp. 1-38.
- <sup>52</sup> W. A. SEABY - P. WOODFIELD, Viking Stirrups, pp. 87-122.
- <sup>53</sup> N. GOSSLER, Die mittelalterlichen Steigbügel, p. 109-215. – N. GOSSLER, *Reiter und Ritter – Formenkunde, Chronologie, Verwendung und gesellschaftliche Bedeutung des mittelalterlichen Reitzubehörs aus Deutschland*. Schwerin, 2011, pp. 145-146. – N. GOSSLER, Wikingerzeitliche Waffen und Reitzubehörfunde aus dem Berliner Bestand der Prussia-

Brojnost i raznovrsnost stremena pronađenih na velikom broju europskih i prednjoazijskih nalazišta već je davno nagnala stručnjake da se pozabave njihovim tipološkim razvrstavanjem i kronološkim određenjem, a u određenim prilikama i pokušajem njihovoga kulturnog i regionalnog grupiranja. Ponekad se nastojalo, proučavanjem upravo te vrste nalaza, objašnjavati i moguće kulturne i trgovačke kontakte, a nerijetko i ratne sukobe uz koje su bila povezana pomjerenja različitih etničkih skupina koje su bile nositelji određenog tipa stremena.

Ključni doprinos u tim nastojanjima dali su veliki stručnjaci i naši časni prethodnici s kraja 19. i početka 20. stoljeća, A. Schlieben, Z. Schile, R. Forrer i J. Hampel<sup>50</sup> i na njihovim zasadama P. Reinecke, E. M. Jope i L. T. White Jr.<sup>51</sup>. Od druge polovine 20. stoljeća pa do danas literatura o tim pitanjima se umnogostručila, uglavnom poštujući regionalni princip kao početak rasprave. Tako su, pored velikog broja objavljenih rasprava o pojedinačnim nalazima, obrađeni primjerice stremeni iz Engleske<sup>52</sup>, s germanskog i skandinavskog prostora<sup>53</sup>, iz Transilvanije<sup>54</sup>, iz srednjeg Podunavlja<sup>55</sup>, iz Poljske<sup>56</sup> i

- <sup>50</sup> A. SCHLIEBEN, Geschichte des Steigbügel, *Annalen des Vereins für Nassauische Altertumskunde und Geschichtsforschung* 24, Wiesbaden, 1892. – R. ZSCHILLE - R. FORRER, *Die Steigbügel in ihrer Formen-Entwicklung. Characterisierung und Datierung der Steigbügel unserer Culturvölker*. Berlin, 1896, (reprint). – J. HAMPEL, *Alterthümer des frühen Mittelalters*, Vol. I, str. 217-242.
- <sup>51</sup> P. REINECKE, Zur Geschichte des Steigbügels, *Germania* 17/3, Berlin, 1933. str. 220-222. – E. M. JOPE, Agricultural Implements, u: *The Mediterranean Civilizations and the Middle Ages*, (ur. Ch. Singer, E. J. Holmyard, A. R. Hall, T. I. Williams), *A History of Technology* 2, Oxford, 1956, str. 81-102. – L. WHITE Jr., *Medieval Technology*, str. 1-38.
- <sup>52</sup> W. A. SEABY - P. WOODFIELD, Viking Stirrups, str. 87-122.
- <sup>53</sup> N. GOSSLER, Die mittelalterlichen Steigbügel, str. 109-215. – N. GOSSLER, *Reiter und Ritter – Formenkunde, Chronologie, Verwendung und gesellschaftliche Bedeutung des mittelalterlichen Reitzubehörs aus Deutschland*. Schwerin, 2011, str. 145-146. – N. GOSSLER, Wikingerzeitliche Waffen und Reitzubehörfunde aus dem Berliner Bestand der Prussia-Sammlung (ehemals Königsberg/Ostpreußen) und ihre Beziehung zu Skandinavien, *Acta Praehistorica et Archaeologica* 46, Berlin, 2014, str. 1-26.
- <sup>54</sup> E. GÁLL, An attempt to classify the stirrups dating from the 10<sup>th</sup> century and the first quarter of the 11<sup>th</sup> century in the Transylvanian Basin, the Crişana/Parthium and the Banat with an outlook to the Carpathian Basin, u: *Warriors, Weapons and harness from the 5<sup>th</sup>-*

prednjoazijskih (ruskih) prostora<sup>57</sup>, protobugarski stremeni<sup>58</sup>, stremeni s područja Slovenije<sup>59</sup>, s područja Velikomoravske Kneževine<sup>60</sup>...

*10<sup>th</sup> centuries in the Carpatian Basin*, (ur. C. Cosma), Cluj - Napoca, 2015, str. 355-406.

<sup>55</sup> CS. BÁLINT, *Die Archäologie der Steppe*, u: *Steppenvölker zwischen Volga und Donau vom 6. bis zum 10. Jahrhundert*, (ur. F. Daim), Wien - Köln - Böhlau, 1989. – M. SCHULZE DÖRRLAMM, *Untersuchungen zur Herkunft der Ungarn*, str. 425-438, popis nalazišta na str. 470-471.

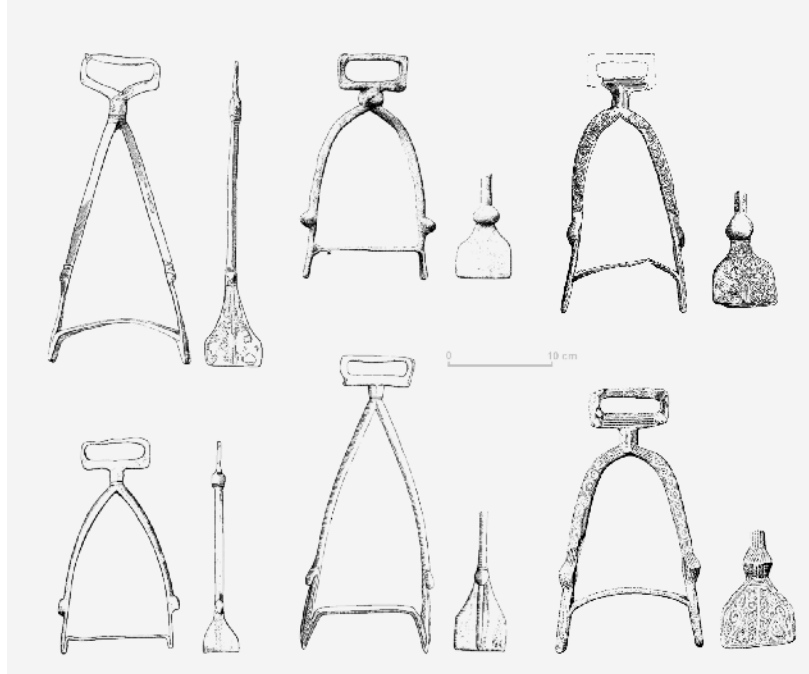
<sup>56</sup> D. NOWAKOWSKA CWETSCH, *Strzemiona z terenu Polski (do XIV wieku): próba typologii*, *Światowit* 35, Warszawa, 1986, str. 65-81. – W. ŚWIĘTOŚLAWSKI, *Strzemiona średniowieczne z ziem Polski*. Łódź, 1990, o podrijetlu i tipologiji stremena na str. 20-33.

<sup>57</sup> Ruska literatura o stremenima ranoga srednjeg vijeka je kao stepa, vrlo prostrana i nesaglediva. U cijelom tom prostranstvu upozoravamo na: A. H. КИРПИЧНИКОВ, *Снаряжение всадника и верхового коня*, str. 83-116, sl. 65-68. – A. К. АМБРОЗ, *Стремена и сёдла раннего средневековья как хронологический показатель (IV-VIII вв.)*, *Советская археология* 4, Москва, 1973, str. 81-86. – С. В. НЕВЕРОВ, *Стремена Верхнего Приобья в VII-XII вв. (классификация и типология)*, u: *Снаряжение верхового коня на Алтае в раннем железном веке и средневековье*, Алтайский государственный университет, Барнаул, 1998, str. 129-151. – А. КРЫГАНОВ, *Восточноевропейские кочевнические стремена второй половины VII-X вв.*, *Вестник Харьковского университета*, 343, история, вып., 23, Харьков, 1989, str. 92-121.

<sup>58</sup> В. ЙОТОВ, *Стремената на прабългарите*, str. 125-134, s tipologijom stremena bizantskoga podrijetla od 7. do 11. stoljeća u Bugarskoj. Zanimljivi su tauširanjem ukrašeni stremeni iz Varne, danas u Arheološkom muzeju u Sofiji, datirani na kraj 8. i 9. stoljeće, str. 131, sl. 8. – В. ЙОТОВ, *Относно датировката на сборната находка от Стрежево, Битолско*, u: *Проблеми на прабългарската история и култура* 42, София, 2007, str. 173-182. – П. В. КРАСИЛЬНИКОВ, *К вопросу о типологии стремян с памятников раннебулгарского времени*, u: *Труды Камской археолого-этнографической экспедиции*, Пермь, 2012, str. 360-367.

<sup>59</sup> Š. KARO, *Die Typologie der frühmittelalterlichen Steigbügel aus slowenischen*, str. 165-173.

<sup>60</sup> A. RUTTKAY, *Waffen und Reiterausrüstung des 9. bis zur ersten Hälfte des 14. Jahrhunderts in der Slowakei II*, *Slovenská archeológia* 24/2, Bratislava, 1976, str. 353-356. – Z. MĚCHUROVÁ, *Trmeny a jiné součásti sedla z časné středověkého období*, *Časopis Moravského muzea v Brně* 68, Brno, 1983, str. 61-87. – A. BARTOŠKOVÁ, *Slovanské depoty železných předmětů v Československu*, *Studie archeologického ústavu Československé akademie Věd*, Praha, 1986. – M. SCHULZE DÖRRLAMM, *Untersuchungen zur Herkunft der Ungarn*, str. 425-438.



sl. 20. Vikinški stremeni iz Engleske (prema: W. A. Seaby, P. Woodfield).  
fig. 20 Viking stirrups from England (after: W. A. Seaby, P. Woodfield).

the central Danube valley<sup>55</sup>, from Poland<sup>56</sup> and the central Asian (Russian) space<sup>57</sup>, of proto-Bulgari-

Sammlung (ehemals Königsberg/Ostproußen) und ihre Beziehung zu Skandinavien, *Acta Praehistorica et Archaeologica* 46, Berlin, 2014, pp. 1-26.

<sup>54</sup> E. GÁLL, *An attempt to classify the stirrups dating from the 10<sup>th</sup> century and the first quarter of the 11<sup>th</sup> century in the Transylvanian Basin, the Crişana/Partium and the Banat with an outlook to the Carpathian Basin*, in: *Warriors, Weapons and Harness from the 5<sup>th</sup>-10<sup>th</sup> centuries in the Carpathian Basin*, (ed. C. Cosma), Cluj - Napoca, 2015, pp. 355-406.

<sup>55</sup> CS. BÁLINT, *Die Archäologie der Steppe*, in: *Steppenvölker zwischen Volga und Donau vom 6. bis zum 10. Jahrhundert*, (ed. F. Daim), Wien - Köln - Böhlau, 1989. – M. SCHULZE DÖRRLAMM, *Untersuchungen zur Herkunft der Ungarn*, pp. 425-438, list of sites on pp. 470-471.

<sup>56</sup> D. NOWAKOWSKA CWETSCH, *Strzemiona z terenu Polski (do XIV wieku): próba typologii*, *Światowit* 35, Warszawa, 1986, pp. 65-81. – W. ŚWIĘTOŚLAWSKI, *Strzemiona średniowieczne z ziem Polski*. Łódź, 1990, on the origin and typology of stirrups on pp. 20-33.

<sup>57</sup> Russian literature about the stirrups of the Early Middle age is like the steppes in its vastness and immensity. In the whole of this great expanse, we would mention: A. H. КИРПИЧНИКОВ, *Снаряжение всадника и верхового коня*, pp. 83-116, figs. 65-68. – A. К. АМБРОЗ, *Стремена и сёдла раннего средневековья как хронологический показатель (IV-VIII вв.)*, *Советская археология* 4, Москва, 1973, pp. 81-86. – С. В. НЕВЕРОВ, *Стремена Верхнего Приобья в VII-XII вв. (классификация и типология)*, in: *Снаряжение верхового коня на Алтае в раннем железном веке и средневековье*, Алтайский государственный университет, Барнаул, 1998, pp. 129-151. – А. КРЫГАНОВ, *Восточноевропейские*

an stirrups<sup>58</sup>, stirrups from Slovenia<sup>59</sup> and Greater Moravia<sup>60</sup>...

Not a single one of these discussions of typology and chronology of medieval stirrups, selected and relevant to our discussion though they are<sup>61</sup>, gives a simple answer to the question of the type and time to which the specimen from Bribir might belong. Still, with an analysis of individual details, which are referential for typological determination, our opinion is that it can be discussed as a product of the Early Middle Age. The markedly triangular shape is an important marker from this point of view. Such shapes on the whole belong to the early medieval period, from the end of the 8<sup>th</sup> to the end of the 9<sup>th</sup> century, and have been found in a string of sites, from the Steppes to Western and Northern Europe<sup>62</sup>. On them there are on the whole mainly

кочевнические стремена второй половины VII-X вв., *Вестник Харьковского университета*, 343, история, вып., 23, Харьков, 1989, pp. 92-121.

<sup>58</sup> В. ЙОТОВ, Стремената на прабългарите, pp. 125-134, with a typology of stirrups of Byzantine origin from the 7<sup>th</sup> to 11<sup>th</sup> century in Bulgaria. There are interesting damascened stirrups from Varna, today in the Archaeological Museum in Sofia, dated to the end of the 8<sup>th</sup> and the 9<sup>th</sup> century, p. 131, fig. 8. – В. ЙОТОВ, Относно датировката на сборната находка от Стрежево, Битолско, in: *Проблеми на прабългарската история и култура* 42, София, 2007, pp. 173-182. – П. В. КРАСИЛЬНИКОВ, К вопросу о типологии стремян с памятников раннебулгарского времени, in: *Труды Камской археолого-этнографической экспедиции*, Пермь, 2012, pp. 360-367.

<sup>59</sup> Š. KARO, Die Typologie der frühmittelalterlichen Steigbügel aus slowenischen, pp. 165-173.

<sup>60</sup> A. RUTTKAY, Waffen und Reiterausrüstung des 9. bis zur ersten Hälfte des 14. Jahrhunderts in der Slowakei II, *Slovenská archeológia* 24/2, Bratislava, 1976, pp. 353-356. – Z. MĚCHUROVÁ, Třmeny a jiné součásti sedla z časně středověkého období, *Časopis Moravského muzea v Brně* 68, Brno, 1983, pp. 61-87. – A. BARTOŠKOVÁ, Slovanské depoty železných předmětů v Československu, *Studie archeologického ústavu Československé akademie Věd*, Praha, 1986. – M. SCHULZE DÖRRLAMM, Untersuchungen zur Herkunft der Ungarn, pp. 425-438.

<sup>61</sup> See n. 49-59. The main reference indicators for their typological determination are the basic shape of the stirrups, the appearance of the lugs or plates with a hole through which to draw the leathers and the form of the wrought tread. Not a single one of these indicators is specific for just one type, for they are used in variations and combinations.

<sup>62</sup> С. В. НЕБЕРОВ, Стремена Верхнего Приобья, p. 130 (*Class I, types 1 and 2*). – N. GOSSLER, Die mittelalterlichen Steigbügel, pp. 114-116, 127-130 (*Type*

Ni jedna od ovdje odabranih i za nas relevantnih tipološko-kronoloških rasprava o stremenima srednjega vijeka<sup>61</sup> ne pruža jednostavan odgovor na pitanje kojem tipu i kojem vremenu bi mogao pripadati primjerak s Bribira. Ipak, analizom pojedinih detalja, koji su referentni za tipološko određenje, moje je mišljenje da se o njemu može raspravljati kao o proizvodu ranoga srednjeg vijeka. Izrazito trokutasti oblik je važan pokazatelj u tom smislu. Takvi oblici uglavnom pripadaju ranome srednjem vijeku, od kraja 8. do kraja 9. stoljeća, a pronađeni su na nizu lokaliteta od ruskih stepa do zapadne i sjeverne Europe<sup>62</sup>. Na njima su pretežito pločice s rupom za remen, sa zemljopisno najbližim analogijama u ranokarolinškim stremenima iz Slovenije<sup>63</sup>. Raskovano gazište im je ravno ili konkavno i konveksno savinuto. Važan detalj na stremenu s Bribira su zadebljanja pri dnu krakova, na spoju s ravnim raskovanim gazištem, što je svojstveno sjevernoeuropskim nalazima 10. i početka 11. stoljeća (sl. 20)<sup>64</sup>. U tipološkom smislu bibrirski stremen naglašenog trokutastog oblika, u odnosu na europske primjere, pokazuje jednostavniju formu, što može biti razlog za njegovu raniju dataciju. Okrugle rupice na spoju krakova stremena i pločice za remen su bez analogija među srednjovjekovnim primjercima.

Specifičnost bibrirskog stremena je i njegova ukrašenosť. Izvorno mu je bila ukrašena cijela vanjska strana, donja strana gazišta i pločica za remen. Ukraš s krakova je gotovo u potpunosti otpao i sačuvan je tek u tragovima. Dade se naslutiti da je bio

<sup>61</sup> Vidi bilj. 49-59. Glavni referentni pokazatelji za njihovo tipološko određenje su osnovni oblik stremena, izgled ušice ili pločice s rupom za provlačenje remena i forma raskovanoga gazišta. Pri tome ni jedan od ovih pokazatelja nije specifičan za jedan tip jer se koriste u raznim varijantama i kombinacijama.

<sup>62</sup> С. В. НЕБЕРОВ, Стремена Верхнего Приобья, str. 130 (*razred I, tip 1 i 2*). – N. GOSSLER, Die mittelalterlichen Steigbügel, str. 114-116, 127-130 (*tip A I*). – N. GOSSLER, Wikingerzeitliche Waffen, str. 2-5. – W. A. SEABY - P. WOODFIELD, Viking Stirrups, str. 87-122.

<sup>63</sup> Š. KARO, Die Typologie der frühmittelalterlichen Steigbügel aus slowenischen, str. 167-169, sl. 3-4 (primjerci definirani kao *tip 2* i datirani u kraj 8. ili početak 9. stoljeća).

<sup>64</sup> W. A. SEABY, Late Dark Age Finds from the Cherwell and Ray, 1876-86, *Oxoniensia* 15, Oxford, 1950, str. 33-34, 38-39, sl. 14, T. VI/A. – W. A. SEABY - P. WOODFIELD, Viking Stirrups, sl. 4-10. Kao važnu osobinu nordijskih stremena karolinškog doba taj zadebljani detalj već su davno istaknuli R. ZSCHILLE - R. FORRER, *Die Steigbügel*, str. 4-6, sl. 3.





sl. 21. Bribirski stremen: 1. ukrašena pločica za remen; 2. stremen u pogledu sa svih strana (foto: A. Z. Alajbeg).

fig. 21 Bribir stirrup: 1. decorated plate for leathers; 2. stirrup in a view from all around (photograph: A. Z. Alajbeg)

izveden srebrnom tauširanom žicom. Istom tehnikom ukrašena je i donja strana gazišta koja je cijela bila pokrivena dijagonalno postavljenom mrežom malih pravilnih kvadrata (sl. 21.2). Istom tehnikom i sličnim ornamentom ukrašen je i jedan ranokarolinški stremen iz Celja u Sloveniji (sl. 22)<sup>65</sup>, a vrlo dobra analogija za naš primjerak s Bribira je i stremen 9. stoljeća iz Švicarske, kojemu je pločica za remen također ukrašena srebrnom dijagonalnom mrežom. Za nas je posebno zanimljivo da taj stremen ima naglašeni trokutasti oblik i zadebljanja na spoju lukova s raskovanim gazištem (sl. 23.2)<sup>66</sup>. Tauširanom mesinganom žicom, dijagonalni mrežasti ornament izveden je i na jabučici jednoga mača iz Hessena u Njemačkoj (sl. 23.1)<sup>67</sup>.

<sup>65</sup> Š. KARO, Die Typologie der frühmittelalterlichen Steigbügel aus slowenischen, str. 168-169, sl. 4/1.

<sup>66</sup> R. ZSCHILLE - R. FORRER, *Die Steigbügel*, str. 20, T. I.20.

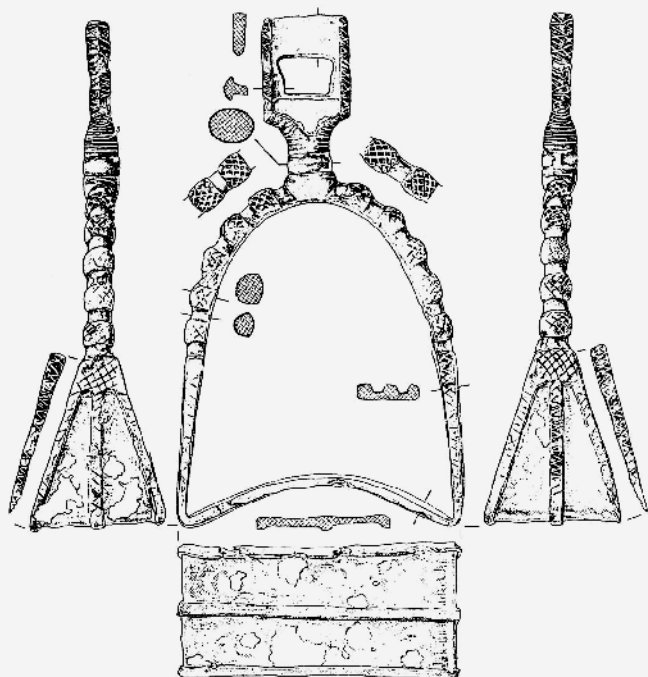
<sup>67</sup> 799 - *Kunst und Kultur der Karolingerzeit. Karl der Große und Papst Leo III. in Paderborn*. Bd. 1, (ur. Ch. Stiegemann, M. Wemhof), Paderborn, 1999, str. 279-280, kat. jed. V.17.

plates with a hole for the leather, with the geographically closest analogies in the early Carolingian stirrups from Slovenia<sup>65</sup>. Their opulent tread is straight or bent, concavely or convexly. An important detail on the Bribir stirrup is the thickening at the bottom of the arms, at the join with the straight hammered tread, which is proper to northern European finds of the 10<sup>th</sup> and early 11<sup>th</sup> century (fig. 20)<sup>64</sup>. In a typological sense, the Bribir stirrup of a marked trian-

<sup>64</sup> A. J). – N. GOSSLER, *Wikingerzeitliche Waffen*, pp. 2-5. – W. A. SEABY - P. WOODFIELD, *Viking Stirrups*, pp. 87-122.

<sup>65</sup> Š. KARO, Die Typologie der frühmittelalterlichen Steigbügel aus slowenischen, pp. 167-169, figs. 3-4 (examples defined as Type 2 and dated to the end of the 8<sup>th</sup> and the early 9<sup>th</sup> century).

<sup>64</sup> W. A. SEABY, *Late Dark Age Finds from the Cherwell and Ray, 1876-86*, *Oxoniensia* 15, Oxford, 1950, pp. 33-34, 38-39, fig. 14, T. VI/A. – W. A. SEABY - P. WOODFIELD, *Viking Stirrups*, fig. 4-10. This thickened detail was long ago noted as an important feature of Nordic stirrups of the Carolingian age by R. ZSCHILLE - R. FORRER, *Die Steigbügel*, pp. 4-6, fig. 3.

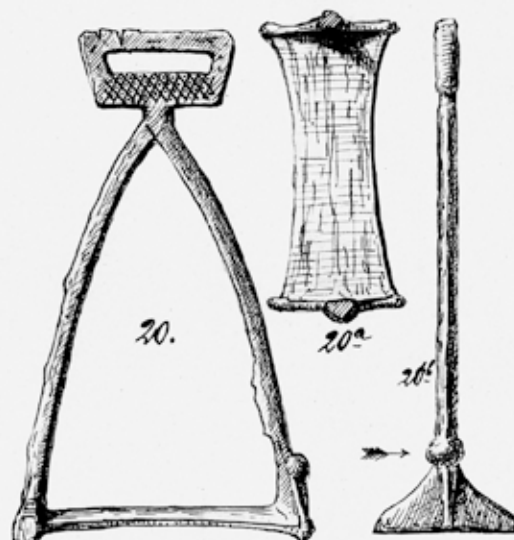


sl. 22. Ranosrednjovjekovni stremen iz Celja ukrašen tauširanim mrežastim ornamentom (prema: Š. Karo).  
fig. 22 Early medieval stirrup from Celje decorated with a damascened lattice ornament (after Š. Karo).

gular shape, as compared with European examples, shows a simpler form, which could be a reason to date it earlier. The round perforations at the joins of the arms of the stirrup and the plate for the leather strap have no analogies in medieval examples.

The specific feature of the Bribir stirrup is its decorativeness. Originally the whole of the outer face of it was ornamented, the lower side of the tread, and the plate for the strap. The decoration has been almost completely effaced from the arms and is preserved only in traces. It can be guessed that it was done with silver damascene wire. The lower side of the tread was done in the same technique, being entirely covered with diagonal network of small regular squares (fig. 21.2). One early Carolingian stirrup from Celje, Slovenia (fig. 22)<sup>65</sup> is decorated in the same technique and with a similar ornamentation, and a very good analogy for our Bribir specimen is a 9<sup>th</sup> century Swiss stirrup, the strap plate of which is also decorated with a silver diagonal reticulation. Particularly interesting for us is that this stirrup has a markedly triangular shape and a thickening at the

<sup>65</sup> Š. KARO, Die Typologie der frühmittelalterlichen Steigbügel aus slowenischen, p. 168-169, fig. 4/1.



sl. 23. Ranosrednjovjekovni proizvodi ukrašeni tauširanim mrežastim ornamentom: 1. kasnomeroviška jabučica mača (prema: 799 - *Kunst und Kultur*); 2. ranokarolinški stremen iz Švicarske (prema: Z. Schille, R. Forrer).

fig. 23 Early medieval products decorated with damascened lattice ornamentation: 1. late Merovingian sword pommel (after: 799 – *Kunst und Kultur*); 2. early Carolingian stirrup from Switzerland (after: Z. Schille, R. Forrer).

Najsloženije je ukrašena vanjska strana pločice bibriskog stremena (sl.3.3, 21.1, 24). Različitim motivima, izvedenim tauširanjem zlatne i srebrne žice, ukrašena joj je cijela površina. Središnji srebrni motiv je komponiran dvjema nasuprotnim bezglavim pticama postavljenima u trokut, možda s ugledanjem na ranosrednjovjekovne zabate oltarnih ograda na kojima su upravo tako postavljene ptice sa strana križa najčešći ikonografski motiv. Na vrh tako formiranoga trokuta nasadena je okrunjena muška glava s krunom otvorenog tipa i s privjescima ili dijelom koji pokriva glavu s objiju strana, na sličan način kako je to u velikom broju primjera izvedeno na bizantskom imperijalnom novcu<sup>68</sup>, a ta-

<sup>68</sup> Ph. GRIERSON, *Byzantine Coinage*. Washington D.C., 1999, str. 29.



sl. 24. Bribirski stremen (rekonstrukcija ukrasa: D. Popović).  
fig. 24 Bribir stirrup (reconstruction of the decoration: D. Popović).

kođer i na poznatoj ploči oltarne ograde koja je danas interpolirana u splitsku krstionicu<sup>69</sup>. Vrlo dobra usporedba je i kruna na glavi jahača ugraviranog na razrezanom pladnju s poluotoka Jamal na sjeveru Rusije (sl. 25)<sup>70</sup>, što možda otvara i druge mogućnosti istraživanja. Ikonografsko značenje kompozicije na pločici za remen još treba istraživati. Ostali prostor pločice, primjenjujući *horror vacui*, ispunjavaju biljni i vitičasti ornamenti izvedeni tauširanom zlatnom žicom.

Za vremensko i kulturno određenje stremena s Bribira zanimljiva može biti i tehnika ukrašavanja – tauširanje zlatnom i srebrnom žicom. U europskom

joins of the arcs with the hammered out tread (fig. 23.2)<sup>66</sup>. The same diagonal reticulated ornament is also produced with damascened brass wire on the pommel of a sword from Hessen in Germany (fig. 23.1)<sup>67</sup>.

The most complexly ornamented is the outer side of the plate of the Bribir stirrup (fig. 3.3, 21.1, 24). The whole surface of it is decorated with various motifs produced in damascening with gold and silver wire. The central silver motif is composed of two opposed headless birds placed in a triangle, perhaps modelled on early medieval gables of rood-screens on which birds are placed in just the same way at the sides of a cross, the most frequent iconographic motif. At the peak of a triangle so formed is placed a crowned male head, with a crown of the open type, with pendants or a part that covers the head on both sides, in a manner similar to that found in a large number of examples on imperial

<sup>69</sup> V. KLAJIĆ, Kruna kralja Tomislava, u: *Crtice iz hrvatske prošlosti*, (ur. J. Nagy), Zagreb, 1928, str. 88-90. – I. GUBERINA, O postanku hrvatske krune. (Viest X. vieka o slici 'nedavno umrloga kralja'), *Hrvatska revija* 16/1, Zagreb, 1943, str. 1-14. – LJ. KARAMAN, Još o kruni hrvatskih kraljeva, *Obzor* 78-84/73, Zagreb, 1932. – I. FISKOVIĆ, Reljef kralja Petra Krešimira IV., *Starohrvatska prosvjeta*, ser. 3, sv. 28-29, Split, 2002, str. 24-25.

<sup>70</sup> Н. В. ФЕДОРОВА, Торевтика Волжской Болгарии. Серебряные изделия X-XIV вв. из зауральских коллекций, *Труды Камской археологической экспедиции*, Вып. 3. Пермь, 2003, str. 141-142, sl. 6. Različito se datira, u 8., odnosno u 10. – 11. stoljeće.

<sup>66</sup> R. ZSCHILLE - R. FORRER, *Die Steigbügel*, p. 20, T. I.20.

<sup>67</sup> 799 - *Kunst und Kultur der Karolingerzeit. Karl der Große und Papst Leo III. in Paderborn*. Bd. 1, (ed. Ch. Stiegemann, M. Wemhof), Paderborn, 1999, pp. 279-280, cat. entry V.17.



Byzantine coins<sup>68</sup>, and also on the well-known altar screen that is today incorporated into the Split baptistery<sup>69</sup>. A very good comparison is also the crown on the head of a rider engraved on a cut platter from the Yamal Peninsula in northern Russia (fig. 25)<sup>70</sup>, which perhaps starts up other research possibilities. The rest of the space of the plate, applying the principle of horror of the vacuum, is filled up with plant and tendril ornaments done with damascened gold wire.

For the temporal and cultural determination of the Bribir stirrup, the technique of decoration could well be interesting, that is, the gold and silver wire damascening. In the European Early Middle Age, it was used more and more from the Merovingian period on, particularly central Europe and Scandinavia, most often on artefacts that belonged to harness and the accoutrements of riders<sup>71</sup>. In a reduced extent, objects of the same kind were damascened in the later centuries of the Early Middle Age. We would refer, as the closest find geographically, to a pair of iron spurs with a partially preserved fastening set from Biskupija by Knin<sup>72</sup> and to early Carolingian swords from Žeževica and Koljane (fig. 26)<sup>73</sup>. We have already mentioned the Celje stirrup



sl. 25. Jahač s krunom na razrezanom srebrnom pladnju s poluotoka Jamal na sjeveru Rusije (prema: N. V. Fedorova).

fig. 25 Rider with crown on a cut silver platter from Yamal Peninsula, northern Russia (after: N. F. Fedorova).

ranom srednjem vijeku intezivnije se koristi od merovinskog razdoblja, osobito u srednjoj Europi i u Skandinaviji, i to najčešće na izrađevinama koje pripadaju konjskoj ormi i opremi jahača<sup>71</sup>. U smanjenom obimu, tauširanjem se dekoriraju i predmeti iste vrste u mlađim stoljećima ranoga srednjeg vijeka. Kao prostorno najbliži nalaz upozoravam na par željeznih ostruga s djelomično sačuvanom garniturom za zakopčavanje iz Biskupije kod Knina<sup>72</sup> i na ranokarolinške mačeve iz Žeževice i Koljana (sl.

<sup>68</sup> Ph. GRIERSON, *Byzantine Coinage*. Washington D.C., 1999, p. 29.

<sup>69</sup> V. KLAČIĆ, Kruna kralja Tomislava, in: *Crte iz hrvatske prošlosti*, (ed. J. Nagy), Zagreb, 1928, pp. 88-90. – I. GUBERINA, O postanku hrvatske krune. (Viest X. vieka o slici 'nedavno umrloga kralja'), *Hrvatska revija* 16/1, Zagreb, 1943, pp. 1-14. – LJ. KARAMAN, Još o kruni hrvatskih kraljeva, *Obzor* 78-84/73, Zagreb, 1932. – I. FISKOVIĆ, Reljef kralja Petra Krešimira IV., *Starohrvatska prosvjeta*, ser. 3, vol. 28-29, Split, 2002, pp. 24-25.

<sup>70</sup> Н. В. ФЕДОРОВА, Торевтика Волжской Болгарии. Серебряные изделия X-XIV вв. из зауральских коллекций, *Труды Камской археологической экспедиции*, Вып. 3. Пермь, 2003, pp. 141-142, fig. 6. Dated variously to the 8<sup>th</sup> or to the 10<sup>th</sup> and 11<sup>th</sup> centuries.

<sup>71</sup> H. ROTH, *Kunst und Handwerk im frühen Mittelalter*. Stuttgart, 1986, pp. 41-43, 53-54. – *Tauschierarbeiten der Merowingerzeit*. (Ed. W. Menghin), Berlin, 1994.

<sup>72</sup> A. MILOŠEVIĆ, Karolinški utjecaji u Hrvatskoj kneževini u svjetlu arheoloških nalaza, in: *Hrvati i Karolinzi. Rasprave i vrela*. (Ed. A. Milošević), Split, 2000, pp. 121-122. – *Hrvati i Karolinzi. Katalog*, cat. no. IV.45, pp. 216-217.

<sup>73</sup> For the Žeževica sword see: *Hrvati i Karolinzi. Katalog*, cat. entry IV. 260, pp. 356-358. – A. PITEŠA, *Katalog nalaza iz vremena seobe naroda, srednjeg i novog vijeka u Arheološkome muzeju u Splitu*. Split, 2009, pp. 53-55, and for the Koljano sword, see in: A. MILOŠEVIĆ, Novi mač iz Koljana, pp. 459-470.

<sup>71</sup> H. ROTH, *Kunst und Handwerk im frühen Mittelalter*. Stuttgart, 1986, str. 41-43, 53-54. – *Tauschierarbeiten der Merowingerzeit*. (Ur. W. Menghin), Berlin, 1994.

<sup>72</sup> A. MILOŠEVIĆ, Karolinški utjecaji u Hrvatskoj kneževini u svjetlu arheoloških nalaza, u: *Hrvati i Karolinzi. Rasprave i vrela*. (Ur. A. Milošević), Split, 2000, str. 121-122. – *Hrvati i Karolinzi. Katalog*, kat. br. IV.45, str. 216-217.

26)<sup>73</sup>. Stremen iz Celja (sl. 22) već smo spomenuli. Njemu treba dodati i nekoliko proizvoda s područja Velikomoravske Kneževine<sup>74</sup>, predmete iz drugih dijelova Karolinškoga Carstva<sup>75</sup> te nalaze iz Skandinavije i Engleske<sup>76</sup>.

Je li u nekom od tih područja i radioničko podrijetlo bibrskog stremena ili je on izrađen pod tim utjecajima<sup>77</sup>, za sada se ne može pouzdano utvrditi, no vrlo je vjerojatno da je riječ o ranosrednjovjekovnom proizvodu, bez izravnih analogija u sličnim predmetima toga vremena u Europi. Tehnika ukrašavanja i pogotovo oblik stremena glavni su razlozi za ovakvo naše mišljenje, premda smo svjesni činjenice da se na sličan način dekoriraju ratnički artefakti i u mlađim stoljećima srednjeg vijeka. Za to su vrlo dobar primjer ukrašeni buzdovani s balkanskih nalazišta koja su nekada bila dio Bizantskoga Carstva (sl. 27)<sup>78</sup>. No kako god daljnja pro-

<sup>73</sup> Za mač iz Žeževice vidi: *Hrvati i Karolinzi. Katalog*, kat. jed. IV. 260, str. 356-358. – A. PITEŠA, *Katalog nalaza iz vremena seobe naroda, srednjeg i novog vijeka u Arheološkom muzeju u Splitu*. Split, 2009, str. 53-55, a za mač iz Koljana u: A. MILOŠEVIĆ, *Novi mač iz Koljana*, str. 459-470.

<sup>74</sup> Npr. *Great Moravia and the Beginnings of Christianity*, str. 327, 344, 345, 369, 370, 373, 374, 376.

<sup>75</sup> Npr. R. ZSCHILLE - R. FORRER, *Die Steigbugel*, T. I.1-2, II. 1-3, 5. – F. STEIN, *Adelsgraber des Achten Jahrhunderts*, T. 58/3-4, 66/2-3, 75, 79, 80, 81, 85, 88.

<sup>76</sup> Npr. W. A. SEABY - P. WOODFIELD, *Viking Stirrups*, str. 87-122. – N. GOSSLER, *Wikingerzeitliche Waffen*, str. 2-4. – M. KARA, *Frühmittelalterliches Grab eines bewaffneten Kaufmannes aus dem ort Cieple (Warmhof) in danziger Pommern im Lichte einer erneuten Analyse*, *Acta universitatis Lodyensis, Folia archaeologica* 23, Łódź, 2001, str. 136-139.

<sup>77</sup> U tome smislu može biti zanimljiv fragment jednog stremena ukrašenog u skandinavskom *Borre-stilu*, nađen u ranosrednjovjekovnom grobu na poluotoku Samland/Sambia u Kaliningradskoj oblasti (usp. N. GOSSLER, *Wikingerzeitliche Waffen*, str. 4-6, sl. 3).

<sup>78</sup> Jedan primjerak donosi R. D'AMATO, *The war-mace of Byzantium, the 9<sup>th</sup>-15<sup>th</sup> c. AD. New evidences from the Balkans in the collection of the World Museum of Man*, Florida, *Acta Militaria Mediaevalia* 7, Kraków - Rzeszów - Sanok, 2011, str. 38, 40, sl. 23.5. Za taj željezni primjerak ukrašen tauširanom srebrnom mrežom se navodi da je pronađen u balkanskom dijelu Podunavlja. Pretpostavlja se da je pripadao visokom vojnom časniku u razdoblju između kraja 12. i 14. stoljeća. Nekoliko na sličan način ukrašenih buzdovana iz Bugarske donosi i S. POPOV, *The Maces from the Present Bulgarian Lands (10<sup>th</sup>-17<sup>th</sup> c. AD)*. *Vatevi Collection*. Sofia, 2015, str. 296-297, kat. br. 296, 297, str. 298, kat. br. 299, str. 280, kat. br. 414, str. 404, kat. br. 448. Uglavnom su datirani u 13. – 14. stoljeće.



sl. 26. Ranosrednjovjekovni proizvodi ukrašeni tauširanom srebrnom i mesinganom žicom: 1. ostruge iz Biskupije kod Knina (foto: A. Z. Alajbeg); 2. jabučica mača iz Koljana (foto: M. Rogošić); 3-4. jabučice mačeva iz Haithabua (prema: E. Wamers); 5-6. jabučice mačeva iz Mikulčica (prema: J. Košta).

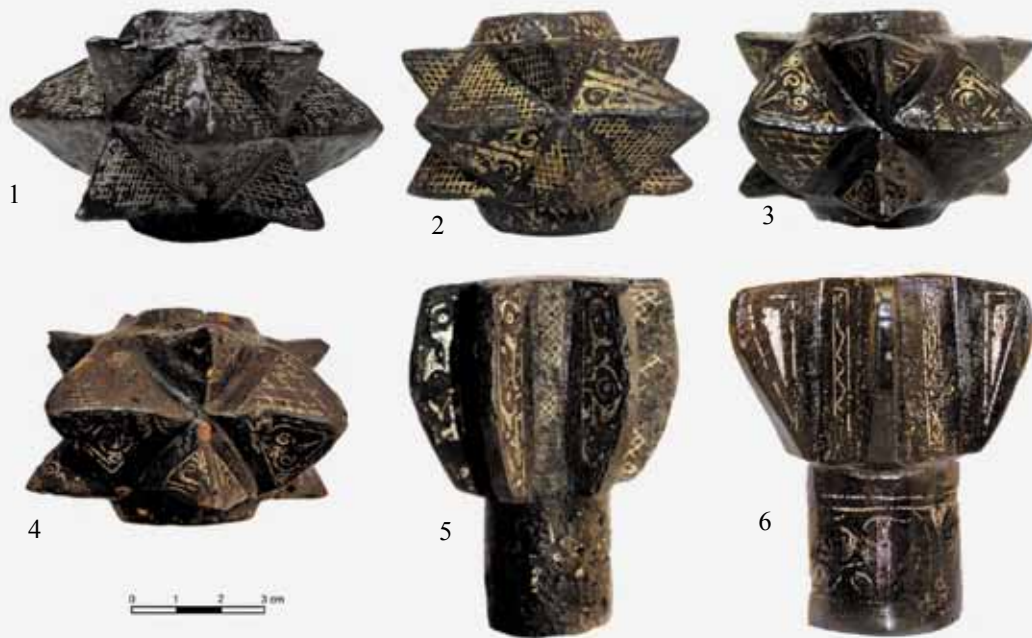
(fig. 22). To it should be added several products from Greater Moravia Duchy<sup>74</sup>, objects from other parts of the Carolingian Empire<sup>75</sup> and finds from Scandinavia and England<sup>76</sup>.

<sup>74</sup> E.g. *Great Moravia and the Beginnings of Christianity*, pp. 327, 344, 345, 369, 370, 373, 374, 376.

<sup>75</sup> Npr. R. ZSCHILLE - R. FORRER, *Die Steigbugel*, T. I.1-2, II. 1-3, 5. – F. STEIN, *Adelsgraber des Achten Jahrhunderts*, T. 58/3-4, 66/2-3, 75, 79, 80, 81, 85, 88.

<sup>76</sup> Npr. W. A. SEABY - P. WOODFIELD, *Viking Stirrups*, pp. 87-122. – N. GOSSLER, *Wikingerzeitliche Waffen*, pp. 2-4. – M. KARA, *Frühmittelalterliches Grab eines bewaffneten Kaufmannes aus dem ort Cieple (Warmhof) in danziger Pommern im Lichte einer erneuten Analyse*, *Acta universitatis Lodyensis, Folia archaeologica* 23, Łódź, 2001, pp. 136-139.





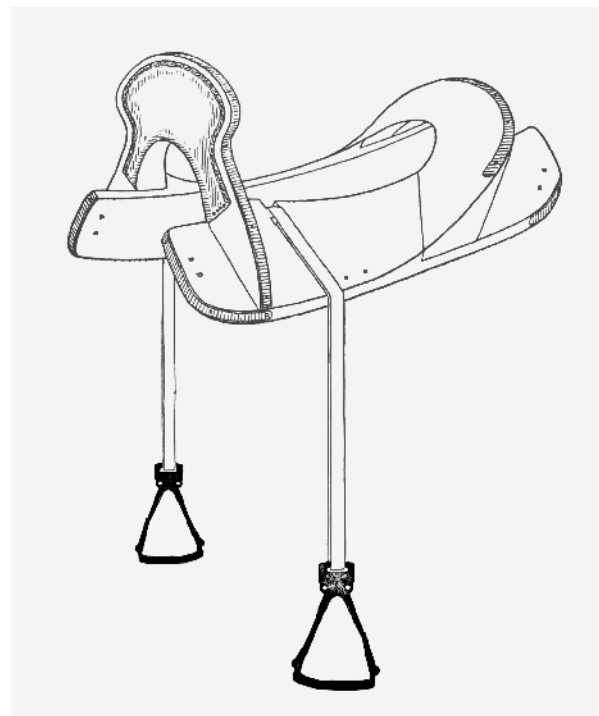
sl. 27. Buzdovani ukrašeni tauširanjem: 1. balkanski dio Podunavlja (prema: R. D'Amato);  
2-6. Bugarska, *Vatevi kolekcija* (prema: S. Popov).

fig. 27 Maces decorated with damascening: 1. Balkan part of the Danube valley (after: R. D'Amato);  
2-6. Bulgaria, *Vatevi Collection* (after: S. Popov).

It is impossible to say at the moment with any certainty whether the Bribir stirrup originated in a workshop in one of these regions, or whether it was made under the influence of them<sup>77</sup>, but it is very probable that it is an early medieval product, without direct analogies in similar objects of the time in Europe. The decoration technique and particularly the shape of the stirrup are the reasons for this kind of thinking, although we must be aware that artefacts of warfare were decorated in a similar way in the later centuries of the Middle Ages. A very good example of this is the decorated maces from the Balkan sites that were once part of the Byzantine Empire (fig. 27)<sup>78</sup>. But however further study of the

<sup>77</sup> Perhaps interesting from this point of view is a fragment of a stirrup decorated in Scandinavian Borre-style, found in an early medieval grave on the Samland/Sambia peninsula in the Kaliningrad district (cf. N. GOSSLER, *Wikingerzeitliche Waffen*, pp. 4-6, fig. 3).

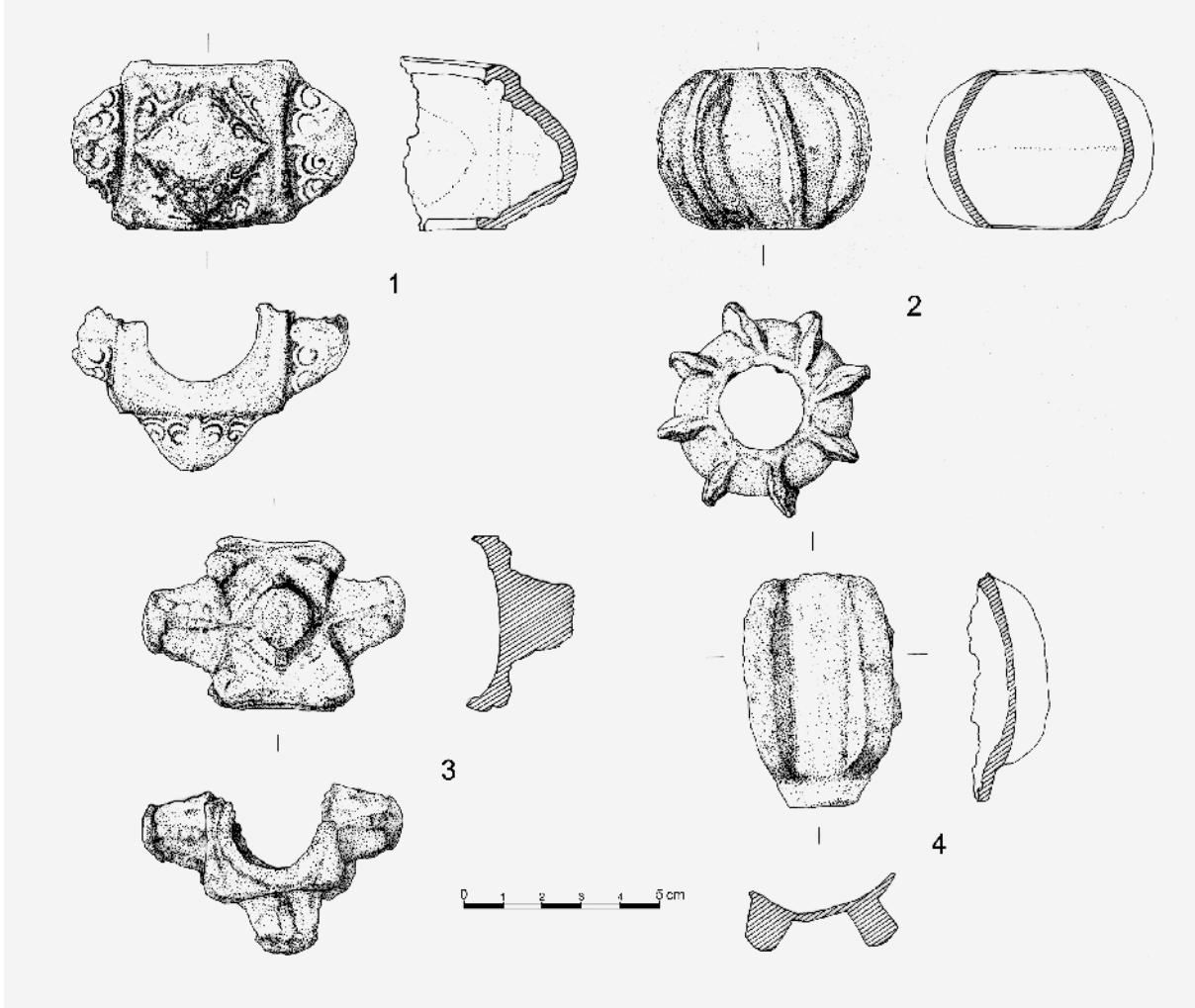
<sup>78</sup> An example is provided by R. D'AMATO, *The war-mace of Byzantium, the 9<sup>th</sup>-15<sup>th</sup> c. AD. New evidence from the Balkans in the collection of the World Museum of Man, Florida, Acta Militaria Mediaevalia 7, Kraków – Rzešów - Sanok, 2011, pp. 38, 40, fig. 23.5. This iron specimen decorated with a damascened silver lattice is said to have been found in the Balkan part of the Danube valley. It is hypothesised to have belonged to a senior officer in the period between the end of the 12<sup>th</sup> and the 14<sup>th</sup> century. A number of similarly decorated maces from Bulgaria are cited by S. POPOV, *The Maces from the Present Bulgarian Lands (10<sup>th</sup>-17<sup>th</sup> c. AD). Vatevi Collection*. Sofia, 2015, p. 296-297, cat. no. 296, 297, p. 298, cat. no. 299, p. 280, cat. no. 414, p. 404, cat. no. 448. On the whole they are dated to the 13<sup>th</sup> to 14<sup>th</sup> centuries.*



sl. 28. Rekonstrukcija ranosrednjovjekovnog sedla sa stremenima.

fig. 28 Reconstruction of an early medieval saddle with stirrups.

učavanja bibriskog stremena završila, vjerujem da ona neće izići iz vremenskog okvira omeđenog 9. i 11. stoljećem. U ovome trenutku, s obzirom na to da je riječ o jedinstvenom nalazu stremena i po luksuznoj izvedbi dostojnoga nekoga ranosrednjovjekovnoga bibriskog *princepsa*, nama nije bila namjera pouzdano ga vremenski i kulturno vrednovati, nego



sl. 29. Buzdovani s Bribira (crtež: N. Šimundić Bendić).  
fig. 29 Maces from Bribir (drawing: N. Šimundić Bendić).

tek o njemu otvoriti raspravu te još jednom upozoriti na Bribir kao vrlo važno arheološko nalazište na kojemu svaki arheološki trud može biti višestruko koristan (sl. 28).

### Buzdovan

Sličnoga podrijetla i značaja su i buzdovani koje ovdje objavljujem i koji su rijedak nalaz u Dalmaciji. Na Bribiru su zastupljena dva osnovna tipa: primjerci s piramidalnim završecima na kubičnom tijelu i dva primjerka s krilcima ili perima na loptastom ili bačvastom tijelu (sl. 4-7, 29.1-4). Svi bribirski primjerci su šuplji jer su izvorno bili napunjeni olovom i nasadeni na dugačku elastičnu motku, što je sve zajedno doprinosilo efikasnosti toga oružja u ratnim sukobima, kako to na više mjesta prikazuje I. Skilica, krajem 11. i početkom 12. stoljeća i ninijature iz nešto starijeg *Psaltira Teodora iz Cezareje* (oko 1066. godine, sl. 30.1-5)<sup>79</sup>. Osim

Bribir stirrup finally ends up, we believe that it will not get out of the temporal framework bounded by the 9<sup>th</sup> and 11<sup>th</sup> century. At this moment, since this is a unique finding of a stirrup and in terms of its luxurious workmanship is worthy of some early medieval Bribir *princeps*, it was not part of our remit to evaluate it definitively in terms of time and culture, rather to start up a debate about it, and once again to draw attention to Bribir as a very important archaeological site in which any archaeological effort will pay off handsomely (fig. 28).

### The maces

The maces that we publish here are of a similar origin and significance, rare finds as they are in Dalmatia. Two basic types are to be found at Bribir: examples with pyramidal endings on a cubic body, and two examples with wings or flanges on a spherical or barrel-shaped body (fig. 4-7, 29.1-4). All the Bribir examples are hollow, for they were originally filled with lead and fitted onto a long flexible pole, which all together contributed to the efficacy of this weapon in warfare, as shown in several places by J. Skylitzes, at the end of the 11<sup>th</sup> and in the early

<sup>79</sup> V. TSAMAKDA, *The Illustrated Chronicle of Ioannes Skylitzes in Madrid*. Leiden, 2002, str. 202-203 (minijatura 418, fol. 162r), 204-205 (minijatura 425, fol. 164v), 210-211 (minijatura 442, fol. 172r), 212-213 (minijatura 448, fol. 174r). Za minijature s buzdovanima usp. i R. D'AMATO, *The war-mace*, str. 8-22.



12<sup>th</sup> century and the illuminations from the some older *Psalter of Theodore of Caesarea* (about 1066, fig. 30.1-5)<sup>79</sup>. As well as the finds from Bribir, the MCAM holds three more examples of chronologically approximately correlative bronze maces:

1. A fragment of a bronze mace with no information about the place or circumstances of the find

<sup>79</sup> V. TSAMAKDA, *The Illustrated Chronicle of Ioannes Skylitzes in Madrid*. Leiden, 2002, p. 202-203 (miniature 418, fol. 162r), 204-205 (miniature 425, fol. 164v), 210-211 (miniature 442, fol. 172r), 212-213 (miniature 448, fol. 174r). For miniatures with maces, also cf. R. D'AMATO, *The war-mace*, pp. 8-22. – *The Theodore Psalter*. (British Library Add. 19352), a CD-ROM Facsimile, (ur. Ch. E. Barber), University of Illinois Press, Champaign-Urbana, 2000, f. 45v - *The Betrayal*, a group of soldiers, Mary, and women weeping; f. 178v - *St. Hermolaus and warrior with mace and shield*.



sl. 30. Buzdovani u naoružanju bizantske vojske: 1-4. minijature iz *Kronike Ivana Skilice* (prema: V. Tsamakada); 5. vojnik s buzdovanom i štitom (prema: Ch. E. Barber).

fig. 30 Maces in the arms of the Byzantine army: 1-4. miniatures from the *Chronicle of John Skylitzes* (after: V. Tsamakada); 5. warrior with mace and shield (after: Ch. E. Barber).

nalaza s Bribira, Muzej hrvatskih arheoloških spomenika čuva još tri primjerka kronološki približno sukladnih brončanih buzdovana:

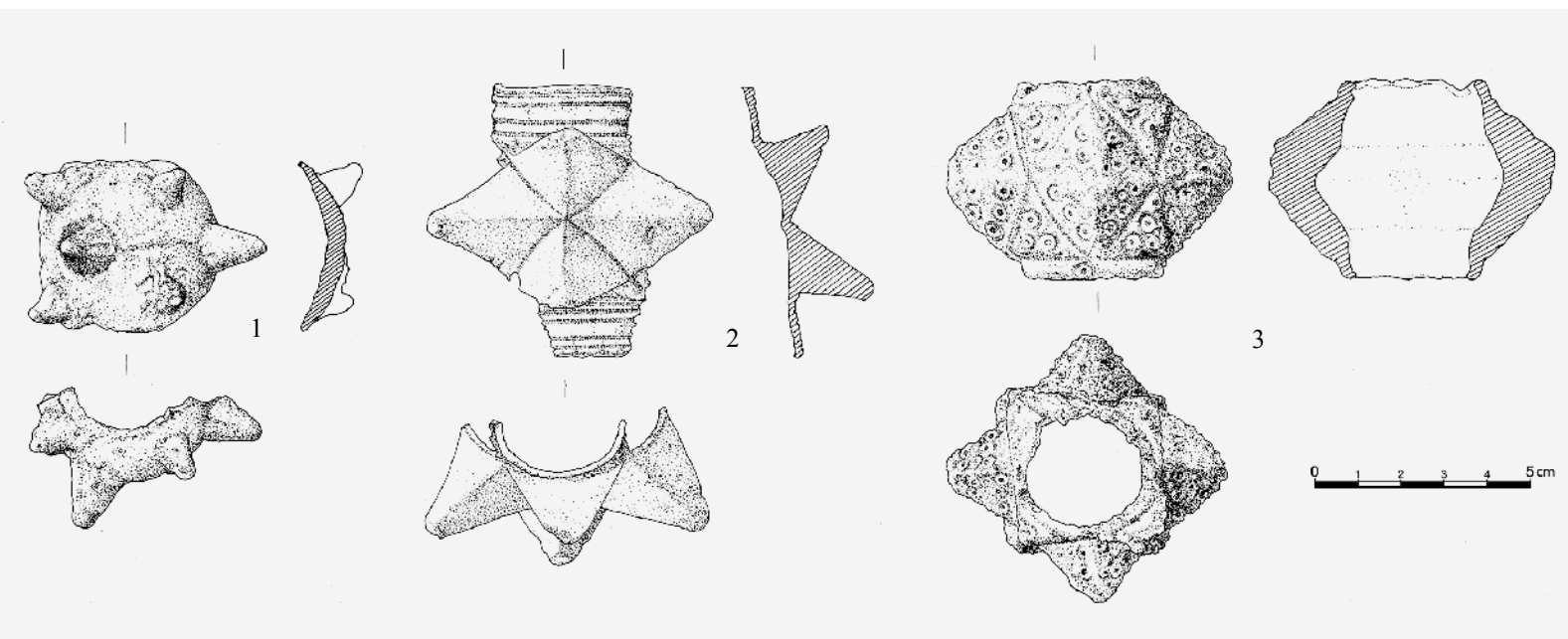
1. Ulomak brončanog buzdovana bez podataka o mjestu i okolnostima nalaza (sl. 31.1, 32.1). U sredini šupljega bačvastoga tijela je rupa za nasad drška, a iz njegovoga vanjskoga plašta stršilo je

– *The Theodore Psalter*. (British Library Add. 19352), E-faksimil, (ur. Ch. E. Barber), University of Illinois Press, Champaign-Urbana, 2000, fol. 45v - grupa vojnika s buzdovanima u sceni Judine izdaje s Marijom i ženama koje plaču, fol. 178v, sv. Hermolan i vojnik s buzdovanom i okruglim štitom.





sl. 31. Brončani buzdovani s nepoznatih nalazišta u Dalmaciji u zbirci Muzeja HAS (foto: A. Z. Alajbeg).  
 fig. 31 Bronze maces from unknown sites in Dalmatia in the collection of the MCAM  
 (photograph: A. Z. Alajbeg).



sl. 32. Brončani buzdovani s nepoznatih nalazišta u Dalmaciji u zbirci Muzeja HAS (crtež: N. Šimundić Bendić).  
 fig. 32 Bronze maces from unknown sites in Dalmatia in the collection of the MCAM  
 (drawing: N. Šimundić Bendić).

(fig. 31.1, 32.1). In the centre of the hollow barrel-shaped body is a hole in which to fit the handle, and from the external surface twelve conical convexities of unequal size stuck out (on the fragment there are still six of them) with slightly visible traces of striking. The size of the fragment is 4. x 5.7 cm, and the diameter of the hole in which to put the handle is approximately 3 cm. Inv. no. 6458 MHAS – Collection of Medieval Weaponry and Cavalry Equipment.

2. A fragment of a bronze mace with no information about the place and circumstances of the find (fig. 31.2, 32.2). The hole for the housing of the handle is in the centre of the hollow, cylindrical body on which on the outer side there are twelve massive endings in the shape of three-sided or four-sided pyramids (four of them are still in existence) with visible traces of beating. The body of the mace is longer on the upper and lower side than the zone on which the pyramidal spikes are placed. Its height is 6.4 cm while the maximum extant width is 6.8 cm and the estimated diameter of the hole for the handle is 3.5 cm. Inv. no. 6456 MHAS – Collection of Medieval Weaponry and Cavalry Equipment.

3. A bronze mace with no information about the place and circumstances of the find (fig. 31.3, 32.3)<sup>80</sup>. The annularly rimmed upper and lower edge of the hole for the handle is in the centre of a hollow cuboid body that tapers at half of the height from the outside. From these lateral surfaces, massive pyramidal peaks stick out, one from each surface. The damage to the tips on all sides shows that it was used in martial clashes. All the surfaces are decorated with densely arranged dotted circles. Its size is 3.9 x 6.3 cm, and the diameters of the upper and lower openings for the handle are 2.8 and 2.4 cm. Inv. no. 6459 MHAS - Collection of Medieval Weaponry and Cavalry Equipment<sup>81</sup>.

Mace number 3 will be analysed with the Bribir specimens of a similar type, while the other two,



sl. 33. Ulomak brončanog buzdovana iz Vrane kod Biograda n/m (foto: J. Šučur).

fig. 33 Fragment of a bronze mace from Vrana near Biograd n/m (photograph: J. Šučur).

dvanaest stožastih izbočina nejednake veličine (na ulomku ih je sačuvano šest) sa slabo vidljivim tragovima udaranja. Veličina ulomka je 4 x 5,7 cm, a promjer rupe za nasad drška je približno 3 cm. Inv. br.: 6458 MHAS – Zbirka srednjovjekovnog oružja i konjaničke opreme.

2. Ulomak brončanog buzdovana bez podataka o mjestu i okolnostima nalaza (sl. 31.2, 32.2). Rupa za nasad drška je u sredini šupljega valjkastog tijela na kojemu je s vanjske strane raspoređeno dvanaest masivnih završetaka u obliku trostrane i četverostrane piramide (sačuvano ih je četiri) s vidljivim tragovima udaranja. Tijelo buzdovana je na gornjoj i donjoj strani duže od zone na kojoj su piramidalni šiljci. Visina mu je 6,4 cm, najveća sačuvana širina 6,8 cm, a pretpostavljeni promjer rupe za nasad je 3,5 cm. Inv. br.: 6456 MHAS – Zbirka srednjovjekovnog oružja i konjaničke opreme.

3. Brončani buzdovan bez podataka o mjestu i okolnostima nalaza (sl. 31.3, 32.3)<sup>80</sup>. Prstenasto obrubljen gornji i donji rub rupe za nasad drška je u sredini šupljega kubičnog tijela koje se na pola visine s vanjske strane sužava. Iz tako oblikovanih bočnih površina strše masivni piramidalni vrhovi, sa svake plohe po jedan. Oštećenost vrhova na svim stranama pokazuje da je korišten u borbenim sukobima. Sve plohe su mu ukrašene gusto raspoređenim krugovima s točkom u sredini. Veličina mu je 3,9 x 6,3 cm, a promjeri gornjega i donjega otvora za nasad drška iznose 2,8 odnosno 2,4 cm. Inv. br.:

<sup>80</sup> Mentioned as an analogy in: M. SIJARIĆ, *Hladno oružje iz Bosne i Hercegovine*, p. 259.

<sup>81</sup> In the collection of the MCAM there is one more iron mace with a head on eight rounded flanges and an iron handle. Its total length is 40.5 cm and its width is 13 cm (inv. no. 9136 – Collection of Archaeological Material of the Modern Age). In terms of typology it corresponds to specimens from the 16<sup>th</sup> century. Cf. maces from the CHM in Zagreb in (M. ŠERCER, *Staro oružje na motki*. Zagreb, 1972, pp. 44-45, T. X/60, 61, 63.

<sup>80</sup> Kao analogija spomenut je u: M. SIJARIĆ, *Hladno oružje iz Bosne i Hercegovine*, str. 259.





sl. 34. Fragment svilene tkanine iz Egipta, *The Walters Art Museum* – Baltimore, 6. stoljeće (prema: <https://commons.wikimedia.org>).

fig. 34 Fragment of silver cloth from Egypt, *The Walters Art Museum*, Baltimore, 6<sup>th</sup> century (after: <https://commons.wikimedia.org>)

6459 MHAS – Zbirka srednjovjekovnog oružja i konjaničke opreme<sup>81</sup>.

Buzdovan pod brojem 3 biti će analiziran s bribirskim primjercima sličnoga tipa, dok za dva preostala, očekujući njihovu detaljniju obradu, možemo tek reći da pripadaju mlađim stoljećima srednjega vijeka. Buzdovan sa stožastim šiljcima na bačvastom tijelu (broj 1) nije osobito čest nalaz. Bliske su mu analogije u brončanom primjerku iz okolice Koprivnice, danas u *Hrvatskom povijesnom muzeju*, a datiran je u široki vremenski raspon, od 11. do 14. stoljeća<sup>82</sup>. Slični nalazi iz Bugarske pretpostavljaju

<sup>81</sup> U zbirci Muzeja HAS nalazi se još jedan željezni buzdovan s glavom na osam zaobljenih pera i drškom od željeza. Ukupna dužina mu je 40,5, a širina 13 cm (inv. br. 9136 – Zbirka arheološke građe novoga vijeka). Tipološki odgovara primjercima iz 16. stoljeća. Usp. buzdovane iz Hrvatskoga povijesnog muzeja u Zagrebu u: M. ŠERCER, *Staro oružje na motki*. Zagreb, 1972, str. 44-45, T. X/60, 61, 63.

<sup>82</sup> M. ŠERCER, *Staro oružje na motki*, str. 36, kat. br. 23, 24, T. IV/23, 24. Nedavno su i u Vrani kod Biograda n/m pronađena dva ulomka istoga brončanoga buzdovana (sl. 33). Veći ulomak (4,6x3,7 cm) pripada primjercima s piramidalnim ispupčenjima na bačvastom tijelu, a prema tipologiji S. Popova, pripada tipu 10, varijanti B2 (usp. S. POPOV, *The Maces*, str. 46-48, 264-267). Datirani su u 12.-13. stoljeće. Za podatak o nalazu i za terensku fotografiju zahvaljujem kolegi Juri Šućuru s Odsjeka za arheologiju Sveučilišta u Zadru.

awaiting further detailed study, can be said only to belong to the later centuries of the Middle Age. The mace with conical spikes on a barrel body (no. 1) is not a particularly frequent find. There are close analogies to it in a bronze specimen from the surroundings of Koprivnica, today in the Croatian History Museum, dated to a fairly wide range, from the 11<sup>th</sup> to the 14<sup>th</sup> century<sup>82</sup>. Similar finds from Bulgaria assume a more precise dating to the 12<sup>th</sup> and 13<sup>th</sup> century<sup>83</sup>. From a chronological point of view, mace number 2 is consistent with them, representing the last developmental phase of shapes that have pyramidal protuberances on a cuboid body. To an extent similar to it is a mace from the Croatian History Museum<sup>84</sup>, as are several examples from Transylvania dated to the second half of the 14<sup>th</sup> and the first half of the 15<sup>th</sup> century<sup>85</sup>, then examples from Hungary dated to the 12<sup>th</sup> and the first half of the 13<sup>th</sup> century<sup>86</sup>, from Bulgaria with the same dates<sup>87</sup> and from central Europe dated to the period from the second half of the 12<sup>th</sup> to the 14<sup>th</sup> century<sup>88</sup>.

Maces with pyramidal knobs on a cuboid body are the most numerous specimens of this kind of medieval weapon. In the general surroundings, in

<sup>82</sup> M. ŠERCER, *Staro oružje na motki*, p. 36, cat. no. 23, 24, T. IV/23, 24. Recently, at Vrana, near Biograd n/m, two fragments of the same bronze mace were found (dimensions of the larger fragment in Fig. 33 is 4,6x3,7 cm). This too belongs among examples with pyramidal knobs on a barrel-shaped body, classified, according to the Popov typology, as *Type 10, variant B2* (cf. S. POPOV, *The Maces*, pp. 46-48, 264-267). They have been dated to the 12<sup>th</sup> or 13<sup>th</sup> century. For this information about the find and for photography from the field, I am grateful to colleague Jure Šućura from the archaeology department of Zadar University.

<sup>83</sup> S. POPOV, *The Maces*, pp. 44-45, *Type IX*.

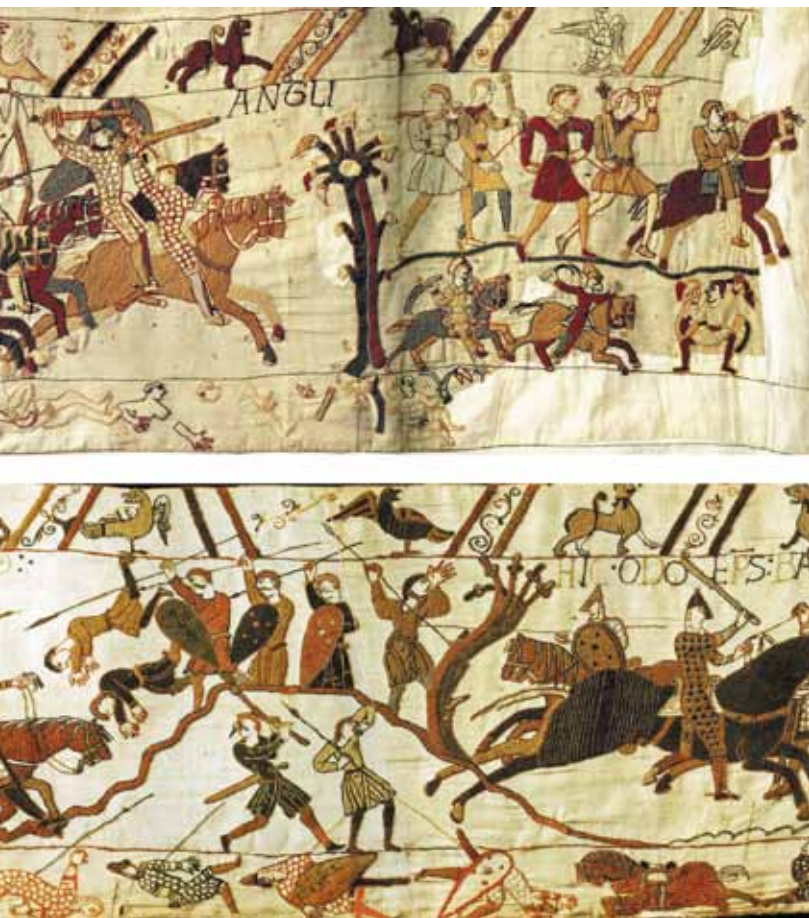
<sup>84</sup> M. ŠERCER, *Staro oružje na motki*, p. 35, T. 3/21.

<sup>85</sup> A. O. FĂRCAȘ, *Maces in Medieval Transylvania between the 13<sup>th</sup> and 16<sup>th</sup> Centuries*. Dissertation. Central European University, Department of Medieval Studies, Budapest, 2016, pp. 65-67. In the typological division they are classified into *Type II/2*.

<sup>86</sup> L. KOVÁCS, A Magyar Nemzeti Múzeum fegyvertárának XI-XIV. századi csillag alakú buzogányai, *Folia archaeologica* 22, Budapest, 1971, pp. 178-180, fig. 4/3, 5/2-3, 6/2. They are defined as *Type V*.

<sup>87</sup> R. D'AMATO, The war-mace of Byzantium, fig. 19. – S. POPOV, *The Maces*, pp. 54-58, approximately his *Type XIII* with variants.

<sup>88</sup> A. MICHALAK, A 14<sup>th</sup> century Hungarian knobbed mace head from the Birów Mountain in Podzamcze in the Polish Jura Chain, in: *Cum arma per aeva. Uzbrojenie indywidualne na przestrzeni dziejów*, (ed: P. Kucypera, P. Pudło), Łódź, 2011, pp. 181-182, fig. 6/1-4.



sl. 35. Buzdovani u naoružanju vojnika u bitci kod Hastingsa, 1066. godine, na tapiseriji iz Bayeuxa (prema: M. D. Wilson).

fig. 35 Maces in the arms of soldiers in the Battle of Hastings, 1066, on the Bayeux Tapestry (after: M. D. Wilson).

the Sava to Drava area<sup>89</sup> and in Bosnia and Herzegovina<sup>90</sup> some forty similar maces have been found, about 15 of which correspond approximately to the Bribir maces with pyramidal knobs. They have been found in large numbers in other areas, mainly

<sup>89</sup> M. ŠERCER, *Staro oružje na motki*, pp. 7-17 (in general about mases), cat. no. 1-22, T. I-IV. The same examples in: D. BOŠKOVIĆ, Naoružanje vojske kralja Kolomana, in: *Kolomanov put*, Zagreb, 2003, pp. 158-160, 166-169. – G. JAKOVLJEVIĆ, Srednjovjekovna konjanička oprema i naoružanje s područja Bilogore, *Opuscula archaeologica* 32, Zagreb, 2009, pp. 113-114. T. 2/3. – D. BOŠKOVIĆ, Slatkovodni nalazi u zbirci hladnog oružja Hrvatskoga povijesnog muzeja u Zagrebu, in: *Jurišičev zbornik*, (ed. L. Bekić), Zagreb, 2009, pp. 127-128.

<sup>90</sup> M. SIJARIĆ, *Hladno oružje iz Bosne i Hercegovine*, p. 254-286. Sijarić in his serious and graphically excellently illustrated monograph provides an extensive bibliography about finds from Croatia and Serbia.

njihovu precizniju dataciju u 12. – 13. stoljeće<sup>83</sup>. U kronološkom smislu njima je sukladan i buzdovan pod brojem 2 koji predstavlja zadnju razvojnu fazu oblika koji na kubičnom tijelu imaju piramidalne završetke. Donekle mu je sličan buzdovan iz *Hrvatskoga povijesnog muzeja*<sup>84</sup>, nekoliko primjeraka iz Transilvanije datiranih u drugu polovinu 14. i prvu polovinu 15. stoljeća<sup>85</sup>, zatim primjerci iz Mađarske datirani u 12. i prvu polovinu 13. stoljeća<sup>86</sup>, iz Bugarske s istom datacijom<sup>87</sup> te iz srednje Europe datirani od druge polovine 12. do 14. stoljeća<sup>88</sup>.

Buzdovani s piramidalnim završetcima na kubičnom tijelu najbrojniji su primjerci te vrste srednjovjekovnog oružja. U širem okruženju, u savsko-dravskom međurječju<sup>89</sup> i u Bosni i Hercegovini<sup>90</sup> pronađeno je još četrdesetak sličnih buzdovana od kojih petnaestak tipološki približno odgovara bribirskim primjercima s piramidalnim završetcima. U velikom broju pronađeni su i na drugim područjima, pretežito u istočnoj Europi<sup>91</sup>, u Karpatskom ba-

<sup>83</sup> S. POPOV, *The Maces*, str. 44-45, tip IX.

<sup>84</sup> M. ŠERCER, *Staro oružje na motki*, str. 35, T. 3/21.

<sup>85</sup> A. O. FĂRCAȘ, *Maces in Medieval Transylvania between the 13<sup>th</sup> and 16<sup>th</sup> Centuries*. Disertacija. Central European University, Department of Medieval Studies, Budapest, 2016, str. 65-67. U tipološkoj podjeli razvrstani su u tip II/2.

<sup>86</sup> L. KOVÁCS, A Magyar Nemzeti Múzeum fegyvertárának XI-XIV. századi csillag alakú buzogányai, *Folia archaeologica* 22, Budapest, 1971, str. 178-180, sl. 4/3, 5/2-3, 6/2. U tipološkoj podjeli određeni su kao tip V.

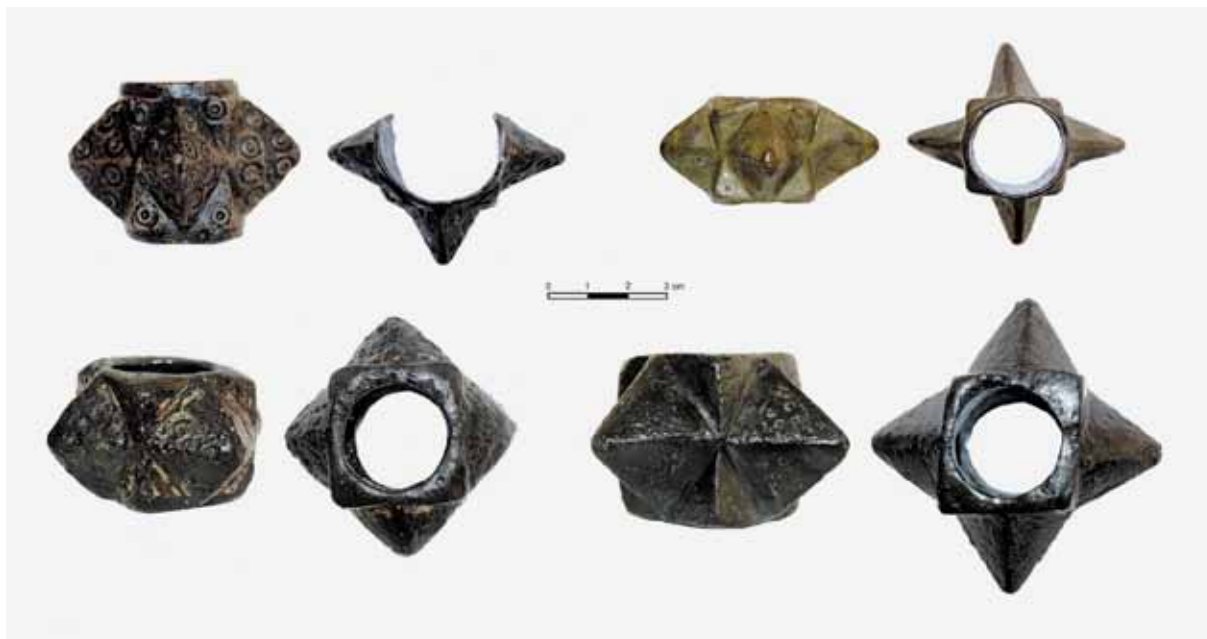
<sup>87</sup> R. D'AMATO, The war-mace of Byzantium, sl. 19. – S. POPOV, *The Maces*, str. 54-58, približno njegov tip XIII s varijantama.

<sup>88</sup> A. MICHALAK, A 14<sup>th</sup> century Hungarian knobbed mace head from the Birów Mountain in Podzámce in the Polish Jura Chain, u: *Cum arma per aeva. Uzbrojenie indywidualne na przestrzeni dziejów*, (ur. P. Kucypera, P. Pudło), Łódź, 2011, str. 181-182, sl. 6/1-4.

<sup>89</sup> M. ŠERCER, *Staro oružje na motki*, str. 7-17 (o buzdovanima općenito), kat. br. 1-22, T. I-IV. Isti primjerci u: D. BOŠKOVIĆ, Naoružanje vojske kralja Kolomana, u: *Kolomanov put*, Zagreb, 2003, str. 158-160, 166-169. – G. JAKOVLJEVIĆ, Srednjovjekovna konjanička oprema i naoružanje s područja Bilogore, *Opuscula archaeologica* 32, Zagreb, 2009, str. 113-114, T. 2/3. – D. BOŠKOVIĆ, Slatkovodni nalazi u zbirci hladnog oružja Hrvatskoga povijesnog muzeja u Zagrebu, u: *Jurišičev zbornik*, (ur. L. Bekić), Zagreb, 2009, str. 127-128.

<sup>90</sup> M. SIJARIĆ, *Hladno oružje iz Bosne i Hercegovine*, str. 254-286. Sijarić u svojoj ozbiljnoj i grafički izvrsno opremljenoj monografiji donosi i opsežnu literaturu o nalazima s područja Hrvatske i Srbije.

<sup>91</sup> A. MICHALAK, A 14<sup>th</sup> century Hungarian knobbed mace, str. 173-200.



sl. 36. Ukrašeni buzdovani iz Bugarske, *Vatevi kolekcija* (prema: S. Popov).  
fig. 36 Decorated maces from Bulgaria, *Vatevi Collection* (after: S. Popov).

zenu<sup>92</sup>, na istočnom Balkanu<sup>93</sup> i na prostranom stepskom prostoru sjeverno od Crnoga mora<sup>94</sup>. Veći broj primjeraka danas se nalazi i u *The World Museum of Man* na Floridi i svi potječu s Balkana<sup>95</sup>.

Buzdovani su, kao i stremeni, u europskom naružanju usvojeni kao posljedica unapređenja vojne taktike i načina ratovanja koji su se prethodno razvijali u Aziji. Arheološki su dokumentirani u postsasanidskom razdoblju, u 7. stoljeću, na području današnjeg Irana<sup>96</sup>, a može se pretpostaviti da je upravo ta vrsta oružja dokumentirana i na jednome

in eastern Europe<sup>91</sup>, in the Carpathian basin<sup>92</sup>, in the east Balkans<sup>93</sup> and in the broad steppe area north of the Black Sea<sup>94</sup>. A large number of them are to be found in the *World Museum of Man* in Florida, all of them coming from the Balkans<sup>95</sup>.

Maces, like stirrups, were adopted into European arms as a result of the advances in military tactics and the way in which war was waged that had been previously developed in Asia. They have been archaeologically documented in the post-Sasanid period in the 7<sup>th</sup> century in the area of today's Iran<sup>96</sup>, and it can be assumed that precisely this type

<sup>92</sup> L. KOVÁCS, *A Magyar Nemzeti Múzeum*, str. 168-178, *tipovi I, II, IV*. – A. O. FĂRCAȘ, *Maces in Medieval Transylvania*, str. 29-33.

<sup>93</sup> S. POPOV, *The Maces*, str. 38-42, 54-57, *tipovi VI, VII i XIII*.

<sup>94</sup> А. Н. КИРПИЧНИКОВ, *Древнерусское оружие. 2. Копья, боевые топоры, кистени, булавы IX-XIII вв. Археология СССР. Свод исторических источников*, E1-36, Москва - Ленинград, 1966, str. 46-56. – R. SHIROUKHOV, *Prussian Graves in the Sambian Peninsula, with Imports, Weapons and Horse Harnesses, from the Tenth to the 13<sup>th</sup> Century: the Question of the Warrior Elite*, *Arheologia Baltica* 18, Klaipėda, 2012, str. 229-231.

<sup>95</sup> R. D'AMATO, *The war-mace of Byzantium*, str. 27-43, sl. 22-23.

<sup>96</sup> U prednjoj Aziji su upotrebljavani u Iranu postsasanidskog perioda, o čemu usp. A. L. KUBIK - S. N. AHMAD, *Bronze mace with three rams' heads from Ashmolean Museum, University of Oxford*, *Historia i Świat* 4, Siedlce, 2015, str. 157-174.

<sup>91</sup> A. MICHALAK, *A 14<sup>th</sup> century Hungarian knobbed mace*, pp. 173-200.

<sup>92</sup> L. KOVÁCS, *A Magyar Nemzeti Múzeum*, p. 168-178, *Types I, II, IV*. – A. O. FĂRCAȘ, *Maces in Medieval Transylvania*, pp. 29-33.

<sup>93</sup> S. POPOV, *The Maces*, p. 38-42, 54-57, *Types VI, VII and XIII*.

<sup>94</sup> А. Н. КИРПИЧНИКОВ, *Древнерусское оружие. 2. Копья, боевые топоры, кистени, булавы IX-XIII вв. Археология СССР. Свод исторических источников*, E1-36, Москва - Ленинград, 1966, pp. 46-56. – R. SHIROUKHOV, *Prussian Graves in the Sambian Peninsula, with Imports, Weapons and Horse Harnesses, from the Tenth to the 13<sup>th</sup> Century: the Question of the Warrior Elite*, *Arheologia Baltica* 18, Klaipėda, 2012, pp. 229-231.

<sup>95</sup> R. D'AMATO, *The war-mace of Byzantium*, pp. 27-43, fig. 22-23.

<sup>96</sup> In the Middle East they were used in the Iran of the post-Sasanid period, for which cf. A. L. KUBIK -



of weapon is documented on a silk fragment of the 6<sup>th</sup> century from Egypt (fig. 34)<sup>97</sup>. Historical sources confirm that maces were regularly used by Byzantine cavalry as early as the 10<sup>th</sup> century (fig. 30)<sup>98</sup>, while there is still discussion about their adoption into the armaments of Europe. A. N. Kirpichnikov is of the opinion that they originated in the Far East and that the forms that appeared in Europe were developed there as early as the 9<sup>th</sup> and 10<sup>th</sup> century<sup>99</sup>. L. Kovács showed by archaeological finds that maces came into widespread use in Europe during the 10<sup>th</sup> and in the early 11<sup>th</sup> century, as a result of the displacement of different ethnic groups generated by the migrations of the Pechenegs and the Magyars<sup>100</sup>. The wide distribution and numerousness of finds in today's Europe shows that at the first time this kind of weapon was not taken on everywhere equally, although it is well documented in the pictures of the Bayeux Tapestry, woven in the 1080s (fig. 35)<sup>101</sup>. In the segment that illustrates the Battle of Hastings, 1066, two kinds of mace can be seen. One is a simple wooden mace with a heavy, extended striking part, while the others are smaller maces with a metal four-armed head. It can also be seen that they were used by infantry and cavalry in both armies and that as well as striking weapons they were also used for throwing.

It is very likely that on the Bayeux Tapestry the mace with a cubic body and four pyramidal knobs, of the kind that was most used in the Middle Ages, was diagrammatically depicted.

S. N. AHMAD, Bronze mace with three rams' heads from Ashmolean Museum, University of Oxford, *Historia i Świat* 4, Siedlce, 2015, pp. 157-174.

<sup>97</sup> <https://commons.wikimedia.org/wiki/File:Egyptian-Textile-Walters83684.jpg>. It is explained that this scene shows symbolically a triumphal imperial victory in which a rider on a rearing horse with a flowing cloak holds in his raised arm a sceptre.

<sup>98</sup> J. F. HALDON, Some Aspects of Byzantine Military Technology from the Sixth to the Tenth Centuries, *Byzantine and Modern Greek Studies* 1, Birmingham, 1975, pp. 11-47. – E. N. LUTTWAK, *The Grand Strategy of the Byzantine Empire*. Harvard University Press, 2009, pp. 370-374. – K. J. SINCLAIR, *War Writing in Middle Byzantine Historiography*. Dissertation, Birmingham, 2012. pp. 143-145, 245, 321-322. See also n. 78.

<sup>99</sup> А. Н. КИРПИЧНИКОВ, *Древнерусское оружие* 2, p. 48.

<sup>100</sup> L. KOVÁCS, A Magyar Nemzeti Múzeum, pp. 168-171.

<sup>101</sup> M. D. WILSON, *The Bayeux Tapestry*. London, 2004, p. 12, T. 54, 61, 73.

svilenom fragmentu 6. stoljeća iz Egipta (sl. 34)<sup>97</sup>. Povijesnim izvorima je potvrđeno da buzdovane redovno upotrebljavaju bizantski konjanici već u 10. stoljeću (sl. 30)<sup>98</sup>, dok se o vremenu i načinu njihova preuzimanja u naoružanju u Europi, još uvijek raspravlja. A. N. Kirpichnikov je mišljenja da im je izvorište na Dalekom istoku te da su oblici kakvi se pojavljuju u Europi tamo bili razvijeni već u 9. ili 10. stoljeću<sup>99</sup>. L. Kovács je arheološkim nalazima pokazao da buzdovani u širu upotrebu u Europi ulaze tijekom 10. i početkom 11. stoljeća, i to kao posljedica premještanja različitih etničkih skupina pokrenutih seobama Pečeneza i Mađara<sup>100</sup>. Rasprostranjenost i brojnost nalaza u današnjoj Europi pokazuje da u prvo vrijeme ta vrsta oružja nije svugdje bila jednako prihvaćena, premda je dobro dokumentirana na prikazima s Tapiserije iz Bayeuxa koja je nastala 1080-tih godina (sl. 35)<sup>101</sup>. U segmentu koji ilustrira normansko-engleski sukob kod Hastingsa, 1066. godine, mogu se vidjeti dvije vrste buzdovana. Jedna je jednostavna drvena s teškom izduženim udarnim dijelom, a druga su manji buzdovani s metalnom četverokrakom glavom. Još se raspoznaje da su ih koristili pješaci i konjanici u objema vojskama te da su, osim kao udaračko oružje, korišteni i za bacanje.

Vrlo je vjerojatno da je na tapiseriji iz Beyauxa shematski prikazan upravo buzdovan s kubičnim tijelom i četirima piramidalnim vrhovima, kakvi su tijekom srednjeg vijeka najčešće bili u upotrebi.

Brojnost takvih nalaza proizvela je nekoliko tipoloških razvrstavanja, no s neujednačenom kronologijom. Prema A. N. Kirpichnikovu riječ je o buz-

<sup>97</sup> <https://commons.wikimedia.org/wiki/File:Egyptian-Textile-Walters83684.jpg>. Tumači se da ta scena simbolički prikazuje trijumfalnu carsku pobjedu u kojoj jahač na propetom konju i s plaštem, koji vijori, u podignutoj ruci drži žezlo.

<sup>98</sup> J. F. HALDON, Some Aspects of Byzantine Military Technology from the Sixth to the Tenth Centuries, *Byzantine and Modern Greek Studies* 1, Birmingham, 1975, str. 11-47. – E. N. LUTTWAK, *The Grand Strategy of the Byzantine Empire*. Harvard University Press, 2009, str. 370-374. – K. J. SINCLAIR, *War Writing in Middle Byzantine Historiography*. Disertacija, Birmingham, 2012. str. 143-145, 245, 321-322. Vidi i bilj. 78.

<sup>99</sup> А. Н. КИРПИЧНИКОВ, *Древнерусское оружие* 2, str. 48.

<sup>100</sup> L. KOVÁCS, A Magyar Nemzeti Múzeum, str. 168-171.

<sup>101</sup> M. D. WILSON, *The Bayeux Tapestry*. London, 2004, str. 12, T. 54, 61, 73.

dovanima *tipa II*, datiranim u 12. i prvu polovinu 13. stoljeća<sup>102</sup>, L. Kovács ih je odredio kao *tip II i IV* i datirao od 12. do početka 14. stoljeća<sup>103</sup>, s tim da najstarije primjerke, koje je definirao kao *tip I*, datira u 11. stoljeće. Među našim nalazima tome Kovácsевom tipu u znatnoj mjeri odgovara ulomak neukrašenog buzdovana s Bribira. Tipologiju i kronologiju srednjoeuropskih buzdovana pokušao je složiti i A. Michalak. Naši primjerci s kubičnim tijelom i piramidalnim završetcima pripadali bi njegovom *tipu I*. Smatra da su najraniji takvi primjerci iz 11. stoljeća te da su u smanjenoj upotrebi i u 12. stoljeću<sup>104</sup>.

M. Šercer u terminološkom smislu razlikuje topuze i buzdovane. Prvi termin bi se odnosio na primjerke s kubičnim tijelom i piramidalnim šiljcima, a drugi na primjerke s kuglastim ili bačvastim tijelom s perima ili krilcima. Nalaze iz *Hrvatskoga povijesnog muzeja*, o kojima je raspravljala, datira široko, od 11. do 14. stoljeća<sup>105</sup>. Takvu terminološku podjelu prihvaća i G. Jakovljević, a bribirskom sličan topuz iz Bjelovara datira u 14. stoljeće<sup>106</sup>. U podjeli M. Sijarića naši primjerci pripadaju *tipu I*, s prijedlogom datacije od kraja 12. do 14. stoljeća<sup>107</sup>. Nalaze iz Rumunjske obradio je A. O. Fărcaș i razvrstao ih je u sedam tipova i nekoliko podtipova. Njegovom *tipu I*, kojega datira u 12. – 13. stoljeće, analogan je naš brončani ukrašeni primjerak iz fundusa Muzeja HAS s nepoznatog nalazišta. Napokon, S. Popov je proučavao najveći broj srednjovjekovnih buzdovana. U njegovoj analizi, koja je obuhvatila 482 primjeraka iz privatne *Vatevi kolekcije* u Bugarskoj, podijelio ih je u dvadesetjednu skupinu i nekoliko podskupina<sup>108</sup>. Prema toj tipološkoj razradi, primjerke s piramidalnim završetcima na četverostranom kubičnom tijelu, kakve ovdje objavljujem, trebalo bi razvrstati u tri

The numerousness of such finds produced several typological classifications, but with an uneven chronology. According to Kirpichnikov this is a *type II* mace, dated to the 12<sup>th</sup> and first half of the 13<sup>th</sup> century<sup>102</sup>; Kovács called it a *Type II* or *IV* mace, and dated it from the 12<sup>th</sup> to the early 14<sup>th</sup> century<sup>103</sup>, with the proviso that the oldest specimens, defined as *Type I*, are dated to the 11<sup>th</sup> century. Among our finds the fragment of the undecorated mace from Bribir corresponds to a considerable extent to this Kovács type. A. Michalak also endeavoured to define the typology and chronology of the maces of central Europe. Our examples with a cuboid body and pyramidal knobs would belong to his *Type I*. He thinks that the earliest such specimens are from the 11<sup>th</sup> century, and that they were less used in the 12<sup>th</sup> century<sup>104</sup>. M. Šercer differentiates two types of mace. One, refers to examples with cubic bodies and pyramidal knobs; the other to examples with a spherical or barrel-shaped body with flights or flanges. She dates the finds from the Croatian History Museum that she discusses quite broadly, from the 11<sup>th</sup> to the 14<sup>th</sup> century<sup>105</sup>. This distinction is also accepted by G. Jakovljević, who dates a mace from Bjelovar similar to the Bribir example to the 14<sup>th</sup> century<sup>106</sup>. In the division of M. Sijarić, our examples belong to *Type I*, with a proposed dating from the end of the 12<sup>th</sup> to the 14<sup>th</sup> century<sup>107</sup>. Finds from Romania have been studied by A. O. Fărcaș who classified them into seven types and several subtypes. His *Type I*, which he dates to the 12<sup>th</sup> - 13<sup>th</sup> century, is analogous to our bronze ornamented specimen from the holdings of the *MCAM* from an unknown site. Finally, S. Popov studied the greatest number of medieval maces. In his analysis, which covered 482 specimens from the private *Vatevi Collection* in Bulgaria, he divided them into twenty

<sup>102</sup> A. Н. КИРПИЧНИКОВ, *Древнерусское оружие 2*, str. 54, sl. 10.

<sup>103</sup> L. KOVÁCS, *A Magyar Nemzeti Múzeum*, str. 172-178, sl. 1.

<sup>104</sup> A. MICHALAK, *Głowica buławy z Trzciela, pow. Międzyrzecz. Wstępne uwagi w kwestii występowania buław na ziemiach polskich w średniowieczu na tle znalezisk europejskich, Archeologia Środkowego Nadodrza 4*, Zielona Góra, 2005, str. 183-220.

<sup>105</sup> M. ŠERCER, *Staro oružje na motki*, str. 7-18.

<sup>106</sup> G. JAKOVLJEVIĆ, *Srednjovjekovna konjanička oprema*, str. 102-104, 113-114. T. 2/3.

<sup>107</sup> M. SIJARIĆ, *Hladno oružje iz Bosne i Hercegovine*, str. 257-262.

<sup>108</sup> S. POPOV, *The Maces*, str. 17-90.

<sup>102</sup> A. Н. КИРПИЧНИКОВ, *Древнерусское оружие 2*, p. 54, fig. 10.

<sup>103</sup> L. KOVÁCS, *A Magyar Nemzeti Múzeum*, pp. 172-178, fig. 1.

<sup>104</sup> A. MICHALAK, *Głowica buławy z Trzciela, pow. Międzyrzecz. Wstępne uwagi w kwestii występowania buław na ziemiach polskich w średniowieczu na tle znalezisk europejskich, Archeologia Środkowego Nadodrza 4*, Zielona Góra, 2005, pp. 183-220.

<sup>105</sup> M. ŠERCER, *Staro oružje na motki*, pp. 7-18.

<sup>106</sup> G. JAKOVLJEVIĆ, *Srednjovjekovna konjanička oprema*, pp. 102-104, 113-114. T. 2/3.

<sup>107</sup> M. SIJARIĆ, *Hladno oružje iz Bosne i Hercegovine*, pp. 257-262.



one groups and several subgroups<sup>108</sup>. According to this typological scheme examples with pyramidal knobs on a four-faced cubic body, of the kind we are publishing here, should be classified into three types. The Bribir mace no. 1 would belong to *Type VI*, number 2 to *Type 5* and the ornamented bronze specimen from the holdings of the MCAM from an unknown site to *Type II*. Such a typological classification has a consequent probably chronological difference, and the first specimen should be dated to the 12<sup>th</sup> century, the second to the 11<sup>th</sup> to 12<sup>th</sup> and the third to the 11<sup>th</sup>. The maces from the Vatevi Collection published are additionally interesting for us, for there are some forms that are comparable with all our specimens, including two ornamented specimens that are absolute analogies to ours (fig. 36)<sup>109</sup>.

In contrast to maces with a cuboid body with pyramidal knobs or spikes, specimens with flanges or flights on a spherical or barrel shaped body are in general less represented in all the areas mentioned, save in Bulgaria. According to the Popov typology, the damaged example belongs to *Type XVI/d-e*, which was long in use, from the early 12<sup>th</sup> to the end of the 15<sup>th</sup> century<sup>110</sup>. In A. N. Kirpichnikov's division it corresponds to *Type V*, to be dated to the 12<sup>th</sup> to 13<sup>th</sup> century<sup>111</sup>. A complete mace that on a spherical body has rotated flanges with a triangular cross-section is a variant of *Type XI/b* in Popov's list<sup>112</sup>. This is a very rare shape of medieval mace. In the *Vatevi Collection* there are four examples, two more have been found in Bulgaria<sup>113</sup>, and there are three in the *World Museum of Man* in Florida<sup>114</sup>. It is interesting that maces of this kind appear only in the Balkans, which suggests they were produced in the region or, more likely, that their source was in the

<sup>108</sup> S. POPOV, *The Maces*, pp. 17-90.

<sup>109</sup> S. POPOV, *The Maces*, pp. 124-125 (bronze *Type II* mace decorated with dotted circles, cat. no. 45, 11<sup>th</sup> century), p. 208 (iron *Type VI* mace decorated with incised and silvered tendrils, cat. no. 169, 12<sup>th</sup> - 13<sup>th</sup> century).

<sup>110</sup> S. POPOV, *The Maces*, pp. 65-68.

<sup>111</sup> А. Н. КИРПИЧНИКОВ, *Древнерусское оружие 2*, p. 54.

<sup>112</sup> S. POPOV, *The Maces*, pp. 50-52.

<sup>113</sup> S. POPOV, *The Maces*, pp. 51-52. Also says that his type corresponds with *Type I/d* according to the typology of V. Yotova (10<sup>th</sup> - 12<sup>th</sup> century).

<sup>114</sup> R. D'AMATO, *The war-mace of Byzantium*, p. 41, fig. 25. Two come from the Balkans (11<sup>th</sup> - 12<sup>th</sup> century), and one, fairly widely dated, is allegedly from Germany (9<sup>th</sup> - 14<sup>th</sup> century).



sl. 37. Buzdovani u naoružanju bizantskih vojnika na mozaiku iz crkve S. Maria Nuova u Monrealeu na Siciliji, zadnja četvrtina 12. stoljeća (prema: <https://01varvara.wordpress.com>).

fig. 37 Maces in the arms of Byzantine soldiers on a mosaic in the Church of S. Maria Nuova in Monreale, Sicily, last quarter of the 12<sup>th</sup> century (after: <https://01varvara.wordpress.com>)

tipa. Tako bi bribirski buzdovan 1 pripadao *tipu VI*, broj 2 *tipu V*, a ukrašeni brončani primjerak iz fundusa Muzeja HAS s nepoznatog nalazišta *tipu II*. Ovakvo tipološko razvrstavanje za posljedicu ima i njihovu vjerojatnu kronološku razliku, pa bi prvi primjerak trebalo datirati u 12. stoljeće, drugi u 11. - 12., a treći u 11. stoljeće. Objavljeni buzdovani iz *Vatevi kolekcije* za nas su dodatno zanimljivi jer se tamo nalaze oblici koji su usporedivi sa svim našim primjercima, uključivo i dva ukrašena primjerka koja s našima imaju apsolutne analogije (sl. 36)<sup>109</sup>.

Nasuprot buzdovanima kubičnoga tijela s piramidalnim šiljcima, primjerci s krilcima ili perima na loptastom ili bačvastom tijelu općenito su manje zastupljeni na svim navedenim područjima, osim u Bugarskoj. Prema tipologiji S. Popova, oštećeni primjerak pripada *tipu XVI/d-e* koji je dugo bio u upotrebi, od početka 12. pa do kraja 15. stoljeća<sup>110</sup>.

<sup>109</sup> S. POPOV, *The Maces*, str. 124-125 (brončani buzdovan *tipa II* ukrašen krugovima s točkicama, kat. br. 45, 11. stoljeće), str. 208 (željezni buzdovan *tipa VI* ukrašen urezanim i posrebrenim viticama, kat. br. 169, 12. - 13. stoljeće).

<sup>110</sup> S. POPOV, *The Maces*, str. 65-68.

U tipološkoj podjeli A. N. Kirpičnikova odgovara *tipu V* s datacijom u 12. – 13. stoljeće<sup>111</sup>. Cjeloviti buzdovan koji na loptastom tijelu ima zarotirana krilca trokutastog presjeka je varijanta *tipa XI/b* prema S. Popovu<sup>112</sup>. Riječ je o vrlo rijetkom obliku srednjovjekovnih buzdovana. U *kolekciji Vatevi* nalaze se četiri primjerka, dva su još pronađena u Bugarskoj<sup>113</sup>, a tri se nalaze u *The World Museum of Man* na Floridi<sup>114</sup>. Zanimljiva je činjenica da se buzdovani ovog tipa pojavljuju samo na Balkanu, što upućuje na njihovu regionalnu proizvodnju ili, što je vjerojatnije, na njihovo izvorište u bizantskim oružarnicama jer upravo takve buzdovane nose bizantski vojnici u sceni *Judine izdaje* na zidnom mozaiku iz zadnje četvrtine 12. stoljeća u crkvi *S. Maria Nuova* u mjestu Monreale na Siciliji (sl. 37)<sup>115</sup>.

Primjerci oružja i konjaničke opreme koje ovdje objavljujem u mnogome dopunjavaju sliku bribirske prošlosti, no svojim kulturološkim pokazateljima nisu izišli iz okvira kakav nam je za taj lokalitet poznat od ranije i iz drugih nalaza ranoga srednjeg vijeka<sup>116</sup>. Tipološko-kronološkom analizom također smo željeli pokazati različite utjecaje pod kojima su ti predmeti nastajali ili su izravno importirani iz tadašnjih većih radioničkih centara u srednjoj Europi i Bizantskome Carstvu. Njihova kvaliteta i vrsnoća izrade vrlo dokumentarno svjedoči visoku razinu života na Bribiru u stoljećima u kojima su *nobiles Breberiensis* započeli svoj gospodarski, vojni i politički uspon.

armouries of Byzant, for such maces are borne by Byzantine soldiers in the scene of Judah's betrayal on a wall mosaic from the last quarter of the 12<sup>th</sup> century in the Church of *S. Maria Nuova* in Monreale, Sicily (fig. 37)<sup>115</sup>.

The examples of weapons and cavalry equipment that we discuss here have made a considerable contribution to illuminating the past of Bribir, but with their cultural indicators they have not gone outside the framework that is known to us about this site from earlier and other finds of the early medieval period<sup>116</sup>. With typological and chronological analysis we also wanted to show the different influences under which these objects were created or directly imported from the big workshop centres in central Europe and the Byzantine Empire. Their quality and excellent workmanship documents the high level of life at Bribir in the centuries in which the *nobiles Breberiensis* started their economic, military and political rise.

Translated: Graham McMaster

<sup>111</sup> A. N. КИРПИЧНИКОВ, *Древнерусское оружие 2*, str. 54.

<sup>112</sup> S. POPOV, *The Maces*, str. 50-52.

<sup>113</sup> S. POPOV, *The Maces*, str. 51-52. Također navodi da njegov tip korespondira s *tipom I/d* prema *tipologiji V*. Yotova (10. - 12. stoljeće).

<sup>114</sup> R. D'AMATO, *The war-mace of Byzantium*, str. 41, sl. 25. Dva potječu s Balkana (11. - 12. stoljeće), a jedan, široko datiran, navodno iz Njemačke (9. - 14. stoljeća).

<sup>115</sup> O mozaicima u crkvi vidi u: J. LOWDEN, *Early Christian & Byzantine Art*. Reprinted, New York, 2012, str. 329-335. – *Il ciclo musivo del Duomo di Monreale*. (Ur. D. Gulizia), bez mjesta i godine priređivanja. Izvor: <https://www.academia.edu/5352148/ImosaicidelDuomodimonreale>. – O mozaiku s buzdovanima u: S. POPOV, *The Maces*, str. 51-52, sl. 36. – <https://01varvara.wordpress.com/2011/08/25/>.

<sup>116</sup> Prilozi T. Burića, V. Delonga, M. Dragičević i M. Zekana u: *Bribir u srednjem vijeku*, (ur. A. Milošević), Split, 1995.

<sup>115</sup> For church mosaics, see in: J. LOWDEN, *Early Christian & Byzantine Art*. Reprinted, New York, 2012, p. 329-335. – *Il ciclo musivo del Duomo di Monreale*. (Ur. D. Gulizia), no place or year of pub. Source: <https://www.academia.edu/5352148/ImosaicidelDuomodimonreale>. – For mosaics with maces, see in: S. POPOV, *The Maces*, pp. 51-52, fig. 36. – <https://01varvara.wordpress.com/2011/08/25/>.

<sup>116</sup> Articles of T. Burić, V. Delonga, M. Dragičević and M. Zekan in: *Bribir u srednjem vijeku*, (ed. A. Milošević), Split, 1995.