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## O posebnom tipu trokrilne strelice, s posebnim osvrtom na rimsku provinciju Dalmaciju

*Autor raspravlja o provenijenciji jednog posebnog tipa trokrilne strelice. Radi se o strelici čiji se trokrilni presjek kombinira s punim, odnosno trokutastim presjekom u drugoj polovici glave ili pri samom vrhu. Autor se slaže s mišljenjima da se ne radi o avarskim strelicama, ali i preispituje teorije o njihovom mediteranskom porijeklu. Rad se posebno dotiče nalaza s prostora rimske provincije Dalmacije, te im na tragu nalaza s lokaliteta Knin – Greblje, u svezi s prethodno iznesenim pretpostavkama, definira vrijeme i kontekst u kojem su korištene.*

*Ključne riječi: trokrilne strelice, Avari, Bizant, Germani, rimska provincija Dalmacija, Podgradina kod Livna, Knin-Greblje.*

## On the special type of trilobate arrowhead with specific reference to the roman province of Dalmatia

*The author discusses the provenance of a particular type of trilobate arrowhead, namely the arrowhead whose trilobate cross-section is combined with a full or triangular cross-section in the second half of the head or at the very tip of it. The author shares the views that these are not Avar arrowheads, but at the same time questions the theories about their Mediterranean origin. This paper particularly points to finds from the area of the Roman province of Dalmatia, and following the leads provided by the finds from site Knin - Greblje, and in regard to the previously stated assumptions, defines the time and context in which they were used.*

*Keywords: trilobate arrowheads, Avars, Byzantium, Germanic people, Roman province of Dalmatia, Podgradina near Livno, Knin-Greblje.*

## Trokrilne strelice i Avari

Avarska materijalna ostavština, na području u kojem se taj narod smjestio u 2. pol. 6. st., pokazuje određene specifičnosti, među kojima je i obilan repertoar trokrilnih strelica, većinom nađenih u grobovima.<sup>1</sup> Međutim, sustavna morfološka analiza tih

<sup>1</sup> Mađarski arheolog G. Csiky je 2011. godine naveo kako je poznato više od 60 000 avarodobnih grobova, a u bilješci donosi podatak kako je do 31. prosinca 1993. godine bilo poznato ukupno 2475 avarodobnih groblja (Csiky 2011, str. 14, bilj. 35). Većina literature u kojima su objavljena ta groblja ili grobni materijal obrađuje trokrilne strelice. Ponajviše su obrađivana groblja na području današnje Mađarske pa postoje i serije izdanja koje obrađuju po jedan lokalitet ili regiju, poput *Cemeteries in Avar period /567 – 829/ in Hungary, Das awarische corpus, Monumenta Avarorum Archaeologica*, ili pak *Studien zur archäologie der Awaren* koji je tiskan u Austriji. Moram priznati da nisam bio u mogućnosti analizirati cjelokupni korpus ove literature, već sam bio ograničen na naslove koji su mi bili dostupni. Iako ograničena, smatram da je pregledana literatura ipak prilično solidan uzorak za izvođenje zaključaka o postojanju specifičnog tipa trokrilne strelice o kojoj će se raspravljati u radu. Naslovi koje sam pregledao, a koji sadrže trokrilne strelice, pokrivaju nalazišta s područja današnje Mađarske, Austrije i Slovačke. Njih i prezentiram tim redoslijedom: E. Bárdos – É. Garam: *Das awarenzeitliche Gräberfeld in Zamárdi-Retiföldek*, Teil I, Monumenta Avarorum Archaeologica, vol 9, Budapest, 2009., É. Garam: *Katalog der awarenzeitlichen Goldgegenstände und der Fundstücke aus den Fürstengräbern im Ungarischen Nationalmuseum*, Catalogi Musei Nationalis Hungarici, Seria Archeologica I, Budapest, 1993., L. Gyula et alii: *Das awarenzeitliche Gräberfeld in Csákberény–Orondpuszta*, Monumenta Avarorum Archaeologica, vol 11, Budapest, 2015., I. Juhász: *Awarenzeitliche Gräberfelder in der Gemarkung Orosháza*, Monumenta Avarorum Archaeologica, vol. 1, Budapest, 1995., A. Kiss: *Avar cemeteries in County Baranya*, Cemeteries of the Avar period /567-829/ in Hungary, vol. 2, Budapest, 1977., A. Kiss: *Das awarenzeitlich gepidische Gräberfeld von Kölked-Feketekapu A*, Monographien zur Frühgeschichte und Mittelalterarchäologie 2, Studien zur archäologie der Awaren 5, Innsbruck 1996., G. Török: *Das awarenzeitliche Gräberfeld von Halimba*, Das awarische corpus, Beihefte V, Debrecen-Budapest, 1998., F. Daim: *Das awarische Gräberfeld von Loebersdorf*, Nö, Band 1, Studien zur archäologie der Awaren 3, Wien, 1987., A. Distelberger: *Das awarische Gräberfeld von Mistelbach*, Monographien zur Frühgeschichte und Mittelalterarchäologie 3, Innsbruck, 1996., H. Winter: *Awarische Grab –und Streufunde aus Ostösterreich*, Monographien zur Frühgeschichte und Mittelalterarchäologie 4, Innsbruck, 1997., V. Budinský-Krička – A. Točík: *Šebastovice. Gräberfeld aus der zeit des awarischen reiches*, Katalog, Nitra, 1991., Z. Čilinska: *Slawisch-awarisches gräberfeld in Nové Zámky*,

## Trilobate arrowheads and Avars

The material legacy of Avars in the area that was colonized by them in the second half of the 6<sup>th</sup> century shows certain specificities, including the abundance of trilobate arrowheads that were mostly found in graves.<sup>1</sup> However, the fact that a system-

<sup>1</sup> In 2011, the Hungarian archaeologist G. Csiky stated that over 60,000 Avar-era graves were known. In the footnote, he also provided the information that a total of 2,475 Avar-era cemeteries were known until December 31, 1993 (Csiky 2011, p. 14, fn. 35). Most of the literature in which these cemeteries or grave material were published contains trilobate arrowheads. Mostly the cemeteries in present-day Hungary have been the subject of these works, and hence there are also series of publications that deal with one site or region in particular, such as *Cemeteries in Avar period /567 – 829/ in Hungary, Das awarische corpus, Monumenta Avarorum Archaeologica*, or *Studien zur archäologie der Awaren* which was printed in Austria. I must admit that I was not able to analyse the entire corpus of this literature, but was limited to the publications available to me. Although limited, I believe that the reviewed literature is still a fairly solid sample for drawing conclusions about the existence of a specific type of trilobate arrowhead that is the topic of this paper. The literature I reviewed, which contains trilobate arrowheads, covers sites from present-day Hungary, Austria, and Slovakia and is presented here in that order: E. Bárdos - É. Garam: *Das awarenzeitliche Gräberfeld in Zamárdi-Retiföldek*, Teil I, Monumenta Avarorum Archaeologica, vol 9, Budapest, 2009, É. Garam: *Katalog der awarenzeitlichen Goldgegenstände und der Fundstücke aus den Fürstengräbern im Ungarischen Nationalmuseum*, Catalogi Musei Nationalis Hungarici, Seria Archeologica I, Budapest, 1993, L. Gyula et alii: *Das awarenzeitliche Gräberfeld in Csákberény–Orondpuszta*, Monumenta Avarorum Archaeologica, vol 11, Budapest, 2015, I. Juhász: *Awarenzeitliche Gräberfelder in der Gemarkung Orosháza*, Monumenta Avarorum Archaeologica, vol. 1, Budapest, 1995, A. Kiss: *Avar cemeteries in County Baranya*, Cemeteries of the Avar period /567-829/ in Hungary, vol. 2, Budapest, 1977, A. Kiss: *Das awarenzeitlich gepidische Gräberfeld von Kölked-Feketekapu A*, Monographien zur Frühgeschichte und Mittelalterarchäologie 2, Studien zur archäologie der Awaren 5, Innsbruck 1996, G. Török: *Das awarenzeitliche Gräberfeld von Halimba*, Das awarische corpus, Beihefte V, Debrecen-Budapest, 1998, F. Daim: *Das awarische Gräberfeld von Loebersdorf*, Nö, Band 1, Studien zur archäologie der Awaren 3, Wien, 1987, A. Distelberger: *Das awarische Gräberfeld von Mistelbach*, Monographien zur Frühgeschichte und Mittelalterarchäologie 3, Innsbruck, 1996, H. Winter: *Awarische Grab –und Streufunde aus Ostösterreich*, Monographien zur Frühgeschichte und Mittelalterarchäologie 4, Innsbruck, 1997, V. Budinský-Krička – A. Točík: *Šebastovice. Gräberfeld aus der zeit des awarischen reiches*, Katalog, Nitra, 1991, Z. Čilinska: *Slawisch-awarisches gräberfeld*

strelica nikad nije rađena. Takva situacija ostavit će prostora da se avarskima definiraju i mnogi nalazi trokrilnih strelica koje nisu nađene u avarskim grobovima ili pak na avarskom području, i to na temelju tek površne usporedbe, a još češće i bez ikakve potrage za analogijom i bez reference u literaturi. Problem je posebno izražen na područjima izvan neposredne avarske vlasti, odnosno na područjima koje povijesni izvori spominju u kontekstu avarskih provala.<sup>2</sup> Ovdje se trokrilne strelice većinom nalaze u sklopu kasnoantičkih utvrđenja i naselja pa se lako daju uklopiti u postojeći historiografski narativ o avarskim ili avaro-slavenskim provalama te uništenjima koje su prouzročili. U takvim okolnostima trokrilne strelice postaju predmet cirkularnog argumentiranja – one su dokaz avarskih ili avaro-slavenskih provala, tj. provala koje u isto vrijeme služe kao dokaz da su te strelice avarske. Sljedeća argumentacijska i logička pogreška je *argumentum ad populum*, kako se to naziva u pravu i komunikologiji, što znači da se trokrilne strelice definiraju avarskima jer tako rade i drugi. Čast izuzetcima – ovaj je rad potaknut njihovim istraživanjima i zaključcima te će kao takvi biti obimno citirani.

Opisana situacija s trokrilnim strelicama u potpunosti je primjenjiva i na nalaze s područja rimske provincije Dalmacije. Na arheološkim lokalitetima kojima je definiran horizont kasne antike ili ranoga srednjeg vijeka, trokrilne strelice gotovo se uvijek definiraju kao avarske, pa tako i datiraju zadanim historiografskim okvirom od kraja 6. do sredine 7. st.<sup>3</sup> Utjecaj avarskih nalaza i narativa o avaro-slavenskim provalama ovdje zna biti toliko snažan da im se pripisuju i rimske trokrilne strelice, čije su morfološke značajke ipak bitno drugačije.<sup>4</sup>

atic morphological analysis of these arrowheads has never been made consequently leads to the case that many finds of trilobate arrowheads, which were not found in Avar graves or on Avar territory, are also defined as Avar arrowheads based upon an often only superficial comparison, and even more often without any search for analogy and without references in literature. This problem is particularly prominent in areas that were not directly under Avar rule, that is, in areas that historical sources mention in the context of Avar invasions.<sup>2</sup> Here, the trilobate arrowheads were mostly found within late ancient fortifications and settlements, so they can easily be adapted to the existing historiographical narrative of Avar or Avaro-Slavic invasions and the destruction they caused. In such circumstances, the trilobate arrowheads become the subject of circular argumentation—they are evidence of Avar or Avaro-Slavic invasions, i.e. invasions which at the same time serve as evidence that these arrowheads are of Avar origin. The following argumentative and logical mistake is *argumentum ad populum*, as it is named in law and communicology, which means that the trilobate arrowheads are defined to be Avar simply because others do so as well. Kudos to those who are the exception - this work is encouraged by their research and conclusions and hence they will be, as such, quoted extensively.

The earlier described circumstances regarding the attribution of trilobate arrowheads can also be entirely applied to the finds from the Roman province of Dalmatia. At archaeological sites with a defined horizon of Late Antiquity or the Early Middle Ages, these trilobate arrowheads have almost always been defined as Avar ones, and thus dated to the set historiographical timeframe spanning from the end of the 6<sup>th</sup> to the mid-7<sup>th</sup> century.<sup>3</sup> The influ-

Archeologica Slovaca Fontes, Tomus VII, Bratislava, 1966., A. Točik: *Slawisch-awarisches gräberfeld in Holiare*, Archeologica Slovaca – Catalogi, Tomus I, Bratislava, 1968., A. Točik: *Slawisch-awarisches gräberfeld in Štúrovo*, Archeologica Slovaca – Catalogi, Tomus II, Bratislava, 1968.

<sup>2</sup> Ovaj je problem detektirao još M. Buora u svom radu o trokrilnim strelicama na području sjeverne Italije (Buora 1991, str. 61).

<sup>3</sup> Ova datacija omeđena je navodima bizantskog pisca Teofilakta Simokate o kaganovoj vojsci koja je prodrla u Dalmaciju, osvojila grad Vonke i devastirala četrdeset utvrda (*Византиски извори...*, 1955, str. 121-122) što se datira 597. godine, te viješću o padu Salone iz djela bizantskog cara Konstantina Porfirogeneta, čemu se datum pokušao postaviti unutar razdoblja 1. pol. 7. st. Pregled rasprave o datumu razorenja Salone vidi u: Maroević, 2006.

<sup>4</sup> Kako je primjerice definirano 29 primjeraka trokril-

*in Nové Zámky*, Archeologica Slovaca Fontes, Tomus VII, Bratislava, 1966, A. Točik: *Slawisch-awarisches gräberfeld in Holiare*, Archeologica Slovaca – Catalogi, Tomus I, Bratislava, 1968, A. Točik: *Slawisch-awarisches gräberfeld in Štúrovo*, Archeologica Slovaca – Catalogi, Tomus II, Bratislava, 1968.

<sup>2</sup> M. Buora also recognized this problem in his work on trilobate arrowheads in the area of northern Italy (Buora 1991, p. 61).

<sup>3</sup> This dating is limited by the statements of the Byzantine writer Theophylact Simocatta about the army of Khagan that invaded Dalmatia, conquered the city of Vonke and devastated forty forts (*Византиски извори...*, 1955, pp. 121-122), which is dated to the year 597 AD, and the news about the fall of Salona from the works of the Byzantine emperor Constantine

Nasuprot tome, rijetki nalazi iz grobnih cjelina izvan neposredne avarske vlasti mogu uputiti i na alternativne opcije tumačenja trokrilnih strelica iz konteksta utvrđenja i naselja. S obzirom na tek jedan takav nalaz s prostora provincije Dalmacije, uz njega ću spomenuti i one koji se nalaze u neposrednom susjedstvu.

Jedini siguran nalaz iz zatvorenog arheološkog konteksta, s prostora tada već bivše rimske provincije Dalmacije, otkriven je u Bajagiću kod Sinja, na položaju Banova draga.<sup>5</sup> Uništenom grobu s tog lokaliteta pripadale su ostruge, dva željezna noža, srp, keramička posuda i trokrilna strelica s tuljcem, umjesto karakterističnije verzije s trnom za nasad na drvenu osovinu. Groblje se datira u kraj 8. i početak 9. st., pa tako i spomenuti grob, kao i trokrilna strelica koja mu je pripadala. Ako se i radi o novodoseljenom slavenskom stanovništvu, kako se tumači populacija sahranjena na ovom groblju,<sup>6</sup> ostaje činjenica da se ova trokrilna strelica nikako ne može povezati s onim nasilnim avarsko-slavenskim aktivnostima koje spominju povijesni izvori. Između takvog narativa i nalaza trokrilne strelice nalazi se nekih 150 godina razlike.

Kronološki blizak ovome je nalaz trokrilne strelice s ranosrednjovjekovnoga groblja u Velikoj Gorici koje se također pripisuje Slavenima. Od četiri strelice pronađene u grobu 16 jedna je trokrilna s trnom za nasad.<sup>7</sup> Ta strelica definira se avarskom s obzirom da je pojasni jezičac nađen u istom grobu tipičan za Avare.<sup>8</sup> Kao i u prethodnom primjeru,

ence of Avar finds and the narrative on Avaro-Slavic invasions can be so strong in these cases that even the Roman trilobate arrowheads are attributed to them, despite their morphological features being still significantly different.<sup>4</sup>

In contrast, rare finds from grave entities in areas that were not directly under Avar rule might indicate to alternative possibilities of interpretation of the trilobate arrowheads based upon the context of fortifications and settlements. Given that there is only one such find from the territory of the province of Dalmatia, I will also mention those in the immediate vicinity.

The only certain find from a closed archaeological context, from the territory of the then already former Roman province of Dalmatia, was discovered in Bajagić near Sinj, at site Banova Draga.<sup>5</sup> The destroyed grave at this site contained spurs, two iron knives, a sickle, a ceramic vessel and a trilobate socketed arrowhead, instead of the more characteristic arrowhead with a tang for attachment to the wooden shaft. The cemetery is dated to the end of the 8<sup>th</sup> and the beginning of the 9<sup>th</sup> century, and so is the grave and the trilobate arrowhead that was found in it. Even if this had been the newly settled Slavic population, as the population buried in this cemetery is interpreted,<sup>6</sup> the fact remains that this trilobate arrowhead cannot be linked in any way to those violent Avaro-Slavic activities mentioned by historical sources. Between such a narrative and the

nih strelica s lokaliteta Lib kod Tomislavgrada (Oreč 1984, str. 99), a takvu sam strelicu našao izloženu u jednom arheološkom muzeju s legendom na kojoj se spominju avarsko-slavenska osvajanja. Ovdje ću iskoristiti priliku da ukažem na jednu očitu različitost u obliku rimskih i avarskih strelica. Zahvaljujući E. Erdmannu, J. L. Daviesu, a posebno W. Zanieru, postalo je moguće razlučiti četiri glavna tipa trokrilnih rimskih strelica 1. do 4. st., a čije su dužine, mjereno bez trna, između 2,3 i 4,0 cm, sa širinom između 1,0 i 1,6 cm. (Vidi: Erdmann 1976, str. 5-10, Davies 1977, str. 257-270 i posebno Zanier 1988, str. 5-27.) S druge pak strane, kako je ustvrdila U. von Freeden za razdoblje prvog Avarskog Kaganata, ni najmanje verzije avarskih strelica, mjereno bez trna, nemaju ispod 4,0 cm dužine, te širinu manju od 2,0 cm (von Freeden 1991, str. 601).

<sup>5</sup> Petrincec 2009, str. 168.

<sup>6</sup> Milošević 2017, str. 104.

<sup>7</sup> U grobu 16, osim strelice, pronađeni su još i željezna sjekira, nož, keramička posuda te pojasni jezičac. Vidi: Hoffiller 1909, str. 128-129.

<sup>8</sup> Simoni 1981, str. 160.

Porphyrogenitus, for which an attempt was made to place the date within the period of the first half of the 7<sup>th</sup> century. See: Maroević, 2006 for an overview of the discussion on the date of the destruction of the Salona.

<sup>4</sup> For example, 29 specimens of trilobate arrowheads from site Lib near Tomislavgrad were defined as such (Oreč 1984, p. 99). I came across such an arrowhead on display in an archaeological museum with a legend mentioning the Avaro-Slavic conquests. Here, I will take the opportunity to point out one obvious difference in the shape of Roman and Avar arrowheads. Thanks to E. Erdmann, J. L. Davies, and especially W. Zanier, it has become possible to distinguish four main types of Roman trilobate arrowheads from the 1<sup>st</sup> to the 4<sup>th</sup> century, whose lengths, measured without the tang range between 2.3 and 4, 0 cm, with a width between 1.0 and 1.6 cm. (See: Erdmann 1976, pp. 5-10, Davies 1977, pp. 257-270 and especially Zanier 1988, pp. 5-27.) On the other hand, as stated by U. von Freeden regarding the period of the first Avar Khaganate, even the smallest versions of Avar arrowheads, measured without the tang, were not less than 4.0 cm long and less than 2.0 cm wide. (von Freeden 1991, p. 601).

<sup>5</sup> Petrincec 2009, p. 168.

<sup>6</sup> Milošević 2017, p. 104.

i ovdje vrijedi konstatacija da se nalazi nikako ne mogu inkorporirati u narativ o avarskim ili avarsko-slavenskim pustošenjima u 6. i 7. stoljeću. Naime, groblje se datira oko 800. godine. Prema tome, nalazi trokrilnih strelica mogu biti i dovoljno mlađi od spomenutog narativa da s njim nemaju nikakve veze.<sup>9</sup>

Avari i Slaveni nisu jedini koji su koristili trokrilne strelice. Na nalazištu Brežac kod Buzeta u Istri nađen je grob s oružjem i konjaničkom opremom.<sup>10</sup> Među devet strelica iz toga groba čak njih osam su trokrilne strelice s trnom za nasad. Ove je trokrilne strelice, površnom usporedbom s nalazima iz Panonije, B. Marušić definirao kao avarske. Tako je i dataciju groba postavio nakon dolaska Avara u Panoniju, a samog je pokojnika definirao kao Langobarda. Datacija je poslije dodatno opravdana na temelju analogija s materijalom iz sjeverne Italije te je postavljena na početak 7. st.,<sup>11</sup> što bi i odgovaralo avarsko-slavenskim provalama iz 6. i 7. st. Međutim, ovdje je problem što pokojnika teško možemo definirati kao Avara ili Slavena. Njegove su analogije najčvršće u Italiji, i to na langobardskim grobljima.

Istovremeno, trokrilne se strelice koriste i u južnom susjedstvu rimske provincije Dalmacije. Na prostoru današnje Albanije te malom dijelu Crne Gore i Makedonije, a uglavnom između Skadarskog i Ohridskog jezera, definirana je jedna poprilično autohtona kultura – Komani-Kroja.<sup>12</sup> Zanimljivo je da većina pronađenih trokrilnih strelica s ovog područja potječe iz grobova. Trokrilna strelica

find of the trilobate arrowhead is a time difference of about 150 years.

Chronologically close to this one is the find of a trilobate arrowhead from the early medieval cemetery in Velika Gorica, which is also attributed to the Slavs. Out of the four arrowheads discovered in grave 16, there is also one tanged trilobate specimen.<sup>7</sup> This arrowhead is defined as Avar, given that the belt strap end found in the same grave is typical for Avars.<sup>8</sup> As in the previous example, it is valid to state here that the finds cannot be incorporated into the narrative of the Avar or Avaro-Slavic lootings of the 6<sup>th</sup> and 7<sup>th</sup> centuries. Namely, the cemetery is dated to the time around the year 800, which means that the finds of trilobate arrowheads can be much younger than the aforementioned narrative so that they have no relations to it whatsoever.<sup>9</sup>

Avars and Slavs were not the only ones using trilobate arrowheads. At site Brežac near Buzet in Istria, a grave with weapons and horseman's equipment was found,<sup>10</sup> including nine arrowheads, eight of which were tanged trilobate arrowheads. B. Marušić defined the latter ones, based upon a merely superficial comparison with finds from Pannonia, as Avar arrowheads. Thus, he dated the grave to a time after the arrival of the Avars in Pannonia and defined the deceased himself as a Lombard. The dating was later additionally justified on the basis of analogies with material from northern Italy and

<sup>9</sup> Groblje u Velikoj Gorici spada u panonski prostor, uza sam rub Avarskog Kaganata, pa ću za trenutak uzeti mjesto i za konstataciju da se trokrilne strelice na prostoru Panonske nizine koriste i dalje u 9. stoljeću, dakle u razdoblju kada su Avari već izgubili političku važnost, čemu svjedoče nalazi iz Velikomoravske Kneževine (Ruttkey 2014 str. 77-78. Primjer trokrilne strelice nađene u grobu na području Velikomoravske u 9. st. vidi u: F. Kalousek 1971, str. 132). Nalazi trokrilnih strelica na području koje su naseljavala slavenska plemena često se shvaćaju kao avarski utjecaj, no vjerojatno je da su Slaveni i prije kontakta s Avarima poznavali i koristili ovu vrstu naoružanja. Nalazi trokrilnih strelica na prostoru Praške, Penkovske i Koločinske kulture datiraju se od 5. do 7. st. (Kazanski 2015, str 48-49, i Kazanski 2009, str. 235, sl. 1).

<sup>10</sup> Od oružja nađen je dvosjekli mač, dugi bojni nož s jednom oštricom, manji bojni nož te devet željeznih strelica. Vidi: Marušić 1962, str. 460-461.

<sup>11</sup> Torcellan 1986, str. 27.

<sup>12</sup> Pregled rasprave o porijeklu i karakteru kulture vidi u: M. Zagarčanin, 2018, str. 139.

<sup>7</sup> Apart from arrowheads, an iron axe, a knife, a ceramic vessel and a belt strap end were also found in grave 16. See: Hoffiller 1909, pp. 128-129.

<sup>8</sup> Simoni 1981, p. 160.

<sup>9</sup> The cemetery in Velika Gorica belongs to the Pannonian area, right on the edge of the Avar Khaganate, so I will briefly state that trilobate arrowheads were still used in the area of the Pannonian Plain in the 9<sup>th</sup> century, that is, in the period when the Avars had already lost their political importance, as evidenced by the finds from Great Moravia (Ruttkey 2014, pp. 77-78). A specimen of a trilobate arrowhead found in a grave in the area of Great Moravia in the 9<sup>th</sup> century can be seen in: F. Kalousek 1971, p. 132). Finds of trilobate arrowheads in the area inhabited by Slavic tribes are often interpreted as an Avar influence, however, it is likely that the Slavs knew and used this type of weapon even before their contact with the Avars. Finds of trilobate arrowheads in the area of the Prague-Penkov-Kolochin group of cultures date from the 5<sup>th</sup> to the 7<sup>th</sup> century (Kazanski 2015, pp. 48-49 and Kazanski 2009, pp. 235, fig. 1).

<sup>10</sup> Finds of weapons included a double-bladed sword, a long battle knife with one blade, a smaller battle knife and nine iron arrowheads. See: Marušić 1962, pp. 460-461.

nađena je na groblju u Sardu<sup>13</sup> te u grobovima 6 i 8 s groblja u Mijelama.<sup>14</sup> Jedna trokrilna strelica nađena je u grobu 7 u Lješ, na groblju koje traje od kraja 6. st. i tijekom cijelga 7. st.<sup>15</sup> Također, jedna je nađena u grobu 2, a čak dvije u grobu 15 groblja u Proseku, unutar sektora koji se datira u 7. i 8. st.<sup>16</sup> Poznate su mi i dvije trokrilne strelice pronađene u sklopu utvrda, konkretno u utvrđi Pogradec na južnom rubu Ohridskog jezera, a koja se datira u razdoblje od 4. do 8. st.<sup>17</sup> Zanimljivo je i to, da od svih trokrilnih strelica koje su pronađene u grobovima jedino strelica iz Lješa ima trn, dok sve druge strelice imaju tuljac za pričvršćivanje na drvenu osovinu. Po tome, ali i po izgledu glave strelice nalikuje im već spomenuta strelica iz Bajagića kod Sinja, čije bi detaljnije povezivanje s ovima iz Albanije, već moglo biti predmetom neke druge rasprave. Za sada je dovoljno konstatirati da iako datacijom ove strelice mogu biti uklopljene u narativ o avarsko-slavenkim napadima na Balkanski poluotok, one su pak nalaz iz grobova koji se nikako ne mogu povezati s Avarima.

Dakle, nijedan od ovih primjera trokrilnih strelica iz grobnih cjelina, iz provincije Dalmacije i bližeg joj područja, a izvan avarske vlasti, uopće ne možemo uklopiti u narativ o avarskim ili avaroslavenskim provalama s kraja 6. i u prvoj pol. 7. st. Tome možemo pridodati i činjenicu da ni jedna od spomenutih strelica, a također ni nijedna trokrilna strelica koja je nađena na području provincije Dalmacije, uopće ne posjeduje neke od izrazitijih značajki trokrilnih strelica s područja avarske vlasti – tupi vrh, perforacije u krilima ili pak dvostruki konkavni zavoj u prvoj polovini dužine glave.<sup>18</sup> Naravno, ne uzimam ovakve okolnosti kao dokaz da sve one trokrilne strelice s područja rimske provincije Dalmacije koje su nađene u sklopu utvrđenja ili naselja, nisu imale veze s avarskim ili avarsko-slavenkim provalama. Za sada mogu samo ustvrditi da oni Avari i Slaveni s kraja 6. i poč. 7. st., nisu jedini koji su ih koristili. Zbog toga upućujem na oprez pri pripisivanju trokrilnih strelica Avarima i Slavenima, odnosno kontekstualizaciji takvih nalaza unutar spomenutog narativa, ali i uzimam sebi za pravo da ispitam druge mogućnosti njihove interpretacije.

was set at the beginning of the 7<sup>th</sup> century,<sup>11</sup> which would correspond to the Avaro-Slavic invasions of the 6<sup>th</sup> and 7<sup>th</sup> centuries. However, the problem here is that we can hardly define the deceased as an Avar or Slav. His analogies are strongest in Italy or, to be precise, in Lombard cemeteries.

At the same time, trilobate arrowheads were also used in the southern neighbouring area of the Roman province of Dalmatia. On the territory of present-day Albania and a small part of Montenegro and Macedonia, mainly between Lake Skadar and Lake Ohrid, one rather autochthonous culture – the Komani-Kruja - was defined.<sup>12</sup> Interestingly, most of the trilobate arrowheads in this area were grave finds. One trilobate arrowhead was found in the cemetery in Sarda,<sup>13</sup> but also in graves 6 and 8 in the cemetery in Mijele.<sup>14</sup> One trilobate arrowhead was discovered in grave 7 in Lješ, in a cemetery that lasted from the end of the 6<sup>th</sup> century through the entire 7<sup>th</sup> century.<sup>15</sup> Another one was found in grave 2 and even two specimens in grave 15 of the cemetery in Prosek, within the sector that is dated to the 7<sup>th</sup> and 8<sup>th</sup> centuries.<sup>16</sup> Furthermore, I also know of two trilobate arrowheads found within fortifications, specifically in the Pogradec fortress on the southern edge of Lake Ohrid, which dates to the period from the 4<sup>th</sup> to the 8<sup>th</sup> century.<sup>17</sup> It is noteworthy that, of all the trilobate arrowheads that were found in graves, only the arrowhead from Lješ has a tang, while all other arrowheads have a socket for the attachment to a wooden shaft. In this respect, but also in terms of the arrowhead's appearance, the already mentioned arrowhead from Bajagić near Sinj resembles them, for which the establishment of a more detailed connection with these from Albania could certainly become the subject of another discussion. For now, it is sufficient to state that although the dating of these arrowheads can fit into the narrative of the Avaro-Slavic attacks on the Balkan Peninsula, they are nevertheless finds from graves that cannot at all be linked to the Avars.

<sup>11</sup> Torcellan 1986, p. 27.

<sup>12</sup> For an overview of the discussion on the origin and character of the culture, see: M. Zagarčanin, 2018, p. 139.

<sup>13</sup> Komata 1979, p. 109, T. III, 4.

<sup>14</sup> Zagarčanin, 2018, pp. 127-128, T.3,22 and T. IV,38.

<sup>15</sup> Prendi, 1979, p. 145, T. III and T. XVII,8.

<sup>16</sup> Doda, 1989, p. 147, 149 and 163, TII,9 and TVII, 7 and 10.

<sup>17</sup> Anamali, 1979, p. 231, T XI, 2 and 4.

<sup>13</sup> Komata 1979, str. 109, T. III, 4.

<sup>14</sup> Zagarčanin, 2018, str. 127-128, T.3,22 i T. IV, 38.

<sup>15</sup> Prendi, 1979, str. 145, T. III i T. XVII, 8.

<sup>16</sup> Doda, 1989, str. 147, 149 i 163, T. II, 9 i T VII, 7 i 10.

<sup>17</sup> Anamali, 1979, str. 231, T XI, 2 i 4.

<sup>18</sup> Von Freeden 1991, str. 601.

## Trokrilne strelice

### – historijat kritike avarske paradigme

Godine 1991. Uta von Freeden objavila je članak *Awarische Funde in Süddeutschland?*, u kojem se prvi put kritički pristupilo definiranju trokrilnih strelica u avarskom okruženju koje se datiraju u vrijeme Avarskog Kaganata. Svoju kritiku definiranja tih strelica kao avarskih autorica temelji na nalazima iz južne Njemačke koji se mogu datirati prije dolaska Avara u Panoniju, poput onih s groblja u Altenerdingu, gdje su trokrilne strelice pronađene u tri groba.<sup>19</sup> Grobovi iz Altenerdinga, naravno, nisu osamljen slučaj trokrilnih strelice s predavarskom datacijom na tom području. Tako je u jednom grobu u Hobersdorfu, koji se datira u 1. pol. 5. st., pronađeno čak pet trokrilnih strelica. J. Warner smatra da se radi o nomadskom grobu ili pak ukopu pod utjecajem hunskih običaja.<sup>20</sup> Uzgred ću spomenuti da su nomadski utjecaji vidljivi i u grobu 2 četvrte nekropole antičkog Singidunuma, datiranom u razdoblje 420./430. – 550. godine. Grob je uz pet trokrilnih strelica posjedovao i kompozitni luk.<sup>21</sup> Dvije trokrilne strelice nađene su i u ratničkom ukopu u Hammelburgu, koji se datira u posljednja desetljeća 5. st.,<sup>22</sup> a također se spominju i u grobu u katedrali u Kölnu, Gelbe Bürgu i Basel-Kleinhüningenu.<sup>23</sup> Prije dolaska Avara u Panoniju datira se i grob 18 iz Bülacha, u kojem su nađene tri trokrilne strelice. Netom prije dolaska Avara, odnosno u razdoblje između 530. i 570. godine, datira se i grob 21b u Inzing-Hartkirchenu, u kojem su također nađene tri trokrilne strelice.<sup>24</sup>

Iako se predavarske trokrilne strelice na području srednje Europe mogu vezati i uz hunski utjecaj, kako upućuju možda nalazi iz Hobersdorfa i Singidunuma, von Freeden ipak smatra da bi ove iz južne Njemačke, kao i one nađene na langobardskim grobljima u Italiji, ipak trebalo vezati za utjecaje mediteranske streličarske tradicije.<sup>25</sup> Naime, trokrilne strelice koristila je i rimska vojska. Zahvaljujući W. Zanieru, mogu se razlučiti četiri glavna tipa rimskih trokrilnih strelica u razdoblju od 1. do 4. st (sl. 1).<sup>26</sup>

Therefore, none of these trilobate arrowheads deriving from grave entities, from the province of Dalmatia and the area closer to it, and outside of Avar rule, can by no means be included in the narrative of Avar or Avaro-Slavic raids from the end of the 6<sup>th</sup> century and the first half of the 7<sup>th</sup> century. We can also add that neither one of the mentioned arrowheads nor any of the trilobate arrowheads that were found in the territory of the province of Dalmatia displayed any of the more distinct features of the trilobate arrowheads that come from the area under Avar rule - a blunt tip, perforations in the lobes or a double concave bend in the first half of the head's length.<sup>18</sup> Of course, I do not take these circumstances as proof that all those trilobate arrowheads from the area of the Roman province of Dalmatia, which were found within fortifications or settlements, had nothing to do with Avar or Avaro-Slavic raids. For now, I can only state that the Avars and Slavs from the end of the 6<sup>th</sup> century and the beginning of the 7<sup>th</sup> century were not the only ones who used them and therefore, I recommend caution when attributing the trilobate arrowheads to the Avars and Slavs, or contextualizing such finds within the aforementioned narrative. However, I also take it upon myself to examine other possibilities of their interpretation.

### Trilobate arrowheads – history of the criticism of the Avar paradigm

In 1991, Uta von Freeden published the article *Awarische Funde in Süddeutschland?*, in which, for the first time, a critical approach was taken to the definition of the trilobate arrowheads in the Avar environment, and which date back to the time of the Avar Khaganate. The author bases her criticism of defining these arrowheads of Avar origin on finds from southern Germany that can be dated to a time before the arrival of the Avars in Pannonia, such as those from the cemetery in Altenerding, where trilobate arrowheads were found in three graves.<sup>19</sup> The Altenerding graves are, of course, not the only case of trilobate arrowheads that date to the pre-Avar period in this area, as such a case was also recorded in one grave in Hobersdorf, which dates to the first half of the 5<sup>th</sup> century and contained five trilobate

<sup>19</sup> Radi se o grobovima br. 249, 682 i 1343, koji se datiraju u kraj 5. i poč. 6. st. (Von Freeden 1991, str. 597).

<sup>20</sup> Werner 1956, str. 49, 82, 89 i T. 11.

<sup>21</sup> Ivanišević, Kazanski 2008, str. 116-118, 133-134 i sl. 7.

<sup>22</sup> Menghin 1983, str. 196-197.

<sup>23</sup> Von Freeden 1991, str. 597.

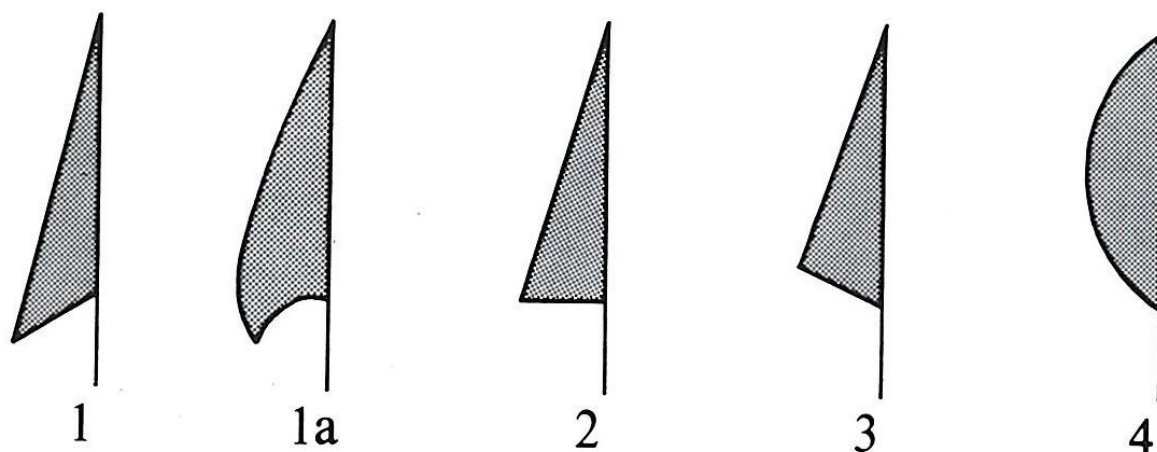
<sup>24</sup> Menghin 1983, str. 242.

<sup>25</sup> Von Freeden 1991, str. 595-598 i 605.

<sup>26</sup> Zanier 1988, str. 5-27. Naknadno je dodan i 5. tip

<sup>18</sup> von Freeden 1991, p. 601.

<sup>19</sup> These are graves no. 249, 682 and 1343 that date to the end of the 5<sup>th</sup> and the beginning of the 6<sup>th</sup> century (von Freeden 1991, p. 597).



Sl. 1. Tipovi rimskih strelica prema W. Zanieru (preuzeto iz: Zanier 1988, Abb.1)

Fig. 1 Types of Roman arrowheads according to W. Zanier (taken from: Zanier 1988, Abb.1)

Utvrđeno je također da se rimske trokrilne strelice od 1. do 4. stoljeća razlikuju od onih kasnijih izgledom i veličinom. Tako je dužina ovih strelica, mjereno bez trna, tek između 2,3 i 4,0 cm, sa širom između 1,0 i 1,6 cm. U kasnoj antici one se ponešto mijenjaju.<sup>27</sup> Njihovu je tipologiju, ali samo za ograničen prostor sjeverne Italije, napravio M. Buora, uz uzgredne paralele na obližnjim područjima.<sup>28</sup> Buora je tako definirao 6 tipova strelica (A – F), koje datira od 4. do 6. st., a od kojih bi ovdje izdvojio tip C, jer se za analogiju uzima nalaz trokrilne strelice iz Biska kod Sinja, koja je pak u izvještaju o istraživanjima definirana kao avarska.<sup>29</sup> Radi se o strelici koju odlikuje elegantnost, odnosno o relativno uskim i duguljastim strelicama za koje autor tvrdi da su tipične upravo za kasnu antiku.<sup>30</sup> Zanimljivo je u kontekstu mediteranske tradicije trokrilnih strelica spomenuti i nalaz iz Kripte Balbi u Rimu. Ondje je nađeno pet takvih strelica koje se datiraju u kraj 6. i poč. 7. st., što sugerira njihovu proizvodnju na Mediteranu, i to u vrijeme već uspostavljenog Avarskog Kaganata.<sup>31</sup> Strelice su očuvane u ukupnoj dužini od 5 do 7,8 cm, sa širom od 1,5 do 1,9 cm.<sup>32</sup> Izvan Avarskog Kaganata zasigurno su proizvedene i trokrilne strelice koje su

arrowheads. J. Warner believes that it is a Nomad's grave or a burial influenced by Hunnic customs.<sup>20</sup> It should be mentioned that nomadic influences are also visible in grave 2 of the fourth necropolis of ancient Singidunum, dated to the period 420/430-550 AD. The grave contained, in addition to five trilobate arrowheads, also a composite bow.<sup>21</sup> Two trilobate arrowheads were also found in a warrior's grave in Hammelburg, which dates to the last decades of the 5<sup>th</sup> century,<sup>22</sup> and are also mentioned in a grave in the cathedral in Cologne, Gelbe Bürg and Basel-Kleinhüningen.<sup>23</sup> Grave 18 in Bülach, in which three trilobate arrowheads were found, is also dated to the time before the arrival of the Avars in Pannonia. Grave 21b in Inzing-Hartkirchen, which also contained three trilobate arrowheads, is dated to the time just before the arrival of the Avars, i.e. to the period between 530 and 570 AD.<sup>24</sup>

Despite the fact that pre-Avar trilobate arrowheads discovered in the area of Central Europe can also be linked to the Hunnic influence, as the finds from Hoberndorf and Singidunum suggest, von Freeden still believes that the ones from southern Germany, as well as those found in Lombard cemeteries in Italy, should nevertheless be linked to the influences of the Mediterranean archery tradition.<sup>25</sup> Namely, trilobate arrowheads were also used by the Roman army. Thanks to W. Zanier, four main types

strelice, koji je datiran u Augustovo doba, a koji se dimenzijama uklapa u Zanierov okvir (Musch 2016, str. 201-204.).

<sup>27</sup> Kao primjer prilažem 30-ak trokrilnih strelica s područja Akvileje, koje se datiraju u razdoblje od 4. do 6. st. Vidi: M. Buora, 2016.

<sup>28</sup> Buora, 1991, str. 63-69.

<sup>29</sup> Milošević 1987, str. 95 i sl. 3.

<sup>30</sup> Buora, 1991, str. 64.

<sup>31</sup> Ricci 2012, str. 398-399.

<sup>32</sup> Isto 2012, str. 398, 748-752, II.4.

<sup>20</sup> Werner 1956, p. 49, 82, 89 and T. 11.

<sup>21</sup> Ivanišević, Kazanski 2008, pp. 116-118, 133-134 and fig. 7.

<sup>22</sup> Menghin 1983, pp. 196-197.

<sup>23</sup> von Freeden 1991, p. 597.

<sup>24</sup> Menghin 1983, p. 242.

<sup>25</sup> von Freeden 1991, pp. 595-598 and 605.



nađene u Španjolskoj, u bizantskoj utvrdi u Cartagena koja je u 2. pol. 7. st. doživjela destrukciju pod vizigotskom ofenzivom.<sup>33</sup>

Dakle, na temelju postojanja mediteranske tradicije izrade trokrilnih strelica te datacije strelica s područja južne Njemačke u predavarsko doba, von Freeden će izvesti svoj zaključak. Prema autorici, većinu strelica iz 6. st. i 1. pol. 7. stoljeća koje su nađene izvan avarskog prostora te kojima uz to nedostaju neke tipične avarske morfološke značajke, ne bi trebalo tražiti u avarskim, nego u mediteranskim modelima. Takvu definiciju prostorno širi i izvan Srednje Europe, pa upozorava, na primjer, da trokrilne strelice iz Rifnika u Sloveniji te Vrbljana u Bosni i Hercegovini ne moraju biti svjedočanstvo avarskih napada, već jednako tako mogu predstavljati i lokalne branitelje.

Von Freeden se u svom radu posebno osvrnula na trokrilne strelice *mit massiven Kopf*, kako ih naziva, koje pri samom vrhu ili u drugoj polovini glave, umjesto trokrilnog, imaju trokutasti presjek. Za njih tvrdi da nikako ne mogu biti avarski tipovi trokrilnih strelica, već upravo tipovi koji se preuzimaju od istočnorimske/bizantske vojske.<sup>34</sup> Pokušao ju je osporiti G. Csiky, strelicama s groblja na lokalitetu Csákberény-Orondpuszta koje se pripisuju Avarima. Tvrdi kako čak četvrtina svih trokrilnih strelica s ovog lokaliteta pripada tipu strelice *mit massiven Kopf* Ute von Freeden.<sup>35</sup> Smatram da to ipak neće biti slučaj, s obzirom da se na crtežima i fotografijama nalaza takvo što uopće ne vidi, osim eventualno na jednoj strelici iz groba 155. Ako i postoji takav tip strelice kod Avara, što je itekako sumnjivo s obzirom da nisu prepoznate na drugim avarodobnim lokalitetima, ipak im nije svojstven ni izvoran, već se radi o tipu strelice koji je u upotrebi i prije avarskog zaposjedanja tog prostora, o čemu dalje u tekstu. Mišljenje Ute Von Freeden da se radi o strelicama koje su posljedica bizantskog utjecaja mnogo prije dolaska Avara, prihvatio je i Buora, pa je ove trokrilne strelice uklopio u svoju klasifikaciju označivši ih kao tip E.<sup>36</sup> Takvo mišljenje zastupa i B. Odar, koji tvrdi da takvih strelica nema u avarskim grobljima, a njihove nalaze u zapadnoalpskom pro-

of Roman trilobate arrowheads from the 1<sup>st</sup> to the 4<sup>th</sup> century can be distinguished (fig. 1).<sup>26</sup>

It has also been established that the Roman trilobate arrowheads, dating from the 1<sup>st</sup> to 4<sup>th</sup> century, differ from the later ones in terms of appearance and size. Thus, the length of these arrowheads, measured without the tang, is only between 2.3 and 4.0 cm, while their width ranges between 1.0 and 1.6 cm. In the Late Antiquity, they slightly changed.<sup>27</sup> M. Buora developed a typology for them, but only for a limited area of northern Italy, with incidental parallels in nearby areas,<sup>28</sup> in which he defined 6 types of arrowheads (A - F) dating from the 4<sup>th</sup> to the 6<sup>th</sup> century. I would like to single out type C, because the find of the trilobate arrowhead from Bisko near Sinj was taken as an analogy here, which in the research report was defined as Avar.<sup>29</sup> It is a type of arrowhead that is characterized by elegance, i.e. a relatively narrow and elongated arrowhead, which the author claims is typical of the late ancient period.<sup>30</sup> In the context of the Mediterranean tradition of trilobate arrowheads, one should mention the find from Crypta Balbi in Rome, where five such arrowheads were found that date to the end of the 6<sup>th</sup> and the beginning of 7<sup>th</sup> century, which implies their production in the Mediterranean region during the already established Avar Khaganate.<sup>31</sup> The arrowheads have been preserved in a total length of 5 to 7.8 cm, with a width of 1.5 to 1.9 cm.<sup>32</sup> Furthermore, the trilobate arrowheads discovered in Spain, more precisely in the Byzantine fortress in Cartagena that was destroyed in the second half of the 7<sup>th</sup> century during the Visigoth offensive, were certainly also produced outside the territory of the Avar Khaganate.<sup>33</sup>

Namely, based upon the existence of a Mediterranean tradition of producing trilobate arrowheads and the dating of the arrowheads from southern Germany to the pre-Avar period, von Freeden draws her conclusion. According to the author,

<sup>26</sup> Zanier 1988, pp. 5-27. A fifth type of arrowhead was subsequently added, which is dated to the Augustan age, and whose dimensions fit into Zanier's framework (Müsch 2016, pp. 201-204).

<sup>27</sup> I add about 30 trilobate arrowheads from the area of Aquileia as an example, which date from the 4<sup>th</sup> to the 6<sup>th</sup> century. See: M. Buora, 2016.

<sup>28</sup> Buora, 1991, pp. 63-69.

<sup>29</sup> Milošević 1987, p. 95 and fig. 3.

<sup>30</sup> Buora, 1991, p. 64.

<sup>31</sup> Ricci 2012, pp. 398-399.

<sup>32</sup> Ibid., p. 398, 748-752, II.4.

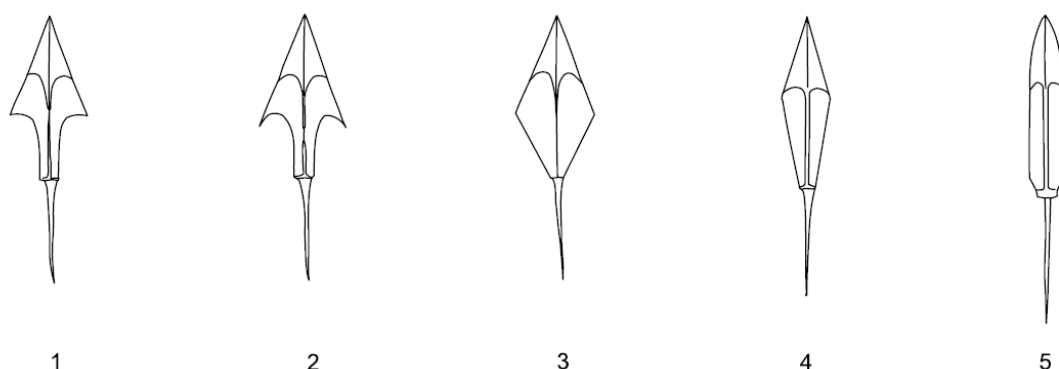
<sup>33</sup> Sánchez 2005, pp. 188-190.

<sup>33</sup> Sánchez 2005, str. 188-190.

<sup>34</sup> Von Freeden 1991, str. 601-604.

<sup>35</sup> Csiky 2015, str. 191. Kao grobovi s takvim strelicama navode se oni označeni brojevima 10 (T. 1), 89 (T.8), 100 (T.9 i T.54), 155 (T.14 i T.66), 179, 262 (T.22 i T.80), 278 (T.24), 365 (T.32) i 377 (T.33).

<sup>36</sup> Buora 1991, str. 65-66.



Sl. 2. Varijante A2 tipa trokrilnih strelica prema B. Odaru (preuzeto iz: Odar 2006, Sl. 13)

Fig. 2 Variants of type A2 of trilobate arrowheads according to B. Odar (taken from: Odar 2006, Fig. 13)

storu dovodi u vezu s bizantskom dominacijom iz sredine 6. st., koja se zbilila nakon pada istočnogot-ske i prije uspostave langobardske vlasti.<sup>37</sup> Odarov doprinos ovoj temi jest to što je povezo i objavio materijal iz jednog davno otkopanog groba s kasno-antičkog groblja Kranj - Lajh u Sloveniji, te je prvi napravio klasifikaciju ovog tipa strelica (sl. 2).<sup>38</sup>

Grob je, uz mač, dva duga noža i tobolac, sadržavao i 23 strelice. Među njima bilo je čak 12 strelica *mit massivem Kopf*, kako ih naziva von Freeden, odnosno tip E po Buori. Odar ih pak naziva trokrilnim strelicama s piramidalnim vrhom te ih u svojoj klasifikaciji označava kao tip A2. Potom je autor strelice s piramidalnim vrhom razdvojio na nekoliko podtipova, temeljeći tu podjelu ponajprije na nalazima iz Slovenije, ali i na paralelama s nalazima koje su također koristili von Freeden i Buora.<sup>39</sup> Iako Odarovu tipologiju smatram vrijednim doprinosom daljnjoj analizi ove vrste strelica, ipak ću je dalje u tekstu dodatno razraditi, na osnovi sagledavanja većeg broja nalaza u odnosu na one dostupne spomenutim autorima. Takve strelice za potrebe ovog rada deskriptivno nazivam – trokrilnim strelicama s djelomično trokutastim presjekom. Ovdje se sam vrh ili druga polovica trokrilne glave dizajnira u oštricu punog trokutastog presjeka, vjerojatno kako bi strelica postigla bolji efekt kod neprijatelja zaštićenog oklopom, a da pritom zadrži približno jednaka aerodinamična svojstva koja karakteriziraju osnovnu vrstu trokrilne strelice.<sup>40</sup>

Upravo tako dizajnirane trokrilne strelice tema su ovog rada, a sam rad obilježiti će izrada njihova

most arrowheads from the 6<sup>th</sup> and the first half of the 7<sup>th</sup> century that were found outside Avar territory, but also lack some typical Avar morphological features, should not be searched in Avar, but rather in Mediterranean models. She also expands such a definition spatially beyond Central Europe and as an example points out that the trilobate arrowheads from Rifnik in Slovenia and Vrbljani in Bosnia and Herzegovina do not have to be a testimony of Avar attacks, but can actually represent local defenders.

In her work, von Freeden specifically referred to trilobate arrowheads *mit massivem Kopf*, as she calls them, which instead of a trilobate cross-section have a triangular one at the very top or in the second half of the head. She claims that they cannot possibly be Avar types of trilobate arrowheads, but actually types that had been taken over from the Eastern Roman/Byzantine army.<sup>34</sup> G. Csiky tried to dispute her point of view by referring to the arrowheads from the cemetery at site Csákberény-Orondpuszta, which are attributed to the Avars. He claims that as many as a quarter of all trilobate arrowheads from this site belong to the type Freeden classified as arrowheads *mit massivem Kopf*.<sup>35</sup> I believe that this is not the case here, given the fact that this feature cannot be seen at all in the drawings and photographs of the finds, except maybe on one arrowhead from grave 155. If there even is such a type of arrowhead among the Avars, which is very doubtful as that they have not been identified at other sites from the Avar period, it is neither a characteristic Avar arrowhead nor one of Avar origin, but rath-

<sup>37</sup> Odar 2006, str. 257.

<sup>38</sup> Isto, str. 243-253.

<sup>39</sup> Isto, str. 255-257.

<sup>40</sup> Кирпичников, Медведев 1985, str. 303-307 i 314-315.

<sup>34</sup> Von Freeden 1991, pp. 601-604.

<sup>35</sup> Csiky 2015, p. 191. Graves with such arrowheads are those marked with the numbers 10 (T. 1), 89 (T.8), 100 (T.9 and T.54), 155 (T.14 and T.66), 179, 262 (T.22 and T.80), 278 (T.24), 365 (T.32) and 377 (T.33).

popisa te produbljuvanje rasprave o njihovoj provenijenciji, dataciji, atribuciji te njihovoj kontekstualizaciji, posebice s obzirom na područje rimske provincije Dalmacije.<sup>41</sup>

### Trokrilne strelice s djelomično trokutastim presjekom

Nalazi s područja južne Njemačke, sjeverne i srednje Italije te Slovenije bili su osnova za zaključke koje su iznijeli U. von Freeden, M. Buora i B. Odar, povezujući ih s istim nalazima iz Klobuka kod Ljubuškog u Bosni i Hercegovini te onima s lokaliteta Kulina e Vogel kod Tenešdola na Kosovu te Golemanovo i Sadovsko kale u Bugarskoj. Strelica iz Klobuka nađena je na prostoru ranokršćanske crkve, u njenom naosu, ali u naknadnom ispunjenju toga prostora kamenjem i zemljom.<sup>42</sup> Kulina e Vo-

er a type of arrowhead that was used even before the Avar occupation of that area, which will be further discussed in the text. Von Freeden's opinion that these are arrowheads that are the result of Byzantine influence long before the arrival of the Avars was also accepted by Buora, who included these trilobate arrowheads in his classification, marking them as type E.<sup>36</sup> B. Odar also shares this opinion and claims that such arrowheads have not been found in Avar cemeteries, while their finds in the western Alpine area can rather be linked to the Byzantine domination in the mid-6<sup>th</sup> century, which was after the fall of the Ostrogothic and before the establishment of the Lombard rule.<sup>37</sup> Odar contributed to this topic by linking and publishing material from a grave, excavated a long time ago from the late ancient cemetery of Kranj - Lajh in Slovenia. He was also the first to make a classification of this type of arrowheads (fig. 2).<sup>38</sup>

Apart from a sword, two long knives and a quiver, the grave contained also 23 arrowheads. Among them, there were even 12 arrowheads *mit massivem Kopf*, as von Freeden calls them, or type E according to Buora. Odar, on the other hand, calls them trilobate arrowheads with a pyramidal tip and designates them as type A2 in his classification. He further divides the arrowheads with a pyramidal tip into several subtypes, based primarily on finds from Slovenia, but also on analogies to finds that were also used by von Freeden and Buora.<sup>39</sup> Although I consider Odar's typology to be a valuable contribution to the further analysis of this type of arrowhead, I will further elaborate it later in the text, based on reviewing a larger number of finds than was available to the mentioned authors. For the purposes of this paper, I descriptively name these arrowheads- trilobate arrowheads with a partially triangular cross-section. In this case, the tip itself or the second half of the trilobate head is designed into a blade of a full triangular cross-section, presumably to make the arrowhead more effective against an enemy protected by armour, while maintaining approximately the same aerodynamic properties that characterize the basic type of the trilobate arrowhead.<sup>40</sup>

<sup>41</sup> Najkvalitetniji nalaz strelice, za potrebe njihove tipologije, datiranja i atribuiranja, jesu zatvoreni arheološki konteksti. Oni su pak za trokrilne strelice najbrojniji kao grobne cjeline „ratničkog tipa“. Neka su istraživanja „ratničkih“ grobova ukazala da se zapravo oni ne moraju nužno vezati uz ratnike, već da u određenim okolnostima „oružja“ postaju simbolikom koja veže prostor i vlast, a posebno se to odnosi na ona oružja koje se koriste u lovu, kao što su strelice. Ipak, trokrilne strelice s djelomično trokutastim presjekom dizajnirane su kao takve radi veće efikasnosti u borbi s oklopljenim neprijateljem, dakle koriste se u vojne, a ne u lovne svrhe. Tome u prilog govori i činjenica da su ove strelice, kao grobni nalaz, u svim slučajevima nađene najmanje s mačem, a nerijetko je to i veoma bogato opremljen pokojnik s repertoarom vojne opreme, navalne i obrambene. Iznimka su jedino strelice s područja kulture Komani-Kruja, gdje uz strelice ne dominira tako snažan ratnički repertoar, ali čiji se pripadnici zapravo tumače kao „zaštitari“ određenog područja. Nadalje, u razdoblju koje ovdje ponajviše obrađujemo, zemljoposjednička aristokracija ujedno je i vojna, odnosno nastala je iz vojnih krugova kad se plaća ratnicima ne osigurava toliko iz porezom održavane blagajne, već češće plijenom i novoosvojenim prostorom. Ovdje bismo opet mogli napraviti iznimku s obzirom na Bizant, što bi moglo odgovarati i iznimnosti kulture Komani-Kroja koja je s njim u vezi. Uglavnom, prostorna je vlast i sada u rukama ratnika. Pa makar se neki od njih i nisu okušali u borbi, njihov je status mogao ostati „ratničkim“, odnosno prostorna vlast davala im je pravo pa i obvezu udjela u „monopolu nad nasiljem“. Ratnik tako postaje statusom koji se može, ali i ne mora iskazivati na bojnopolju. Stoga, kada se govori o grobovima u kojima su ove strelice nađene, koristit će se termin ratnički, koji možemo zamišljati i u statusnom, a ne samo praktičnom smislu.

<sup>42</sup> Na crtežu koji donosi D. Sergejevski označena je njezina dužina od 5,6 cm, od čega na glavu otpada 3,5 cm, te je nacrtan trokrilni presjek. Ta krila su na crtežu

<sup>36</sup> Buora 1991, pp. 65-66.

<sup>37</sup> Odar 2006, p. 257.

<sup>38</sup> Ibid., pp. 243-253.

<sup>39</sup> Ibid., pp. 255-257.

<sup>40</sup> Кирпичников, Медведев 1985, pp. 303-307 and 314-315.

gel je pak gradinsko naselje na Kosovu. Ovdje je u sondi 3, u izmiješanim slojevima koje su sadržavali ranobizantski materijal i novac cara Justinijana I (527.-565.), nađena brončana, odlično sačuvana trokrilna strelica s djelomično trokutastim presjekom.<sup>43</sup> Iako spomenutim autorima nije bio poznat, ovdje ću spomenuti i nalaz ovog tipa trokrilne strelice iz Albanije, s utvrde Pogradec koja se datira od 4. do 8. st.<sup>44</sup> Najviše strelica takvog tipa nađeno je u bugarskom Sadovcu, na dva utvrđenja međusobno udaljena nekih 500-ak metara: Golemanovo i Sadovsko kale (T.2:16-17, T.3:8-12, T.4:12).<sup>45</sup> Na prvom je nađeno čak 23 primjerka takvih strelica, i to posvuda na utvrđenju: u tzv. gornjem gradu, uz glavna vrata, uz zidove utvrđenja i u predgradu. Na Sadovskom kalu ih je nađeno pak šest, što čini ukupno 29 trokrilnih strelica s djelomično trokutastim presjekom na ova dva obližnja lokaliteta. J. Werner ih tumači kao ostavštinu avarskih napadača, a što se zbilo 585. ili 587. godine.<sup>46</sup> Dakle, radi se o područjima koja su, uz izuzetak južne Njemačke, većim ili manjim dijelom bila pod vlašću istočnorimskog cara i na kojima još uvijek živi ili pak preživljava antička tradicija, pa tako i tradicija streličarstva. Međutim, postoji zaista i velik broj nalaza ovih strelica i na područjima kojih se spomenuti trojac autora nije doticao, kao i novijih nalaza ovog tipa strelica na području Italije i Slovenije, a koji bi možda mogli utjecati na njihovu interpretaciju.

Pregled nalaza trokrilnih strelica s djelomično trokutastim presjekom započet ću prvo s područjima koje su obradili spomenuti autori. Na području južne Njemačke nalazi se već spomenuti ratnički grob 21b iz Inzing – Hartkirchena, koji je u repertoaru ratne opreme imao i tri trokrilne strelice s djelomično trokutastim presjekom (T.4:1,9-10). Grob se datira netom prije dolaska Avara u Panoniju, između 530. i 570. godine,<sup>47</sup> pa tako postaje i indikativan u određivanju ovog tipa strelice kao predavarski

presjeka spojena isprekidanom linijom pa se čini da je autor želio ukazati i na njezin puni trokutasti presjek u određenom dijelu glave (vidi: Sergejevski 1954, str. 192 i 198, sl. 2B). Takvom mišljenju, koje je uostalom zastupala i von Freeden, priklonit ću se i zbog analogije u obliku ove strelice s onima nađenim na lokalitetima Kranj – Lajh, Rifnik, Konjski Hrib, Felbach – Schmiden, a možda i Petronell te neki drugi koji će biti spomenuti u daljnjem pregledu nalaza.

<sup>43</sup> Mehmetaj 1990, str. 96-99, sl. 5.

<sup>44</sup> Anamali, 1979, str. 231, T XI, 2 i 4.

<sup>45</sup> Uenze 1992, str. 421-535, T. 41:19-46

<sup>46</sup> Werner 1992, str. 417.

<sup>47</sup> Menghin 1983, str. 242.

It is exactly the trilobate arrowheads designed in such way that are the topic of this paper. The paper itself will be marked by the creation of their list and the deepening of the discussion about their provenance, dating, attribution and their contextualization, especially with regard to the area of the Roman province of Dalmatia.<sup>41</sup>

### Trilobate arrowheads with a partially triangular cross-section

The finds from southern Germany, northern and central Italy and Slovenia were the basis for the conclusions presented by U. von Freeden, M. Buora and B. Odar, who linked them to identical finds from Klobuk near Ljubuški in Bosnia and Herze-

<sup>41</sup> The best finds of arrowheads, for the purposes of their typology, dating and attribution, are those from closed archaeological contexts. In the case of trilobate arrowheads, they are most numerous as grave entities of the “warrior-type”. Some research works of “warrior” graves have shown that in fact they were not necessarily associated with warriors, but that in certain circumstances “weapons” became symbols that link space and power, which especially applies to weapons used in hunting, such as arrowheads. However, the trilobate arrowheads with a partially triangular cross-section were intentionally designed to achieve greater efficiency in combat with an armoured enemy, hence they were used for military, not hunting purposes. This is supported by the fact that these arrowheads, when grave finds, were in all cases found at least with a sword. In many cases, it was a very richly equipped deceased with a repertoire of military equipment, both for offense and defence. The only exception are arrowheads from the area of the Komani-Kruja culture, where such a strong warrior repertoire is not dominant with those arrowheads, and where its members are actually interpreted as “protectors” of a certain area. Furthermore, in the period we are mostly dealing here with, the landowning aristocracy was also military, that is, it arose from military circles when the warriors were not paid so much from the treasury financed by taxes, but more often with loot and newly conquered territory. Here again, we could make an exception with regard to Byzantium, which could also correspond to the exceptionality of the Komani-Kruja culture, which is related to it. Basically, the territorial power was still in the hands of the warriors. Even if some of them had not participated in the fight, their status could still have been of a “warrior”, that is, the territorial authority gave them the right and even the obligation to participate in the “monopoly over violence”. The warrior thus becomes a status that may or may not be manifested on the battlefield. Therefore, when talking about the graves in which those arrowheads were found, the term warrior will be used, a term conceivable in status terms and not only in a practical sense.

tip. Trokrilne strelice s djelomično trokutastim presjekom nađene su još i na lokalitetima Muhtal-Nieder-Ramstadt II (grob 3), Mundesheim (grob 5), Bopfingen (grob 112), Feldbach - Schmiden (T.2:4) (grob 37) i Pulling (grob 9) u južnoj i središnjoj Njemačkoj,<sup>48</sup> na području Alemana, Bavaraca i dijelom Tirinžana. Trokrilne strelice s djelomično trokutastim presjekom nađene su i u Carnuntumu (T.5:7) i Petronellu (T.2:5) u današnjoj Austriji, a ako se već ne mogu pripisati Avarima, onda ih pak možemo povezati s Langobardima koji su ovdje boravili neko vrijeme.<sup>49</sup>

Na prostoru današnje Slovenije također je nađen veći broj strelica ovakvog tipa. U sklopu utvrđenja nađene su na lokalitetima Zidani gaber nad Mihovim (T.2:13),<sup>50</sup> Gradac kod Velike Strmice,<sup>51</sup> Gradec kod naselja Prapetno (T.4:7)<sup>52</sup> te Tonovcov grad kod Kobarida (T.2:14),<sup>53</sup> kasnoantičkoj utvrdi u kojoj je jedno vrijeme bio stacioniran manji garnizon Istočnih Gota i/ili Langobarda.<sup>54</sup> Dvije takve strelice nađene su i na lokalitetu Rifnik kod Šentjurja, od kojih jedna unutar kuće br. 5 datirane u 6. st (T.2:11).<sup>55</sup> Na lokalitetu Ajdna nad Potoki pred jednom su građevinom nađene dvije trokrilne strelice, od toga jedna s djelomično trokutastim presjekom (T.4:6). Prepoznat je i sloj ugljena koji ukazuje da je građevina uništena požarom, što je datirano u 2. pol. 6. st. Izvan građevine nađeni su ljudski ostatci s vrhom sulice među kostima, što sugerira nasilnu smrt

govina and those from the site Kuline e Vogël near Teneshdoll in Kosovo and Golemanovo Kale and Sadovsko Kale in Bulgaria. The arrowhead from Klobuk was found in the area of an early Christian church, i.e. in its naos or in the subsequent filling of that space with stones and earth respectively.<sup>42</sup> Kuline e Vogël is a hillfort settlement in Kosovo, where a well-preserved bronze trilobate arrowhead with a partially triangular cross-section was found in mixed layers of earth in trench 3, which also contained early Byzantine material and coins of Emperor Justinian I (527-565 AD).<sup>43</sup> Although not known to the afore-mentioned authors, I'd also like to mention the find of this type of trilobate arrowhead that derives from the Pogradec fortress in Albania, which dates from the 4<sup>th</sup> to the 8<sup>th</sup> century.<sup>44</sup> Most of these arrowheads were found in Sadovets, Bulgaria, within two fortifications that lie some 500 meters apart: Golemanovo Kale and Sadovsko Kale (T.2:16-17, T.3:8-12, T.4:12).<sup>45</sup> As many as 23 specimens of such arrowheads were found everywhere within the first fortification: in the so-called upper town, next to the main gate, along the walls of the fortification and in the suburbs. The fortification Sadovsko Kale yielded six specimens, which means that there was a total of 29 trilobate arrowheads with a partially triangular cross-section at these two nearby sites. J. Werner interprets them as belongings of Avar invaders from their raids in 585 or 587 AD.<sup>46</sup> In this regard, we in fact speak of areas that, with the exception of southern Germany, were more or less under the rule of the Eastern Roman Emperor and where the ancient tradition was still present or had survived, including the tradition of archery. However, there is indeed also a large number of finds of these arrowheads in areas that the

<sup>48</sup> Von Freeden 1991, str. 601-602.

<sup>49</sup> Winter 1997, str. 64, 103, 110, Kat.br. 3i/2 i 3m/36. Iako autor strelice datira u avarsko doba radi avarskih nalaza na tom prostoru, te im neposredno sugerira avarsku provenijenciju, ipak se radi o nalazima izvan arheološkog konteksta. Oni, s obzirom na druge nalaze, mogu pripadati i Langobardima. Tako je primjerice u Carnuntumu nađena S-fibula koja se tradicionalno pripisuje Langobardima, a koji su također naseljavali ovaj prostor (vidi: Werner 1962, Die Langobarden in Pannonien, str. 115).

<sup>50</sup> Njezina ukupna dužina je 8,0 cm. Datirana je u 6. st (Bitenc, Knific 2001, str. 73, sl. 235).

<sup>51</sup> Odar 2006, str. 255.

<sup>52</sup> Strelica je nađena detektorom metala. Očuvana je tek glava s manjim dijelom trna. Ukupne dimenzije su 5,1 x 1,14 cm (Bausovac 2001, str. 11 i 26).

<sup>53</sup> Prema crtežu iz: Modrijan, Milavec 2011a, T.9:16. Strelica je pronađena u izmiješanim slojevima (Milavec 2011, str. 49), a njezina ukupna duljina je 6,7 cm. (Modrijan, Milavec, 2011b, str. 412).

<sup>54</sup> Ciglinečki 2011, str. 287.

<sup>55</sup> Ukupna dužina strelice iz kuće br. 5 je 7,6 cm, dok je druga strelica nalaz izvan arheološkog konteksta i njezina je dužina 8,8 cm (Bitenc, Knific 2001, str. 73, sl. 238).

<sup>42</sup> The drawing by D. Sergejevski shows its length to be marked as 5.6 cm, of which 3.5 cm represent the head, and a trilobate cross-section. The lobes are connected by a broken line on the drawing of the cross-section, so it seems that the author wanted to indicate its full triangular cross-section in a certain part of the head (see: Sergejevski 1954, p. 192 and 198, fig. 2B). I will agree with such an opinion, which was also represented by von Freeden, because of the analogy in the shape of this arrowhead with those found at the sites Kranj - Lajh, Rifnik, Konjski Hrib, Felbach - Schmiden, and perhaps Petronell and some others that will be mentioned in the further review of the finds.

<sup>43</sup> Mehmetaj 1990, pp. 96-99, fig. 5.

<sup>44</sup> Anamali, 1979, p. 231, T XI, 2 and 4.

<sup>45</sup> Uenze 1992, pp. 421-535, T. 41:19-46.

<sup>46</sup> Werner 1992, pp. 417.

osobe kao i nasilnu devastaciju objekta.<sup>56</sup> Trokrilna strelica s djelomično trokutastim presjekom nađena je i na utvrđi Konjski hrib, izvan Kule 1, u sloju koji je datiran u 2. pol. 6. st (T.2:12).<sup>57</sup> Najviše trokrilnih strelica s djelomično trokutastim presjekom nađeno je pak na nekropoli Kranj – Lajh. Jedan grob sadržavao je tek jednu strelicu toga tipa, dok je drugi grob, već prethodno spomenuti, uz dvosjekli mač, dva duga noža i suspenzor za tobolac, sadržavao i 23 strelice, od kojih je čak 12 trokrilnih s djelomično trokutastim presjekom (T.2:6-9, T.4:3-5, T.5:2-6). Radi se o groblju koje traje tijekom cijeloga 6. st., a na kojem se prema Z. Vinskom uočavaju autohtoni i germanski elementi, od ovih posljednjih posebice langobardski, potom i ostrogotski, gepidski i alemanski, a također su prisutni i merovinški utjecaji.<sup>58</sup> B. Odar spomenuti grob datira oko sredine 6. st.,<sup>59</sup> te, prihvaćajući von Freedeninu teoriju o porijeklu ovih strelica, smatra da one na područje Slovenije dolaze s bizantskom vojskom u razdoblju između ostrogotske i langobardske vlasti.

Ipak, ova je Odarova pretpostavka kontradiktorna u odnosu na kontekst u kojem su strelice nađene. Naime, pokojnik koji je s njima pokopan na nekropoli Kranj – Lajh uopće se ne bi trebao definirati kao bizantski vojnik ili autohtoni žitelj, jer je njegov ukop zapravo analogan grobovima koji se susreću kod germanskih populacija. Pokojnika bismo prije mogli povezati s Langobardima, s obzirom na analogije predmeta iz groba, druge nalaze s iste nekropole, a i poznate okolnosti o langobardskoj vladavini ovim područjem i njihovom prodiranju u Italiju u 2. pol. 6. st.

Kao langobardski definira se, primjerice, i grob u Brešču u Istri kao i grobovi 119 iz Castel Trosina te grob 48 iz Nocera Umbre, koji su sadržavali ovaj tip strelice. Grob u Brešču, već prethodno spomenut, datira se u 1. pol. 7. st. Od oružja je sadržavao dvosjekli mač, dugi bojni nož s jednom oštricom, manji bojni nož te devet željeznih strelica. Jedna strelica je oblika lovorova lista, a sve ostale, njih čak osam, trokrilne su strelice s djelomično trokutastim presjekom (T.3:2-3, T.4:9-10).<sup>60</sup> Slično Brešču datira

three mentioned authors did not address, as well as more recent finds of this type of arrowheads in Italy and Slovenia, which could possibly influence the interpretation of them.

My review of the finds of trilobate arrowheads with a partially triangular cross-section starts with the areas covered by the mentioned authors. In terms of the territory of southern Germany, there is the already mentioned warrior grave 21b from Inzing - Hartkirchen, which among military equipment also contained three trilobate arrowheads with a partially triangular cross-section (T.4:1,9-10). The grave is dated to the time just before the arrival of the Avars in Pannonia, between 530 and 570 AD,<sup>47</sup> and hence becomes indicative in determining this type of arrowheads as pre-Avar. Trilobate arrowheads with a partially triangular cross-section were also found at the sites Muhtal-Nieder-Ramstadt II (grave 3), Mundesheim (grave 5), Bopfingen (grave 112), Feldbach - Schmiden (T.2:4) (grave 37) and Pulling (grave 9) in southern and central Germany,<sup>48</sup> in the territory of the Alemanni, Bavarians and partly of the Thuringians. Trilobate arrowheads with a partially triangular cross-section were also found in Carnuntum (T.5:7) and Petronell (T.2:5) in present-day Austria, and even if no attribution can be established to the Avars, then we can link them to the Lombards who had lived there for some time.<sup>49</sup>

A large number of arrowheads of this type were also found on the territory of present-day Slovenia. Specimens were discovered within fortification complexes at sites Zidani gaber nad Mihovim (T.2:13),<sup>50</sup> Gradac near Velika Strmica,<sup>51</sup> Gradec near the settlement Prapetno (T.4:7),<sup>52</sup> and Tonov-

<sup>47</sup> Menghin 1983, p. 242.

<sup>48</sup> von Freeden 1991, pp. 601-602.

<sup>49</sup> Winter 1997, p. 64, 103, 110, cat.no. 3i/2 and 3m/36. Despite the author's dating of the arrowheads to the Avar era due to Avar finds in that area, and his suggestion of Avar provenance, these are finds outside the archaeological context. By taking into account the other finds, they may also belong to the Lombards. For example, an S-fibula was found in Carnuntum, which is traditionally attributed to the Lombards, who also inhabited this area. (see: Werner 1962, Die Langobarden in Pannonien, p. 115).

<sup>50</sup> Its overall length is 8.0 cm. It is dated to the 6<sup>th</sup> century. (Bitenc, Knjfic 2001, p. 73, fig. 235)

<sup>51</sup> Odar 2006, p. 255.

<sup>52</sup> The arrowhead was discovered with a metal detector. Only the head with a smaller part of the tang has been preserved. The overall dimensions are 5,1 x 1,14 cm (Bausovac 2001, p. 11 and 26).

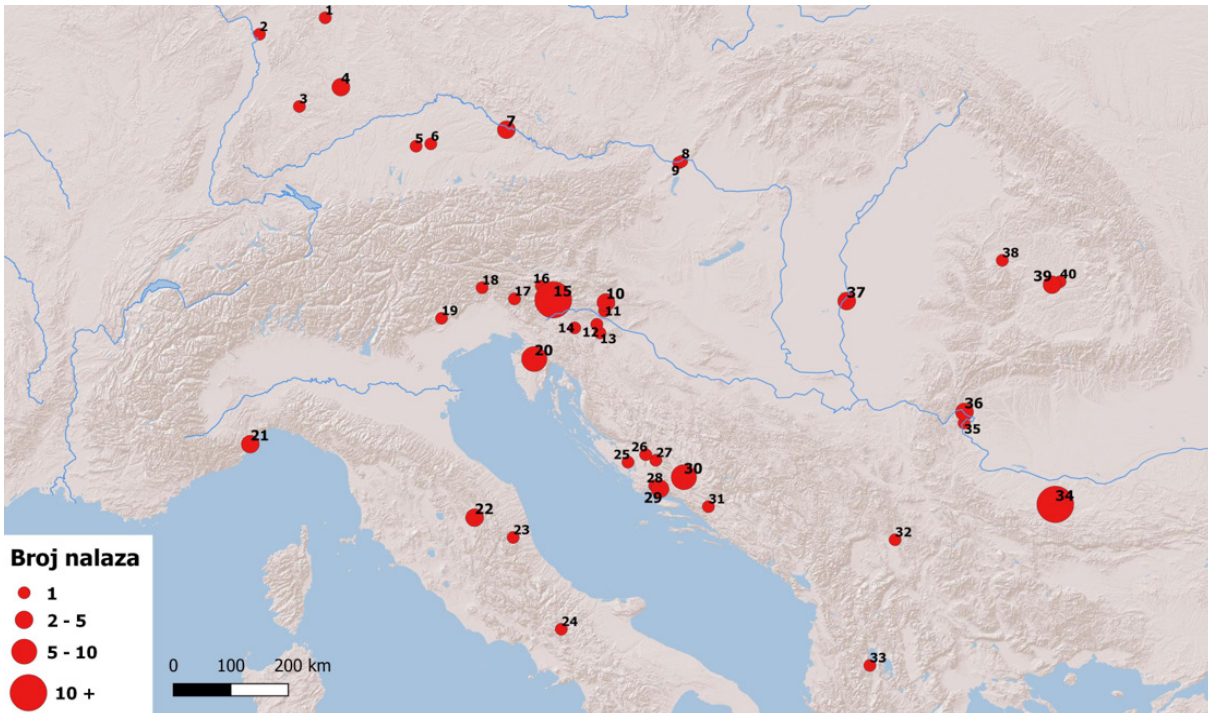
<sup>56</sup> Vidrih-Perko, Sagadin 2004, str. 219-221, sl. 7.

<sup>57</sup> Ukupna dužina strelice je 6,2 cm (Milavec, Modrijan 2020a, str. 171, T.1,10, i Milavec, Modrijan, 2020b, str. 346).

<sup>58</sup> Vinski 1980, str. 18-19.

<sup>59</sup> Odar 2006, str. 257 i 263.

<sup>60</sup> Torcellan 1986, str. 25-27. Većina strelica jako je oštećena korozijom, ali se svakako raspoznaje njihov trokutasti presjek pri vrhu (vidi crteže u Torcellan 1986,



1. Mundesheim, 2. Muhtal – Niedre-Ramstadt II, 3. Felbach Schmidlen, 4. Bopfingen, 5. Pulling, 6. Altermerding, 7. Inzing – Hartkirchen, 8. Carnuntum, 9. Petronell, 10. Rifnik, 11. Gradec pri Prapetnem, 12. Gradac – Velika Strmica, 13. Zidani gaber nad Mihovim, 14. Konjski hrib, 15. Kranj – Lajh, 16. Ajdna nad Potoki, 17. Tonovcov grad kod Kobarida, 18. Invillino – Ibligo, 19. Monte Castelazzo, 20. Brežac, 21. S. Antonino, 22. Nocera Umbra, 23. Castel Trosino, 24. Campochiario, 25. Bribir, 26. Knin - Greblje, 27. Jojića glavica kraj Vrlike, 28. Birani, 29. Solin, 30. Podgradina kod Livna, 31. Klobuk kod Ljubuškog, 32. Kulina e Vogel, 33. Pogradec, 34. Sadovec, 35. Liubičevac – Glamija, 36. Dijana, 37. Szőreg-Téglagvár, 38. Căpusu Mare – Cănepiste, 39. Maroscsapó, 40. Moreszi

#### Karta 1. Nalazišta trokrilnih strelica s djelomično trokutastim presjekom

Map 1. Sites of discovery of trilobate arrowheads with a partially triangular cross-section

se grob 119 s nekropole Castel Trosino u središnjoj Italiji.<sup>61</sup> U grobu su nađeni dijelovi konjske opreme, pojasna garnitura od zlata i srebra, mač, ostruge, umbo i ručka štita, dijelovi oklopa, češalj itd. Nađeno je i devet trokrilnih strelica, a među njima i jedna s djelomično trokutastim presjekom (T.3:4). Tobolac se nije očuvao, ali slično grobu s lokaliteta Kranj – Lajh očuvao se njegov suspenzor, oblikom jako sličan navedenom.<sup>62</sup> Na još jednoj langobardskoj nekropoli iz središnje Italije, u Nocera Umbri, među repertoarom vrlo različitih strelica u grobu 48 nađene su i dvije trokrilne s djelomično trokutastim presjekom (T.2:15, T.4:11). Od oružja nađen je još i dvosjekli mač te suspenzor za tobolac, sličan prethodno navedenim primjerima.<sup>63</sup> Prema tome, grob s nekropole Kranj – Lajh, u kojem se nalazilo čak 12 trokrilnih strelica s djelomično trokutastim presjekom, po svom grobnom inventaru podosta nalikuje

cov grad near Kobarid (T.2:14),<sup>53</sup> a late ancient fortress where a small garrison of Ostrogoths and/or Lombards was stationed at one point of time.<sup>54</sup> Two arrowheads of this type were also found at site Rifnik near Šentjur, one of which was inside house no. 5 dated to the 6<sup>th</sup> century (T.2:11).<sup>55</sup> At site Ajdna above Potoki, two trilobate arrowheads were found in front of a building, one of them with a partially triangular cross-section (T.4:6). A layer of coal identified there indicates that the building was destroyed by a fire that is dated to the second half of 6<sup>th</sup> century. Human remains with the tip of a dart between the bones were found outside the building, which suggests a violent death of the person as well as a violent devastation of the building.<sup>56</sup>

T.4). Njihove ukupne dimenzije su: 7,2 x 1,0 cm / 6,6 x 1,3 cm / 6,0 x 1,2 cm / 5,0 x 1,2 cm / 4,5 x 1,2 cm / 4,4 x 1,5 cm / 4,0 x 1,2 cm / 4,0 x 1,1 cm (Marušić 1962, str. 460-461).

<sup>61</sup> Ricci 2000, str. 228.

<sup>62</sup> Mengarelli 1902, str. 282-295, sl.184 i 189.

<sup>63</sup> Pasqui, Paribeni 1918, str. 246-247, sl. 96 i 97.

<sup>53</sup> Based upon the drawing: Modrijan, Milavec 2011a, T.9:16. The arrowhead was discovered in mixed layers of earth (Milavec 2011, p. 49), its overall length is 6.7 cm. (Modrijan, Milavec, 2011b, p. 412)

<sup>54</sup> Ciglinečki 2011, p. 287.

<sup>55</sup> The overall length of the arrowhead from house no. 5 is 7.6 cm, the other arrowhead was found outside the archaeological context, its length is 8.8 cm. (Bitenc, Knific 2001, p. 73, fig. 238).

<sup>56</sup> Vidrih-Perko, Sagadin 2004, pp. 219-221, fig. 7.

langobardskim grobovima čiji su utjecaji vidljivi i na drugim grobovima iste nekropole. Tako se otvara i mogućnost da se trokrilne strelice s djelomično trokutastim presjekom, nađene u Sloveniji, pripišu langobardskoj fazi. Prilog tome može biti i kontekst u kojem su ove strelice nađene na lokalitetima Ajdna nad Potoki i Konjski hrib. Nalazi strelica ovdje sugeriraju nasilnu radnju koja se datira u 2. pol. 6. stoljeća, upravo kada na ovoj prostor započinje priljev Langobarda. Situacija u sjevernoj Italiji u tom je pogledu slična Sloveniji. Na kasnoantičkom utvrđenju Invillino – Ibligio nađena je jedna trokrilna strelica s djelomično trokutastim presjekom, a autor objave datirao ju je u razdoblje langobardske dominacije.<sup>64</sup> Langobardski materijal ipak nije evidentiran na sljedećem lokalitetu sjeverne Italije, na utvrđenju na Monte Castellazu (T.4:8).<sup>65</sup> Naselje u ovom utvrđenju egzistiralo je u razdoblju od 4. do 7. st., odnosno do dolaska Langobarda, i nije poznato je li napušteno spontano ili pod kakvim drugim okolnostima.<sup>66</sup> Naspram tome, utvrda S. Antonino u sjeverozapadnoj Italiji relativno se dugo održala u bizantskoj vlasti, otprilike do godine 643. Unutar utvrđenja, na jednom prostranom položaju, nađeno je čak pet trokrilnih strelica s djelomično trokutastim presjekom. Ipak, smatra se da nakon langobardskog osvajanja regije u kojoj se utvrda nalazila, nije došlo do njezinog ekstenzivnog naseljavanja od strane Langobarda,<sup>67</sup> ali je germanski utjecaj vidljiv u keramici i pronađenim dijelovima ratničke pojašne garniture koji se datiraju u 1. pol. 7. st.<sup>68</sup> Još jedna takva strelica s područja Italije nađena je na jugu, a radi se o nekropoli Vicenne u Campochiaru, u regiji Molise.<sup>69</sup> Ta zanimljiva nekropola posjeduje mješavinu bizantskih, germanskih, ali i stepsko-nomadskih značajki u pronađenom materijalu. Nama je zanimljiv grob 85, u kojem je pokopan konj sa svojim vlasnikom. Uz pokojnika su nađeni dugi bojni nož, koplje, koštani dijelovi luka, četiri strelice te kopča sa zoomorfnim ukrasom, a u ustima pokojnika bio je postavljen novčić u svrsi obola. Grobni nalazi, skupa s novcem cara Konstansa II. (641. - 668.), datiraju grob u razdoblje oko sredine 7. st. Dvije strelice imaju puni trokutasti presjek, a

A trilobate arrowhead with a partially triangular cross-section was also found at fort Konjski Hrib, outside Tower 1, in a layer dated to the second half of the 6<sup>th</sup> century (T.2:12).<sup>57</sup> Most of the trilobate arrowheads with a partially triangular cross-section were discovered at the Kranj - Lajh necropolis. One grave contained only one arrowhead of this type, while the other, already mentioned grave had, along with a double-bladed sword, two long knives and a hook for quiver suspension, 23 arrowheads, even 12 specimens of which were trilobate ones with a partially triangular cross-section (T.2 :6-9, T.4:3-5, T.5:2-6). It is a cemetery that lasted throughout the 6<sup>th</sup> century, where, according to Z. Vinski, autochthonous and Germanic elements can be noticed, of the latter especially Lombard, then Ostrogothic, Gepid and Alemannic, but also Merovingian influences.<sup>58</sup> B. Odar dates the mentioned grave to the time around the mid-6<sup>th</sup> century,<sup>59</sup> and by accepting von Freeden's theory about the origin of these arrowheads, he believes that they arrived in the Slovenian territory with the Byzantine army in the period between the Ostrogothic and Lombard rule.

However, this assumption by Odar contradicts the very context in which the arrowheads were found. Namely, the deceased who was buried with them at the Kranj - Lajh necropolis should not be defined as a Byzantine soldier or an autochthonous inhabitant at all, because his burial is in fact analogous to the graves found among the Germanic populations. The deceased could rather be connected to the Lombards, given the analogies to the items from the grave, other finds from the same necropolis, and the known circumstances about the Lombard rule in this area and their penetration into Italy in the second half of the 6<sup>th</sup> century.

The grave in Brežac in Istria for example, but also grave 119 from Castel Trosino and grave 48 from Nocera Umbra, which all contained this type of arrowhead, are defined as Lombard. The afore-mentioned grave in Brežac dates back to the first half of the 7<sup>th</sup> century. In terms of weaponry, it contained a double-bladed sword, a long battle knife with one blade, a smaller battle knife and nine iron arrowheads. One arrowhead has the shape of a laurel leaf, while the other eight specimens are

<sup>64</sup> Von Freeden 1991, str. 603 i sl. 9.1.

<sup>65</sup> Njezine dimenzije su 7,5 x 1,0 cm (Arnosti 1997, str. 94, T.V: 24).

<sup>66</sup> Arnosti 1997, str. 84-85.

<sup>67</sup> Murialdo 2001, str. 232.

<sup>68</sup> De Vigno, Fossati 2011, str. 480-486.

<sup>69</sup> Ceglia 2000, str. 212-213, 219, i Ceglia, Marchetta 2012, str. 217-238.

<sup>57</sup> The overall length of the arrowhead is 6.2 cm. (Milavec, Modrijan 2020a, p. 171, T.1,10 and Milavec, Modrijan, 2020b, p. 346).

<sup>58</sup> Vinski 1980, pp. 18-19.

<sup>59</sup> Odar 2006, p. 257 and 263.



jedna je trokrilna s djelomično trokutastim presjekom.<sup>70</sup>

Dakle, ova su nalazišta i nalazi, uz iznimku onih koji su objavljeni nakon radova U. von Freeden, M. Buore i B. Odara, bila osnova za njihove zaključke o istočnorimskoj/bizantskoj provenijenciji trokrilnih strelica s djelomično trokutastim presjekom. Kao glavni argument von Freeden uzima nalaze šiljatih strelica čija je glava kvadratnog presjeka. Ove strelice drži bizantskima, pa njihovu pojavu u istom grobu s trokrilnim strelicama smatra indikativnom za određivanje porijekla potonjih. Šiljata strelica se tako javlja zajedno s trokrilnom strelicom s djelomično trokutastim presjekom u grobu 48 na nekropoli Nocera Umbra i grobu 5 iz Mudeseima, a s drugim vrstama trokrilnih strelica javlja se na lokalitetima Altenerding, Bulach i Schretzheim. Prema tome, vezano s teorijom o različitosti ovih trokrilnih strelica u odnosu na one s avarskih groblja, one bi, prema von Freeden, bile mediteranskog, odnosno bizantskog porijekla.<sup>71</sup> Među njima su i trokrilne strelice s djelomično trokutastim presjekom. Osobno, ovaj von Freedenin argument smatram nedostatnim iz nekoliko razloga. Naime, šiljate strelice vrlo su čest streličarski repertoar tijekom duljega razdoblja, široko su rasprostranjene i međusobno su vrlo različitih oblika i u samoj kasnoj antici. U tom razdoblju šiljate strelice s kvadratnim presjekom javljaju se kako s tuljcem tako i s trnom za nasad, izdužene šiljaste glave, manje glave s proširenjem po sredini, manje glave trokutastog oblika, izdužene glave s proširenjem na gornjoj polovici itd. Iako možemo biti sigurni da su korištene na Mediteranu i od strane bizantske vojske, ove se strelice nikad nisu dovoljno obradile pa nam je sve ostalo relativno nepoznato. Također, radi se i o jednom od najjednostavnijih tipova strelica, uz to zasigurno efikasnijim od mnogih drugih tipova u borbi s oklopljenim ili zaštićenim neprijateljem, a jednostavnost i različitost njihovih oblika možda upućuje da im ne moramo tražiti jedno jedino ishodište. Ne mislim da njihovi nalazi među germanskim populacijama, pa čak i da jesu bili direktan utjecaj Mediterana, nužno obvezuju na isto i trokrilne strelice, a u slučaju da je ovo i točno, opet to ne obvezuje i ovaj poseban tip trokrilne strelice koje ovdje razmatramo, one s djelomično trokutastim presjekom. Uz to, uzorak od pet nalazišta, odnosno dva za trokrilne strelice s

trilobate arrowheads with a partially triangular cross-section (T.3:2-3, T.4:9-10).<sup>60</sup> Quiet similar to the one in Brežac in terms of its dating is grave 119 from the necropolis Castel Trosino in central Italy,<sup>61</sup> in which elements of horse gear, a gold and silver belt set, a sword, spurs, an umbo and handle of shield, parts of the armour, comb, etc. were found. The grave yielded also nine trilobate arrowheads, one of which had a partially triangular cross-section (T.3:4). Like in the case of the grave from site Kranj – Lajh, the quiver was not preserved, but its hook for suspension was, which had a shape very similar to the afore-mentioned one.<sup>62</sup> Another Lombard necropolis from central Italy, i.e. Nocera Umbra, yielded, among finds of very different arrowheads, also two trilobate arrowheads with a partially triangular cross-section in grave 48 (T.2:15, T.4:11). Weaponry finds included also a double-bladed sword and a quiver suspension, similar to the previously mentioned specimens.<sup>63</sup> Therefore, the grave from the necropolis Kranj - Lajh, which contained as many as 12 trilobate arrowheads with a partially triangular cross-section, in terms of its grave inventory is quite similar to Lombard graves whose influences are also visible in other graves within the same necropolis. This opens up the possibility to attribute the trilobate arrowheads with a partially triangular cross-section, found in Slovenia, to the Lombard phase. The context of their discovery at sites Ajdna above Potoki and Konjski Hrib can contribute to this. Finds of arrowheads here suggest violent activities that date back to the second half of the 6<sup>th</sup> century, when the influx of Lombards began in this area. In this regard, the situation in northern Italy is similar to the one in Slovenia. A trilobate arrowhead with a partially triangular cross-section was found in the late ancient fort Invillino - Ibligio, and the author of the publication dated it to the period of Lombard domination.<sup>64</sup> However, Lombard material was not recorded at the next site in northern Italy, at the fortification on Monte Cas-

<sup>60</sup> Torcellan 1986, pp. 25-27. Most arrowheads are severely damaged by corrosion, but their triangular cross-section near the tip is definitely recognizable. (see drawings in Torcellan 1986, T. 4). Their overall dimensions are: 7.2x1.0 cm / 6.6x1.3 cm / 6.0x1.2 cm / 5.0x1.2 cm / 4.5x1.2 cm / 4.4x1.5 cm / 4.0x1.2 cm / 4.0x1.1 cm (Marušić 1962, pp. 460-461).

<sup>61</sup> Ricci 2000, p. 228.

<sup>62</sup> Mengarelli 1902, pp. 282-295, fig.184 and 189.

<sup>63</sup> Pasqui, Paribeni 1918, pp. 246-247, fig. 96 and 97.

<sup>64</sup> von Freeden 1991, p. 603 and fig. 9.1.

<sup>70</sup> Dimenzije čitave strelice su 12,3 x 2,7 cm, od čega na glavu otpada 6,7 cm (Ceglia 2000, str. 219).

<sup>71</sup> Von Freeden 1991, str. 605-609.

djelomično trokutastim presjekom, teško može biti indikativan. Utoliko više što se u „streličarskim“ grobovima često ne nalazi unificirani set s dvije vrste strelica, nego naprotiv, vrlo heterogen. U spomenutom grobu 48 s nekropole Nocera Umbra nalazi se i jedna trokutasta strelica ovalnog presjeka te jedna listolika strelica s tuljcem.<sup>72</sup> Na Brešču se pak trokrilne strelice s djelomično trokutastim presjekom nalaze s jednom listolikom strelicom, a grob s nekropole Kranj-Lajh, uz dvanaest trokrilnih koje ovdje razmatramo, ipak je imao i četiri šiljaste strelice četvrtastog presjeka, i to vrlo ujednačeno rađene, s proširenjem u drugoj polovici glave. Uz to, imao je i jednu strelicu lećastog presjeka te pet strelica oblikom vrlo sličnih nabrojenim, ali pak s potpuno trokutastim presjekom.<sup>73</sup> Situacija se još više komplicira kad pogledamo groblja na gepidskom prostoru, o kojima ću poslije nešto detaljnije. Ovdje se trokrilne strelice najčešće nalaze u setu s listolikim ili kopljastim strelicama. Ako bismo razmatrali ostale strelice u setu, na način koji to radi von Freeden, onda bismo trokrilne strelice možda prije trebali odrediti prema onima listolikog i kopljastog oblika, što bi moglo dovesti do drukčijeg rezultata. M. Boura, nadovezujući se na teoriju O. von Freeden o porijeklu, smatra kako su strelice s djelomično trokutastim presjekom razvijene od onih trokrilnih koje imaju puni trokutasti presjek u cijeloj svojoj dužini glave.<sup>74</sup> Ipak, ovo je tek logična tipološka pretpostavka, a logika dopušta da one s punim kao i one s djelomično trokutastim presjekom u svom ishodištu mogu imati trokrilnu strelicu. Uz to, strelice s punim trokutastim presjekom nije koristila samo carska vojska, jer one se, primjerice, često nalaze i u hunskim grobovima.<sup>75</sup> Odar se nastavlja na rečeno te, prihvaćajući teoriju O. von Freeden o njihovom porijeklu, smatra da su one na prostor Slovenije došle sredinom 6. st., u vrijeme kratkotrajne bizantske vlasti. Ipak, kao što je već prethodno objašnjeno, grob koji je Odar objavio s nekropole Kranj-Lajh ima zapravo značajke langobardskih grobova. Nalazi trokrilnih strelica s djelomično trokutastim presjekom na području Slovenije i Italije, kako vidimo, teško se mogu osloboditi germanske, posebice langobardske „kontaminacije“.

tellaz (T.4:8).<sup>65</sup> The settlement in this fortification existed from the 4<sup>th</sup> to the 7<sup>th</sup> century, that is, until the arrival of the Lombards, and it is not known whether it was spontaneously or under which other circumstances it was abandoned.<sup>66</sup> In contrast, the fort S. Antonino in north-western Italy remained under Byzantine rule for a relatively long time, until around 643 AD. Inside the fort, in a spacious location, even five trilobate arrowheads with a partially triangular cross-section were found. However, it is believed that after the Lombards' conquest of the region where the fort is located, it was not extensively settled by them,<sup>67</sup> yet the Germanic influence is visible in the finds of pottery and elements of the warrior's belt set that are dated to the first half of the 7<sup>th</sup> century.<sup>68</sup> Another arrowhead of this type deriving from the territory of Italy was discovered in the south, i.e. in the necropolis of Vicenne in Campochiaro, in the Molise region.<sup>69</sup> The material found at this interesting necropolis has a mixture of Byzantine, Germanic and steppe-nomadic characteristics. Particular interesting is grave 85, where a horse was buried with its owner. A long battle knife, a spear, bone parts of a bow, four arrowheads and a buckle with a zoomorphic decoration were found with the deceased, while a coin as a Charon's obol was placed in the mouth of the deceased. The grave finds, together with the coins of Emperor Constans II (641-668), date the grave to the period around the mid-7<sup>th</sup> century. Two arrowheads have a full triangular cross-section, while one is a trilobate arrowhead with a partially triangular cross-section.<sup>70</sup>

These sites and finds, with the exception of those published after the works of U. von Freeden, M. Buora and B. Odar, were the basis for their conclusions about the Eastern Roman/Byzantine provenance of the trilobate arrowheads with a partially triangular cross-section. As her main argument, von Freeden takes the finds of pointed arrowheads whose head is square-shaped. She considers these arrowheads to be Byzantine, and considers their appearance in the same grave with trilobate arrowheads indicative

<sup>72</sup> Pasquai, Paribeni 1918, sl. 96.

<sup>73</sup> Odar 2006, T. 1: 4-13.

<sup>74</sup> Buora 1991, str. 65.

<sup>75</sup> Radi se o tipu 7 po klasifikaciji hunskih ili hunskodobnih strelica od strane I. P. Zaseckaje. Vidi: Засецкая 1994, sl. 4, T. 3:11, T. 26: 13 i T. 37: 14.

<sup>65</sup> Its dimensions are 7.5 x 1.0 cm (Arnosti 1997, p. 94, T.V: 24).

<sup>66</sup> Arnosti 1997, pp. 84-85.

<sup>67</sup> Murialdo 2001, p. 232.

<sup>68</sup> de Vigno, Fossati 2011, pp. 480-486.

<sup>69</sup> Ceglia 2000, pp. 212-213, 219 and Ceglia, Marchetta 2012, pp. 217-238.

<sup>70</sup> The dimensions of the entire arrowhead is 12.3 x 2.7 cm, of which the head accounts for 6.7 cm. (Ceglia 2000, p. 219.)

Da je ove strelice koristila bizantska vojska u Italiji i Sloveniji, za to zapravo nemamo nikakvu potvrdu. Njihov običaj pokapanja najčešće nije uključivao oružje, što svakako otežava donošenje zaključaka o bizantsku vojnom repertoaru. Najviše nam o njihovom naoružanju, kroz arheologiju, govore nalazi iz vojnih utvrda ili utvrđenih naselja. Nažalost, ni ovdje stvari nisu bez komplikacija. Takvi se nalazi mogu pripisati napadačima, jednako kao i braniteljima. U tom se smislu često sagledavaju nalazi oružja na širokom prostoru (što nam primjer ranog Bizant dopušta s obzirom na njegovu rasprostranjenost), pa se, uzevši takav prostor u obzir, mogu tražiti ponavljajući nalazi oružja koji mogu donekle osnažiti pretpostavke o bizantskom oružju. Možda su na tom tragu ove prostorne disperzije rečenim autorima poslušili tek nalazi iz jugoistočne Europe, s područja koje je većinom pod carskom kontrolom i na kojima je germanska prisutnost zapravo tek sporadična, a germanske vlasti kratkotrajne (u usporedbi s prethodno spomenutim područjima). Tako prisutnost germanskog materijala nije evidentirana na lokalitetu Klobuk kod Ljubuškog, kao ni na lokalitetima Kulina e Vogel na Kosovu te Pogradec u Albaniji. Situacija na lokalitetima u Sadovcu u Bugarskoj ipak je ponešto drugačija. Već je spomenuto da je ovdje pronađeno najviše strelica ovakvog tipa, čak 23 na lokalitetu Golemanovo kale te 6 na lokalitetu Sadovsko kale. Na Golemanovom kalu pretpostavljao se germanski plaćenički garnizon, što je opovrgnuto analizom pokretnog materijala,<sup>76</sup> ali je zato na petstotinjak metara udaljenom Sadovskom kalu pronađeno više dijelova ratničke pojasne garniture koji analogije imaju na Krimu, u Podunavlju te na langobardskom groblju u Arcisi u Italiji. Spomenuti nalazi datiraju se u raspon od sredine 6. do poč. 7. stoljeća,<sup>77</sup> te zasigurno svjedoče o germanskim vojnim utjecajima.

Rasprava o porijeklu trokrilnih strelica s djelomično trokutastim presjekom dodatno se komplicira kada pogledamo nalaze na istočnom dijelu Pansonske nizine i u Transilvaniji, a kojih se spomenuti autori nisu dotakli.

Pred dolazak Avara ovim su prostorom gospodarili Gepidi, a u njihovim su grobovima trokrilne strelice čest nalaz. Trokrilne strelice evidentirane su na grobljima Szentes-Kökényzug,<sup>78</sup> Szentes-

of the origin of the latter. Furthermore, a pointed arrowhead was recorded together with a trilobate arrowhead with a partially triangular cross-section in grave 48 at the Nocera Umbra necropolis and in grave 5 in Mudesheim, while at sites Altenerding, Bulach and Schretzheim they were found together with other types of trilobate arrowheads. Therefore, following the theory about the difference between these trilobate arrowheads in relation to those from the Avar cemeteries, they would, according to von Freeden, be of Mediterranean or Byzantine origin.<sup>71</sup> These include also trilobate arrowheads with a partially triangular cross-section. Personally, I consider von Freeden's argument insufficient for several reasons. Namely, pointed arrowheads are a very common archery item used over a long period of time, they were widely scattered and differed greatly in shape from each other even in the Late Antiquity. At that time, pointed arrowheads with a square cross-section appeared both with the socket and the tang, had elongated pointed heads, smaller heads with an extension in the middle, smaller triangular heads, elongated heads with an extension in the upper half, etc. Although we are sure that, in the Mediterranean region, they were used by the Byzantine army, these arrowheads have not been researched enough and hence everything remains relatively unknown to us. Furthermore, it is one of the simplest types of arrowheads, though certainly more efficient than many other types in a fight with an armoured or protected enemy. The simplicity and diversity of their shapes may indicate that we do not have to look for one single origin. Even if the discovered specimens among Germanic populations were directly influenced by the Mediterranean, it does not mean that this case also applies to trilobate arrowheads in my view; but even if that was really the case, it does not have to apply to the particular type discussed here, namely the trilobate arrowhead with a partially triangular cross-section. A sample consisting of five sites, i.e. two for trilobate arrowheads with a partially triangular cross-section, can hardly be indicative. Besides, "archery" graves do not often contain a unified set with two types of arrowheads, but on the contrary, a very heterogeneous one. The aforementioned grave 48 from the necropolis of Nocera Umbra had one triangular arrowhead with an oval cross-section and one leaf-shaped arrowhead with a socket.<sup>72</sup> At site Brežac, on the

<sup>76</sup> Werner 1992, str. 415-417.

<sup>77</sup> Uenze 1992, str. 187-192.

<sup>78</sup> Csallány 1961, str. 23,33, T.VII: 10,11, T.XII: 7-9, 11-17.

<sup>71</sup> Von Freeden 1991, pp. 605-609.

<sup>72</sup> Pasquai, Paribeni 1918, fig. 96.

Nagyhegy,<sup>79</sup> Szentes-Berekhát,<sup>80</sup> Csanad-Bokeny,<sup>81</sup> Kiszombor,<sup>82</sup> Maroscsapó,<sup>83</sup> Szöreg–Téglagyár<sup>84</sup> i Čăpusu Mare–Cânepiste,<sup>85</sup> a ono što je važno za temu jest da su neke od njih upravo i trokrilne strelice s djelomično trokutastim presjekom.<sup>86</sup> To su tri strelice s groblja u Maroscsapóu (T. 2:2-3, T. 4:1),<sup>87</sup> jedna s groblja Čăpusu Mare–Cânepiste (T. 4:2),<sup>88</sup> moguće nekoliko njih s groblja Szöreg–Téglagyár (T.5:8),<sup>89</sup> kao i jedna strelica s lokaliteta Morești.<sup>90</sup> Na temelju datacije grobova u kojima su te strelice nađene, posebice Čăpusu Mare–Cânepiste (sred. 5. st. - 6.st.) i Szöreg–Téglagyára (1. pol. 6. st.), dobivamo dodatnu potvrdu toga da su ove strelice, barem na prostoru istočne Panonije, Transilvanije i sjeverno od Alpa, bile u upotrebi i prije dolaska Avara. Uz to, trokrilne strelice s djelomično trokutastim presjekom kod Gepida imaju za sada najstariju dataciju. Nažalost, ti nalazi nisu korišteni kao materijal za izgradnju hipoteze o porijeklu ovih strelica, a možda su i ključ za njihovo razumijevanje. Gepidsku vlast u 2. pol. 6. st. zamijenit će Avarski Kaganat, što ne znači da su Gepidi skupa sa svojim običajima i materijalnom kulturom odjednom

other hand, trilobate arrowheads with a partially triangular cross-section were found with a leaf-shaped arrowhead, whereas the grave at the Kranj-Lajh necropolis, apart from the twelve trilobate ones that are examined here, also had four pointed arrowheads with a square cross-section, very uniformly made with an extension in the second half of the head. Furthermore, one arrowhead with a lenticular cross-section and five arrowheads that were very similar in shape to the ones listed before, but with a full triangular cross-section, were also discovered in this grave.<sup>73</sup> Even more complicated is the situation at cemeteries in the Gepid areas, which I will address in more detail later in the text. Here, trilobate arrowheads are most often found in a set with leaf-shaped or spear-shaped arrowheads. If we were to consider the other arrowheads in the set, in the way that von Freeden does, then the trilobate arrowheads should perhaps be determined by the leaf-shaped and spear-shaped ones, which hence could lead to a different result. M. Boura, following upon von Freeden's theory regarding the origin, believes that arrowheads with a partially triangular cross-section were developed from trilobate ones that have a full triangular cross-section throughout the length of the head.<sup>74</sup> However, this is only a logical typological assumption, and logic allows that those with a full as well as those with a partially triangular cross-section can trace their origin to the trilobate arrowheads. Besides, arrowheads with a full triangular cross-section were not only used by the imperial army, because they were also often found in Hunnic graves for example.<sup>75</sup> Odar continues on this path, accepting von Freeden's theory about their origin, and believes that they arrived in the territory of Slovenia in the mid-6<sup>th</sup> century, during the short Byzantine rule there. However, as already explained previously, the grave from the Kranj-Lajh necropolis published by Odar actually displays features of Lombard graves. Finds of trilobate arrowheads with a partially triangular cross-section in the territory of Slovenia and Italy, as we can see, can hardly be freed from Germanic, especially Lombard "contamination". There is actually no confirmation at all that these arrowheads were used by the Byzantine army in Italy and Slovenia. Their burial

<sup>79</sup> Isto, str. 57-54, T. XXII: 14-16, T. XXIV: 1-5, T. XXVI: 1-4, 5-7, T. XXXVIII: 10-13, T. XLIII: 7-8.

<sup>80</sup> Isto, str. 70-81, T. XLIV: 16-18, T. XLV: 12a-d, T. LV: 16-18, T. LXIX: 20-24, T. LXXXVI: 5-8.

<sup>81</sup> Isto, str. 142.

<sup>82</sup> Isto, str. 189, T. CXLVIII: 1,4,7,12-17.

<sup>83</sup> Isto, str. 200, T. CCLXXIX: 9-12.

<sup>84</sup> Nagy 2005, T.60: 6-10.

<sup>85</sup> Dobos 2009, str. 220-221.

<sup>86</sup> Nažalost, osnovna publikacija za grobne nalaze s gepidskog područja, ona od D. Csallánya, posjeduje u velikoj većini samo fotografije strelica kojima je korozivna patina neočišćena, pa je teško iz literature donositi procjene o njihovu izgledu. Ipak, rijetki prikazi strelica u crtežu, poput onih vezanih za lokalitet Maroscsapó, jasno pokazuje tri trokrilne strelice s djelomično trokutastim presjekom. Prema tome, velika je mogućnost da je takvih strelica bilo i mnogo više, samo što ih stanje nalaza i kvaliteta fotografija prikriju. Sumnju u postojanje takvih strelica, na temelju spomenutih fotografija, budi mi tako strelica s lokaliteta Szentes - Kőkényzug (Csallány 1961, T. VII: 3) četiri strelice s lokaliteta Szentes - Nagyhegy (Csallány 1961, T. XXVI: 3-5 i T. XXVII:10) te dvije strelice s lokaliteta Szoreg (Csallány 1961, T. CLXXVIII: 2-3). Csallány 1961, T. CCLXXIX, 9-11.

<sup>87</sup> Csallány 1961, T. CCLXXIX, 9-11.

<sup>88</sup> Dobos 2009, str. 220-221, fig. 4:4.

<sup>89</sup> Nagy 2005, T. 60: 6-10. Na temelju crteža na kojem se čini kao da 4 trokrilne strelice imaju puni vrh.

<sup>90</sup> Nažalost, nisam mogao doći do literature u kojoj je strelica objavljena pa prenosim ono što iz nje donosi U. von Freeden (vidi: Von Freeden 1991, str. 604).

<sup>73</sup> Odar 2006, T. 1: 4-13.

<sup>74</sup> Buora 1991, p. 65.

<sup>75</sup> It is type 7 according to the classification of Hunnic or Hunnic-era arrowheads by I. P. Zaseckaja. See: Засецкая 1994, fig. 4, T. 3:11, T.26: 13 and T.37: 14.

nestali.<sup>91</sup> Ipak, teško možemo računati s tim da se gepidski vojni repertoar, poput trokrilnih strelica s trokutastim presjekom, inkorporirao u avarsku vojsku. Osim možda jednog primjera, onog s lokaliteta Csákberény-Orondpuszta, na tipičnim avarskim ili generalno avarodobnim lokalitetima, ovakve strelice nisu evidentirane.

Trokrilne strelice s djelomično trokutastim presjekom nađene su i s južne strane Dunava, na području carske provincije Mezije.<sup>92</sup> Ove slučajne nalaze strelica, dvije na području Dijane (T. 3:14) i jedna s područja Ljubičevca ili ušća Slatinske reke (T. 3:13), teško je određenije atribuirati. Radi se o carskom području, ali veoma trusnom – to je granica prema barbarskom svijetu kroz koju barbari konstantno provaljuju, ali koju barbari i čuvaju, a za koju nije isključeno i da je kratko vrijeme bila i dijelom Gepidskog Kraljevstva sa sjedištem u Sirmiju.<sup>93</sup>

Rasprava o porijeklu mogla bi se proširiti i na prostor istočne Europe, gdje se također javljaju trokrilne strelice s djelomično trokutastim presjekom. Prema dostupnim mi informacijama one su korištene na prostoru Bjelorusije, Ukrajine i Rusije. Međutim, njihova je datacija ipak nešto kasnija. Radi se o trokrilnim strelicama tipa 18 po A. F. Medvedevu, koje su ograničene na razdoblje 8. i 9. st.<sup>94</sup> Ovaj tip strelice posebno je koncentriran na područje uz rijeku Dnjepar u Ukrajini, uz jedno nalazište nešto sjevernije u Bjelorusiji te dva nalazišta tek nešto istočnije od Dnjeptra. Druga koncentracija nalazi se na prostoru južne Rusije, sjeverno od Kavkaza, a tri nalaza ovakvog tipa strelica nađena su i nešto dalje, prema središnjoj Rusiji. Trokrilne strelice s djelomično trokutastim presjekom nalaze se na još tri lokaliteta srednje Rusije, ali se one oblikom glave znatnije razlikuju od prethodno navedenih.<sup>95</sup> Prva

custom most often did not include weapons, which certainly makes it difficult to draw conclusions about the Byzantine military repertoire. Most information about their weapons, in terms of archaeology, derives from finds from military fortifications or fortified settlements. Unfortunately, things are not without complications here either as such finds can be attributed to attackers as well as defenders. In this sense, we often look at weapon finds in a wide area (the example of early Byzantium allows us given the size of its area) and by taking into account its territory, we can look for repeated weapon finds that can somewhat strengthen the assumptions about Byzantine weapons. Following this line of reasoning in terms of spatial distribution, the aforementioned authors perhaps just used the finds from South-Eastern Europe, from areas that were mostly under imperial control and where Germanic presence was actually only sporadic, and their rule only brief (compared to the previously mentioned areas). The presence of Germanic material was hence not recorded at site Klobuk near Ljubuški, nor at sites Kuline e Vogël in Kosovo and Pogradec in Albania. The situation at the sites in Sadovets in Bulgaria is somewhat different. It has already been mentioned that most arrowheads of this type were found here, as many as 23 at site Golemanovo Kale and 6 specimens at site Sadovsko Kale. It is assumed that there was a Germanic mercenary garrison at Golemanovo Kale, which was disproved by the analysis of movable material.<sup>76</sup> However, about five hundred meters away, several parts of a warrior's belt set were found at Sadovsko Kale, which have analogies in the Crimea, the Podunavlje region and on the Lombard cemetery in Arcis, Italy. Said finds date from the middle of the 6<sup>th</sup> to the beginning of 7<sup>th</sup> century,<sup>77</sup> and certainly bear witness to Germanic military influences.

The discussion about the origin of the trilobate arrowheads with a partially triangular cross-section becomes even more complicated when we look at the finds in the eastern part of the Pannonian Plain and in Transylvania, which the aforementioned authors did not address at all.

Before the arrival of the Avars, this area was ruled by the Gepids, whose graves often contained trilobate arrowheads. Trilobate arrowheads were recorded in the following cemeteries: Sz-

<sup>91</sup> Materijal koji je karakterizirao doba gepidske vlasti još neko vrijeme se nalazi i na avarskim grobljima Podunavlja i Potisja. Vidi: Kiss 1992 i Kiss 1996.

<sup>92</sup> Špehar 2010, str. 129-130 i T. XXXIX: 704 (Dijana) i str. 129, T. XXXIX: 696 (Ljubičevac/Ušće Slatinske reke).

<sup>93</sup> O barbarima u sjevernim balkanskim provincijama Carstva vidi: Kharalambieva 2010. Za mogućnost gepidske kontrole srednjodunavskog limesa na području Mezije, a u ime Carstva vidi: Gračanin, Škrkulja 2019, str. 208.

<sup>94</sup> Медведев 1966, str. 60.

<sup>95</sup> Медведев 1966, str. 60, T. 12: 9-12, T. 13: 13-14, T. 15: 23-25. Lokaliteti uz rijeku Dnjepar na kojima su nađene ove strelice su: Voznesenka, Pastirskoe gorodišće (T. 5:11), Miklaševskoe gorodišće, Dyvich – hora

<sup>76</sup> Werner 1992, pp. 415-417.

<sup>77</sup> Uenze 1992, pp. 187-192.

skupina, „ukrajinsko-južnoruska“, u obliku glave je vrlo vitka, s linijama bridova koji se od vrata blago spuštaju na vrh, dok su strelice iz središnje i sjeverne Rusije generalno zdepastije glave, odnosno glava strelice je kraća i šira, a kod jednog je primjerka s užom glavom trokrilnost pak uklopljena žlijebljenjem unutar strelice s punim trokutastim presjekom. Ta posljednja skupina podsjeća ponajviše na trokrilne strelice s djelomično trokutastim presjekom koje su u istom razdoblju evidentirane i na prostoru središnje i istočne Azije, primjerice kod Kirgiza (T. 5:17-18),<sup>96</sup> pa bismo ih mogli vezati za tamošnje utjecaje, ili pak svrstati u jednu, istočniju skupinu. Ipak, prva skupina strelica ima morfoloških sličnosti s onima koje smo do sada obrađivali. Postavlja se pitanje, na osnovi nalaza s prostora Istočne Europe i Azije, da li zaista postoje dva različita izvorišta i tradicije izrade strelica koje se upravo ovdje istovremeno susreću? Bila bi to ona azijska, najvjerojatnije, i ona koju von Freeden definira kao mediteransku. Ili je to pak u korijenu jedna jedinstvena tradicija koja se prijenosom u određenim regijama i u određenim razdobljima manifestirala na jedan drugačiji stilski i praktični način, sljubivši se s regionalnim tradicijama ili potrebama?

Ako se radi o jednom izvorištu ovakvih strelica, pretpostavljam da bi to bilo na stepskim područjima Euroazije, prije nego na Mediteranu, iako se ove u Istočnoj Europi i Aziji datiraju nešto kasnije. To mišljenje, priznat ću, zastupam na tragu tradicionalnog shvaćanja o transferu vojne tehnologije vezane za konjaništvo i strelčarstvo, ali i time što se ova vrste strelice koristi gotovo na samom istoku Azije, dok ih na bizantskim posjedima izvan Europe nisam našao. U svakom slučaju, definiranje izvorišta trokrilnih strelica s djelomično trokutastim presjekom na Mediteranu, odnosno u Bizantu, itekako je problematično, a problem predstavlja i odluka da se

(T. 5:12) te Hotemelj nešto sjevernije u Bjelorusiji. Istočno od Dnjepra ovaj tip trokrilne strelice javlja se na lokalitetima Novopokrtovka i Dmitrijevskij mogilnik (T. 5:13). Na prostoru južne Rusije i sjevernog Kavkaza ove su strelice evidentirane na lokalitetima Borisovskij mogilnik (T. 5:14), Kolosovskij mogilnik, Tahtamukaevski mogilnik i Nikolaevskij mogilnik (T. 5:15). Trokrilne strelice nađene su i u središnjoj Rusiji na lokalitetima Tankejevskij mogilnik, Serpovskij mogilnik i Čudskoe kostišće, dok su one na lokalitetima Biljar (T. 5:16), Petrovskij mogilnik i Bajanovskij mogilnik bitno drugačijeg izgleda od prethodno navedenih (Vidi: Медведев 1966, str. 60, T. 12: 9-12, T. 13: 13-14, T. 15: 23-25).

<sup>96</sup> Худяков 1980, T.19.

entes - Kökényzug,<sup>78</sup> Szentes-Nagyhegy,<sup>79</sup> Szentes-Berekhat,<sup>80</sup> Csanad-Bokeny,<sup>81</sup> Kiszombor,<sup>82</sup> Maroscsapó,<sup>83</sup> Szöreg-Téglagyár<sup>84</sup> and Căpusu Mare – Cănepiste.<sup>85</sup> Noteworthy is hereby the fact that some of them were actually trilobate arrowheads with a partially triangular cross-section.<sup>86</sup> These are three arrowheads from the Maroscsapó cemetery (T.2:2-3, T.4:1),<sup>87</sup> one from the cemetery Căpusu Mare – Cănepiste (T.4:2),<sup>88</sup> possibly a few from the cemetery Szöreg-Téglagyár (T.5:8),<sup>89</sup> and one arrowhead from site Morești.<sup>90</sup> Based on the dating of the graves in which these arrowheads were found, especially Căpusu Mare – Cănepiste (mid-5<sup>th</sup> to 6<sup>th</sup> century) and Szöreg-Téglagyár (first half of the 6<sup>th</sup> century), we get additional confirmation that these arrowheads, at least in the area of eastern Pannonia, Transylvania and north of the Alps, were in use even before the arrival of the Avars. In addition, the trilobate arrowheads with a partially trian-

<sup>78</sup> Csallány 1961, p. 23,33, T.VII: 10,11, T.XII: 7-9, 11-17

<sup>79</sup> Ibid., pp. 57-54, T. XXII: 14-16, T. XXIV: 1-5, T.XXVI: 1-4, 5-7, T.XXXVIII: 10-13, T. XLIII: 7-8

<sup>80</sup> Ibid., pp. 70-81, T. XLIV: 16-18, T.XLV: 12a-d, T.LV: 16-18, T.LXIX: 20-24, T.LXXXVI: 5-8

<sup>81</sup> Ibid., p. 142.

<sup>82</sup> Ibid., p. 189, T.CXLVIII: 1,4,7,12-17

<sup>83</sup> Ibid., p. 200, T.CCLXXIX: 9-12.

<sup>84</sup> Nagy 2005, T.60: 6-10

<sup>85</sup> Dobos 2009, pp. 220-221.

<sup>86</sup> Unfortunately, the main publication for grave finds from the Gepid area, the one by D. Csallány, contains mostly only photographs of arrowheads that were not cleaned from the corrosive patina, so it is difficult to make assumptions regarding their appearance based upon this literature. However, a rare illustration of arrowheads in a drawing, such as those related to site Maroscsapó, clearly shows three trilobate arrowheads with a partially triangular cross-section. Therefore, there is a great possibility that there had been many more arrowheads of this type, but the condition of the finds and the quality of the photographs conceal them. My assumption regarding the existence of such arrowheads, based on the mentioned photographs, is strengthened by the arrowhead from site Szentes - Kökényzug (Csallány 1961, T.VII: 3), four arrowheads from site Szentes - Nagyhegy (Csallány 1961, T.XXVI: 3-5 and T. XXVII:10) and two arrowheads from site Szoreg (Csallány 1961, T. CLXXVIII: 2-3).

<sup>87</sup> Csallány 1961, T. CCLXXIX, 9-11.

<sup>88</sup> Dobos 2009, pp. 220-221, fig.4:4.

<sup>89</sup> Nagy 2005, T.60: 6-10. Based on the drawing where it appears as if the 4 trilobate arrowheads have a full tip.

<sup>90</sup> Unfortunately, the literature in which the arrowhead was published was not available to me, so I am passing on what U. von Freeden has cited from it (see: von Freeden 1991, p. 604)

Bizantu pripiše posrednička uloga u prijenosu ovih strelica među Gepide, Langobarde i druga german-ske narode. Naime, i oni su imali doticaja s prostorom euroazijske stepe, posebice Goti i Gepidi, a upravo se na gepidskom području, ustvrdili smo, rano i u većem broju koristi ovaj oblik strelice.

#### Trokrilne strelice s djelomično trokutastim presjekom na prostoru rimske provincije Dalmacije

Na prostoru provincije Dalmacije pronađen je nezanemariv broj trokrilnih strelica iz postrimskog vremena; koliko mi je poznato, ukupno ih je 34 na 19 lokaliteta.<sup>97</sup> Njih čak sedam nađeno je u Podgradini kod Livna (Bosna i Hercegovina),<sup>98</sup> pet u Solinu (Hrvatska),<sup>99</sup> po dvije u Gornjim Vrbljanima<sup>100</sup> i Debelom brdu nad Sarajevom (Bosna i Hercegovina),<sup>101</sup> te po jedna na lokalitetima Sokol

gular cross-section found among the Gepids have the oldest dating so far. Unfortunately, these finds were not used as grounds for building a hypothesis about their origin, yet they possibly might be the key to their understanding. The rule of the Gepids was replaced in the second half of the 6<sup>th</sup> century by the Avar Khaganate, which does not mean that the Gepids, together with their customs and material culture, suddenly disappeared.<sup>91</sup> However, we can hardly assume that the Gepid military repertoire, such as the trilobate arrowheads with a partially triangular cross-section, has been incorporated into the Avar army. Apart from perhaps the one example from site Csákberény-Orondpuszta, such arrowheads have not been recorded at typical Avar sites or sites from the Avar era in general.

Trilobate arrowheads with a partially triangular cross-section were also found on the south side of the Danube, in the area of the imperial province of Moesia.<sup>92</sup> These accidental finds of arrowheads, two in the area of Diana (T.3:14) and one in the area of Ljubičevac or the mouth of the Slatinska river (T.3:13), are difficult to attribute more precisely. Though imperial territory, it was a highly unstable one - it was the border to the barbarian world which the barbarians repeatedly crossed in attacks, but also guarded. Moreover, it cannot be excluded that it was also part of the Gepid Kingdom with its centre in Syrmia for a short period of time.<sup>93</sup>

While discussing their provenance, we could also extend the discussion to the area of Eastern Europe, where trilobate arrowheads with a partially triangular cross-section were also noticed. According to the information available to me, they were used on the territory of Belarus, Ukraine and Russia. However, their dating is somewhat later. These are trilobate arrowheads of type 18 according to A.F. Medvedev, which are limited to the period of the 8<sup>th</sup> and 9<sup>th</sup> centuries.<sup>94</sup> This type of arrowhead is especially concentrated in the area along the Dnie-

<sup>97</sup> Radi se samo o strelicama koje su objavljene s fotografijom ili crtežom. Tako u ovom popisu neće biti trokrilnih strelica koje se tek uzgred spominju bez ikakvih drugih informacija, poput strelice s Varvare nad Ramom (Miletić 1984, str. 390). Trokrilnih strelica sigurno ima još po depoima muzeja i privatnim zbirka, čemu svjedoči navod D. Sergejevskog o tome kako se nekoliko „avarskih“ strelica, bez oznake provenijencije, čuva u Zemaljskom muzeju u Sarajevu (Sergejevski 1956, str. 31 i 39). Za privatne zbirke takvo što pretpostavljam s obzirom da su svih 7 strelica iz Podgradine, svih 5 iz Solina, kao i strelica s Garduna, pribavljene otkupom (za Solin i Gardun vidi: Piteša 2009, str. 70-73).

<sup>98</sup> D. Periša navodi da ih je nađeno desetak i da se čuvaju u Muzeju hrvatskih arheoloških spomenika u Splitu (Periša 2009, str. 242.). Međutim, u fundusu muzeja nalazi se ukupno 7 trokrilnih strelica s ovog lokaliteta. One će biti podrobije obrađene u daljnjem tekstu.

<sup>99</sup> Strelice su objavljene u *Katalogu nalaza iz vremena seobe naroda, srednjeg i novog vijeka* u Arheološkom muzeju u Splitu pod kat. br. 100 (dim. 7,1 x 1,2 cm), 101 (dim. 8,9 x 1,2 cm), 104 (dim. 5,7 x 1,5 cm), 105 (dim. 7,7 x 1,4) i 106 (dim. 7 x 1,1). Autor prvu strelicu datira u razdoblje 5.-8 st, drugu u razdoblje 6.-9. st., treću u razdoblje od 5.-9. st., a posljednje dvije u razdoblje 7.-12. st. (Piteša 2009, str. 70-73).

<sup>100</sup> Obje strelice nađene su u sjevernom bedemu utvrđenja, što autor tumači napadačkom aktivnošću Avara i Slavena s kraja 6. i poč. 7. st. (Bojanovski 1976, str. 246-248). Za obje strelice navodi se dužina od 7 cm. (Bojanovski 1976, str. 246). Zanimljivo je da jedna strelica ima tordirani trn, što još nigdje nisam prepoznao.

<sup>101</sup> Prva strelica ima naglašen vrat koji nisam primijetio kod klasičnih rimskih strelica (Fiala 1984a, str. 122 i T. 15:16), dok ga s druge strane posjeduju neke strelice iz 6. i 7. st. kojima ova strelica uistinu i nalikuje (vidi: Odar 2006, T. 2: 10-12). Za drugu strelicu autor

<sup>91</sup> The material that characterized the era of Gepid rule has also remained in the Avar-era cemeteries of Podunavlje and Potisje for some time. See: Kiss 1992 and Kiss 1996.

<sup>92</sup> Špehar 2010, pp. 129-130 and T. XXXIX: 704 (Diana) and p. 129, T. XXXIX: 696 (Ljubičevac/mouth of the Slatinska river).

<sup>93</sup> On the barbarians in the northern Balkan provinces of the Empire, see: Kharalambieva 2010. For the possibility of Gepid control of the Middle Danube Limes in the area of Moesia, and on behalf of the Empire, see: Gračanin, Škrkulja 2019, p. 208.

<sup>94</sup> Медведев 1966, p. 60.

grad u Konavlima,<sup>102</sup> Biranj u Kaštelima,<sup>103</sup> Gardun kod Trilja,<sup>104</sup> Bisko kod Sinja,<sup>105</sup> Bajagić kod Sinja,<sup>106</sup> Podumac kod Unešića,<sup>107</sup> Jojića glavica kod Vrlike,<sup>108</sup> Greblje u Kninu,<sup>109</sup> Bribir kod Skradina,<sup>110</sup> Stankovci kod Benkovca<sup>111</sup> (Hrvatska), Klobuk kod Ljubuškog,<sup>112</sup> Humac kod Ljubuškog,<sup>113</sup> Lib kod

per River in Ukraine, with one site a little further north in Belarus, and two sites just a little to the east of the Dnieper. The second place of concentration is located in southern Russia, north of the Caucasus, and three finds of this type of arrowhead were also discovered a little further, towards central Russia. Trilobate arrowheads with a partially triangular cross-section were also recorded at three more sites in central Russia, but their head shape differs considerably from the previously mentioned ones.<sup>95</sup> The first group, the “Ukrainian-South Russian”, has a very slender head shape, with edge lines that gently descend from the neck to the top, while the arrowheads from central and northern Russia generally have more chunkier heads, i.e. the head is shorter and wider. The trilobate appearance of one specimen with a narrower head was achieved by grooving the arrowhead with a full triangular cross-section. This last group is mostly reminiscent of the trilobate arrowheads with a partially triangular cross-section, which have been recorded for the same period of time in Central and Eastern Asia, for example among the Kyrgyz (T.5:17-18),<sup>96</sup> hence, we could link them to local influences, or group them into one, more eastern group. Nevertheless, the first group of arrowheads has morphological similarities with those we have examined so far. The question arises, based on the finds from Eastern Europe and Asia, whether there are really two different origins and traditions of making arrowheads that meet here at the same time? It would be then the Asian one, most likely, and the one that von Freeden defines as Mediterranean. Or is it at the root a unique tradition that, through transmission in certain regions and in

kaže da je rimska (Fiala 1984a, 121 i T. 16:10), što ne isključujem, ali s obzirom na dimenzije glave (negdje oko 4,3 cm) možemo uključiti i mogućnost da se radi o kasnijoj strelici.

<sup>102</sup> Zahvaljujem Miroslavu Katiću što me uputio na ovu strelicu. Rad o arheološkom istraživanju ovoga lokaliteta, skupa s nalazom trokrilne strelice, u procesu je objavljivanja.

<sup>103</sup> Na prapovijesnoj gradini s jakim kasnoantičkim stratumom nađena je trokrilna strelica koja se kao avarska (Burić 2020, str. 219-220). Pronađena je u poremećenom arheološkom sloju koji nema datacijsku vrijednost (vidi: Markovac *et alii* 2018, str. 13-18, 22), a njezine ukupne sačuvane dimenzije su 6,2 cm x 1,4 cm (Bralić 2021, str. 122).

<sup>104</sup> Strelica je otkupljena 1898. godine. Njezine dimenzije su 6 x 0,8 cm. Autor je datira u razdoblje od 7. do 10. st. (Piteša 2009, str. 71, kat. br. 102).

<sup>105</sup> Strelica je definirana kao avarska i nađena je uza zid kuće br. 2, na lokalitetu koji je vjerojatno opstojao u 6. st. (Milošević 1987, str. 94-95, sl. 3).

<sup>106</sup> Petrincec 2009, str. 168.

<sup>107</sup> Nepoznate su okolnosti nalaza ove strelice. Njezina dužina je 9 cm, od čega na glavu otpada 7 cm. Autor smatra da nije avarska (Krnčević 2000, str. 490, T. 8:1).

<sup>108</sup> Nađena je u probnom istraživanju gradine na Jojića glavici. Autor je definira kao avarsku strelicu. (Milošević 1998, str. 69, sl. 111).

<sup>109</sup> Strelica je slučajni nalaz iz 1964. godine s groblja koje se datira u 6. i 7. st. Spominje se da je dužine 6 cm (Simoni 1991, str. 108).

<sup>110</sup> Nepoznate su okolnosti nalaza, a njezine dimenzije su 8,5 x 1 cm. Strelica se nalazi u Muzeju hrvatskih arheoloških spomenika u Splitu.

<sup>111</sup> Nepoznate su okolnosti nalaza, a nisu navedene ni dimenzije strelice (Belošević 1985, T. XXI).

<sup>112</sup> Strelica je pronađena u sloju kamenja i zemlje u naosu crkve čiju gradnju autor datira u 2. pol. 5. st. Ukupne je dužine 5,6 cm, od čega na glavu otpada 3,5 cm. Autor tvrdi da je tipično avarskog oblika (Sergejevski 1954, str. 192 i 198, sl. 2b).

<sup>113</sup> Okolnosti nalaza strelice su nepoznate. Njezina ukupna dužina je 7,7 cm. (Oreč 1984, str. 123, sl. 17a).

<sup>95</sup> Медведев 1966, p. 60, T.12: 9-12, T.13: 13-14, T.15: 23-25. Sites along the Dnieper river, where these arrowheads were found are as follows: Voznesenka, Pastirskoe gorodišće (T.5:11), Miklaševskoe gorodišće, Dyvich – hora (T.5:12) and Hotemelj a little further north in Belarus. East of the Dnieper, this type of trilobate arrowhead occurs at sites Novopokrtočka and Dmitrijevskij mogilnik (T.5:13). In the area of southern Russia and the northern Caucasus, these arrowheads were recorded at sites Borisovskij mogilnik (T.5:14), Kolosovskij mogilnik, Tahtamukaevskij mogilnik and Nikolaevskij mogilnik (T.5:15). Trilobate arrowheads were also found in central Russia at sites Tankejevskij mogilnik, Serpovskij mogilnik and Čudskoe kostišće, while those at sites Biljar (T.5:16), Petrovskij mogilnik and Bayanovskij mogilnik have a significantly different appearance than the previously mentioned ones. (See: Медведев 1966, p. 60, T.12: 9-12, T.13: 13-14, T.15: 23-25)

<sup>96</sup> Худяков 1980, T.19



Tomislavgrada,<sup>114</sup> Branković na Glasincu,<sup>115</sup> Rusanović na Glasincu<sup>116</sup> (Bosna i Hercegovina) te jedna s nepoznatog nalazišta.<sup>117</sup>

Za potrebe ovog rada osvrnut ću se samo na trokrilne strelice s djelomično trokutastim presjekom. Ponovit ću, to su one koje von Freeden u svojoj analizi naziva *mit massiven Kopf*, koje u Buorinoj klasifikaciji spadaju pod tip E, a kod Odara su klasificirane kao tip A2. Radi se o šest strelica iz Podgradine kod Livna (T. 1:2-7), trima strelicama iz Solina te pojedinačnim strelicama s lokaliteta Biranj u Kaštelima, Jojića glavica kod Vrlike (T. 3:1), Greblje u Kninu (T. 1:8), Bribir kod Skradina, Klobuk kod Ljubuškog (T. 2:1), te jednoj strelici s nepoznatog lokaliteta.<sup>118</sup>

<sup>114</sup> Autor je u obilasku lokaliteta sakupio ukupno 29 komada trokrilnih strelica te ih sve veže za okršaj u vrijeme doseljenja Avara i Slavena, uz mogućnost okršaja i u vrijeme stabilizacije nove vlasti na ovom području (Oreč 1984, str. 99). Ipak, sve strelice koje je prikazao u formi crteža, osim jedne (sl. 1a), odgovaraju klasičnim rimskim strelicama po Zanierovoj tipologiji. Jedina vjerojatno postrimska strelica ukupne je dužine 6 cm, od čega na glavu otpada 4,5 cm (Oreč 1984, str. 98, sl. 1a). K. Patsch je 1897. godine, vjerojatno s istog lokaliteta, pribavio 11 trokrilnih strelica za koje kaže da su dužine 3 do 4,3 cm (Patsch 1904, str. 359). Na temelju veličine, kao i zbog nalaza P. Oreča, ipak smatram da se radi o klasičnim rimskim strelicama.

<sup>115</sup> Strelica je nađena u grobnom humku u kojem se nalazilo 10 kosturnih i jedan spaljeni ukop. Dominira željeznodobni materijal, ali su nađena i dva primjerka novca rimskog cara Konstancija (353. - 357. g.) (Fiala 1896, str. 454-455, sl. 48) pa to može biti orijentir za datiranje strelice u vrijeme kasne antike.

<sup>116</sup> Strelica je nađena u Gomili 3, koja je sadržavala 9 pokojnika u dvije skupine. Prvoj skupini pokojnika pripada prapovijesni materijal, a drugoj skupini pripada razmjerno manje priloga, koje je prema opisu iz teksta teško definirati. Među materijalom koji je nađen uz drugu skupinu pokojnika je i trokrilna strelica. Njezina cjelokupna dužina je gotovo 10 cm, dok na glavu otpada oko 6,5 cm (Fiala 1894b, str. 752-754, sl. 57). Strelica je uvrštena u popis postrimskih strelica s obzirom na vitki izgled i dužinu glave te s obzirom da su u drugim gomilama na istom području evidentirani ukopi iz vremena kasne antike i ranog srednjeg vijeka (vidi: Fiala 1984a, str. 728-729, 746, 740), a koji možda mogu rastumačiti definiranje druge skupine pokojnika iz Gomile 3.

<sup>117</sup> Nalazi se u zbirci Muzeja hrvatskih arheoloških spomenika u Splitu pod inventarnim brojem 8864. Njezine dimenzije su 8 x 1,3 cm.

<sup>118</sup> Strelice iz Solina objavljene su u: *Katalog nalaza iz vremena seobe naroda, srednjeg i novog vijeka u Arheološkom muzeju u Splitu* pod kat. br. 13, 104 i 105. Vidi: A. Piteša, 2009, str. 72-73.

certain periods, manifested itself in a different stylistic and practical way and thereby merged with regional traditions or needs?

If there is one place of origin of such arrowheads, I assume that it would be in the areas of the Eurasian steppe, rather than in the Mediterranean, even though the arrowheads in Eastern Europe and Asia are dated somewhat later. I will admit that I represent this point of view based upon the traditional understanding of the transfer of military technology related to horsemanship and archery, but also due to the fact that these types of arrowheads were used almost in the very east of Asia, while I could not find them in Byzantine territories outside of Europe. In any case, defining the provenance of trilobate arrowheads with a partially triangular cross-section in the Mediterranean, that is, in Byzantium, is very problematic. Another problem is also the decision to attribute an intermediary role to Byzantium in the transmission of these arrowheads among the Gepids, Lombards and other Germanic peoples. Namely, they also had contact with the area of the Eurasian steppe, especially the Goths and Gepids, and as we have established earlier, it was precisely in the Gepid area that this form of arrowhead was used very early and in greater numbers.

#### Trilobate arrowheads with a partially triangular cross-section in the area of the roman province of Dalmatia

A considerable amount of post-Roman trilobate arrowheads was found in the territory of the province of Dalmatia; namely 34 specimens at 19 sites as far as I know.<sup>97</sup> As many as seven were found in Podgradina near Livno (Bosnia and Herzegovina),<sup>98</sup>

<sup>97</sup> These are only arrowheads that have been published with a photo or drawing. Therefore, this list will not contain trilobate arrowheads that are only mentioned incidentally without any other information, such as the arrowhead from Varvara above Rama (Miletić 1984, p. 390). Certainly, there are still some trilobate arrowheads in museum storages and private collections, as evidenced by D. Sergejevski's statement about how several "Avar" arrowheads, without any marks of their provenance are kept in the National Museum in Sarajevo. (Sergejevski 1956, p. 31 and 39). I assume this is the case also in terms of private collections, given that all 7 arrowheads from Podgradina, all 5 arrowheads from Solin, as well as the arrowhead from Gardun, were acquired by purchase (for Solin and Gardun see: Piteša 2009, pp. 70-73).

<sup>98</sup> D. Periša states that ten of them were found and that they are kept in the Museum of Croatian Archaeologi-

Trokrilne strelice iz Podgradine kod Livna prvi je spomenuo D. Periša u raspravi o Delminiju kao sjedištu starokršćanske biskupije, pri čemu se strelicama služi kako bi objasnio vrijeme i kontekst njezinog prestanka: *Isto tako, u ruševinama kasnoantičke utvrde iznad Podgradine, također u Buškom blatu, nađeno je desetak avaroslavenskih željeznih trokrilnih vrhova strijela, što najbolje svjedoči o tome kada je i kako stradala ta utvrda.*<sup>119</sup> Periša je tako i prvi koji je definirao strelice s ovog lokaliteta. Pretpostavivši (vjerojatno s pravom) razdoblje kasne antike na jednom uzvišenju u Podgradini te primijetivši trokrilan presjek kod strelica, Periša je izveo jednostavan zaključak o avarsko-slavenskim akcijama na tom području. Daljnja analiza strelica, barem u sagledavanju analogija, ipak nije rađena. Strelice nisu opisane niti je donesen njihov crtež, pa ću ovdje iskoristiti priliku da ih zapravo i publiciram prvi put. Selo Podgradina nalazi se oko 13 km jugoistočno od grada Livna (Bosna i Hercegovina), na južnom rubu Livanjskog polja i s istočne strane planine Kamešnice, na prometnom pravcu iz unutrašnjosti prema obali, odnosno prema antičkoj Salonu. Na prostoru sela nalazi se lokalitet Rešetarica s istraženom starokršćanskom crkvom i ranosrednjovjekovnim grobovima unutar i uokolo nje,<sup>120</sup> a iznad sela nalazila se pretpostavljena kasnoantička i ranosrednjovjekovna utvrda.<sup>121</sup> Muzej hrvatskih arheoloških spomenika u Splitu, završno do 2011. godine, otkupio je nekolicinu nalaza od lokalnog ljubitelja prošlosti i rekreativnog „detektoraša“,<sup>122</sup> za

five in Solin (Croatia),<sup>99</sup> two in Gornji Vrbljani<sup>100</sup> and two at site Debelo brdo above Sarajevo (Bosnia and Herzegovina),<sup>101</sup> and one specimen at each of the following sites: Sokol grad in Konavle,<sup>102</sup> Biranj in Kaštela,<sup>103</sup> Gardun near Trilj,<sup>104</sup> Bisko near Sin-

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cal Monuments in Split (Periša 2009, p. 242). However, a total of only 7 trilobate arrowheads from this site are in the museum's holdings. They will be discussed in more detail further in the text.

<sup>99</sup> The arrowheads were published in *Katalog nalaza iz vremena seobe naroda, srednjeg i novog vijeka (Catalogue of finds from the Migration Period, Middle Ages and Modern Age)* in the Archaeological Museum in Split under cat. no. 100 (dim. 7.1 x 1.2 cm), 101 (dim. 8.9 x 1.2 cm), 104 (dim. 5.7 x 1.5 cm), 105 (dim. 7.7 x 1.4) and 106 (dim. 7 x 1.1). The author dates the first arrowhead to the period from the 5<sup>th</sup> to 8<sup>th</sup> century, the second to the period from the 6<sup>th</sup> to 9<sup>th</sup> century, the third to the period from the 5<sup>th</sup> to 9<sup>th</sup> century, and the last two to the period from the 7<sup>th</sup> to 12<sup>th</sup> century. (Piteša 2009, pp. 70-73).

<sup>100</sup> Both arrowheads were found in the northern rampart of the fortification, which the author relates to the attacks of Avars and Slavs at the end of the 6<sup>th</sup> century and the beginning of 7<sup>th</sup> century (Bojanovski 1976, pp. 246-248). The length of both arrowheads is stated to be 7 cm. (Bojanovski 1976, p. 246). It is interesting that one arrowhead has a twisted tang, which I have not seen anywhere else.

<sup>101</sup> The first arrowhead has a pronounced neck, which I had not noticed in classical Roman arrowheads (Fiala 1984a, p. 122 and T.15:16), but on the other hand, some arrowheads from the 6<sup>th</sup> and 7<sup>th</sup> century have this feature and this arrowhead really resembles them (see: Odar 2006, T.2: 10-12). The author considers the second arrowhead to be Roman (Fiala 1984a, 121 and T. 16:10), which I do not exclude, but considering the dimensions of the head (around 4.3 cm), we can also include the possibility that it is an arrowhead with a later dating.

<sup>102</sup> I thank Miroslav Katić for pointing out this arrowhead to me. The paper on the archaeological research of this site, along with the find of the trilobate arrowhead is in the process of publication.

<sup>103</sup> The trilobate arrowhead that is defined as Avar was found on the prehistoric hillfort with a strong late ancient stratum (Burić 2020, pp. 219-220), in a disturbed archaeological layer that has no dating value (see: Markovac et alii 2018, pp. 13-18, 22). Its preserved overall dimensions are 6.2 cm x 1.4 cm (Bralić 2021, p. 122)

<sup>104</sup> The arrowhead was purchased in 1898. Its dimensions are 6 x 0.8 cm. The author dates it to the period from the 7<sup>th</sup> to the 10<sup>th</sup> century (Piteša 2009, p. 71, cat. no. 102).

<sup>119</sup> Periša 2009, str. 242.

<sup>120</sup> Vrdoljak 1988, str. 122. Među tim grobovima, priložima se ističe grob 4 u kojem su nađene željezne ostruge, nož, britva, kresivo, dva jezičca i karolinški mač. Grob je položen unutar crkve, pa uz nekoliko drugih grobova koji su položeni u crkveno urušenje ili su pak koristili arhitektonske dijelove, sugerira da je ova crkva bila izvan funkcije krajem 8. ili poč. 9. st. (Vrdoljak 1988, str. 182-184, T. XVII). Uzevši u obzir otkupljene ulomke crkvenog namještaja koji datiraju upravo oko navedenog razdoblja, moguće je da se na nekom obližnjem položaju gradi nova crkva u predromaničkom stilu. Za drugačiju dataciju crkvenog namještaja pa i same crkve vidi: Milošević 2003.

<sup>121</sup> Kasnoantički kastrum je termin koji za Podgradinu koristi T. Šeparović (Šeparović 2020, str. 37), dok termin ranosrednjovjekovni kastrum koristi A. Milošević (Milošević 2016, str. 60).

<sup>122</sup> Od nalaza ranoga srednjeg vijeka otkupljeni su, uz spomenute ulomke crkvenog namještaja, također i dva željezna stremena, jedna ranokarolinška željezna ostruga s garniturom za kopčanje te par ranosrednjovjekovnih željeznih ostruga, također s garniturom za kopčanje. Od kasnoantičkog materijala otkupljen je

koje se smatra da su s položaja utvrde, a najviše je intrige bilo oko pečata bizantskih careva Lava VI. i Aleksandra, koji se datira od 886. do 912. godine.<sup>123</sup>

Među otkupljenim materijalom bilo je i 7 trokrilnih strelica koje spominje D. Periša, te su u muzejsku dokumentaciju uvedene pod inventarnim brojevima 18018 – 18024. Osim strelice pod inv. br. 18018, koja cijelom dužinom glave ima trokrilni presjek, sve ostale su trokrilne strelice s djelomično trokutastim presjekom. Slijedi njihov opis:

Inv. br. **18018** – Glava strelice započinje trokutastom bazom. Iako teško oštećena, može se pretpostaviti širi trokutasti obris glave strelice koja se razvija konkavnom linijom iz njezine baze. Glava je dužine 3,5 cm te najveće sačuvane širine 1,2 cm. Trn je kružnog presjeka i očuvan je u dužini od 2,7 cm. Ukupne sačuvane dimenzije strelice su tako 6,2 x 1,2 cm (sl. 3, T. 1:1).



Sl. 3. Strelica iz Podgradine kod Livna, inv. br. 18018  
*Fig. 3 Arrowhead from Podgradina near Livno, inv. no. 18018*

Inv. br. **18019** – Donji dio glave strelice teško je oštećen, a na gornjem dijelu glave raspoznaje se puni trokutasti presjek u duljini od 2,1 cm. Iako teško korodirana, raspoznaje se da je glava imala oblik uskog trokuta te dužinu od 4,5 cm. Najveća sačuvana širina je 0,9 cm. Trn je nepravilnog kružnog presjeka i očuvan je u dužini od 1,0 cm. Ukupne sačuvane dimenzije strelice su tako 5,5 x 0,9 cm (sl. 4, T. 1:2).



Sl. 4. Strelica iz Podgradine kod Livna, inv. br. 18019  
*Fig. 4 Arrowhead from Podgradina near Livno, inv. no. 18019*

Inv. br. **18020** – Strelica je teško oštećena pa se oblik glave teško može definirati. Ipak, primjetno je da ima puni trokutasti presjek u dužini od 1,2 cm te ukupnu dužinu glave od 4,3 cm. Najveća sačuvana

ulomak tanjura s urezanim križem (Milošević 2016, str. 59-60 i bilj. 16).

<sup>123</sup> Šeparović 2020, str. 37. Za nešto užu dataciju vidi: Bali 2014, str. 163-164.

j,<sup>105</sup> Bajagić near Sinj,<sup>106</sup> Podumac near Unešić,<sup>107</sup> Jojića glavica near Vrlika,<sup>108</sup> Greblje in Knin,<sup>109</sup> Bribir near Skradin,<sup>110</sup> Stankovci near Benkovac<sup>111</sup> (Croatia), Klobuk near Ljubuški,<sup>112</sup> Humac near Ljubuški,<sup>113</sup> Lib near Tomislavgrad,<sup>114</sup> Branković on the plateau Glasinac,<sup>115</sup> Rusanović on the plateau

<sup>105</sup> The arrowhead is defined as Avar and was found next to the wall of house no. 2, on a site that probably existed in the 6<sup>th</sup> century (Milošević 1987, pp. 94-95, fig. 3).

<sup>106</sup> Petrinc 2009, p. 168.

<sup>107</sup> The discovery circumstances of this arrowhead are unknown. Its length is 9 cm, of which the head takes up 7 cm. The author believes that it is not of Avar origin. (Krnčević 2000, p. 490, T. 8:1)

<sup>108</sup> It was found during a trial trenching of the fortress on Jojića glavica. The author defines it as an Avar arrowhead. (Milosevic 1998, p. 69, fig. 111)

<sup>109</sup> The arrowhead is a chance find from 1964 from a cemetery dating back to the 6<sup>th</sup> and 7<sup>th</sup> centuries. Its length is mentioned to be 6 cm (Simoni 1991, p. 108).

<sup>110</sup> The discovery circumstances of the find are unknown, and its dimensions are 8.5 x 1 cm. The arrowhead is kept in the Museum of Croatian Archaeological Monuments - Split.

<sup>111</sup> The discovery circumstances of the find are unknown, and the dimensions of the arrowhead are not specified. (Belošević 1985, T. XXI)

<sup>112</sup> The arrowhead was found in a layer of stones and earth in the nave of a church, whose construction is dated to the second half of the 5<sup>th</sup> century by the author. Its overall length is 5.6 cm, the head takes up 3.5 cm. The author claims that it has a typical Avar shape. (Sergejevski 1954, p. 192 and 198, fig. 2b)

<sup>113</sup> The discovery circumstances of the arrowhead are unknown. Its overall length is 7.7 cm. (Oreč 1984, p. 123, fig. 17a)

<sup>114</sup> While surveying the site, the author collected a total of 29 trilobate arrowheads. He links them all to the conflict that took place at the time the Avars and Slavs settled in this area, with the possibility that the conflict also occurred when the new government was stabilized (Oreč 1984, p. 99). Nevertheless, all arrowheads he presented as drawings, except for one (fig. 1a), correspond to classical Roman arrowheads according to Zanier's typology. Probably the only post-Roman arrowhead has a total length of 6 cm, of which the head takes up 4.5 cm (Verdict 1984, p. 98, fig. 1a). In 1897, K. Patsch purchased 11 trilobate arrowheads, probably from the same site, which, according to him, were 3 to 4.3 cm long. (Patsch 1904, p. 359). Based on the size, as well as the finds of P. Oreč, I still believe that these are classical Roman arrowheads.

<sup>115</sup> The arrowhead was found in a burial mound that contained 10 skeletal and one cremation burial with predominantly Iron Age material, but there were also finds of two coins of the Roman Emperor Constantius II (353-357) (Fiala 1896, pp. 454-455, fig. 48), which can be a point of reference for the dating of the arrowhead to the Late Antiquity.

širina strelice je 0,7 cm, a trna tek 0,3 cm. Ukupne sačuvane dimenzije su tako 4,6 x 0,7 cm (sl. 5, T.1:3).



Sl. 5. Strelica iz Podgradine kod Livna, inv. br. 18020  
Fig. 5 Arrowhead from Podgradina near Livno, inv. no. 18020

Inv. br. **18021** – Donji dio glave strelice teško je oštećen. U gornjem dijelu glave jasan je puni trokutasti presjek u dužini od 1,4 cm. Najveća očuvana širina je 1 cm. Trn je nepravilnog kružnog presjeka i očuvan je u dužini od 1,0 cm. Ukupne sačuvane dimenzije strelice su 5,0 x 1,0 cm (sl. 6, T. 1:4).



Sl. 6. Strelica iz Podgradine kod Livna, inv. br. 18021  
Fig. 6 Arrowhead from Podgradina near Livno, inv. no. 18021

Inv. br. **18022** – Glava strelice teško je oštećena, ali se primjećuje puni trokutasti presjek u dužini od 0,7 cm. Glava je dužine 3,8 cm, a najveća sačuvana širina je 0,7 cm. Trn je nepravilnog kružnog presjeka i sačuvan u dužini od 2,8 cm. Ukupne sačuvane dimenzije strelice su 6,6 x 0,7 cm (sl. 7, T. 1:5).



Sl. 7. Strelica iz Podgradine kod Livna, inv. br. 18022  
Fig. 7 Arrowhead from Podgradina near Livno, inv. no. 18022

Inv. br. **18023** – Krila su oštećena korozijom pa se teško može govoriti o obrisu glave strelice. Puni trokutasti presjek zauzima 1 cm glave, a sama glava je dužine 6,1 cm. Najveća sačuvana širina je 1,1 cm. Trn nije očuvan (sl. 8, T. 1:6).

Glasinac<sup>116</sup> (Bosnia and Herzegovina), while one arrowhead derives from an unknown site.<sup>117</sup>

For the purpose of this paper, I will focus only on the trilobate arrowheads with a partially triangular cross-section, or respectively, the ones that von Freeden names *mit massivem Kopf* in her analysis, that are listed in Buora's classification as type E and in Odar's classification as type A2. These are six arrowheads from Podgradina near Livno (T.1:2-7), three arrowheads from Solin and the single finds of arrowheads from sites Biranj in Kaštela, Jojića glavica near Vrlika (T.3:1), Greblje in Knin (T.1:8), Bribir near Skradin, Klobuk near Ljubuški (T.2:1) and the arrowhead from the unknown site.<sup>118</sup>

D. Periša was the first to mention the trilobate arrowheads from Podgradina near Livno in the paper on Delminium as the seat of the early Christian bishopric, in which he explains the time and context of its end based upon these arrowheads: *A dozen Avaro-Slavic arrowheads were also found in the ruins of the late ancient fort above Podgradina, also located in Buško Blato, which is the best evidence of when and how this fort fell.*<sup>119</sup> Periša is hence also the first to define the arrowheads from this site. Assuming (probably right) the Late Antiquity on an elevation in Podgradina, and noticing the trilobate cross-section of the arrowheads, Periša made a simple conclusion about Avaro-Slavic military actions in the area. A further analysis of the arrowheads, at least in the context of analogies, was not done. As there were no descriptions and drawings of these

<sup>116</sup> The arrowhead was found in tumulus 3, which contained 9 deceased persons in two groups. Prehistoric material belongs to the first group, whereas relatively fewer items belong to the second group, which are difficult to define according to the text's description. The trilobate arrowhead was among the material that was found next to the second group. Its overall length is almost 10 cm, while the head is about 6.5 cm (Fiala 1894b, pp. 752-754, fig. 57). The arrowhead was listed as a post-Roman arrowhead due to its slender appearance and head length, and due to the fact that late ancient and early medieval burials have been recorded in other tumuli located in the same area, (see: Fiala 1984a, pp. 728-729, 746, 740), which might explain the definition of the second group from tumulus 3.

<sup>117</sup> The arrowhead belongs to the collection of the Museum of Croatian Archaeological Monuments in Split and is listed under inventory number 8864. Its dimensions are 8 x 1.3 cm.

<sup>118</sup> The arrowheads from Solin were published in: *Catalogue of finds from the Migration Period, Middle Ages and Modern Age in the Archaeological Museum in Split* under cat. no. 13, 104 and 105. See: A. Piteša, 2009, pp. 72-73.

<sup>119</sup> Periša 2009, p. 242.



Sl. 8. Strelica iz Podgradine kod Livna, inv. br. 18023  
Fig. 8 Arrowhead from Podgradina near Livno, inv. no. 18023

Inv. br. **18024** – Najbolje očuvana strelica. Glava strelice započinje s manjim proširenjem na koji ide trokutasta baza iz koje se konkavnom linijom razvija uža trokutasta glava dužine 4,7 cm. Trokutasti presjek se nalazi u dužini od 2,2 cm. Najveća širina strelice je 1,9 cm. Trn je nepravilnog kružnog presjeka i sačuvan u dužini od 2,2 cm. Ukupne dimenzije strelice su 7,5 x 1,9 cm (sl. 9, T. 1:7 i T. 3:15).



Sl. 9. Strelica iz Podgradine kod Livna, inv. br. 18024  
Fig. 9 Arrowhead from Podgradina near Livno, inv. no. 18024

Među trokrilnim strelicama s djelomično trokutastim presjekom, a s područja provincije Dalmacije, ističe se ona s lokaliteta Knin-Greblje. Radi se zapravo o jedinoj strelici takvog tipa s prostora jugoistočne Europe koja bi mogla potjecati iz groba, pa se čini i kao ključ za objašnjenje njihove pojave, barem u Dalmaciji. Strelica je pronađena zapravo izvan arheološkog konteksta, ali na području većega groblja koje se datira u 6. i 7. st. (T. 1:8). Kako je strelica nađena 1964. godine,<sup>124</sup> prije sustavnog istraživanja groblja, a pri građevinskim radovima u kojima se groblje otkrilo te ponešto i devastiralo, teoretski je moguće da je i pripadala jednom od grobova. Pri otkrivanju groblja devastirao se i jedini grob koji je sadržavao oružje, i to dvosjekli mač.<sup>125</sup>

<sup>124</sup> Simoni 1989, str. 108.

<sup>125</sup> Ovdje netko može uputiti opasku da je vezivanje ova nalaza za grob stari, demodirani pristup situaciji. Ipak, argumenti da oni potječu iz grobne cjeline nisu tek puki nalaz na neistraženom arheološkom lokalitetu, već se radi o groblju sa 218 istraženih grobova koje je uz to i dijelom uništeno upravo kad su ovi nalazi i pronađeni. Također, svi predmeti koji se donose u popisu nalaza iz 1964. godine (a među njima su mač i strelica) evidentirani su i kao nalazi grobnih cjelina u idućim sustavnim istraživanjima groblja. Vidi: Simoni 1989, str. 108.

arrowheads, I will take this opportunity to actually publish them for the first time. The village of Podgradina is located about 13 km southeast of the town of Livno (Bosnia and Herzegovina), on the southern edge of the Livno Plain and on the east side of mountain Kamešnica, along the road that led from the interior to the coast or to ancient Salona respectively. In the area of the village lies the site Rešetarica with the researched early Christian church and the early medieval graves within and around it.<sup>120</sup> An assumed late ancient and early medieval fort was located above the village.<sup>121</sup> The Museum of Croatian Archaeological Monuments in Split purchased several finds considered to be from the site of the fort from a local history buff and recreational “detector” until 2011,<sup>122</sup> of which the seal of the Byzantine emperors Leo VI and Alexander dating from 886 to 912 AD has caused the greatest stir.<sup>123</sup>

Among the material that was purchased then were also the seven trilobate arrowheads mentioned by D. Periša, which are recorded in the museum documentation under inventory numbers 18018 - 18024. Apart from the arrowhead listed under inv. no. 18018, which has a trilobate cross-section along its entire head, all others are trilobate arrowheads with a partially triangular cross-section. Their description is as follows:

<sup>120</sup> Vrdoljak 1988, p. 122. In terms of grave goods, grave 4 stands out among these graves, in which iron spurs, a knife, a razor, flint, two strap ends and a Carolingian sword were found. The grave was located inside the church, so along with several other graves that were placed in the dilapidated church or the used architectural parts, it suggests that this church was not in use at the end of the 8<sup>th</sup> century or the beginning of the 9<sup>th</sup> century (Vrdoljak 1988, pp. 182-184, T.XVII). Taking into account the purchased fragments of the church furniture that date approximately to the mentioned period, it is possible that a new church in the pre-Romanesque style was being built in a nearby location. For a different dating of the church furniture and the church itself, see: Milošević 2003.

<sup>121</sup> T. Šeparović uses the term late ancient castrum for Podgradina (Šeparović 2020, p. 37), while A. Milošević uses the term early medieval castrum (Milošević 2016, p. 60).

<sup>122</sup> In addition to the aforementioned fragments of church furniture, two iron stirrups, an early Carolingian iron spur with a fastening set and a pair of early medieval iron spurs, also with a fastening set, were among the purchased finds that date to Early Middle Ages. To the late ancient material belongs the purchased fragment of a plate with an incised cross. (Milošević 2016, pp. 59-60 and fn.16.)

<sup>123</sup> Šeparović 2020, p. 37. For a more precise dating, see: Bali 2014, pp. 163-164.



Sl. 10. Nekropola Knin – Greblje s označenim grobovima koje je Z. Vinski datirao do sred. 6. st. (preuzeto iz: Vinski 1989.)

Fig. 10 Necropolis Knin – Greblje with marked graves, which Z. Vinski dated to the mid-6<sup>th</sup> century (taken from: Vinski 1989.)

Z. Vinski predlaže za nosioca mača preitalsko langobardsko porijeklo s obzirom da ratnički grobovi Istočnih Gota, koji su vladali ovim područjem krajem 5. i u prvoj trećini 6. st., nisu evidentirani.<sup>126</sup> A. Uglešić je pak mišljenja da je mač gepidske provenijencije, na temelju česte pojave mača u njihovim grobovima te analogija s mačevima na području Podunavlja.<sup>127</sup> Ako bi navedena trokrilna strelica bila dio grobne cjeline, tu bi cjelinu vrlo lako mogla činiti s navedenim mačem jer su oboje, i mač i strelica, nađeni u isto vrijeme, na istom položaju i u istim okolnostima, a to je prilikom otkrivanja groblja i devastacije groba koji je sadržavao mač. Tada je, uz mač i strelicu, nađeno još samo 9 nalaza i svi su oni bili zastupljeni kao grobni nalazi ili prilozima ovom lokalitetu.<sup>128</sup>

<sup>126</sup> Vinski 1989, str. 7 i 32.

<sup>127</sup> Uglešić 1999, str. 97-98

<sup>128</sup> Uz mač i trokrilnu strelicu nađeni su još i dva noža, pločasta fibula, kresivo, dva čavla, rimski ključ, dlijeto i ulomci od željeza nepoznate namjene. Vidi: Simoni 1989, str. 108.

Inv. no. **18018** - The head begins with a triangular base. Although severely damaged, a wider triangular outline of the head that is shaped with a concave line from its base can be assumed. The head is 3.5 cm long and, in the best preserved part, 1.2 cm wide. The tang has a circular cross section and is preserved in 2.7 cm length. The overall preserved dimensions of the arrowhead are 6.2 x 1.2 cm (Fig. 3, T.1:1).

Inv. no. **18019** - The lower part of the head is severely damaged, while the upper part of the head shows a full triangular cross-section in a length of 2.1 cm. Although severely corroded, one can see that the head had the shape of a narrow triangle and a length of 4.5 cm. Its maximum preserved width is 0.9 cm. The tang has an irregular circular cross-section and is preserved in a length of 1.0 cm. The arrowhead's overall preserved dimensions are 5.5 x 0.9 cm (Fig. 4, T.1:2).

Inv. no. **18020** - The arrowhead is severely damaged, hence the shape of the head is difficult to de-

Većina grobova datira se u 2. pol. 6. st. i pripisu- je autohtonom stanovništvu,<sup>129</sup> međutim, nekoliko grobova posjeduje i predmete germanske mode koji se datiraju prije tog vremena, odnosno u razdoblje istočnogotske vlasti.<sup>130</sup> Prema interpretaciji materijala Z. Vinskog do sredine 6. st. trebali bi se datirati grobovi 2, 93, 98, 112, 151, 172, 173 i 174, a oni se grupiraju na samom južnom kraju istraženoga dije- la groblja, te grobovi 47, 50 i 55, koji se nalaze na sjevernom dijelu groblja i zapravo omeđuju jedan prostor koji nije sustavno istražen (sl. 10).

Na samoj granici tog neistraženog i istraženog prostora nalazio se grob 50, a zabilježeno je kako su upravo kraj njega pronađeni mač i strelica.<sup>131</sup> Grob 50 sadržavao je kopču s orlovskom glavom, koja prema Vinskom analogije ima u Potisju, zatim u donjem Pridnjeprovlju te ponajviše na Krimu. Vinski smatra da su nosioci ovih kopčica bili krimski Goti, a preko njih i Gepidi u Panoniji.<sup>132</sup> A. Uglešić se slaže s ovom teorijom o provenijenciji kopče, smatrajući da ona označava pokojnicu kao Gepitkinju, ali da je kopča mogla biti rađena u domaćoj radi- onici, najvjerojatnije Saloni, po gepidskom ukusu i za vrijeme istočnogotske vlasti nad provincijom Dalmacijom.<sup>133</sup> U svakom slučaju, čini se izglednim kako mač i strelica potječu s dijela groblja koje bi se lako moglo datirati u razdoblje do oko 550. godine, odnosno u doba istočnogotske vlasti u provinciji Dalmaciji.

Ta vlast, iako je trajala možda samo 40-ak go- dina, ostavila je zaista zamjetan broj nalaza.<sup>134</sup> Ve-

termine. However, its full triangular cross-section with a length of 1.2 cm and a total head length of 4.3 cm can be identified. The arrowhead's maxi- mum preserved width is 0.7 cm and the tang's one only 0.3 cm. The overall preserved dimensions are 4.6 x 0.7 cm (Fig. 5, T.1:3).

Inv. no. **18021** - The lower part of the arrowhead is severely damaged. A 1.4 cm long full triangular cross-section is clearly visible in the upper part of the head. The maximum preserved width is 1 cm. The tang has an irregular circular cross-section and is preserved in a length of 1.0 cm. The arrowhead's overall preserved dimensions are 5.0 x 1.0 cm (Fig. 6, T.1:4).

Inv. no. **18022** - The arrowhead is severely dam- aged but a 0.7 cm long full triangular cross-section can be identified. The head is 3.8 cm long, its max- imum preserved width is 0.7 cm. The tang has an irregular circular cross-section and is preserved in a length of 2.8 cm. The arrowhead's overall pre- served dimensions are 6.6 x 0.7 cm (Fig. 7, T.1:5).

Inv. no. **18023** - The lobes are damaged by cor- rosion, so that the shape of the head is difficult to determine. The full triangular cross-section takes up 1 cm of the head while the head itself is 6.1 cm long. The maximum preserved width is 1.1 cm. The tang has not been preserved (Fig. 8, T.1:6).

Inv. no. **18024** - Best preserved arrowhead. The head starts with a smaller extension, followed by a triangular base, from which a 4.7 cm long narrower triangular head is concavely shaped. The triangular cross-section is 2.2 cm long. The arrowhead's width at the widest point is 1.9 cm. The tang has an irreg- ular circular cross-section and has been preserved in a length of 2.2 cm. The arrowhead's overall di- mensions are 7.5 x 1.9 cm (fig. 9, T.1:7 and T.3:15).

Among the trilobate arrowheads with a partially triangular cross-section from the area of the prov- ince of Dalmatia, the specimen from site Knin-Gre- blje particularly stands out. In fact, it is the only arrowhead of this type from South-eastern Europe that could have come from a grave, and therefore it seems to be the key to explaining their appear- ance, at least in Dalmatia. The arrowhead was ac- tually found outside the archaeological context, but in the area of a larger cemetery that dates back to the 6<sup>th</sup> and 7<sup>th</sup> centuries (T.1:8). Given that it was found in 1964,<sup>124</sup> before the systematic research of the cemetery and during construction works that

<sup>129</sup> Isto, str. 33 i Džino 2021, str. 118-119.

<sup>130</sup> Vinski 1989, str. 5. Prema Z. Vinskom, fibula S-oblika iz groba 14 najbližnja je langobardskim kopčama iz njihove preditalske faze (Vinski, 1989, str. 28). Tako- đer i kopča iz groba 151 nije autohtoni nakit te ima određene analogije na prostoru Italije, Galije, ali i Pa- nonije te Krima. Ukrasi izvedeni na njoj Z. Vinskog asociraju na stil svojstven Gotima i Gepidima s pro- stora Panonije u 2. pol. 5. ili pak s prostora Italije u 1. pol. 6. st (Isto, str. 14). U grobu 154 nađena je jedna lučna fibula za koju Vinski smatra da je merovinškog, odnosno franačkog porijekla i da je ovdje došla po- sredstvom Langobarda (Isto, str. 27). Kopče, analogne onima u istočnogotskoj Italiji, evidentirane su još i u grobovima 55 i 173 (Isto, str. 21-23).

<sup>131</sup> Simoni 1989, str. 108.

<sup>132</sup> Isto, str. 24-26.

<sup>133</sup> Uglešić 1990, str. 219-220, i Uglešić 1991, str. 96-97.

<sup>134</sup> Istočnogotska vlast u provinciji Dalmaciji datira se nedugo nakon Teodorikove pobjede nad barbarskim uzurpatorom carske vlasti u Italiji, Odoakrom, 493. godine. Dalmaciji je tada, u upravnom smislu, pridoda- na i provincija Savija, a sjedište joj je bilo u Salo- ni gdje oko 500. godine dolazi namjesnik Osuin, koji

<sup>124</sup> Simoni 1989, p. 108.

činom se radi o novcu i nakitu,<sup>135</sup> a razdoblju istočnogotske vlasti pripisuju se i poneki vojni nalazi, poput navedenoga groba na lokalitetu Knin – Greblje ili kaciga tipa Naron/Baldenheim nađenih u Solinu (Salona) i Vidu kraj Metkovića (Naron).<sup>136</sup> U posljednje vrijeme, među nalazima koji se pripisuju razdoblju istočnogotske vlasti u Dalmaciji, prepoznati su i oni koji svoje analogije imaju na prostoru koji su naseljavali Gepidi, dakle u Podunavlju, Potisju i Transilvaniji.<sup>137</sup> Zbog prisutnosti ovakvih nalaza A. Uglešić zaključuje kako je broj Gepida u provinciji Dalmaciji zapravo mogao biti približan broju Istočnih Gota, te da su oni mogli biti naseljeni kao službenici u istočnogotskoj vojsci.<sup>138</sup> Dobru analizu vijesti iz onovremenih izvora napravio je H. Gračanin. On smatra da je osim Gota i Rimljana u provinciji Dalmaciji mogao boraviti tek zanemariv broj barbara, osim možda u vojnoj službi, gdje bi oni u izvorima bili prikriiveni terminom Goti.<sup>139</sup> Stoga, ako razmatramo gepidsku ili kakvu drugu germansku prisutnost u provinciji Dalmaciji, ona se ponajviše manifestirala u istočnogotskoj

resulted in the discovery of the cemetery when it was also somewhat devastated, it is theoretically possible that the arrowhead belonged to one of the graves. When the cemetery was discovered, the only grave that contained weaponry, namely a double-bladed sword, was destroyed.<sup>125</sup> Z. Vinski suggests a pre-Italic Lombard origin for the bearer of the sword, considering that warrior graves of the Ostrogoths, who ruled this area at the end of the 5<sup>th</sup> century and in the first third of the 6<sup>th</sup> century, have not been recorded.<sup>126</sup> On the other hand, A. Uglešić considers the sword to be of Gepid provenance, based on the frequent occurrence of swords in their graves and analogies with swords in the area of Podunavlje.<sup>127</sup> If said trilobate arrowhead was part of a grave entity, it could easily be within the same context as said sword, because both the sword and the arrowhead were found at the same time, in the same location and in the same circumstances, that is during the discovery of the cemetery and the destruction of the grave that contained the sword. Apart from the sword and arrowhead, only 9 other finds were discovered then, all of them as grave finds or grave goods at this site.<sup>128</sup>

Most of the graves are dated to the second half of the 6<sup>th</sup> century and attributed to the autochthonous population.<sup>129</sup> However, there were also several graves containing items of Germanic fashion that date back to before that time, i.e. to the period of the Ostrogoth's rule.<sup>130</sup> According to Vinski's inter-

ovim provincijama vlada kao *comes Dalmatarum et Savie*. Razdoblje istočnogotske vlasti nad Dalmacijom završilo je istočnogotsko-bizantskim sukobom, možda već 537. godine (Uglešić 1991, str. 65-67).

<sup>135</sup> A. Uglešić je 1990. godine naveo da se Istočnim Gotima može pripisati oko 40 nalazišta na području rimske provincije Dalmacije (Uglešić 1990, str. 208.). Trideset godina poslije taj je broj svakako narastao, a u to uključujem i nalaze koje je Uglešić definirao gepidskima. Među njima najviše je nalaza novca, negdje oko 120 primjeraka (vidi: Demo 2003, str. 137-148), a zatim slijedi nakit: lučne fibule, pojasne kopče, predice, ogrlice, narukvice, naušnice, pektoral, prstenje, amajlijska kutijica i povezi za glavu (vidi: Uglešić 2003, str. 99, i Uglešić 1990, str. 207-227).

<sup>136</sup> Uglešić 2000, str. 61-70.

<sup>137</sup> A. Uglešić je takve nalaze ili pak običaje, osim na lokalitetu Knin-Greblje, prepoznao i u jednom grobu s lokaliteta Njive - Podstrana, na području antičke Naron (Uglešić 1999, 94-96.). Gepidsku provenijenciju vidi i u rotirajućoj aplici s lokaliteta Danilo – Gradina te u rotirajućoj fibuli s lokaliteta Podumci – Maretića umac (Uglešić 2007.), a takve rotirajuće fibule spominje i kao nalaz iz jedne pećini u Hercegovini te na širem području Benkovca (Uglešić 2009, str. 186). Također, gepidske utjecaje vidi i u lučnoj fibuli iz Brguda kod Benkovca (Isti 2009, str. 186), ali i na nekropoli Smiljanovac u Solinu, na primjeru umjetno deformirane lubanje (Uglešić 2009, str. 186). Gepidsku provenijenciju spominje još i za ukrasnu alku nađenu u Sarajevu (Uglešić 1999, str. 98).

<sup>138</sup> Uglešić 2009, str. 188.

<sup>139</sup> Gračanin, 2015, str. 58-59, i Gračanin, Škrkulja 2016, str. 19.

<sup>125</sup> One might argue that linking this find to the grave is an old, outdated approach. However, the arguments that they derive from a grave entity are not simply statements regarding the unexplored archaeological site, since it is a cemetery with 218 researched graves that was also partially destroyed when these finds were discovered. Further, all artefacts that are included in the list of finds from 1964 (among them the sword and arrowhead) were also recorded as finds of grave entities in the subsequent systematic research of the cemetery. See: Simoni 1989, p. 108

<sup>126</sup> Vinski 1989, p. 7 and 32.

<sup>127</sup> Uglešić 1999, pp. 97-98

<sup>128</sup> Along with the sword and trilobate arrowhead, two knives, a plate fibula, a flint, two nails, a Roman key, a chisel and iron fragments of unknown purpose were also found. See: Simoni 1989, p. 108.

<sup>129</sup> Ibid., p. 33 and Džino 2021, pp. 118-119

<sup>130</sup> Vinski 1989, p. 5. According to Z. Vinski, the S-shaped fibula from grave 14 is most similar to Lombard buckles from their pre-Italic phase (Vinski, 1989, p. 28). Also, the buckle from grave 151 is not considered autochthonous jewellery and has certain analogies in the area of Italy, Gaul, but also Pannonia and Crimea. According to Z. Vinski, the decorations on it are reminis-



vojsci. P. Amory, koji je napravio veoma opsežnu studiju identiteta u istočnogotskoj Italiji, smatra kako istočnogotska vojska nakon osvojenja Italije i Dalmacije svakako nije homogena skupina, ako je to uopće i bila, već u njoj služe pripadnici drugih barbarskih naroda, vojska pobijeđenog Odoakara i sami Rimljani. Prema tome, iako još uvijek pod imenom Gota, ta vojska više nema, ako je ikad i imala, etničku homogenost. Ona je polietnička skupina koja svoj identitet temelji na statusu, profesiji, regiji, vladaru.<sup>140</sup> Tako bi prema grobnim nalazima bilo jako teško zaključiti tko je German ili Rimljanin, a još teže bi bilo preciznije definirati pripadnosti gotskom, gepidskom, langobardskom ili alemanškom narodu.

Uglešićeva analiza nalaza koje dovodi u vezu s Gepidima doživjela je nekoliko kritika. Prema G. Tici, jedino kopča iz groba 50 s lokaliteta Knin – Greblje uistinu ima jedinstvene analogije na gepidskom području, gdje se javljaju u 1. pol. 6. st., dok je sav drugi, „gepidski“ materijal zapravo analogan materijalu iz Srednje Europe. Uz to, za mač iz uništenoga groba na lokalitetu Knin – Greblje drži da ne mora nužno biti gepidski ili langobardski, jer se običaj pokapanja s mačem javlja i kod Alemana, Tirinžana i Herula.<sup>141</sup> Tako nas Tica, naspram Uglešića koji ovaj materijal povezuje s gepidskim prostorom, upozorava na analogije s prostorom koji naseljavaju Alemani i Tirinžani. Uglešićevo određivanje prisutnosti gepidskog etniciteta na temelju tipologije nalaza, kritiziraju pak H. Gračanin i J. Škrkulja.<sup>142</sup> Oni smatraju da taj materijal više od etničkog ima statusnu i rodnu konotaciju, a može predstavljati i prihvaćanje modnog izričaja.<sup>143</sup> Tako bi i dvosjekli mačevi mogli ukazivati na određeni status, posebno stoga što rimskim civilima nije bilo

pretation of the material, graves 2, 93, 98, 112, 151, 172, 173 and 174 that are grouped at the very southern end of the investigated part of the cemetery, but also graves 47, 50 and 55, which are located in the northern part of the cemetery and actually enclose an area that has not been systematically investigated (fig. 10) yet, should be dated to the mid-6<sup>th</sup> century.

At the very border of that uninvestigated and investigated area was the location of grave 50, where, according to records, in fact the sword and arrowhead were found right next to it.<sup>131</sup> Grave 50 contained a buckle with an eagle's head, which, according to Vinski, has analogies in Potisje, then in lower Transnistria, and mostly in Crimea. Vinski believes that the bearers of these buckles were Crimean Goths, and through them also the Gepids in Pannonia.<sup>132</sup> A. Uglešić agrees with this theory about the provenance of the buckle and believes that it marks the deceased as a Gepid woman, but that the buckle could have been made in a local workshop, most likely in Salona, in the Gepid style and during the Ostrogothic rule over the province of Dalmatia.<sup>133</sup> In any case, it seems probable that the sword and arrowhead originate from the part of the cemetery that could easily be dated to the period up to around 550 AD, that is, to the time of the Ostrogothic rule in the province of Dalmatia.

The ruling of the Ostrogoths, although it lasted maybe only 40 years, left behind a truly remarkable number of finds.<sup>134</sup> These were mostly coins and jewellery,<sup>135</sup> but also a few finds related to mil-

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cent of the style characteristic of the Goths and Gepids from the area of Pannonia in the second half of the 5<sup>th</sup> century or from the area of Italy in the first half of the 6<sup>th</sup> century (Ibid., p. 14). A bow fibula was found in grave 154, which Vinski believes to be of Merovingian or Frankish origin and which arrived here through the Lombards (Ibid., p. 27). Buckles, analogous to those in Ostrogothic Italy, were also recorded in graves 55 and 173 (Ibid., p. 21-23).

<sup>131</sup> Simoni 1989, p. 108.

<sup>132</sup> Ibid., pp. 24-26.

<sup>133</sup> Uglešić 1990, pp. 219-220 and Uglešić 1991, pp. 96-97.

<sup>134</sup> The Ostrogothic rule in the province of Dalmatia is dated to the time shortly after Theodoric's victory over the barbarian usurper of imperial power in Italy, Odoacer, in 493 AD. The province of Savia was administratively added to Dalmatia with the capital in Salona. Around 500 AD, the governor Osuin arrived there and ruled these provinces as *comes Dalmatarum et Savie*. The period of Ostrogothic rule over Dalmatia ended with the Ostrogothic - Byzantine conflict, perhaps as early as 537 AD (Uglešić 1991, pp. 65-67).

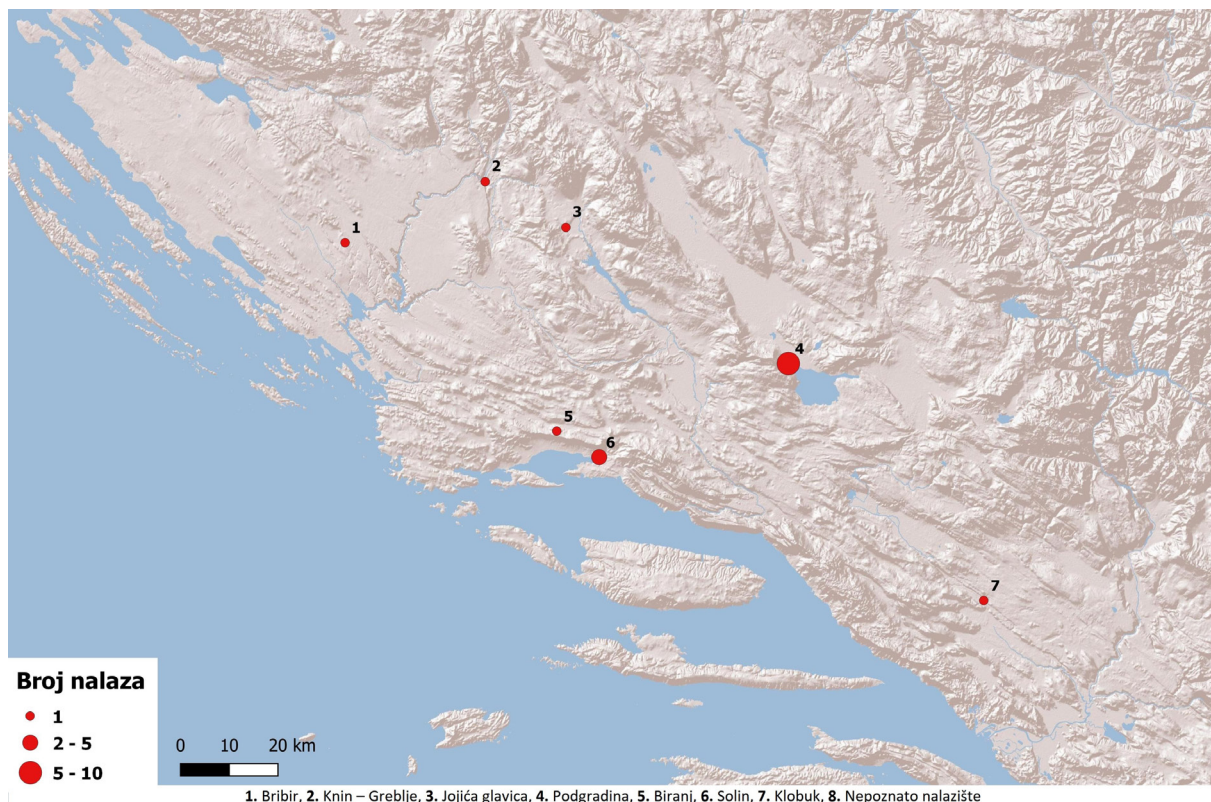
<sup>135</sup> A. Uglešić stated in 1990 that about 40 sites in the area

<sup>140</sup> Amory 1997, str. 13 i 41.

<sup>141</sup> Fibula iz Brguda kod Benkovca za G. Ticu je analogna srednjoeuropskim primjercima i starija je od uspostave istočnogotske vlasti u Dalmaciji. S razdobljem istočnogotske vlasti ipak korespondiraju rotirajuće fibule i aplikacije, ali za Ticu one uopće nisu gepidske. Analogije im nalazi na prostoru Italije, Srednje Europe, Srbije i Kavkaza. Srednjoeuropskim analogijama, s prostora Alemana i Tirinžana, služi se i pri definiranju fibula nađenih u Naroni, na lokalitetu Njive - Podstrana (Tica 2017, str. 224-225).

<sup>142</sup> Vidi: Gračanin, Škrkulja 2019, str. 243-245, Gračanin, Škrkulja 2016, str. 32, i Gračanin 2015, str. 58.

<sup>143</sup> Gračanin, Škrkulja 2019, str. 243-24, i Gračanin, Škrkulja 2016, str. 32, također i Džino 2010, str. 82-83. Za statusnu i rodnu konotaciju grobnih priloga zalaže se i I. Barbiera (Barbiera 2009).



Karta 2. Nalazišta trokrilnih strelica s djelomično trokutastim presjekom u rimskoj provinciji Dalmaciji  
 Map 2. Sites of discovery of trilobate arrowheads with a partially triangular cross-section in the Roman province of Dalmatia

dopušteno nošenje ikakvog oružja.<sup>144</sup> Prema tome, onaj koji je na Greblju pokopan s mačem ne mora nužno biti ni Gepid ni Got ni kakav drugi German, ali bi bio osoba višeg statusa. Ipak, kako tvrdi W. Pohl, demonstracija statusa u postrimskim kraljevstvima može se poklapati i s etničkim identitetom.<sup>145</sup> Na tom tragu je i zaključak s istraživanja na grobljima u Engleskoj za razdoblje 5. - 8. st. Ovdje je polaganje oružja u grobove zapravo sukladno etničkoj distinkciji i bogatstvu.<sup>146</sup> Etnički identiteti, uz prvotna sporenja, tako su ipak dobili određenu šansu u arheologiji. Pokapanje s grobnim prilozi- ma javlja se ili pojačava s nestabilnošću društvenih struktura,<sup>147</sup> a one se očituju u „nemirnim vremenima“ (političkim, ekonomskim itd.). Neki smatraju da u takvim okolnostima etnička identifikacija jača i ostavlja materijalne tragove tzv. amblematskog stila.<sup>148</sup> Takva bi se situacija možda i mogla zamisliti u onodobnoj provinciji Dalmaciji koja doživljava smjenu vlasti, odnosno razdoblje određene tranzici-

itary, which are also attributed to the period of the Ostrogothic rule, such as the aforementioned grave at site Knin - Greblje or the helmets of the Narona/Baldenheim type found in Solin (Salona) and Vid near Metković (Narona).<sup>136</sup> Among the finds attributed to the period of the Ostrogothic rule in Dalmatia were also those identified that have analogies in the area inhabited by the Gepids, i.e. in Podunavlje, Potisje and Transylvania.<sup>137</sup> Due to the presence of

of the Roman province of Dalmatia can be attributed to the Ostrogoths (Uglešić 1990, p. 208). Thirty years later, this number has certainly increased, because I include those finds to it, which Uglešić defined as Gepid ones. Most of them are finds of coins, around 120 pieces (see: Demo 2003, pp. 137-148), followed by jewellery: bow fibulae, belt buckles, frames, necklaces, bracelets, earrings, pectoral, rings, amulet box and headbands (see: Uglešić 2003, p. 99 and Uglešić 1990, pp. 207-227).

<sup>136</sup> Uglešić 2000, pp. 61-70.

<sup>137</sup> A. Uglešić recognized such finds or customs, apart from site Knin-Greblje, also in one grave at site Njive - Podstrana, in the area of ancient Narona (Uglešić 1999, 94-96). He also recognized a Gepid provenance in the rotating appliqué from site Danilo - Gradina and in the rotating fibula from site Podumci - Maretića umac (Uglešić 2007). He also mentioned such rotating fibulae as a find from a cave in Herzegovina and

<sup>144</sup> Gračanin, Škrkulja 2016, str. 31.

<sup>145</sup> Pohl 2010, str. 20.

<sup>146</sup> Härke 1990.

<sup>147</sup> Pohl 2010, str. 30.

<sup>148</sup> Curta 2007, str. 172-183.

je društvenih struktura. Kako bih zbog pustih identitetskih teorija ostao oprezan, ograničit ću se tek na zaključak da je na lokalitetu Knin - Greblje, u slučaju groba s mačem i strelicom, pokopana osoba višeg statusa, povezana s vojskom i novom vlasti u provinciji Dalmaciji, vlasti koja se očituje grobnim priložima „germanske“ mode ili tradicije. Uz tu osobu bila je i pokojnica koja je koristila nakit rađen po ukusu Gepida i krimskih Gota.

Na području antičke Salone nađene su čak tri trokrilne strelice s djelomično trokutastim presjekom. Međutim, na njima se nije potrebno dugo zadržavati. One su slučajni nalaz s prostora provincijske metropole, te se kao takve mogu pripisati svima koji su branili ili napadali Salonu. Ako se uzme u obzir da Avari nisu koristili trokrilne strelice s djelomično trokutastim presjekom, onda bismo nalaze ovih strelica trebali pripisati braniteljima u tom avarskom naletu, a možda čak i vremenu te kontekstu istočnogotsko-bizantskog rata, kako sugerira datacija grebljanske strelice. Nekoliko opsada Salone spominje se u tom ratu, a spominje se također i istočnogotsko i bizantsko stacioniranje u utvrđenjima te čak i jedan napad na strateški važne točke u okolini Salone.<sup>149</sup> Stoga bi takvim događajima mogla pripadati i strelica s Birnja u Kaštelima. Radi se o kasnoantičkom utvrđenju na jednom od vrhova Kozjaka, kao dijelu fortifikacijskog sustava same Salone.<sup>150</sup> Na njoj je uz trokrilnu strelicu s djelomično trokutastim presjekom pronađena i strelica romboidnog oblika te umbo štita.<sup>151</sup> Sljedeća trokrilna strelica s djelomično trokutastim presjekom nađena je na kasnoantičkom utvrđenju na Jojića glavici, nedaleko od Vrlike.<sup>152</sup> Upravo je na području Vrlike nađena i pojasna kopča izgledom najsličnija istočnogotskim kopčama u Italiji.<sup>153</sup> Jedna trokrilna strelica s djelomično trokutastim presjekom pronađena je i na Bribiru, naselju koje ima i karakter utvrde. Bribir se nalazi na 15 km od Skradina, koji se spominje kao mjesto sukoba istočnogotske i bizantske vojske, odnosno rijeke Krke koja je tijekom tih sukoba mogla biti i ratnom granicom.<sup>154</sup> Na lokalitetu

such finds, A. Uglešić concludes that the number of Gepids in the province of Dalmatia could actually have been close to the number of Ostrogoths, and that they could have been stationed there as officers in the Ostrogothic army.<sup>138</sup> H. Gračanin provided a thorough analysis of information from sources from that time. He believes that apart from the Goths and Romans, only an insignificant number of barbarians could have lived in the province of Dalmatia, except perhaps those employed in military service, where they would have been disguised by the term Goths in the sources.<sup>139</sup> Therefore, if we consider the presence of Gepids or any other Germanic people in the province of Dalmatia, it was mostly manifested in the Ostrogothic army. P. Amory, who wrote a very extensive study on identity in Ostrogothic Italy, believes that the Ostrogothic army was certainly not a homogeneous group after the conquest of Italy and Dalmatia, if ever it had been one at all, but that members of other barbarian nations, the army of the defeated Odoacer and even Romans served in this army. Therefore, although still under the name Goths, this army no longer has, if it ever had, ethnic homogeneity. It was a polyethnic group that based its identity on status, profession, region, ruler.<sup>140</sup> In this regard, it would be very difficult to conclude based upon the grave finds who was of Germanic or Roman origin, and it would be even harder to more precisely define its affiliation to the Gothic, Gepid, Lombard or Alemannic people.

Uglešić's analysis of the finds that he links to the Gepids has received several criticisms. According to G. Tica, only the buckle from grave 50 from site Knin - Greblje truly has unique analogies in the Gepid region where they appear in the first half of the 6<sup>th</sup> century, while all other "Gepid" material is actually analogous to material from Central Europe. Furthermore, he believes that the sword from the destroyed grave at site Knin - Greblje does not necessarily have to be a Gepid or Lombard one,

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in the wider area of Benkovac (Uglešić 2009, p. 186). According to him, Gepid influences can be seen in the bow fibula from Brgud near Benkovac (Ibid. 2009, p. 186) but also in the Smiljanovac necropolis in Solin, on the example of an artificially deformed skull (Uglešić 2009, p. 186). He also mentioned the Gepid provenance for a decorative loop found in Sarajevo (Uglešić 1999, p. 98).

<sup>138</sup> Uglešić 2009, p. 188.

<sup>139</sup> Gračanin, 2015, pp. 58-59 and Gračanin, Škrgulja 2016, p. 19.

<sup>140</sup> Amory 1997, p. 13 and 41.

<sup>149</sup> O istočnogotsko-bizantskom ratovanju na području provincije Dalmacije vidi: Uglešić 1991 i Goldstein 2005.

<sup>150</sup> Burić 2020, str. 216-222. Za „salonitanski defanzivni sustav“ vidi: Katić 2018.

<sup>151</sup> Marković *et alii* 2018, str. 22-23, sl. 59 i 60.

<sup>152</sup> Milošević 1998, str. 69, sl. 111.

<sup>153</sup> Uglešić 1990, str. 218.

<sup>154</sup> Pod vodstvom Uligisala, istočnogotska vojska kreće prema Saloni, ali je Bizantinci presreću kod Skradina

Klobuk kod Ljubuškog ovakva je strelica nađena u naknadnom ispunjenju naosa crkve čija se gradnja datira u 2. pol. 5. st. Crkva je prema istraživaču doživjela požar, te je funkciju naosa nakon toga preuzela prostorija na sjeveru od njega, a sam je naos bio očišćen od šute.<sup>155</sup> Nedaleko od tog lokaliteta, na nekih 30-ak kilometara, nalazi se antička Narona, današnji Vid kod Metkovića. Radi se o jednom od administrativnih oslonaca istočnogotske vlasti, koje bi prema A. Uglešiću, bilo i njihovo granično područje, fizički obilježeno tokom rijeke Neretve.<sup>156</sup> Ovdje su evidentirani istočnogotski, ali i drugi germanski utjecaji u arheološkom materijalu. Najveći broj trokrilnih strelica s djelomično trokutastim presjekom, njih čak šest, nađen je u Podgradini kod Livna. Radi se o strateški vrlo bitnom području, nekih 45 kilometara zračne linije udaljenom od Salone, u blizini prometnice koja je ovu metropolu najpogodnije spajala s unutrašnjošću provincije, zaobilazeći planine Dinaru i Kamešnicu. Posljednja strelica je ona kojoj se ne zna nalazište, ali s obzirom da je dio zbirke Muzeja hrvatskih arheoloških spomenika u Splitu, čiji je djelokrug ponajviše vezan za prostor uz rijeku Krku do rijeke Cetine, tako bismo i ovu strelicu mogli smjestiti u taj geografski kontekst.

Trokrilne strelice koje možemo definirati kao postrimske, zapravo se nalaze na cjelokupnom području provincije Dalmacije, pa tako i dubljem zaleđu, odnosno današnjoj sjeveroistočnoj, središnjoj i istočnoj Bosni. Međutim, trokrilne strelice s djelomično trokutastim presjekom koncentrirane su na samo na prostoru uz rijeku Krku do rijeke Cetine, osim tek jedne, one iz Klobuka. Radi se o prostoru koji ponajviše gravitira antičkoj Salonu, a to je upravo prostor na kojem se vodio istočnogotsko-bizantski rat, ako je suditi po povijesnim izvorima.<sup>157</sup> Naravno, taj bi prostor trebao biti i od

pa se ovi povlače u Burnum. Ovdje im se priključuje velika vojska pod vodstvom Asinarija te zajedno kreću u opsadu Salone (Uglešić 1991, str. 72).

<sup>155</sup> Segejevski 1954, str. 192 i 207.

<sup>156</sup> Uglešić 2003, str. 201 i 210.

<sup>157</sup> Prokopije iz Cezareje, koji je i sam sudjelovao u istočnogotsko-bizantskom ratu, iako ne na području Dalmacije, spominje između 535. i 537. čak nekoliko opsada Salone. Salonu prvo osvaja bizantska vojska, zatim kreće istočnogotska protuofenziva s manjom bitkom na putu za Salonu te većom u sklopu Salone. Potom ide novo povlačenje Gota i bizantsko preuzimanje prvo strateških točaka u blizini Salone, a potom i same Salone. Godine 537. kreće nova velika protuofenziva Istočnih Gota. Dio njihove vojske poražen kod

because the custom of burials with a sword was also common among the Alemanni, Thuringii and Heruli.<sup>141</sup> Thus, Tica, contrary to Uglešić, who links this material to the Gepid area, draws attention to analogies with the area inhabited by the Alemanni and the Thuringii. H. Gračanin and J. Škrkulja criticize Uglešić's stance to determine the presence of the Gepid ethnicity based on the typology of the finds.<sup>142</sup> They believe that this material has rather a status and gender connotation than an ethnic one, but can also represent the acceptance of a style in fashion.<sup>143</sup> Thus, the double-bladed swords could indicate a certain status, especially since Roman civilians were not allowed to carry any weapons.<sup>144</sup> Therefore, the one who was buried with the sword in Greblje did not necessarily have to be a Gepid or a Goth or a member of any other Germanic people, but simply a person of higher status. Nevertheless, as W. Pohl claims, the demonstration of status in post-Roman kingdoms can also coincide with ethnic identity.<sup>145</sup> Based upon such reasoning is also the conclusion from the research of cemeteries in England for the period from the 5<sup>th</sup> to 8<sup>th</sup> century. Here, the placing of weapons in graves is actually in accordance with ethnic distinction and wealth.<sup>146</sup> Ethnic identities, after initial disputes, received a certain chance in archaeology nonetheless. Burials with grave goods occurred or intensified with the instability of social structures,<sup>147</sup> and they manifested in "troubled times" (political, economic, etc.). Some believe that in such circumstances, the ethnic identification strengthened and left material trac-

<sup>141</sup> G. Tica considers the fibula from Brgud near Benkovac analogous to Central European specimens and to be older than the establishment of the Ostrogothic rule in Dalmatia. Rotating fibulae and appliqué correspond to the period of Ostrogothic rule, but Tica does not consider them to be of Gepid origin at all. He finds analogies in Italy, Central Europe, Serbia and the Caucasus. He also uses Central European analogies, from the area of the Alemanni and the Thuringians, to define the fibulae found in Narona, at site Njive - Podstrana. (Tica 2017, pp. 224-225.)

<sup>142</sup> See: Gračanin, Škrkulja 2019, pp. 243-245, Gračanin, Škrkulja 2016, p. 32 and Gračanin 2015, p. 58.

<sup>143</sup> Gračanin, Škrkulja 2019, pp. 243-24 and Gračanin, Škrkulja 2016, p. 32, also Džino 2010, pp. 82-83. I. Barbiera also argues for the status and gender connotation of grave goods (Barbiera 2009).

<sup>144</sup> Gračanin, Škrkulja 2016, p. 31.

<sup>145</sup> Pohl 2010, p. 20.

<sup>146</sup> Härke 1990.

<sup>147</sup> Pohl 2010, p. 30.

najvećeg interesa Avarima i Slavenima u njihovim pohodima na Dalmaciju. Tako bismo ove strelice mogli pripisati i obrambenim akcijama u sklopu tih provala. Ipak, takvi su pohodi nužno trebali ići kroz unutrašnjost provincije Dalmacije, kao što je to opisano za pohod iz 597. godine,<sup>158</sup> a u unutrašnjosti, kako vidimo, trokrilnih strelica s djelomično trokutastim presjekom uopće nema. Stoga sam na temelju nalaza s lokaliteta Knin-Greblje, a potom i njihove rasprostranjenosti, trokrilne strelice s djelomično trokutastim presjekom pokušao dovesti više u vezu s istočnogotsko-bizantskim ratovanjem, koje se ovdje odvijalo kratko, ali vrlo intenzivno.

Prema broju i karakteru nalazišta (utvrđenja) te njihovoj koncentraciji na užem prostoru, slučaj Slovenije i sjeveroistočne Italije čini se usporediv s dalmatinskim. Međutim, strelice koje su tamo nađene, a čiji se arheološki kontekst može datirati, sugeriraju razdoblje nakon istočnogotsko-bizantskog rata, dakle sredinu i 2. pol. 6. st. Grob s nekropole Kranj – Lajh, ali i obližnji grob u Brešcu te slučajevi iz Italije, jasno pokazuju da su ove strelice spadale u repertoar langobardskog ratnika, dok, s druge strane, kako je već utvrđeno, nisu bile dijelom naoružanja Slavena i Avara. U tom se smislu nalazi te vrste trokrilnih strelica mogu pripisati langobardskoj invaziji ili pak obrani od slavenskih i avarskih nasrtaja. Ostaje nam zaključiti zašto bi se onda strelice iz rimske provincije Dalmacije datirale u 1. pol., a ne u sredinu ili 2. pol. 6. st., kako to sugerira situacija u Sloveniji. Razloge možemo pronaći u tome što se na području između Krke i Cetine istočnogotsko-bizantski sukob odvija mnogo intenzivnije nego na prostoru zapadnih Alpa, a u njemu je sudjelovao i velik broj barbarskih ratnika, i to na obje sukobljene strane. Među njima je uistinu mogao biti i velik broj Gepida, kod kojih se ova vrsta strelice koristi još u 1. pol. 6. st.

### Klasifikacija i datacija

Pokušat ću još sagledati i rezultate tipološke klasifikacije ovih strelica. Jedinu podjelu na tipove trokrilnih strelica s djelomično trokutastim presjekom napravio je B. Odar (sl. 2). Iako je raspolagao s mnogo manjim brojem nalaza od onih koji su ovdje

es of the so-called emblematic style.<sup>148</sup> One could imagine such circumstances also in the province of Dalmatia at that time, which was experiencing a change in ruling, that is, a period of certain transition of social structures. In order to remain cautious due to the many theories on identity, I will restrict myself to concluding that in the case of the grave with the sword and arrowhead at site Knin - Greblje, a person of higher status was buried there, who was connected to the army and the new rule in the province of Dalmatia, the latter manifested in grave goods of “Germanic” fashion or tradition. Next to this person was also a deceased woman who wore jewellery that features style elements of Gepids and Crimean Goths.

In the area of ancient Salona, even three finds of trilobate arrowheads with a partially triangular cross-section have been recorded. However, it is not necessary to dwell on them for a long time. They were chance finds from the area of the provincial metropolis, and, as such, can be attributed to all those who defended or attacked Salona. Assuming that the Avars did not use trilobate arrowheads with a partially triangular cross-section, then the finds of these arrowheads should be attributed to the defenders in this Avar raid, and perhaps even to the time and context of the Ostrogothic-Byzantine war, as indicated by the dating of the arrowhead from Greblje. Several sieges of Salona are mentioned during that war, but also the stationing of Ostrogoths and Byzantines in fortifications and even one attack on strategically important locations in the vicinity of Salona.<sup>149</sup> Hence, the arrowhead discovered at site Biranj in Kaštela could also be related these events. It is a late ancient fortification on one of the peaks of the Kozjak mountain that was part of the fortification system of Salona itself.<sup>150</sup> There, a rhombic arrowhead and a shield boss were found along with a trilobate arrowhead with a partially triangular cross-section.<sup>151</sup> The next trilobate arrowhead with a partially triangular cross-section was found in the late ancient fort at Jojića glavica, not far from Vrlika.<sup>152</sup> It was in the area of Vrlika that a belt buckle was found that most closely resembles

<sup>148</sup> Curta 2007, pp. 172-183

<sup>149</sup> On the Ostrogothic-Byzantine warfare in the territory of the province of Dalmatia, see: Uglešić 1991 and Goldstein 2005.

<sup>150</sup> Burić 2020, p. 216-222. For the “Salonitan defensive system”, see: Katić 2018.

<sup>151</sup> Marković et alii 2018, pp. 22-23, fig. 59 and 60.

<sup>152</sup> Milošević 1998, p. 69, fig. 111

Skradina povlači se u Burnum, a onda velika istočnogotska vojska ponovo napada Salonu, koja je nakon opsade uspješno obranjena. O istočnogotsko-bizantskom ratovanju na području provincije Dalmacije vidi: A. Uglešić 1991 i Goldstein 2005.

<sup>158</sup> *Византиски извори...*, 1955, str. 121-122.

bili spomenuti, ipak smatram da je u srži njegova klasifikacija kvalitetan okvir u koji ću ipak, nakon sagledavanja većeg broja strelica, unijeti neke preinake (sl.11). Odar razlikuje pet tipova, od kojih prva tri tipa imaju naglašena krila. Podtip 1 su strelice trokutaste glave s vratom koji blago konkavno prelazi u krila. Podtip 2 je sličan prvom, uz razliku što je donji kraj krila izvučen u bodlju radi otežanog izvlačenja strelice iz pogođene mete. Treći, i posljednji, podtip s naglašenim krilima je strelica romboidnog oblika i bez vrata. Podtip 4 je strelica nenaglašenih, konveksnih krila, a podtip 5 je strelica s donekle ravnim krilima.<sup>159</sup> Naravno, sve strelice u ovome radu neće biti obuhvaćene klasifikacijom jer neke od njih nisu ni opisane, a za neke nije donesen ni crtež ni fotografija. Neke od njih prije publikacije nisu ni očišćene, odnosno konzervirane. Uz to, velik je broj strelica koje su toliko oštećene korozijom da im je prvotan izgled dvojbena ili ga je pak nemoguće pretpostaviti. Do nekih strelica, priznajem, bilo je teško i doći. Također, ovdje se neće uzeti u obzir veličina i težina strelica, s obzirom da se dimenzije i težina zapravo nerijetko i ne navode, a i tamo gdje se navode, navode se u trenutnom stanju strelice koja zbog korozijskog djelovanja svakako ne odgovara prvobitnom stanju. Analiza i klasifikacija, pa prema tome i određivanje tipova, bit će rađena samo prema stilskim značajkama strelica.

Prvi tip strelice bit će ona s naglašenim krilima i (u većini slučajeva) istaknutim vratom koji blago konkavno prelazi u širu trokutastu glavu te čiji je rub krila blago šiljast (sl. 11:1). Čak 4 primjerka ovakvog tipa strelica nađena su u grobu na nekropoli Kranj – Lajh (T. 2:6-9) i oni su analogni još jednom primjerku s iste nekropole (T. 2:10), koji je pak potpuno sličan strelici nađenoj u južnoj Njemačkoj, u Fellbach – Schmidenu (T. 2:4). Strelice spomenutih značajki još su nađene i na Rifniku (T. 2:12), Tonovcovu gradu (T. 2:14), Konjskom hribu (T. 2:12) i Zidanom Gaberu u Sloveniju (T. 2:13), od kojih jedino ova posljednja, zbog nešto izduženijeg ruba krila koji prelazi u bodlju, donekle odudara, pa ju je B. Odar stavio u tip 2. Ovdje će ona ipak biti uvrštena u tip 1 budući da je ovo jedini primjerak strelice s izvučenim bodljama, a koji pak oblikom glave nalikuje prethodno opisanim strelicama. Strelica analogna spomenutima nađena je u dva primjerka i na gepidskom lokalitetu Maroscapo (T. 2:2-3). Strelica koja ima sličan oblik glave,

the Ostrogothic buckles in Italy.<sup>153</sup> One trilobate arrowhead with a partially triangular cross-section was also found at Bribir, a settlement that also has the features of a fort. Bribir is located 15 km from Skradin and mentioned as the place where the Ostrogothic and Byzantine armies clashed, that is at the river Krka, which could have been the border during these conflicts.<sup>154</sup> At site Klobuk near Ljubuški, this type of arrowhead was found in the subsequent filling of the naos of the church, the construction of which dates back to the second half of the 5<sup>th</sup> century. According to the researcher, the church experienced a fire, and the function of the naos was then taken over by a space to the north of it, while the naos itself was cleared of rubble.<sup>155</sup> Not far from Klobuk, some 30 kilometres away, lies ancient Naronia or present-day Vid near Metković, which was one of the administrative pillars of support to the Ostrogothic government, and which, according to A. Uglešić, would also have been their border area, physically marked by the course of the Neretva river.<sup>156</sup> Ostrogothic and other Germanic influences have been recorded there in the archaeological material. The largest number of trilobate arrowheads with a partially triangular cross-section, as many as six of them, were found in Podgradina near Livno, a strategically highly important area, some 45 kilometres as the crow flies from Salona itself, near the road that most conveniently connected this metropolis with the interior of the province, bypassing the Dinara and Kamešnica mountains. The last arrowhead is the one from an unknown site, but given that it is part of the collection of the Museum of Croatian Archaeological Monuments in Split, whose scope of work is mostly related to the area along the Krka River to the Cetina River, one can assume that it can also be attributed to that geographical context.

Trilobate arrowheads, defined as post-Roman, are actually found in the entire area of the province of Dalmatia, including the deeper hinterland, i.e. today's north-eastern, central and eastern Bosnia. However, trilobate arrowheads with a partially tri-

<sup>153</sup> Uglešić 1990, p. 218,

<sup>154</sup> Under the leadership of Uligisalus, the Ostrogothic army moved towards Salona, but the Byzantines intercepted it near Skradin, so they retreated to Burnum, where they were joined by a large army under the leadership of Asinarius, and together they begun the siege of Salona. (Uglešić 1991, p. 72)

<sup>155</sup> Segejevski 1954, p. 192 and 207.

<sup>156</sup> Uglešić 2003, p. 201 and 210.

<sup>159</sup> Odar 2006, str. 255-257.

ali bez istaknutog vrata nađena je na lokalitetu Petronell u Austriji (T. 2:5). Strelice sličnih značajki glave nađene su još i u Pullingu u južnoj Njemačkoj, a možda i na gepidskom groblju u Szöreg–Téglagyáru. Strelicama tipa 1 mogle bi pripadati i tri strelice s utvrđenja Golemanovo kale kao i jedna s njemu obližnjeg lokaliteta Sadovsko kale (T. 2:16-17),<sup>160</sup> te možda i strelica s lokaliteta Nocera Umbra u Italiji (T. 2:15). Među strelicama iz provincije Dalmacije ovom bi tipu pripadala strelica nađena u Klobuku kraj Ljubuškog (T. 2:1), koja oblikom ponajviše sliči strelici iz Rifnika, ponekim strelicama s nekropole Kranj – Lajh te jednoj strelici s lokaliteta Golemanovo kale. Također, ovom bi tipu pripadala i strelica s lokaliteta Biranj u Kaštelima, koja je možda najbližnja onima sa slovenskih lokaliteta, te strelica s nepoznatog nalazišta, koja se nalazi u Muzeju hrvatskih arheoloških spomenika u Splitu.

Tip 2 ima nešto manje naglašena krila od prethodnog tipa, što je čini nešto vitkijom strelicom. Glava ove strelice također je trokutastog oblika te se i ona blago konkavno razvija iz vrata, pa je razlika tek u proporcijama tog trokutastog oblika, što kod nekih primjeraka otežava klasifikaciju (sl. 11:2). B. Odar je ovaj tip strelice uvrstio u svoj tip 1, skupa sa zdepastijim trokutastim strelicama koje sam prethodno definirao. Nasuprot tome, mišljenja sam da se neke od ovih strelica oblikom dovoljno jasno odmiču od prethodnih te se može sugerirati tipološko odvajanje. Ovome tipu ne možemo pripisati ni jednu objavljenu strelicu s područja Slovenije, južne Njemačke ili pak prostora koje su naseljavali Gepidi. Najbolje očuvana je strelica s lokaliteta Kulina e Vogel na Kosovu (T. 3:7). Ovoj je strelici veoma slična ona s utvrde Pogradec u Albaniji (T.) kao i strelice pronađene uz dunavski limes, na lokalitetu Ljubičevac – Glamija u Srbiji (T. 3:13) te strelica iz Dijane. Iako nešto manje očuvane, takve se značajke nalaze i na dvije ili tri strelice s utvrde S. Antonino u Italiji (T. 3:5-6) te možda čak i na jednoj strelici iz Castel Trosina (T. 3:4). Još lošije su očuvane strelice iz groba u Brežcu u Istri, ali se na dvije strelice može primijetiti uža trokutasta glava (T. 3:2-3). Zanimljivo je da je zapravo i većina strelica koje bi se mogle tipološki odrediti s utvrda Golemanovo i Sadovsko kale takvih obilježja, neg-

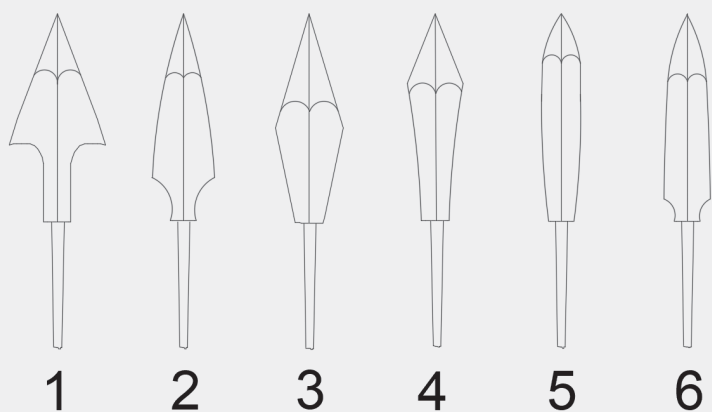
angular cross-section are concentrated only in the area along the Krka River up to the Cetina River, except for the one from Klobuk. It is an area that primarily gravitated towards ancient Salona and in fact the area where the Ostrogothic – Byzantine, i.e. the Gothic War was fought according to historical sources.<sup>157</sup> Of course, this area should have also been of greatest interest to the Avars and Slavs in their raids into Dalmatia. Thus, these arrowheads could be attributed to the defensive actions during these attacks. Nevertheless, such campaigns necessarily had to go through the interior of the province of Dalmatia, as it has been recorded for the campaign in 597 AD,<sup>158</sup> but as we can see, there have been no finds of trilobate arrowheads with a partially triangular cross-section at all. Therefore, on the basis of the finds from the Knin-Greblje site, and hence their distribution, my attempt was to establish a link between the trilobate arrowheads with a partially triangular cross-section and the brief, but very fierce Ostrogothic-Byzantine war that took place in this area.

According to the number and the character of the sites (fortifications), and their concentration in a smaller area, the case of Slovenia and north-eastern Italy seems comparable to that of Dalmatia. However, the arrowheads found there, whose archaeological context can be dated, suggest the period after the Ostrogothic - Byzantine war or the middle to second half of the 6<sup>th</sup> century. The grave from the necropolis Kranj - Lajh, the nearby grave in Brežac and the cases from Italy clearly show that these arrowheads belonged to the repertoire of a Lombard warrior, while on the other hand, as already established, they were not part of the weapons of the Slavs and Avars. In this sense, finds of this type of

<sup>160</sup> Strelice koje su u katalogu nalaza navedene pod brojem 28, 29 i 38 s utvrđenja Golemanovo kale te strelica broj 20 s utvrđenja Sadovsko kale. Vidi: Uenze 1992, T. 41; 20, 28 i 29.

<sup>157</sup> Procopius of Caesarea, who himself participated in the Ostrogothic-Byzantine War, although not in Dalmatia, mentions several sieges of Salona between 535 and 537 AD. Salona is first conquered by the Byzantine army, then the Ostrogothic counter-offensive begins with a smaller battle on the way to Salona and a larger one within Salona. Then the Goths retreat again and the Byzantines take over strategic locations near Salona, and then Salona itself. In 537 AD, the Ostrogoths launch a new large counter-offensive. Part of their army is defeated near Skradin and they retreat to Burnum. Then the large Ostrogothic army again attacks Salona, which is successfully defended after the siege. On the Ostrogothic-Byzantine warfare in the territory of the province of Dalmatia, see A. Uglešić 1991 and Goldstein 2005.

<sup>158</sup> *Византиски извори...*, 1955, pp. 121-122.



Sl. 11. Predložena tipologija za trokrilne strelice s djelomično trokutastim presjekom  
*Fig. 11 Proposed typology for trident arrowheads with a partially triangular cross-section*

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dje ukupno 10 primjeraka (T. 3:8-12).<sup>161</sup> Od nalaza s područja rimske provincije Dalmacije njima bismo trebali pribrojiti strelicu s Jojića glavice kod Vrlike (T. 3:1) i jednu strelicu iz Podgradine kod Livna, onu pod inv. br. 18020 (T. 1:7 i T. 3:15).

Tip 3 je kod B. Odara izdvojen zbog romboidnog oblika glave (sl. 11:3). On je tu uvrstio jednu od dviju strelica s lokaliteta Rifnik, koja mi pak nije bila dostupna. Ovome tipu pripadala bi i jedna strelica iz groba 21b s lokaliteta Inzig-Hartkirchen u južnoj Njemačkoj (T. 5:1). Uzgred ću spomenuti da romboidne strelice, ali nešto zdepastije glave, dominiraju u Aziji kod Kirgiza.<sup>162</sup>

Tip 4 po Odaru je strelica nenaglašenih konveksnih krila. To su strelice čije je proširenje najveće u posljednjoj trećini ili malo iza polovine glave strelice (sl. 11:4). Tri su strelice ovakvog tipa nađene u grobu nekropole Kranj – Lajh (T. 4:3-5). Na prostoru Slovenije ovakav tip strelice prepoznajem još i u onima s lokaliteta Gradac pri Prapatnem (T. 4:7) i Ajdna nad Potoki (T. 4:6). Takva je strelica nađena i u Italiji, na Monte Castelazzu (T. 4:8), ali i u grobu na lokalitetu Nocera Umbra (T. 4:11). Čini mi se da se s područja Italije takvom tipu može pripisati i ona s lokaliteta Invillino-Ibligio. Također mi je izgledno da se i dvije strelice iz groba u Brešcu mogu klasificirati tipom 4 (T. 4:9-10). Ove su strelice nađene i na gepidskom području, na lokalitetima

trilobate arrowheads can be attributed to the Lombard invasion or in fact they relate to the defence against Slavic and Avar attacks. It remains for us to conclude why the arrowheads from the Roman province of Dalmatia would be dated to the first, and not to the middle or second half of the 6<sup>th</sup> century, as the situation in Slovenia indicates. The reasons can be found in the fact that the Ostrogothic-Byzantine conflict was more intense in the area between the rivers Krka and Cetina than in the Western Alps, and that a large number of barbarian warriors participated in it, in both warring parties. There could actually have been a large number of Gepids among them, who used this type of arrowhead already in the first half of the 6<sup>th</sup> century.

### Classification and dating

My work here will also include a review of the results of the typological classification of these arrowheads. The only division into types of trilobate arrowheads with a partially triangular cross-section was made by B. Odar (fig.2). Although he had a much smaller number of finds at his disposal than those mentioned here, I still believe that his classification is, at the core, a good framework. However, after the review of a larger number of arrowheads, I will introduce some changes to it (fig. 11). Odar distinguishes five types, the first three types of which have pronounced lobes. Subtype 1 are arrowheads with a triangular head with a neck that transforms slightly concave into lobes. Subtype 2 is similar to the first one, with the difference that the lower end of the lobe turns into a barb that renders the extraction of the arrowhead from the target more difficult. The third and last subtype with pronounced lobes is a rhombic arrowhead without a neck. Subtype 4 is an arrowhead with unpronounced, convex lobes, and subtype 5 is an arrowhead with somewhat flat lobes.<sup>159</sup> The classification in this paper won't include all arrowheads of course, because some of them have not been even described, while for others there are no drawings or photographs. Some of them were not even cleaned or conserved before their publication. Furthermore, many arrowheads are so severely damaged by corrosion that their original appearance is doubtful or impossible to guess. Some were rather difficult to obtain, I admit. The size and weight of the arrowheads will not be taken into account here as the dimensions and

<sup>161</sup> Po mojem mišljenju radi se o strelicama kataloškog broja 22-25, 27, 31, 32, 40, 42 i 44. Vidi. Uenze 1992, T. 41; 22-25, 27, 31, 32, 40, 42, 44.

<sup>162</sup> Vidi: Ю. С. Худяков, T.19.

<sup>159</sup> Odar 2006, pp. 255-257.



Maroscsapo (T. 4:1) i Căpusu Mare – Cănepiste (T. 4:2), a isti oblik ima još nekoliko gepidskih strelica kojima, zbog stanja u kojem su fotografirane, nisam mogao prepoznati trokutasti presjek pri vrhu. Jedna strelica s lokaliteta Sadovsko kale u Bugarskoj također bi mogla biti ovog tipa (T. 4:12).<sup>163</sup>

Tip 5 u tipologiji koju ovdje izlažem ponovo je analogan Odarovom tipu istog broja (sl. 11:5). Dakle, ova strelica također ima nenaglašena krila, a ona se od posljednje razlikuje po tome što su ta krila blago zaobljena te strelica nema naglašen vrat. Pronađeno je čak 5 primjeraka u grobu s nekropole Kranj - Lajh (T. 5:2-6), a ovom se tipu možda mogu pripisati i strelice iz Carnuntuma (T. 5:7) te Szöreg–Téglagyára (T. 5:8).

Tip 6 su također strelice nenaglašenih krila, a oblikom vitke i trokutaste, s time da su kod nekih primjeraka linije bridova gotovo paralelne do mjesta na kojem se nalazi puni trokutasti presjek (sl. 11:6). Trokutasti oblik izgledom ih približava tipu 2, ali je omjer dužine i širine glave još izraženiji u korist dužine, pa izgledom podsjećaju i na tip 5. Dvije ovakve strelice pronađene su u grobu 21b u Inzing – Hartkirchenu (T. 5:9-10), a većina ih je evidentirana na prostoru Ukrajine i južne Rusije (T. 5:10-15).

Postoji i određeni broj strelica koje se stilskim značajkama teško mogu uklopiti u prethodno navedene tipove. To je strelica iz Pullinga u Njemačkoj, koja ima širu trokutastu glavu, slično tipu 1, s razlikom što je ta glava nešto masivnije oblikovana i bez zašiljenosti rubova krila. Uz to, radi se o jedinom primjeru ove vrste strelica s tuljcem umjesto trna za nasad na drvenu osovinu. Posebna je još jedna strelica s prostora Njemačke, s lokaliteta Muhtal-Nieder-Ramstadt II. To je strelica nepravilnog izduženog oblika, koja je, kako se čini prema crtežu presjeka, imala ojačana krila. Izduženim oblikom slična joj je i jedna strelica iz groba u Brešcu u Istri. Posebnim se čine i dvije strelice s lokaliteta Szöreg–Téglagyár, ako se uopće radi o strelicama s djelomično trokutastim presjekom. Nisam inzistirao na njihovom tipološkom opredjeljenju shvaćajući da ne moraju sve strelice biti izrađene kako bi udovoljile određenim standardima izrade, pa se tako, pretpostavljam, uvijek mogu naći izuzetci. Također, nisam radio tipologiju s obzirom na nalaze u istočnoj i središnjoj Aziji, smatrajući da bih nepotrebno opteretio već obiman rad. Naravno, postoji

weight are often not provided, but even in cases when they are listed, they are given in the current condition of the arrowhead, which due to corrosion certainly does not correspond to the original ones. The analysis and classification, and hence the determination of types, will be done only according to the arrowheads' stylistic features.

The first type of arrowhead is the one with pronounced lobes and (in most cases) a pronounced neck that transitions slightly concave into a wider triangular head and whose lobe edge is slightly pointed (fig. 11:1). As many as 4 specimens of this type of arrowhead were found in the grave at the necropolis Kranj - Lajh (T.2:6-9) and they are analogous to another specimen from the same necropolis (T.2:10), which is completely similar to the arrowhead found in Fellbach – Schmiden in southern Germany (T.2:4). Arrowheads with the mentioned characteristics were also found at sites Rifnik (T.2:12), Tonovcov grad (T.2:14), Konjski Hrib (T.2:12) and Zidani Gaber in Slovenia (T.2:13). The latter is the only one, due to the somewhat elongated edge of the lobe that turns into a barb, which slightly differs from the others and thus was classified as type 2B by Odar. Here it will be included in the category of type 1, given that this is the only specimen of an arrowhead with extended barbs, but still resembles the previously described arrowheads in terms of their shape of the head. Two arrowheads similar to the ones earlier mentioned were also found at the Gepid site of Maroscsapo (T.2:2-3). An arrowhead with a similar head shape, but without a pronounced neck, was found at site Petronell in Austria (T.2:5). Arrowheads with similar characteristics of the head were also found in Pulling in southern Germany, and perhaps in the Gepid cemetery in Szöreg–Téglagyár. Three arrowheads from the fortification Golemanovo Kale could also possibly belong to type 1, as well as one from the nearby site Sadovsko Kale (T.2:16-17),<sup>160</sup> and perhaps also the arrowhead from site Nocera Umbra in Italy (T.2:15). Out of the arrowheads from the province of Dalmatia, the arrowhead found in Klobuk near Ljubuški (T.2:1) would belong to this type, which is most similar in shape to the arrowhead from Rifnik, to some arrowheads from the necropolis Kranj - Lajh, and to one

<sup>163</sup> Uenze 1992, T.41; 19.

<sup>160</sup> The arrowheads listed in the catalogue of finds under numbers 28, 29 and 38 from the Golemanovo Kale fortification and arrowhead number 20 from the Sadovsko Kale fortification. See: Uenze 1992, T. 41; 20, 28 and 29.

velika mogućnost i da se u daljnjem radu na ovoj vrsti strelica donese novi materijal koji bi utjecao na formiranje novih tipova, ali i na revidiranje već iznesenih.

Tipologija koju sam ovdje iznio tek je pokušaj da u ovom radu eventualno dobijem još pokoju iskoristivu informaciju prije formiranja zaključaka. Tako sam nakon izrade tipologije, uvelike oslonjene na onu B. Odara, mogao uvidjeti da se na određenim područjima određeni tip strelice javlja češće ili pak rjeđe. Tipovi 3 i 5 nisu brojni, a poznati su nam samo s prostora južne Njemačke, Austrije i Slovenije. Puno brojniji od njih su tipovi 1 i 4, a oni se javljaju ponajviše na prostoru južne Njemačke, sjeverne Italije, Slovenije i Panonije, dakle u jednoj alpsko-panonskoj zoni. Izvan tog područja su dosta rjeđi, pa se tako javljaju na prostoru provincije Dalmacije s tri primjerka, u Sadovcu u Bugarskoj s nekoliko primjeraka te s dva primjerka na lokalitetu Nocera Umbra u središnjoj Italiji. S druge strane, upravo se na područjima na kojima dominiraju tipovi 1, 3, 4 i 5, uopće ne nalaze strelice koje sam svrstao u tip 2. Najveći broj ovih strelica evidentiran je pak u jugoistočnoj Europi, posebice u Sadovcu, gdje dominiraju repertoarom trokrilnih strelica. Strelica s lokaliteta Kulina e Vogel na Kosovu očuvana je iznimno dobro te može poslužiti kao ogledni primjerak svoga tipa. Njima bi se s prostora rimske provincije Dalmacije mogle pribrojiti i jedna strelica iz Podgradine te strelica s Jojića glavice. Izvan jugoistočne Europe ovaj se tip nalazi najvjerojatnije u Brešcu u Istri te na lokalitetima S. Antonino u sjeverozapadnoj Italiji te Castel Trosino u središnjoj Italiji. Na prvi pogled, ovakva prostorna disperzija strelica može ukazati na postojanje određenih razlika u korištenju strelica na političko-kulturnoj osnovi, što bi konkretno značilo da prostor naseljen Germanima, posebice alpsko-panonsku zonu, karakteriziraju strelice tipova 1, 3, 4 i 5. Prostor na jugu od te zone karakterizira pak tip 2, a on je, u vrijeme kada se datiraju ove strelice, bio pod političkom dominacijom Bizanta.

Klasifikacija ovih strelica te potom njihova prostorna analiza nudi nam zaključak da su na prostoru koji naseljavaju Germani uistinu dominirali neki određeni, svojstveni tipovi trokrilnih strelica s djelomično trokutastim presjekom. Tip 2, kojeg pak nema na prostoru južne Njemačke, Austrije, zapadnih Alpa, Panonije i Transilvanije te koji dominira jugoistočnom Europom, mogao bi se zbog toga čak i pripisati bizantskoj vojsci. Tako bi se dalo

arrowhead from the Golemanovo Kale site. The arrowhead from site Biranj in Kaštela, which perhaps mostly resembles those from Slovenian sites, as well as the arrowhead from an unknown site, which is in the Museum of Croatian Archaeological Monuments in Split, would also belong to this type.

Type 2 has slightly less pronounced lobes than the previous type and hence makes it a slightly slimmer arrowhead. This arrowhead has also a triangular head that is formed from the neck in a slightly concave shape. The difference is therefore only in the proportions of this triangular shape, which makes the classification of some specimens difficult (fig. 11:2). B. Odar included this type of arrowhead in his type 1, together with the chunkier triangular arrowheads that I previously defined. I, on the other hand, believe that some of these arrowheads distinguish themselves clearly enough in their shape from the previous ones to suggest a typological separation. We cannot attribute any published arrowhead from the area of Slovenia, southern Germany or the area inhabited by the Gepids to this type. The best-preserved arrowhead is the one from site Kuline e Vogël in Kosovo (T.3:7). Very similar to this arrowhead is the one from the Pogradec fort in Albania (T.), as well as the arrowheads found along the Danube limes, at site Ljubičevac - Glamija in Serbia (T.3:13) and the arrowheads from Diana. Although somewhat less well preserved, such features are also visible on two or three arrowheads from the fort of S. Antonino in Italy (T.3:5-6), and perhaps even on one arrowhead from Castel Trosino (T.3:4). Though the state of preservation of the arrowheads from the grave in Brežac in Istria is even worse, a narrower triangular head can be recognized on two arrowheads (T.3:2-3). It is interesting that in fact most of the arrowheads that could be typologically determined from the forts of Golemanovo Kale and Sadovsko Kale have such features, about 10 specimens in total (T.3:8-12).<sup>161</sup> Of the finds from the area of the Roman province of Dalmatia, the arrowhead from Jojića glavica near Vrlika (T.3:1) and one arrowhead from Podgradina near Livno, which is listed under inv. no. 18020 (T.1:7 and T.3:15), should be added to them.

Type 3 was singled out by B. Odar because of the rhombic shape of the head (fig. 11:3). He attributed one of the two arrowheads from site Rifnik to

<sup>161</sup> I believe that these are the arrowheads listed in the catalogue under number 22-25, 27, 31, 32, 40, 42 and 44. See: Uenze 1992, T. 41; 22-25, 27, 31, 32, 40, 42, 44.

napraviti jasno razgraničenje korištenja određenih tipova ovih strelica među Germanima i bizantskom vojskom. Ipak, ovaj tip strelice nađen je u Brešču u Istri te Castel Trosinu u Italiji, u grobovima koji se mogu pripisati langobardskom ratniku. Problem stvaraju i nalazi strelica iz Sadovca u Bugarskoj, gdje dominira tip 2, ali su nađene i strelice istovjetne onima na germanskom prostoru. Uz to, na jednom od dva utvrđenja u Sadovcu germanski su utjecaji svakako primjetni, kao i na S. Antoninu u sjevernoj Italiji. Bizantska vojska imala je odrede barbarskih plaćenika, tako da se prisutnost trokrilnih strelica s djelomično trokutastim presjekom, koje su nađene na području Bizanta, može dovesti i u vezu s tim ratnicima. Međutim, još uvijek ostaje činjenica da tip 2 dominira na bizantskom području (Kulina e Vogel, Pogradec, Sadovec, Dijana, Ljubičevac), da se s drugim tipovima strelica javlja na području u kojem je Bizant u većoj ili manjoj mjeri bio prisutan u 6. st. (Dalmacija, Istra, srednja i sjeverna Italija) te da ga uopće nema na području koji Bizant tada nije ni kontrolirao (južna Njemačka, Austrija, Potisje i Transilvanija). Takva rasprostranjenost strelice tipa 2 ipak ostavlja mogućnost da su one korištene i od strane regularnih bizantskih postrojba.

Trokrilne strelice s djelomično trokutastim presjekom mogu se vremenski odrediti prema kontekstima u kojima su nađene. Najranije datacije su za sada postavljene na gepidskom području u Panoniji. Grobovi u kojima su nađene ove strelice tradicionalno se datiraju prije dolaska Avara, dakle do oko 570. godine. Među njima je nekoliko grobova kojima je datacija nešto preciznije određena. Grob 73 iz Szöreg–Téglagyára datira se čak u 1. pol. 6. st. Moram priznati kako ipak nisam siguran, zbog karaktera crteža, radi li se uistinu o trokrilnim strelicama s djelomično trokutastim presjekom. Sigurno je pak da je takvu strelicu sadržavao grob na lokalitetu Căpusu Mare – Cănepiste, a on se pak datira oko sredine 5. st., s time da mu se ostavlja mogućnost kasnije datacije, u 6. st. Time dobivamo indicije da se ova vrsta strelice na gepidskom prostoru koristi prije Avara, možda već u 1. pol. 6. st. Takav se zaključak slaže i s onim o dataciji strelice na lokalitetu Knin – Greblje, što daje dodatni impuls da se barem ovaj nalaz s prostora rimske provincije Dalmacije ponajviše veže uz utjecaje s gepidskog prostora. Konteksti na području južne Njemačke sugeriraju razdoblje sredine i 2. pol. 6. st. Slične datacije su izvedene i za kontekste u kojima su takve strelice nađene u Sloveniji. Primjeri s langobardskih grobo-

this type, which unfortunately was not available to me. One arrowhead from grave 21b from the site of Inzig-Hartkirchen in southern Germany would also belong to this type (T.5:1). I may note here as well that rhombic arrowheads, but with a slightly chunkier head, were dominant in Asia among the Kyrgyz people.<sup>162</sup>

Type 4 according to Odar is an arrowhead with unpronounced convex lobes. These are arrowheads whose expansion is largest in the last third or a little after the middle of the head (fig. 11:4). Three arrowheads of this type were found in the grave at the necropolis Kranj - Lajh (T.4:3-5). In the territory of Slovenia, I recognize this type of arrowhead in the specimens from sites Gradec pri Prapetno (T.4:7) and Ajdna above Potoki (T.4:6). Such an arrowhead was also found in Italy, on Monte Castellazzo (T.4:8), but also in a grave at site Nocera Umbra (T.4:11). It seems that the one from site Invillino-Ibligio in Italy can also be attributed to this type, as well as two arrowheads from the grave in Brežac (T.4:9-10). This type of arrowhead was also found in the area settled by Gepids, i.e. at site Maroscsapo (T.4:1) and Căpusu Mare – Cănepiste (T.4:2). Several other Gepid arrowheads have same shape, but due to the condition in which they were photographed, I could not recognize the triangular cross-section near the tip. One arrowhead from site Sadovsko Kale in Bulgaria could also belong to this type (P.4:12).<sup>163</sup>

Type 5 in the here presented typology complies with Odar's type 5 (fig. 11:5). This arrowhead also has unpronounced lobes, but differs from the previous one in the fact that the lobes are slightly rounded and the arrowhead does not have a pronounced neck. Even 5 specimens were found in a grave at the necropolis Kranj - Lajh (T.5:2-6), while the arrowheads from Carnuntum (T.5:7) and Szöreg–Téglagyár (T.5: 8) can also be attributed to this type.

Type 6 is also comprised of arrowheads with unpronounced lobes. They are slender and triangular in shape, while some specimens have edge lines almost parallel to the place where the full triangular cross-section is located (fig. 11:6). The triangular shape brings them closer in appearance to type 2, but the ratio of the length and width of the head is even more pronounced in favour of length, so in appearance they also resemble type 5. Two arrowheads of this type were found in grave 21b in

<sup>162</sup> See: Ю. С. Худяков, Т.19

<sup>163</sup> Uenze 1992, T.41; 19.

va u Istri i Italiji pokazuju da se ove strelice koriste i u 1. pol. 7. st., a najkasnija datacija postavljena je s grobom 85, koji pripada nekropoli Vicenne na jugu Italije. Ovaj se grob datira oko sredine 7. st. Prema tome, zaključit ćemo kako ove strelice (osim prostora na samom istoku Europe), na temelju datiranih konteksta, možemo postaviti u vremenski okvir od početka 6. do sredine 7. st. Taj okvir vrijedio bi i za nalaze u rimskoj provinciji Dalmaciji. Tako sugerira i jedini nalaz strelice s tog područja kojem možemo pretpostaviti arheološki kontekst. Kontekst događaja, ponovo na sugestiju te strelice, možda bi mogli ponajviše zamišljati u bizantsko-gotskim ratovima, kako sam se već prethodno zalagao.

### Zaključak

Avarsko zaposjedanje Panonske nizine u posljednjoj trećini 6. st. i agresivna avarska vanjska politika, važan su, možda i krucijalan događaj u oblikovanju velikog dijela europskog prostora tog doba, pa tako i prostora rimske provincije Dalmacije. Njihove akcije usmjerene na to područje, a poznate iz povijesnih izvora, često se traže u materijalnim tragovima, a kao jedni od njih poslužile su i trokrilne strelice. Naime, one su obilno predstavljene u avarskim grobljima u Panoniji, pa se naizgled čine kao njihov specifikum. Pripisivanje trokrilnih strelica s područja provincije Dalmacije Avarima, počesto je tek automatizam u istraživanju i interpretaciji kasnoantičkih i ranosrednjovjekovnih nalazišta, i to na nedovoljno temeljenim ili neutemeljenim analogijama. No prema sadašnjim saznanjima, na području provincije Dalmacije nema ni jedne strelice koja se na temelju oblika ili konteksta u kojem je nađena zaista može pripisati Avarima ili avarsko-slavenskoj invaziji. Prema tome, trokrilne strelice s ovog područja ne bi se smjele olako iskorištavati kao ilustracija takvog historiografskog narativa, kao što se tim strelicama ne bi trebalo olako služiti u izgradnji priče o propasti provincije pod avarsko-slavenskom najezdom, što je vrlo čest slučaj. Avarska provenijencija može se sigurno isključiti za jedan poseban tip trokrilne strelice, a to je ona koja je u drugoj polovini glave ili pri samom vrhu punog trokutastog presjeka. Radi se o strelici koja je po porijeklu predavarska, što ponajviše pokazuju nalazi s područja kojem su upravo prije avarskog doseljenja gospodarili Gepidi. Nakon avarskog zaposjedanja one se više ne koriste u Panoniji, ali se nastavlja-

Inzing - Hartkirchen (T.5:9-10). Most of these arrowheads were recorded on the territory of Ukraine and southern Russia (T.5:10-15).

There is also a certain number of arrowheads that, due to their stylistic features, can hardly be ascribed to any of the aforementioned types. One of these is an arrowhead from Pulling, Germany, which has a wider triangular head similar to type 1, with the difference that the head is slightly more massively shaped and without the pointed edges of the lobes. In addition, it is the only specimen of this arrowhead type that has a socket instead of a tang for attachment to the wooden stele. Another arrowhead from Germany, from site Muhtal-Nieder-Ramstadt II, is also special. It is an irregularly elongated arrowhead which, as it seems according to the cross-sectional drawing, had reinforced lobes. An arrowhead from the grave in Brežac in Istria is similar in its elongated shape. Two arrowheads from site Szöreg-Téglagyár also seem special, if they are arrowheads with a partially triangular cross-section at all. I did not insist on their typological determination as I am aware of the fact that not all arrowheads were made to meet certain manufacturing standards, and I suppose, exceptions can always be found. Further, I did not do a typology with regard to the finds in East and Central Asia, considering that it would unnecessarily burden the already voluminous work. Of course, there is a great possibility that further works on this type of arrowhead will yield new material that would affect the formation of new types, but also the revision of the ones already presented.

The here presented typology is just an attempt to possibly get more useful information in this paper before forming any conclusions. Thus, after creating a typology, largely based on that of B. Odar, I was able to notice that a certain type of arrowhead appears more often or less often in certain areas. Types 3 and 5 are not numerous and known only from the area of southern Germany, Austria and Slovenia. Compared to the latter ones, types 1 and 4 are more numerous and mostly occur in the area of southern Germany, northern Italy, Slovenia and Pannonia, i.e. in the Alpine-Pannonian zone. Outside these areas, they are much rarer, i.e. we know of three specimens in the area of the province of Dalmatia, several specimens in Sadovets in Bulgaria, and two specimens at site Nocera Umbra in central Italy. On the other hand, in those areas with a dominance of types 1, 3, 4 and 5, there are no arrowheads

ju koristiti na prostoru južne Njemačke, Slovenije i Italije, a to je prostor na kojem su određena germanska plemena uspostavila svoju vlast. Ovakve se strelice nalaze još i na prostoru jugoistočne Europe, kojom, osim u povremenim epizodama germanske vlasti, dominira Bizant. Ti su nalazi, kao i tradicija korištenja trokrilnih strelica u carskim vojskama, vjerojatno temelj na kojem se uspostavila teorija o njihovom mediteranskom porijeklu. Ipak, atribucije i datacije ovdje je teže uspostaviti s obzirom na to da su ove strelice nađene u kontekstu utvrđenja i naselja, osim eventualno jedne. Ta jedna strelica nađena je upravo u provinciji Dalmaciji, na lokalitetu Knin – Greblje, gdje se miješaju utjecaji kasnoantičkog stanovništva s germanskim impulsima koje je krajem 5. st. donijela istočnogotska vladavina. Jedini ratnički grob s tog lokaliteta, i za sada jedini iz čitave provincije, definirao se kao langobardski, a potom gepidski, a nađen je uz grob u kojem se nalazila kopča s analogijama na Krimu te kod Gepida u Panoniji. Njemu bi uz dvosjekli mač mogla pripadati i trokrilna strelica s djelomično trokutastim presjekom. Prihvaćajući da etnički identitet nije lako odrediti na temelju arheoloških nalaza, ipak ostavljam otvorenim gepidsku tezu, barem u utjecaju na materijal, jer osim mača tome bi grobu mogla pripadati i trokrilna strelica s djelomično trokutastim presjekom. Te strelice, kako smo vidjeli, najranije datiranu pojavu imaju upravo na području kojim vladaju Gepidi. Ranu dataciju, a to je unutar razdoblja istočnogotske vlasti nad provincijom Dalmacijom, imala bi i grebljanska strelica s obzirom na položaj tog nalaza na groblju. Naravno, nije zbog toga nužno da su sve trokrilne strelice s djelomično trokutastim presjekom ostavština istočnogotske vlasti ili gepidskih skupina koje su ovdje ratovale. Njihova generalna datacija, klasifikacija i rasprostranjenost tipova može nam sugerirati da je neke od tih strelica koristila i bizantska vojska. Prema tome, one bi mogle biti i svojina carske vojske u obrani od avarskih ili avaroslavenskih napadača. No još izglednijim čini se, s obzirom na dataciju grebljanske strelice te koncentracije ovih strelica na prostoru od Krke do Cetine, da su one ostavština događaja koji su tome prethodili. Radi se o istočnogotsko-bizantskom ratu, koji je rezultirao revitalizacijom carske vlasti u provinciji Dalmaciji.

I classified as type 2 at all. The largest number of these arrowheads was recorded in south-eastern Europe, especially in Sadovets, where they are the predominant type among the trilobate arrowheads. The arrowhead from site Kuline e Vogël in Kosovo is extremely well preserved and can serve as an exemplary specimen of its type. From the area of the Roman province of Dalmatia, one arrowhead from Podgradina and one from Jojića glavica could be added to them. Outside the territory of Southeast Europe, this type is most likely found in Brežac in Istria and at site S. Antonino in northwest and Castel Trosino in central Italy. At first, this spatial dispersion of arrowheads may indicate the existence of certain differences in the use of arrowheads on a political-cultural basis, which would concretely mean that the area inhabited by Germanic people, especially the Alpine-Pannonian zone, is characterized by arrowheads of types 1, 3, 4 and 5. The area south of that zone is characterized by type 2, which was or is under the political domination of Byzantium at the time these arrowheads are dated to.

The classification of these arrowheads and their spatial analysis allow us to conclude that the area inhabited by Germanic people was truly dominated by certain, characteristic types of trilobate arrowheads with a partially triangular cross-section. Type 2, which is not present in southern Germany, Austria, the western Alps, Pannonia and Transylvania, and which dominates south-eastern Europe, could therefore even be attributed to the Byzantine army. Thus, it would be possible to make a clear demarcation of the use of certain types of these arrowheads between the Germanic people and the Byzantine army. However, this type of arrowhead was found in Brežac in Istria and Castel Trosino in Italy, in graves that can be attributed to a Lombard warrior. Another problem are the finds of arrowheads in Sadovets, Bulgaria, where type 2 predominates, but arrowheads identical to those in the Germanic area have also been found. Furthermore, Germanic influences are certainly noticeable in one of the two fortifications in Sadovets, as well as in S. Antonino in northern Italy. The Byzantine army included also troops of barbarian mercenaries, so the presence of trilobate arrowheads with a partially triangular cross-section, which were found on the territory of Byzantium, can possibly be linked to these warriors. Nevertheless, fact is that type 2 dominates in the Byzantine area (Kuline e Vogël, Pogradec, Sadovets, Diana, Ljubičevac), that it occurs with

other types of arrowheads in the area where Byzantium was more or less present in the 6<sup>th</sup> century (Dalmatia, Istria, central and northern Italy), and that type 2 is completely missing in the area that Byzantium did not control at the time (southern Germany, Austria, Pottisje and Transylvania). Such a spatial distribution of said arrowheads still leaves open the possibility that they were also used by regular Byzantine troops.

Trilobate arrowheads with a partially triangular cross-section can be dated based upon their find contexts. So far, the earliest dating has been applied in the Gepid area in Pannonia. Graves, which contained these arrowheads, are traditionally dated before the arrival of the Avars, i.e. to around 570 AD. There are several graves among them, which have been determined somewhat more precisely. Grave 73 from Szöreg–Téglagyár dates back to the first half of the 6<sup>th</sup> century. I have to admit that I am still not sure, due to the features of the drawing, whether they really are trilobate arrowheads with a partially triangular cross-section. However, it is certain that the grave at site Căpusu Mare - Cânepiste, which is dated to around the mid-5<sup>th</sup> century, with the possibility of a later dating to the 6<sup>th</sup> century, contained such an arrowhead. This indicates that this type of arrowhead was used in the Gepid area before the Avars, perhaps already in the first half of the 6<sup>th</sup> century. Such a conclusion also complies with the dating of the arrowhead at site Knin - Greblje, which gives an additional impulse that at least this find from the area of the Roman province of Dalmatia is mostly related to influences from the Gepid area. In the area of southern Germany, archaeological contexts suggest their dating to the time from the middle and second half of the 6<sup>th</sup> century. Similar datings were applied for the contexts in which such arrowheads were found in Slovenia. Specimens from Lombard graves in Istria and Italy reveal that these arrowheads were also used in the first half of the 7<sup>th</sup> century. The latest dating is provided by grave 85 at the necropolis Vicenne in the south of Italy, which is dated to around the mid-7<sup>th</sup> century. In light of the above, we shall conclude that these arrowheads (with the exception of the area in the very east of Europe), based on the dated contexts, can be placed in the time frame from the beginning of the 6<sup>th</sup> to the mid-7<sup>th</sup> century. This time frame would also be applicable to the finds in the Roman province of Dalmatia. This is also suggested by the only find of an arrowhead from that area,

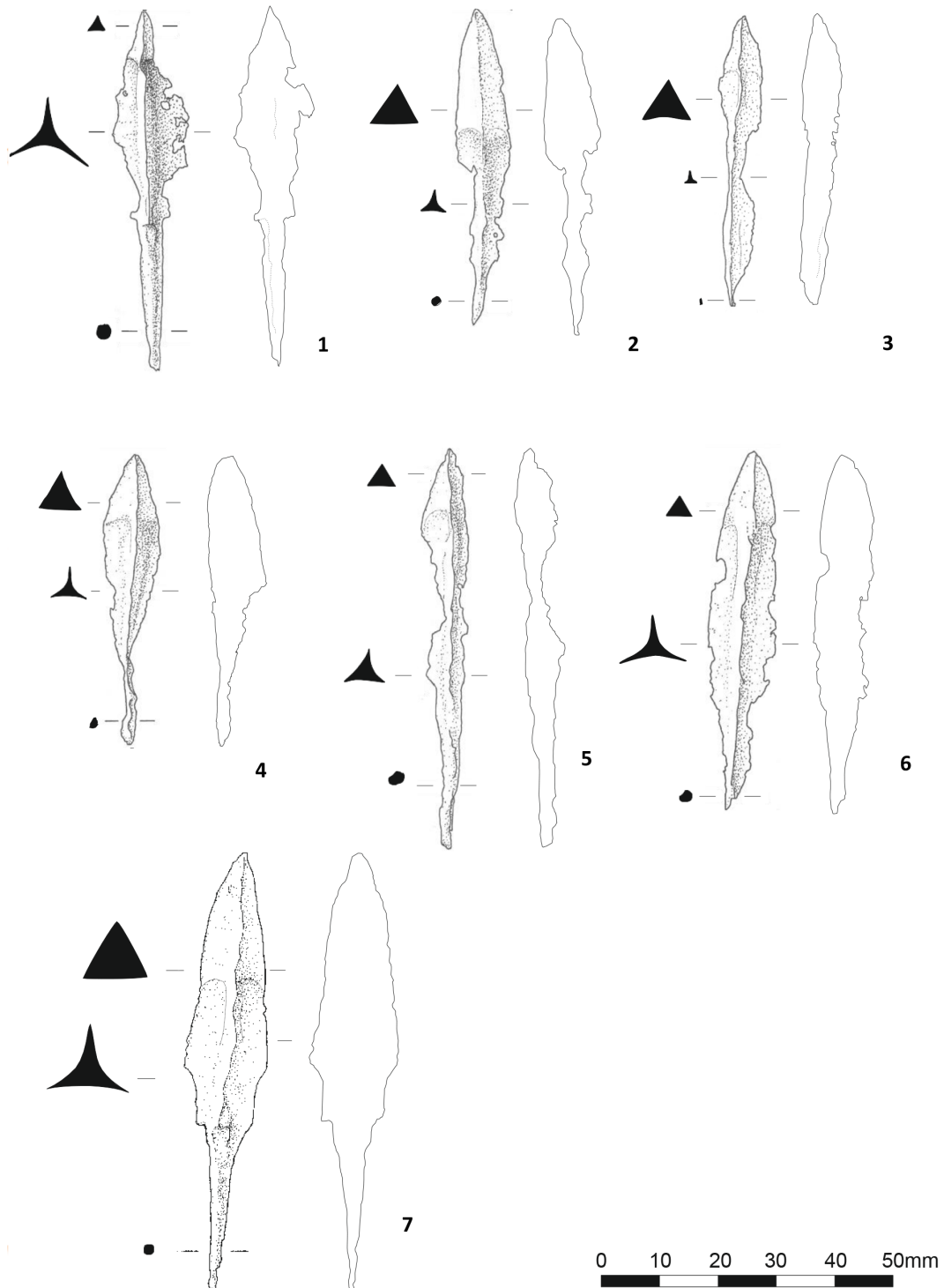
for which we can assume an archaeological context. The context of the event, again at the suggestion of that arrowhead, could have most probably relate to the Byzantine-Gothic wars, as I have argued before.

### Conclusion

The Avar occupation of the Pannonian Plain in the last third of the 6<sup>th</sup> century and their aggressive foreign policy was an important, perhaps crucial event not only in the shaping of a large part of the European area of that era, but also the area of the Roman province of Dalmatia. Their actions that targeted this area and are known from historical sources, are often searched for in material traces, and the trilobate arrowheads could serve as such a trace. Namely, they have been abundantly represented in Avar cemeteries in Pannonia, and hence they seem to be their distinguishing feature. In this regard, the attribution of trilobate arrowheads from the province of Dalmatia to the Avars has often been done automatically in the research and interpretation of late ancient and early medieval sites, based on insufficiently based or completely unfounded analogies. However, according to our current knowledge, there is not one single arrowhead in the territory of the province of Dalmatia that, based on the shape or the context in which it was found, can really be attributed to the Avars or the Avaro-Slavic invasion. And accordingly, the trilobate arrowheads from this area should not be used lightly as an illustration of such a historiographical narrative, just as these arrowheads should not be used lightly in constructing the story of the doom of the province under the Avaro-Slavic invasion, which is very often the case. The Avar provenance can be certainly ruled out for one particular type of trilobate arrowhead, which is the one that has a full triangular cross-section in the second half of the head or at its very tip. It is an arrowhead that is pre-Avar in origin, as the finds from the area that was ruled by the Gepids just before the Avars settled there clearly show. After the Avar occupation, they were no longer in use in Pannonia, but continued to be used in the area of southern Germany, Slovenia and Italy, which is the area where certain Germanic tribes established their rule. Arrowheads like this were also found in Southeast Europe, which, except for occasional periods of Germanic rule, was dominated by Byzantium. These finds, but also the tradition of using trilobate arrowheads in the imperial armies, repre-

sent probably the basis on which the theory of their Mediterranean origin was established. However, it is more difficult to establish here the attribution and dating, given that these arrowheads were found in the context of fortifications and settlements, except possibly one. This arrowhead was actually found in the province of Dalmatia, at site Knin - Greblje, where the influences of the late ancient population mixed with Germanic impulses brought by the Ostrogothic rule at the end of the 5<sup>th</sup> century. The only warrior's grave from that site, and for now the only one from the entire province, was first defined as a Lombard one, and then later as a Gepid one. It was found next to a grave that contained a buckle with analogies in the Crimea and the Gepid people in Pannonia. The trilobate arrowhead with a partially triangular cross-section could have, along with the double-bladed sword, belonged to this grave. By accepting the fact that the ethnic identity cannot be easily determined on the basis of archaeological finds, I still leave the Gepid thesis open, at least in terms of the influence on the material, because in addition to the sword, the trilobate arrowhead with a partially triangular cross-section could have also belonged to that grave. These arrowheads, as we have seen, have their earliest dated appearance precisely in the area ruled by the Gepids. The arrowhead from Greblje would also have an early dating, which is within the period of the Ostrogothic rule over the province of Dalmatia, considering the position of this find in the cemetery. Of course, this does not necessarily mean that all trilobate arrowheads with a partially triangular cross-section represent a legacy of the Ostrogothic rule or Gepid groups that fought here. Their general dating, classification and distribution of types may suggest that some of these arrowheads were also used by the Byzantine army. Therefore, they could also be property of the imperial army in the defence against Avar or Avaro-Slavic invaders. But it seems even more likely, considering the dating of the arrowhead from Greblje and the concentration of these arrowheads in the area from the Krka to the Cetina river, that they are a legacy of the events that preceded it, namely the Ostrogothic-Byzantine war, which resulted in the revitalization of imperial power in the province of Dalmatia.

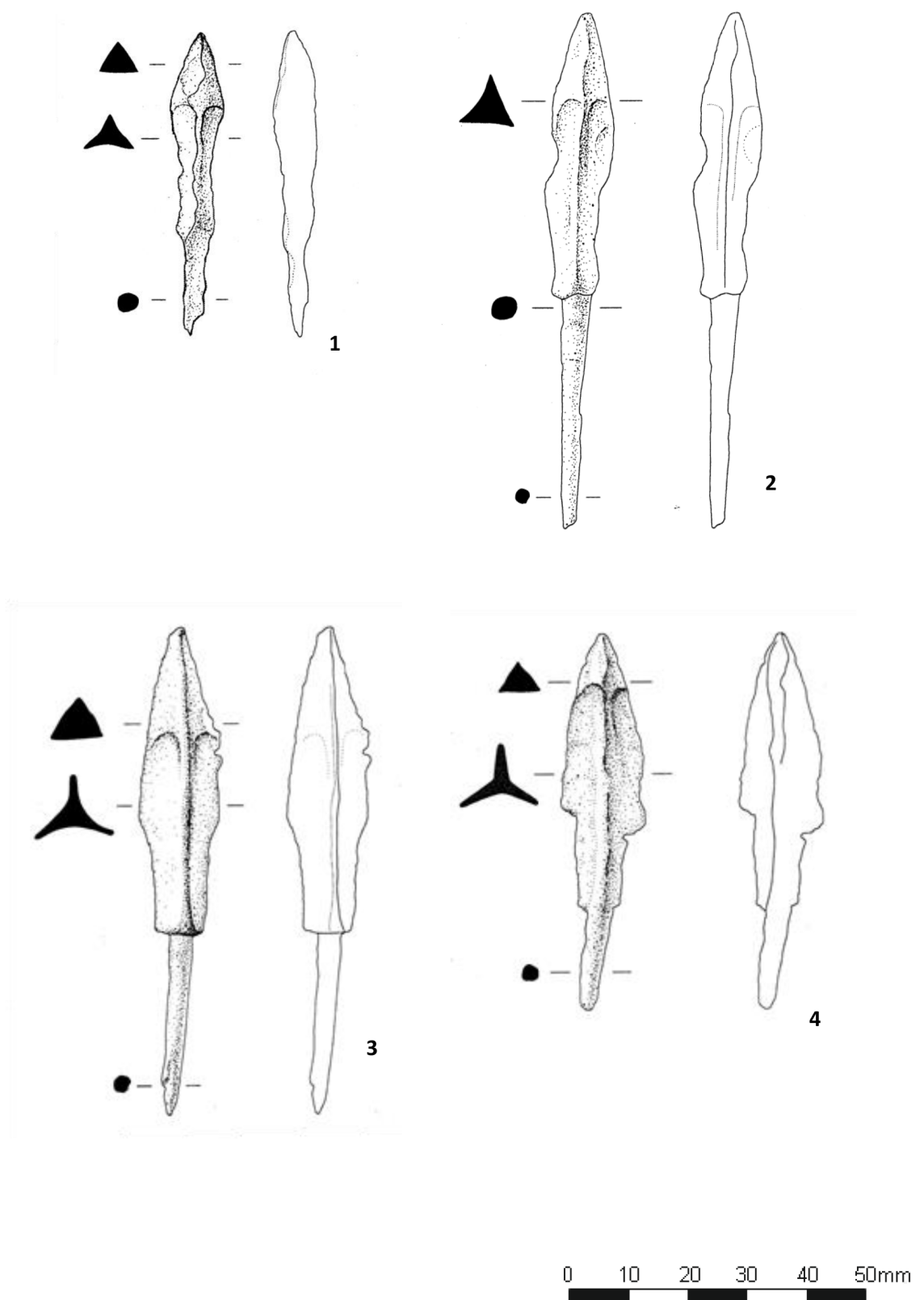
TABLE / PLATES



T. / Pl. 1:

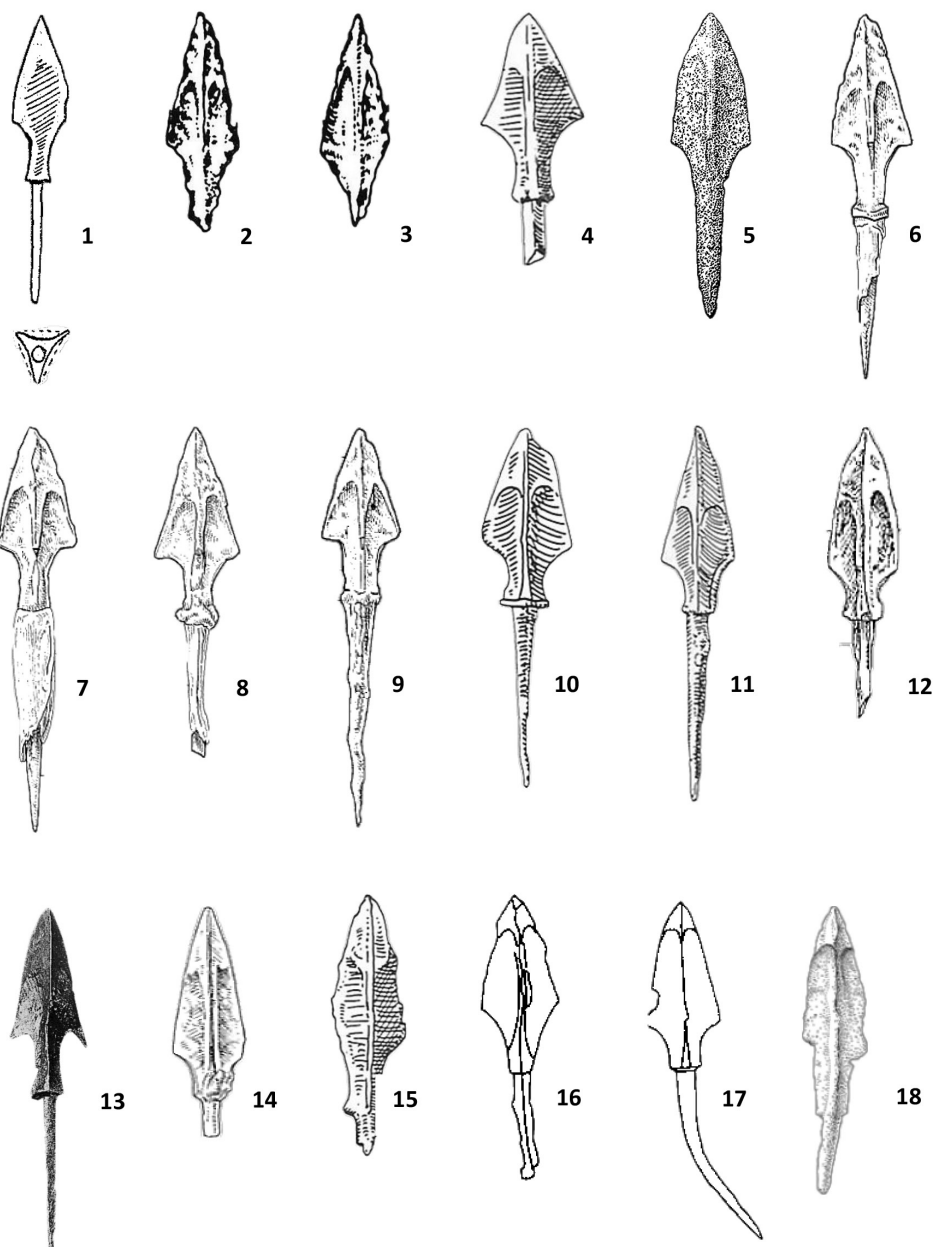
- 1 – Podgradina kod Livna, inv. br. 18018 (crtež / drawing: Maja Marković)
- 2 – Podgradina kod Livna, inv. br. 18019 (crtež / drawing: Maja Marković)
- 3 – Podgradina kod Livna, inv. br. 18020 (crtež / drawing: Maja Marković)
- 4 – Podgradina kod Livna, inv. br. 18021 (crtež / drawing: Maja Marković)
- 5 – Podgradina kod Livna, inv. br. (crtež / drawing: Maja Marković)
- 6 – Podgradina kod Livna, inv. br. (crtež / drawing: Maja Marković)
- 7 – Podgradina kod Livna, inv. br. (crtež / drawing: Maja Marković)





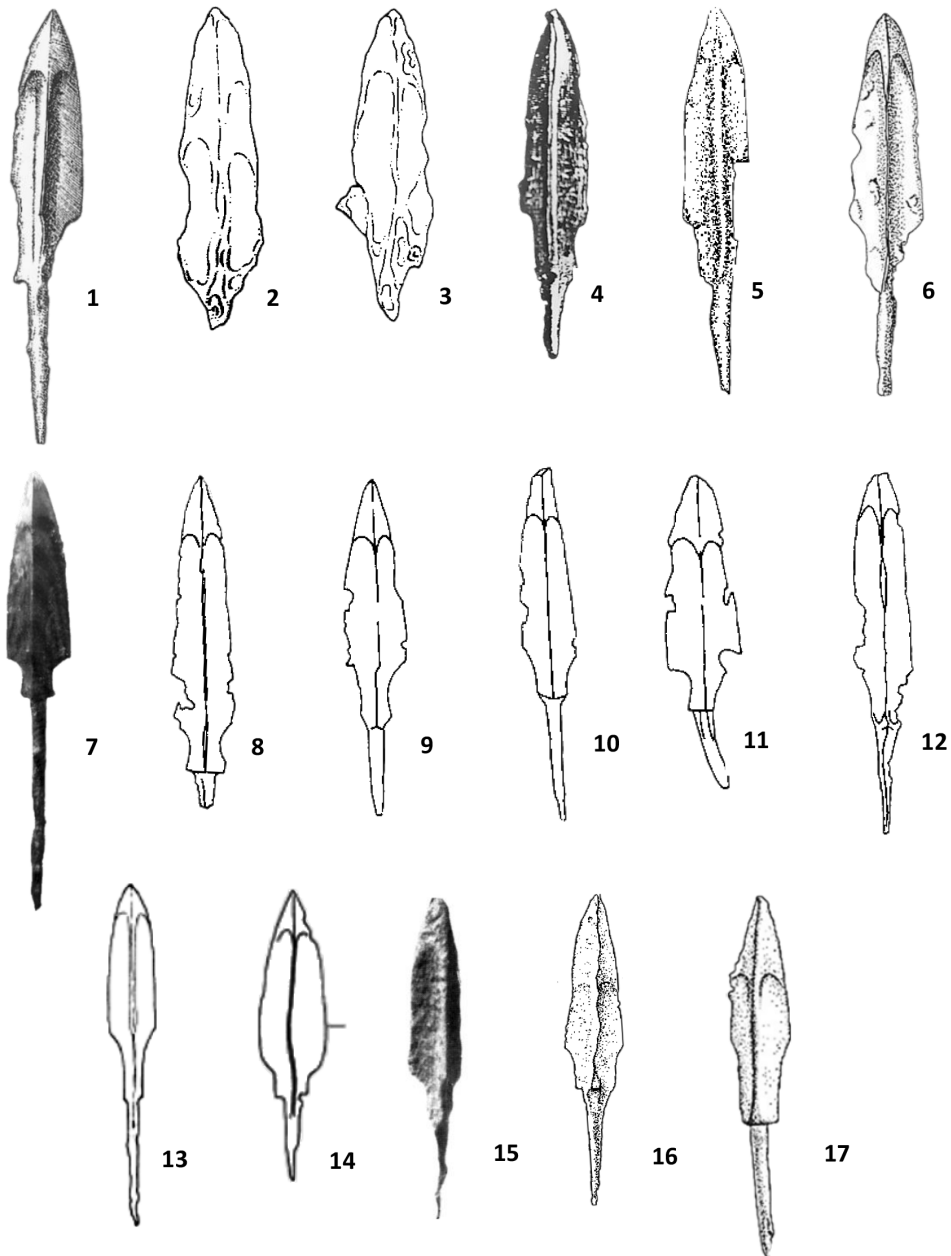
**T. / Pl. 2:**

- 1 – Knin – Greblje, inv. br. 7358 (crtež / drawing: Maja Marković)
- 2 – Nepoznato nalazište, inv. br. 8864 (crtež / drawing: Maja Marković)
- 3 – Bribir, inv. br. 8155 (crtež / drawing: Maja Marković)
- 4 – Biranj (crtež / drawing: Maja Marković)



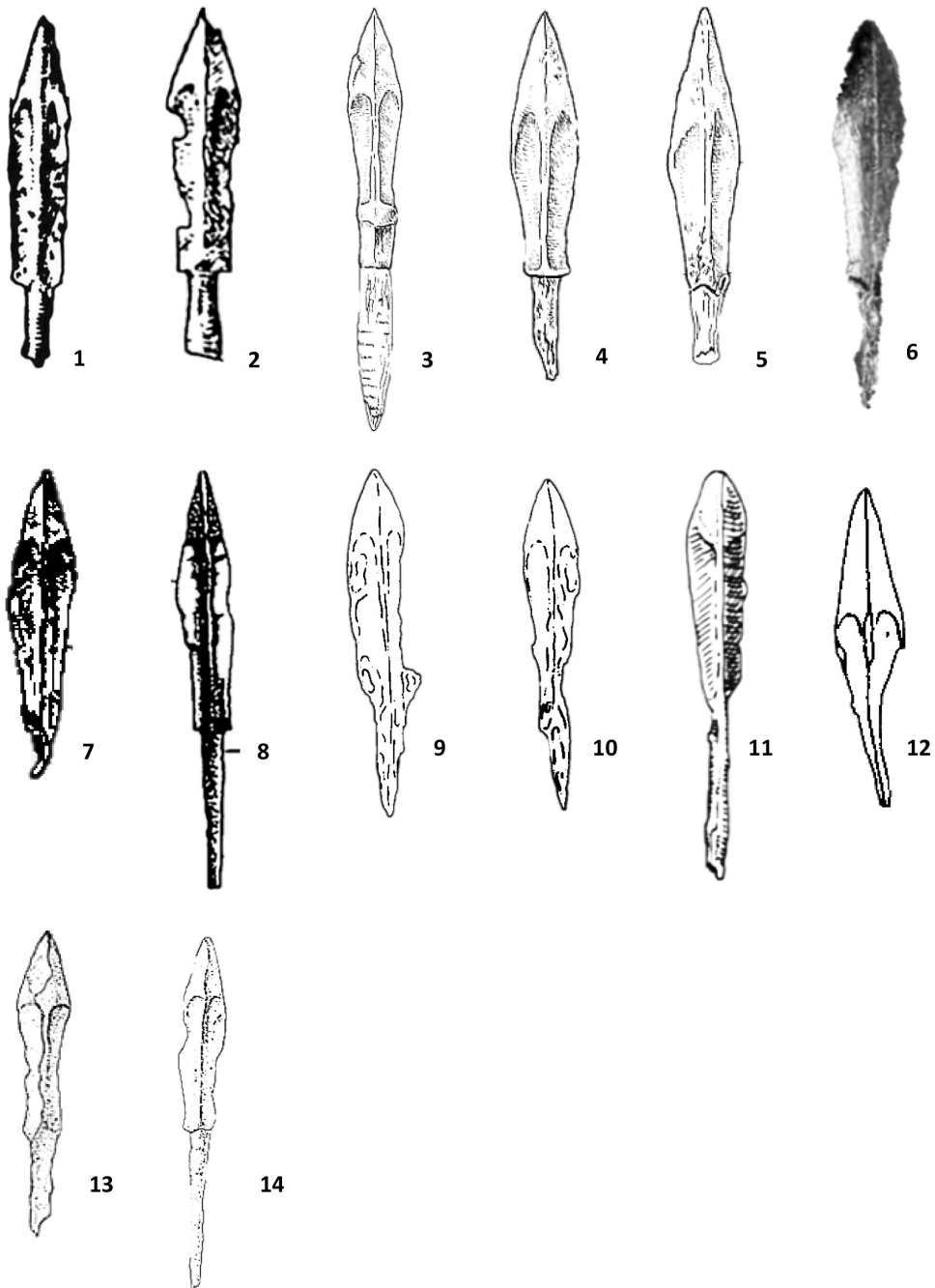
**T. / Pl. 3:**

- 1 – Klobuk kod Ljubuškog (prema / according to: Sergejevski 1954, sl. 2b)
- 2 – Maroscsapó (prema / according to: Csallány 1961, T. CCLXXIX, 9)
- 3 – Maroscsapó ((prema / according to: Csallány 1961, T. CCLXXIX, 11)
- 4 – Felbach – Schmiden (prema / according to: von Freeden 1991, Abb. 7: 5)
- 5 – Petronell (prema / according to: Winter 1997, Kat. no. 3m/36)
- 6 – Kranj – Lajh (prema / according to: Odar 2006, T. 2: 11)
- 7 – Kranj – Lajh (prema / according to: Odar 2006, T. 2: 10)
- 8 – Kranj – Lajh (prema / according to: Odar 2006, T. 2: 12)
- 9 – Kranj – Lajh (prema / according to: Odar 2006, T. 2: 13)
- 10 – Kranj – Lajh (prema / according to: Stare 1980, T. 125, 8)
- 11 – Rifnik (prema / according to: Bitenc, Knific 2001, sl. 238)
- 12 – Konjski hrib (prema / according to: Milavec, Modrijan 2020a, T. 1:10)
- 13 – Zidani gaber (prema / according to: Bitenc, Knific 2001, sl. 235)
- 14 – Tonovcov grad (prema / according to: Modrijan, Milavec 2011a, T. 9: 6)
- 15 – Nocera Umbra (prema / according to: Pasqui, Paribeni 1918, sl. 97)
- 16 – Sadovsko kale (prema / according to: Uenze 1992, T.41: 28)
- 17 – Sadovsko kale (prema / according to: Uenze 1992, T. 41: 29)
- 18 – Biranj (crtež / drawing: Maja Marković)



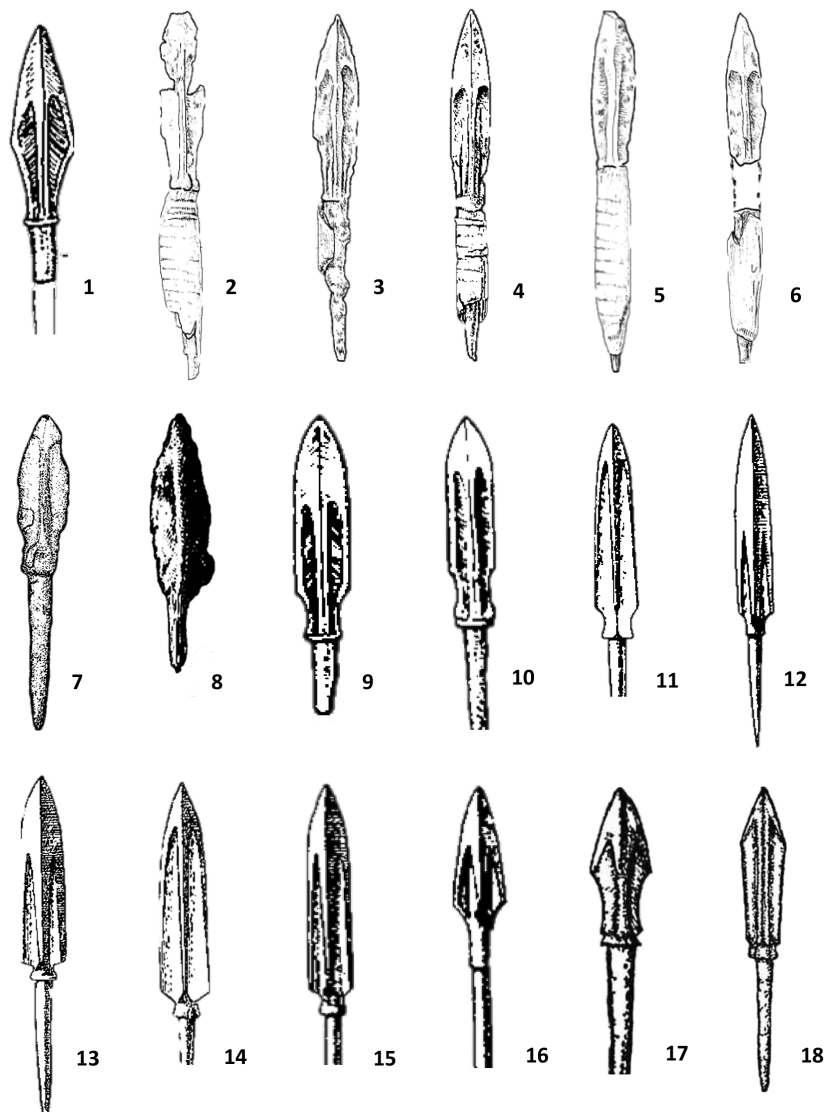
**T. / Pl. 4:**

- 1 – Jojića glavica kod Vrlike (prema / according to: Milošević 1998, sl. 111)
- 2 – Brežac kod Buzeta prema / according to: Torcellan 1986, T. 4: 5)
- 3 – Brežac kod Buzeta (prema / according to: Torcellan 1986, T. 4: 6)
- 4 – Castel Trosino (prema / according to: Mengarelli 1902, sl. 189)
- 5 – S. Antonino (prema: de Vigno, Fossati, Murialdo 2001, T. 75: 2)
- 6 – S. Antonino (prema / according to: de Vigno, Fossati, Murialdo 2001, T. 75: 3)
- 7 – Kulina e Vogel (prema / according to: Mehmetaj 1990, sl. 5.)
- 8 – Golemanovo kale (prema / according to: Uenze 1992, T. 41: 42)
- 9 – Sadvosko kale (prema / according to: Uenze 1992, T. 41: 22)
- 10 – Sadvosko kale (prema / according to: Uenze 1992, T. 41: 24)
- 11 – Sadvosko kale (prema / according to: Uenze 1992, T. 41: 27)
- 12 – Sadvosko kale (prema / according to: Uenze 1992, T. 41: 32)
- 13 – Ljubičevac/Slatinska reka prema / according to: Špehar 2010, T. XXXIX: 696)
- 14 – Dijana (prema / according to: Špehar 2010, T. XXXIX: 704)
- 15 – Pogradec (prema / according to: Anamali 1979, T. 11: 1)
- 16 – Podgradina kod Livna (crtež / drawing: Maja Marković)
- 17 – Bribir (crtež / drawing: Maja Marković)



**T. / Pl. 5:**

- 1 – Maroscsapó (prema / according to: Csallány 1961, T. CCLXXIX, 10)
- 2 – Căpusu Mare – Cănepiste (prema / according to: Dobos 2009, fig. 4: 4)
- 3 – Kranj – Lajh (prema / according to: Odar 2006, T. 2: 6)
- 4 – Kranj – Lajh (prema / according to: Odar 2006, T. 2: 8)
- 5 – Kranj – Lajh (prema / according to: Odar 2006, T. 2: 9)
- 6 – Ajdna nad Potoki (prema / according to: Vidrih-Perko, Sagadin 2004, sl. 7)
- 7 – Gradec pri Prapetnem (prema / according to: Bausovac 2001, 22)
- 8 – Monte Castelazzo (prema / according to: Arnosti 1997, T. V: 24)
- 9 – Brežac kod Buzeta (prema / according to: Torcellan 1986, T. 4: 2)
- 10 – Brežac kod Buzeta (prema / according to: Torcellan 1986, T. 4: 3)
- 11 – Nocera Umbra (prema / according to: von Freeden 1991, Abb. 8: 7)
- 12 – Sadovsko kale (prema / according to: Uenze 1992, T. 41: 19)
- 13 – Knin - Greblje (crtež / drawing: Maja Marković)
- 14 – Nepoznato nalazište (crtež / drawing: Maja Marković)



**T. / Pl. 6:**

- 1 – Inzing – Hartkirchen (prema / according to: von Freeden 1991, Abb. 7: 1)
- 2 – Kranj – Lajh (prema / according to: Odar 2006, T. 2: 1)
- 3 – Kranj – Lajh (prema / according to: Odar 2006, T. 2: 2)
- 4 – Kranj – Lajh (prema / according to: Odar 2006, T. 2: 3)
- 5 – Kranj – Lajh (prema / according to: Odar 2006, T. 2: 4)
- 6 – Kranj – Lajh (prema / according to: Odar 2006, T. 2: 5)
- 7 – Carnuntum (prema / according to: Winter 1997, Kat. br. / no. 3i/2 )
- 8 – Szöreg – Téglagyár (prema / according to: Nagy 2005, T. 60: 6)
- 9 – Inzing – Hartkirchen (prema / according to: von Freeden 1991, Abb. 7: 2)
- 10 – Inzing – Hartkirchen (prema / according to: von Freeden 1991, Abb. 7: 3)
- 11 – Pastirskoe gorodišće (prema / according to: Медведев 1966, T. 12: 9)
- 12 – Dyvich – hora (prema / according to: Медведев 1966, T. 15: 23)
- 13 – Dmitrijevski moglinik (prema / according to: Медведев 1966, T. 12: 11)
- 14 – Borisovskij moglinik (prema / according to: Медведев 1966, T. 12: 10)
- 15 – Nikolaevskij moglinik (prema / according to: Медведев 1966, T. 12: 12)
- 16 – Biljar (prema / according to: Медведев 1966, T. 15: 25)
- 17 – Kirgiške strelice (prema / according to: Худяков 1980, T. 19: 9)
- 18 – Kirgiške strelice (prema / according to: Худяков 1980, T. 19: 1)

## Kratice / Abbreviations

AAdr - Archaeologia Adriatica  
AP - Arheološki pregled  
ARadRaspr - Arheološki radovi i rasprave  
Arh.vest - Arheološki vestnik  
EME - Early Medieval Europe  
HAG - Hrvatski arheološki godišnjak  
QuadFArch - Quaderni Friuliani di Archeologia  
MonAntLin - Monumenti Antichi dei Lincei  
NAD - Nova Antička Duklja  
PP - Povijesni prilozi  
PrilInstArheolZagrebu - Prilozi instituta za arheologiju u Zagrebu  
RFFZd - Radovi Filozofskog fakulteta u Zadru  
RZHP - Radovi zavoda za hrvatsku povijest  
SaalbJb - Saalburg Jahrbuch  
SHP - Starohrvatska prosvjeta  
VAHD - Vjesnik za arheologiju i historiju dalmatinsku  
VAPD - Vjesnik za arheologiju i povijest dalmatinsku  
Vizantijski izvori I - Vizantijski izvori za istoriju naroda Jugoslavije  
ŽA - Živa antika

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