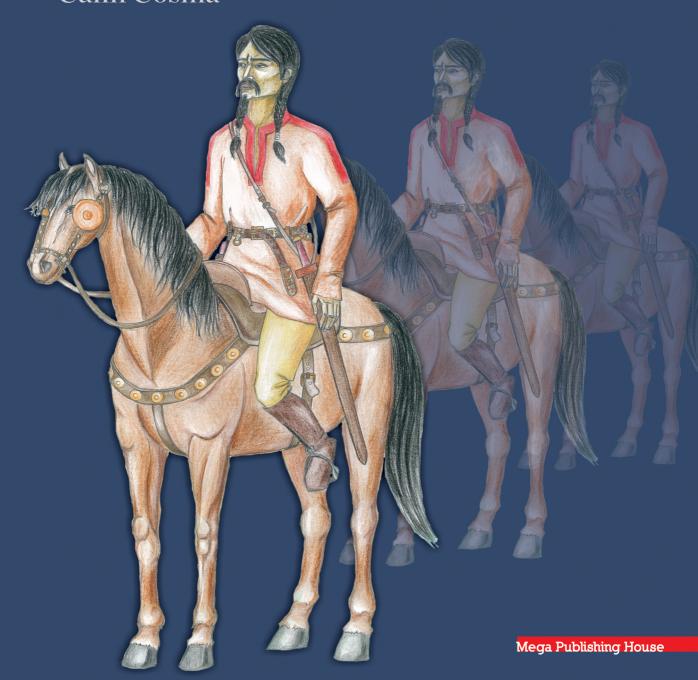
# Warriors, weapons, and harness from the 5<sup>th</sup>-10<sup>th</sup> centuries in the Carpathian Basin

Editor Călin Cosma



### WARRIORS, WEAPONS, AND HARNESS FROM THE 5<sup>TH</sup>–10<sup>TH</sup> CENTURIES IN THE CARPATHIAN BASIN

Editor Călin Cosma

### Academia Română Institutul de Arheologie și Istoria Artei din Cluj-Napoca

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## Warriors, weapons, and harness from the 5<sup>th</sup>-10<sup>th</sup> centuries in the Carpathian Basin

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### Cover image I:

Reconstruction proposal of the Avar military chieftain from the cemetery at Teiuş (drawing Narcisa Şugar, Institute of Archaeology and History of Art, Cluj-Napoca).

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## The horse harness, spurs and stirrups in Bohemia in 8<sup>th</sup> and 9<sup>th</sup> century

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**Abstract:** The paper completed finds of stirrups, bridles, horse harness decorations (19 sites) and spurs from Bohemia 8–9<sup>th</sup> centuries.

Most of the finds are Avar Khaganat in origine, imports, partly also Moravian or Czech territory products after Avar cultural pattern (the find of repoussage forging form on the harness decoration from Tismice). Presence of the spurs with hooks (22 sites, 6 are bronze ones) could indirectly indicate the existence of forming nobility in territory of Czech Republic, because Avars don't ride the horse with spurs. Some of most luxurious type of spurs are western imports (Skorkov, Sv. Jan pod Skalou, Kolín, Křinec).

Keywords: horse harness, stirrups, Bohemia, Early Middle Ages

### I. Introdution

eapons and horse harnesses are very important archaeological finds because of theirs potential to be quite exactly dated and to indicate social status among the grave finds. There are no graves with stirrups in Bohemia<sup>1</sup>. Spurs appear in graves from a half of 9th century till the end of 10th century. From about 850 A.D. we can date the change of burial rite from cremation to inhumation. That is why, the number of finds connected with horse riding before 850 A.D. is quite low. The majority of the finds from 8th century are stirrups, bridles and decorations of harness are in 'Avar' type and are mostly also Avar Khaganate in origin.

Most of the finds comes from hill-forts, hills and newly also from settlements. Because of this situation we usually can't say, if the finds, mainly decorations, were used in the same case as in Avar culture milieu.

The find of repoussage forging form on the harness decoration from Tismice could mean (Fig. 8:7), that the anticipated local production takes after the Avar cultural pattern.

### II.1. Bridles

There are only 3–4 sites with the finds of part of sideboards of bridle in Bohemia, which could be dated to the 8th and the beginning of 9<sup>th</sup> century: Kal and Tismice hill-forts and Semice hoard-find (Fig. 1: 1–4)<sup>2</sup>. We can recognise the 3 basic types: 1. With es shaped sideboard with animal-head; 2. Similar one without animal-heads, but with rectangular loop; 3. Straight twisted bridlesides (like Tismice and probably later Křinec).

The last type was probably used from 8<sup>th</sup> to 10<sup>th</sup> century (Klecany near Prague).

The specific sideboard with two ovals is a part of iron find 2 from Kal (Fig. 1:1), it has a parallel in Izvoare-Bahna in Romania<sup>3</sup>, dated to the 6–7<sup>th</sup> centuries. Probably it is eastern *type* of bridles.

The Merovingian type of bridle with the iron fittings and straight and curved in the end of side-boards was found in the hoard-find in Plužná, dated to the end of 8<sup>th</sup> and first half of 9<sup>th</sup> century<sup>4</sup>.

<sup>&</sup>lt;sup>1</sup> The exception could be a fragment from cremation barrow in Ledenice-Borovany.

<sup>&</sup>lt;sup>2</sup> Profantová 2010, Abb.10:6, 16:1.

<sup>&</sup>lt;sup>3</sup> Mitrea 1998, fig 27:9.

<sup>&</sup>lt;sup>4</sup> Profantová 2011, obr. 6:1.

The hoard-find was found in NW direction from Prague, probably on the road later known as Žitava (Zwikau).

The bridle sideboard of eastern – Oldhungarian/Magyar provenience from 10<sup>th</sup> century man knows only from Libice nad Cidlinou in Bohemia<sup>5</sup> in two variants: first straight with inlays, second as a local copy of antler sideboard. The luxurious bronze piece as well as iron ones are found in Moravia (Stavenice, Mikulčice)<sup>6</sup>.

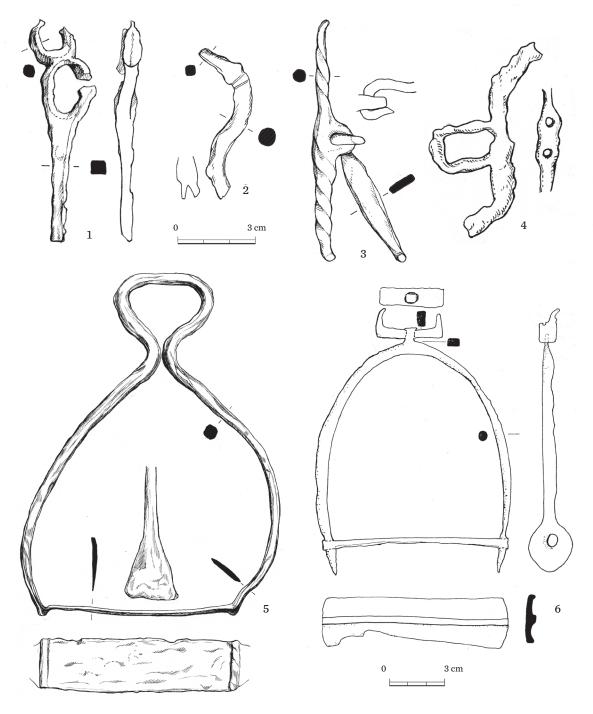


Fig. 1. Bridles and stirrus 8<sup>th</sup>–1<sup>st</sup> third of 9<sup>th</sup> cent. 1–2 Kal, distr. Jičín, 3 Tismice, distr. Kolín, 4 Semice, distr. Nymburk, 5 Roždalovice, distr. Nymburk, 6 Benátky near Litomyšl. 2, 4, 6 After PROFANTOVÁ 2010, 5 after Profantová 2015, fig. 6; 1,3 Unpublished. Drawing L. Raslová, Institut of archaeology Prague, v.v.i.

<sup>&</sup>lt;sup>5</sup> Profantová 2008, obr. 6b, 6c:4.

<sup>&</sup>lt;sup>6</sup> Profantová 2012a.

### II.2. Stirrups

Riders in the Early Medieval Period guided their horses with spurs and snaffle with a metal bridle, while holding their balance with the help of stirrups.

The iron stirrups of Avar Khaganat Period types (Fig. 1:5,6) were found repectivelly in Roždalovice (Middle Bohemia, strayfind is typologically older one – from the end of 7<sup>th</sup>–8<sup>th</sup> cent.), the find from Benátky near Litomyšl, near Bohemia-Moravian border<sup>7</sup>. The bottom of stirrup was probably found in barrow 28 with cremation burial in Ledenice in south Bohemia<sup>8</sup>, it was in very bad condition<sup>9</sup>, in accordance to the situation of the find it could be dated to the period from the end of |7<sup>th</sup> up to first half of 9<sup>th</sup> century.

The import of stirrups from Carolingian empire started during than the find the 9<sup>th</sup> century. The western type of stirrup – as in – with turned (by 90 degrees) neck and oblong loop is present in hoardfind of 3 stirrups from Prachov (NE Bohemia, Fig. 2:2)<sup>10</sup> and the other piece with relief arms from Kolín. This is luxurious type with inlays<sup>11</sup>. Two of stirrups from Prachov have geometrical decoration, one of them in openwork, and wide bottom (Fig. 2:1,3). I search for their origin in Moravia, the similar pieces are known from Klášťov<sup>12</sup> and Břeclav-Pohansko<sup>13</sup>.

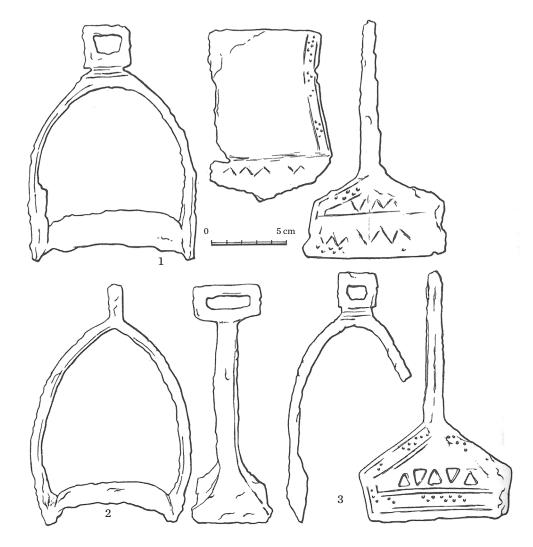


Fig. 2. Zámostí/Prachov- stirrups, After Lutovský / Beranová 2009.

<sup>&</sup>lt;sup>7</sup> Profantová 1992, Taf. 1:16.

<sup>&</sup>lt;sup>8</sup> Poláček 1981, 27, obr.13:4

<sup>&</sup>lt;sup>9</sup> Poláček 1981, 27, obr.13:4.

<sup>&</sup>lt;sup>10</sup> Profantová 2011, obr. 6:2.

<sup>11</sup> Košnar 1982, Tab. X, XI.

<sup>&</sup>lt;sup>12</sup> Geisler / Kohoutek 2014, obr. 7:D1/6-7.

<sup>&</sup>lt;sup>13</sup> Vignatiová 1992, Tab. 8:1a.

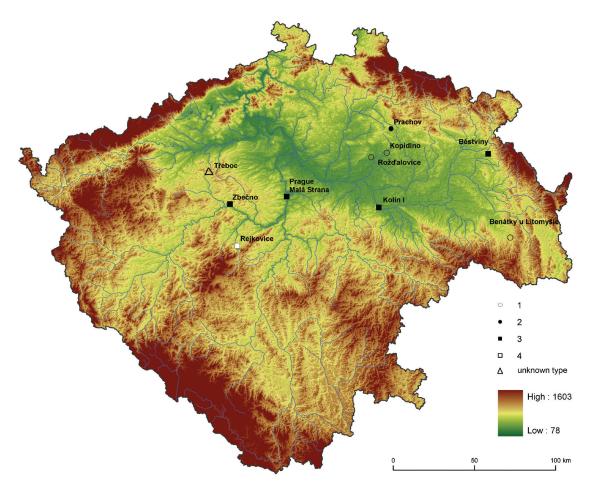


Fig. 3. Early medieval stirrups in Bohemia: 1. Stirrups of Avar origin ( $8^{th}$  century); 2. stirrups with openwork decoration ( $9^{th}$  cent.); 3. stirrups with inlay decoration  $10-1^{st}$  half of  $11^{th}$  cent.; 4. 'old hungarian' type of stirrup. Ledenice is not on the map because of problematic clasification. After Profantová in press 1, with completion.

In the beginning of  $10^{th}$  century "Hungarian pear-shaped typ" of stirrup appears; it was found only in the neighbourhood of Plešivec-Hill and it is now lost (Tab. 1). <sup>14</sup>

Site	Decoration	Dating	Туре	
Benátky bei Litomyšl		End of 8 <sup>th</sup> century	'Avar' type	
Dobruška-Běstviny	inlay, markt	2 <sup>nd</sup> half of 10 <sup>th</sup> –11 <sup>th</sup> century	Local Moravian or Czech type?	
Kolín	inlay	9 <sup>th</sup> –10 <sup>th</sup> century	Carolingian type	
Kopidlno	twister	7–8 <sup>th</sup> century?	'Avar' type	
Ledenice-Borovany		End of 7 <sup>th</sup> - end of 9 <sup>th</sup> c.	Avar? type	
Praha-Malá Strana, Mostecká	inlay	10 <sup>th</sup> century	Carolingian-Ottonian type	
Prachov-	2 inlay	9 <sup>th</sup> century	Local(?) type	
	3. openwork and inlay	9 <sup>th</sup> century	Local (?) type	
Plešivec hill, Rejkovice and surroundings	? not preserved	1st half of 10th century	Oldhungarian type	
Rožďalovice	without	8 <sup>th</sup> century	'Avar' type	
Skuteč-Hlinsko surroundings	inlay Ring-shaped with Protrusion	10 <sup>th</sup> –12 <sup>th</sup> century	Oldhungarian or imitation of it (private collection)	
Třeboc, Fundplace Láz	not preserved	? 11-12 <sup>th</sup> century	?	
Zbečno	inlay	10 <sup>th</sup> century	Western type	

Tab. 1. The stirrups from Bohemia (8–11 $^{\rm th}$  century), after Profantová 2012b, Tab. 1, completed.

<sup>14</sup> Profantová 2008, obr. 3.

### II.3. Spurs (8–9<sup>th</sup> century)

The finds of spurs are also very important, because they are better datable then other finds<sup>15</sup>. Presence of the spurs could indirectly indicate the existence of forming nobility in territory of Czech Republic, because Avars don't ride the horse with spurs.

The oldest Early Medieval spurs are pieces with hooked terminals. The origin of the idea of the production of spur with hooks was transformed from Late Roman period through Merovingian milieu to Bohemia, Moravia and South Slovakia. It is not clear yet, if it has become during 2<sup>nd</sup> half of 7<sup>th</sup> or in 8<sup>th</sup> century.

There are 22 sites with spurs with hooks in Bohemia (Fig. 7)<sup>16</sup>. They are concentrated along the communications (Mořinka, Tetín, Toušeň, Mukov, Štěpánov) and in the hill-fort (Dolánky- Rubín, Toušeň, Budeč, Stará Kouřim, Tetín, Tismice, Mořinka (undated fortification) and Sekeřice (undated hill-fort) and so on, or strategical points (Chlum in E Bohemia), and hill-fort's surroundings (Sadská near Klučov, Sobotka-Spyšová near Vesec hill-fort). They are no finds in the Western Bohemia yet.

Typologically they are two main groups, with the hooks: 1 with the hooks hooked inside (I.1., fig. 5:I). This type prevail.

2 the hooks are hooked outside (I.2).

Both type have variant with relatively low arch (I.1.A, I.2.A, after Wachowski B-C) and with high one (I.1.B, I.2.B, fig. 5; after Wachowski D, as exception E). The spurs of the second version are usually later (Benátky near Litomyšl, Sv. Jan pod Skalou, Všestary-Chlum).

II. Spurs with eyelets. The variant with eyelets outside and inside hooked (Fig. 5.II, see later).

The spurs have three main technological groups<sup>17</sup>:

T1 bronze cast pieces

T2a with alone prick joint with rivet (this technological group, for example Rubín, Sadská – fig. 4:1, Sobotka-Spyšová – fig. 4:3, Mukov, Sv. Jan pod Skalou – fig. 5:I.1.c)

T2b with the prick connected with the band around arm (one piece from Dolánky-Rubín)

T3 iron monolith spurs

These are domestic in origin and appear quite often (after X-ray snaps); for example Stará Kouřim, Klučov, Otmíčská Hora, Toušeń – 3<sup>rd</sup> piece, Jičíněves – fig. 4:4, Češov, some pieces of Rubín)<sup>18</sup>.

The new detail is tinning of the lot of iron pieces (Mořinka, Sekeřice – one piece, control by RFA analyses, in Moravia Brno-Líšeň) and rarely also bronze pieces (Roštín in Middle Moravia, unpublished)<sup>19</sup>.

The larger group of spurs of type I.1.A were produced in Moravia – from Uherské Hradiště are known unfinished bronze peaces<sup>20</sup> and maybe also in Bohemia (probably iron pieces).

There are 5–6 bronze pieces of type I.1 in Bohemia (Mukov, Sadská, Sobotka-Spyšová, Strakonice, Tismice – only parts of two pieces, and probably Skorkov, which is a spatial imported variant). The cast bronze spur from Mukov was repaired, in place where the hook started. Part of broken hook was reattached by soldering (Sn 25, 68 and Pb 17, 34%). In the case of bronze spur of Sadská, it is recorded grinding of hooks (Fig. 6A). All these spurs have analogies in Moravia (Mikulčice, Uherské Hradiště and Olomouc)<sup>21</sup> with exception of Skorkov.

The most luxurious is the gilded bronze decorated find without preserved prick (it could be an iron one) from Skorkov (Middle Bohemia), which also has no hooks. It has embossed arms. It is not exclude, that this spurs is a western import. It could be dated to the last third of 8<sup>th</sup> and the first third of 9<sup>th</sup> century. Their Carolingian analogies are often also without archaeological context (for example Barsleben, old grave, Phahlheim-Letten – in the wood or Rhein near Manz<sup>22</sup>. The iron analogy with inlay decoration is known from late Merovingian warrior grave 921 from Mengen, but without preserve terminals<sup>23</sup>. Important for the dating of this spur is shape of the arms and their terminals. The end is not preserved in our case, but it was the hook or eyelet.

<sup>15</sup> Profantová 1994.

<sup>&</sup>lt;sup>16</sup> Profantová 1994, ibidem in print 1.

<sup>&</sup>lt;sup>17</sup> Cf. Profantová 1994; Wachowski 1991.

<sup>&</sup>lt;sup>18</sup> Cf. Profantová 1994, obr.1; Profantová / Špaček 2003, obr. 3:5.

<sup>&</sup>lt;sup>19</sup> The evidence of tinning we have also in cases of some cast bronzes of Late Avar Period.

<sup>&</sup>lt;sup>20</sup> Profantová 1994, 67–69, obr. 6; Poulík 1985, obr. 5.

We have more than 15 RFA analyses up today, but not the pieces from Uherské Hradiště, only from Mikulčice, Olomouc, Mukov, Sadská, Sekeřice. In all cases is typical presence of Zn – from 0, 1- to 2,8%, often about 0,3- 1,6%.

<sup>&</sup>lt;sup>22</sup> Stein 1967, Taf. 65:17,18, 34:4, a 87:2; Koch 1984, Taf. 9:1; Nawroth 2001, Abb. 86, 198.

<sup>&</sup>lt;sup>23</sup> Walter 2008, Taf. 265:6.

The next type of spur is also western origin. It has band arms, that are narrowing in the end and with hooks. The hooks are made separately and then forge together with arm(Fig. 5, I.1c). The prick is fastened with rivet (I.1.c, fig. 5). The spur is the only one in Bohemia, analogy has in late Merovingian – early Carolingian milieu<sup>24</sup>. Very similar case is the spur from the grave 515 from Mengen in Merovingian burial ground<sup>25</sup>. Our spur was found in Sv. Jan pod Skalou, near prehistoric hill-fort with imprint of early medieval presence (Late Avar Period finds). Find from inhumation grave in Stehelčeves in Middle Bohemia (9<sup>th</sup> cent.) has similar proportion to the spur from Sv. Jan pod Skalou and to the spurs with eyelets, but it has different terminals, that has rivets on the end of band decorated arms<sup>26</sup>. The spurs with eyelets from grave 788 in Čakajovce (West Slovakia) with buckles and strap-ends are also dated to the 1<sup>st</sup> third/half of 9<sup>th</sup> century<sup>27</sup>.

Also the spur from Sv. Jan pod Skalou could be dated to the end of 8<sup>th</sup>-1<sup>st</sup> half of 9<sup>th</sup> century.

### II.3.2. Spurs with hooks turned out

Some of the spurs with hooks could connect with western production (see above), especially the pieces with hooks turned out as Štěpánov in North-western Bohemia (fig. 4:5). It has analogy in Karlburg am Main<sup>28</sup> and other sites<sup>29</sup>.

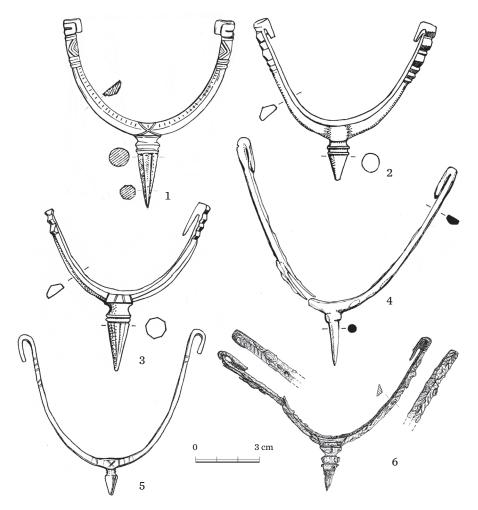


Fig. 4. Spurs with hooks in Bohemia 1: 1. Sadská, distr. Nymburk; 2. Sobotka-Spyšová, distr. Mladá Boleslav; 3. Mukov, distr. Teplice; 4. Jičíněves, distr. Jičín; 5. Štěpánov, distr. Teplice; 6. Sekeřice, distr. Nymburk. 1–3 bronze pieces, rest iron ones. Drawing L. Raslová Institut of archaeology Prague, v.v.i.

<sup>&</sup>lt;sup>24</sup> For example Theune 1999, Taf. 11: 6 – spur with eyelets.

<sup>&</sup>lt;sup>25</sup> Walter 2008, Taf. 153:7.

<sup>&</sup>lt;sup>26</sup> Sláma 1977, Profantová 1994, obr. 4:1, rest unpublished.

<sup>&</sup>lt;sup>27</sup> Rejholcová 1995, Tab. 126. These spurs in grave context are the only ones in West Slovakia.

<sup>&</sup>lt;sup>28</sup> Ettel 2001, Taf. 60: 18.

<sup>&</sup>lt;sup>29</sup> For example Bunte 2013, Taf. 36:2.

The production of the spur from Všestary-Chlum (type I.2b) can be influenced from west as well as from south Poland). It stays an open question without clear archaeological context. That spurs could be dated to the end of 8<sup>th</sup> and beginning of 9<sup>th</sup> century.

### II.3.3. Dating - possibilities

Spurs with hooks we do not know from inhumation graves in Czech Republic with one exception of Mutěnice in South Moravia (1<sup>st</sup> half of 9<sup>th</sup> century)<sup>30</sup>.

It is indirect evidence for dating these types of spurs to the 8<sup>th</sup> century and in Bohemia probably also to the beginning of 9<sup>th</sup> century. Mostly they could be date to the 8<sup>th</sup> century and the beginning of 9<sup>th</sup> century. Only in the Toušeň stronghold spurs were found inside the settlement feature (Nr. 1) and in settlement layer (Nr. 3)<sup>31</sup> and published. The similar situation is in Tišice settlement (3 pieces) in Middle Bohemia, but it is unpublished. The pottery from the features and layer could be dated to the 8<sup>th</sup> and the first third of the 9<sup>th</sup> century. It is in correlation with the situation in Moravia, especially in Mikulčice. There are found minimally in 4–5 cases in settlement features together with Late Avar Period bronzes or needle-case (feat. 138, 199, 1044, XX/60 and probably also 571)<sup>32</sup>.

The spurs are found together with Late Avar Period bronze fitting in the same place also in Dolánky-Rubín, Mořinka, Sekeřice (Fig. 4:6), Tismice (only end parts of spurs) and Budeč. The originally decorated spur from the hill-fort Češov is without detail context, but from the place we know also fitting with Anglo-Carolingian animal decoration from the end of 8<sup>th</sup> century<sup>33</sup>.

The largest concentration of the spurs with hooks is known from Rubín hill (more than 8 pieces) in NW Bohemia<sup>34</sup>, then are the sites with 3 pieces (Toušeň, Tišice) and two pieces (Mořinka, Budeč/Kováry and Sekeřice –all situated in Middle Bohemia).

The high of spur's arm is in case of Bohemia's spurs in category B/C (concrete 40–60 mm, 10 pieces) after K. Wachowski and |D (61–83 mm, 8–9 pieces)<sup>35</sup>.

The decoration of bronze pieces is usually geometrical, plastic relief (often ribbed) as well as engraved (cf. Fig. 4:1–3, 6b). The prick is circular or not often quadrate in section (Fig. 4,5). The exceptions are two bronze pieces from Sadská and Mukov with octagon section (Fig. 4: 1,3) and with the same pieces in Moravia.

The new finds of spurs with hooked terminals were found in Češov, Sekeřice, Jičíněves, Všestary-Chlum (strategical point), Mořinka, Mukov, Sobotka-Spyšová (Fig. 4:2), Štěpánov (found in the wood, Fig. 4:5) and Tismice (unpublished). The piece Nr. 2 from Sekeřice were decorated on the pricks as well as on the arms and both pieces are tinned (Fig. 4:6, 6B).

Spurs with eyelets

In Bohemia there is very rare type of spurs with eyelets hooked outside. This spurs was found only in Sekeřice "prehistoric" hill-fort (fig. 5, piece 1)<sup>36</sup>. It has very short prick and it is western origin, the good analogy is known from rich grave 20/1893 from Pfahlheim dated to the 7<sup>th</sup> century<sup>37</sup> with spathe, bridle and cross-shaped mounts. Find from Sekeřice I date with caution to last third of 8<sup>th</sup> and beginning of 9<sup>th</sup> century because of other finds from the hill (arowheads, lance, Late Avar bronze mounts). Later(?) version with eyelets hooked inside is known from suburb in Libice nad Cidlinou (fig. 5: IIa)<sup>38</sup>. The similar spur with eyelets is known also from Mikulčice in Moravia<sup>39</sup>. The eyelet-spurs are known from Merovingian and also more rare from early Carolingian milieu (for example Osnabrück with reparation)<sup>40</sup>.

<sup>30</sup> Kavánová 1982.

<sup>&</sup>lt;sup>31</sup> Profantová / Špaćek 2003.

<sup>32</sup> Klanica 1995, Abb. 8, 19, 26; Profantová 1992, Taf. 15, 19.

<sup>&</sup>lt;sup>33</sup> But some iron loops from 9<sup>th</sup> century, too. Profantová 1999; Profantová 2012.

<sup>&</sup>lt;sup>34</sup> But it is quite smaller than Mikulčice in Moravia with cca 70–75 pieces (Profantová 2010, Tab. 3) and similar to Brno – Líšeň with cca 8–10 pieces. A lot of them (5) is with separately prodused prick T2.1 and and T2.2 and with inlay using silver wire. Only one piece is a bronze spur (unpublished).

 $<sup>^{35}</sup>$  Wachowski 1991, 87. I have not written about two exception of spurs with long prick and hooks, one is unpublished yet, both are from the  $10^{th}$  century.

<sup>&</sup>lt;sup>36</sup> Profantová in print 1, fig. 11:1.

<sup>37</sup> Nawroth 2001, Abb. 8, Tab. 39.

<sup>38</sup> Profantová 1994, Obr. 5:4.

<sup>&</sup>lt;sup>39</sup> Klanica 1986, obr. 30:6.

<sup>&</sup>lt;sup>40</sup> Gabriel 1991, 182 ff.

The Sekeřice spur could be dated to the end of  $8^{th}$  and  $1^{st}$  third of  $9^{th}$  century.

The production of Libice spur is dated to 1<sup>st</sup> half of 9<sup>th</sup> century, maybe also 60s of the c., settlement context is not published, and it is probably later.

From Křinec hill have come two spurs with rectangular plates and cross-shaped terminals and filigree decoration around the rivets, in one case the spur is probably of Carolingian origin dated to the 1–2<sup>nd</sup> third of 9<sup>th</sup> century<sup>41</sup>. The oldest spurs from the graves are spurs with plates and vertical lines of rivets from the rich warriors graves in Kolín, Kouřim, gr. 55 and grave of warrior in front of the fortification, and Nymburk-Zálabí (dated between 810–870, prob. about 850–860 AD)<sup>42</sup>. Loop and strapeends from the spur sets are also found in Bohemia, sometimes in the regions, which are without spur finds yet (surroundings of Vysoké Mýto in Eastern Bohemia (Svařeň), the western analogies, for examp. Unterthürheim)<sup>43</sup>, the similar loop are known and unpublished also from Middle Bohemia (Tatce).

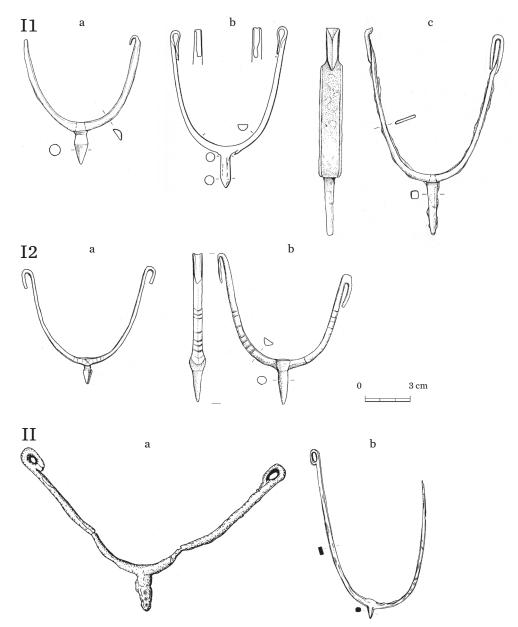


Fig. 5. The main types of spurs with hooks and eyelets and short prick in Bohemia (I, II) I.1.a Mořinka Nr. 1, I.1.b Benátky near Litomyšl, I.1.c Sv. Jan pod Skalou; I.2a Štěpánov, I. 2.b Všestary – Chlum; II.1a Libice n. Cidlinou, II.2b. Sekeřice, Nr. 1. I.1.b, II. 1 after N. Profantová 1994, rest drawing L. Raslová, Institut of archaeology Prague, v.v.i.

<sup>&</sup>lt;sup>41</sup> Profantová in print 1.

<sup>&</sup>lt;sup>42</sup> Profantová 1994; Košta / Lutovský 2014, tab. 10, The new unpublished stray find of large spur of this type is from Opárenské údolí near Litoměřice. The map of grave with spurs Profantová 2013, Abb. 1.

<sup>43</sup> Koch 1984A, Abb. 3.





Fig. 6. a. Sadská, detail of grinding of hook; b. Sekeřice, detail of tinning and decoration of spur. Microphoto D. Perlík.

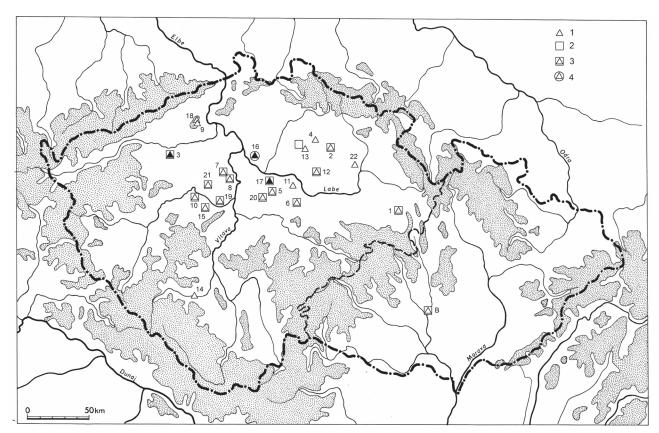


Fig. 7. Map of the spurs with hooks in Bohemia find up to 2013. Symbols 1. spur with hooks; 2. hill-fort; 3. Find in the hill-fort or undated hill-fort; 4. Find in the settlement. Full 3 and more spurs in site, sites: 1. Benátky; 2. Češov; 3. Dolánky-Rubín; 4. Jičíněves-wood; 5. Klučov-háčky odlomeny; 6. Kouřim; 7. Kováry Budeč-akropole; 8. Levý Hradec-noncomplet; 9. Mukov; 10. Otmíče, probably Otmíčská Hora hill-fort; 11. Sadská (Kersko); 12. Sekeřice; 13. Sobotka-Spyšová and hill-fort Vesec; 14. Strakonice; 15. Tetín (lost, only photo); 16. Tišice; 17. Toušeń; 18. Štěpánov; 19. Mořinka (hill-fort undated); 20. Tismice; 21. Sv. Jan pod Skalou; 22. Všestary – Chlum; B –Brno- Líšeň in Moravia, lying in the road to Bohemia. Skorkov is not in map.

### II.4. Decorations

The decorations of horse harness are found in smaller number than Late Avar Period mounts from belts. I know 17–19 sites in Bohemia (Tab. 2).

A lot of phaleras were found in Bohemia during the last 6–7 years including luxurious types in shape of wild boar and horse, often also with engraved plant ornament. This type of decoration were found in Dolánky-Rubín, Podhůří-Jedlová (unpublished), Nová Ves I near Kolín, Tismice, Lipany, Nepřevážka, Hostim (Fig. 8:11–13,15–17, minimally 7 sites, the only published find is from Dolánky).<sup>44</sup>

<sup>&</sup>lt;sup>44</sup> Profantová 2010, Abb. 9:13.

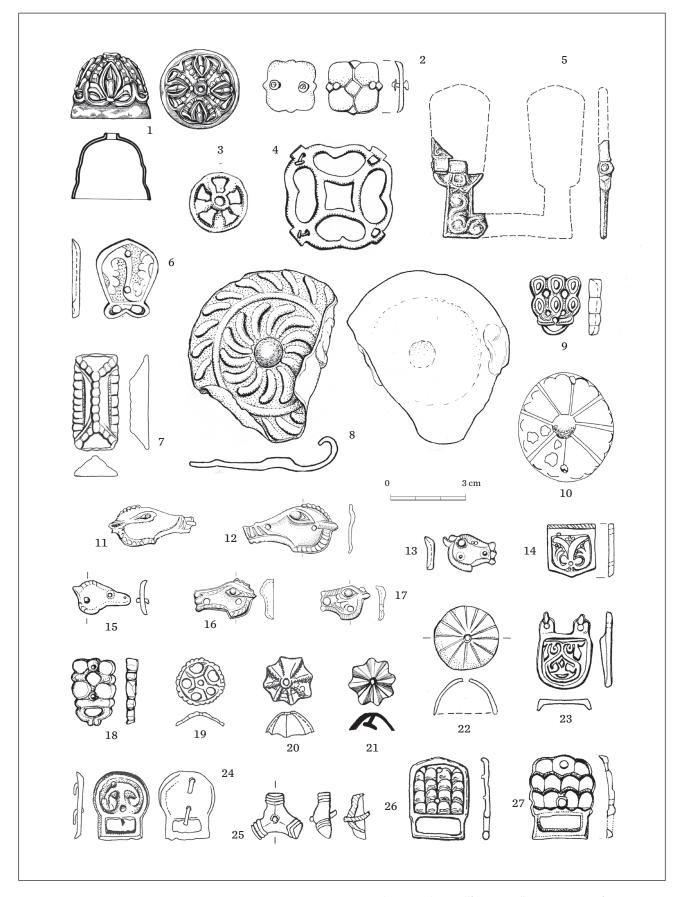


Fig. 8. Horse harness decoration of Late Avar type from Bohemia (selection): 1. Bošín; 2 Kosoř / Praha-Radotín; 3, 4. Budeč / Kováry; 5, 25–27. Kal; 6. Lštění; 7, 14–15, 18–22, 24. Tismice; 8. Dobřichovice; 9. Lipany; 10–11. Dolánky-Rubín; 12, 17. Nová Ves I; 13. Hostim; 16. Nepřevážka; 23. Zámostí/Prachov. 1 after Profantová / Vích 2012, 2 Profantová 2015a, 3, 4, 10–11,18–20, 23, 24–26. after Profantová 2010, rest unpublished. Drawing L. Raslová, Institut of archaeology Prague, v.v.i.

Usually the mounts are small pieces, only\_Dolánky, Nová Ves I (Fig. 8: 11, 12) and Lipany are little bit larger and mainly Podhůří is gilded luxurious large piece (7 cm). High status had the man, who's horse was decorated with openwork phalera from Budeč, which has close parallel in Děvínská Nová Ves near Bratislava, in Komárno and its sourroundings<sup>45</sup> as well as in Vörs near Balaton lake.

More than three decorated pieces of harness we know only from Tismice (minimally 9–10 pieces, fig. 8:7,14–15,18–22,24) and from Kal (4 pieces and 2 bridlesides), Dolánky-Rubín (3 pieces, 2 of them are wild boar shaped, fig. 8:11 and 10) and Lipany (tab. 1, fig. 8:9, rest unpublished). Two pieces were found in Budeč/Kováry (Fig. 8:3,4), Nová Ves I (fig. 8:12,17).

The special attention is necessary got to an luxurious part of gilded phalera-cap from Bošín in Eastern Bohemia (fig. 8:1). It has parallels in Komárno (Gr. 101 and 142) as well as Szentes- Berekháti in Hungary<sup>46</sup>. This decoration could be dated to 2<sup>nd</sup> half of 8<sup>th</sup> century till 1<sup>st</sup> third of 9<sup>th</sup> century. The phalera from Mořinka/Dobřichovice decorated with 'sun' motif (Fig. 8:8) has parallel in burial ground in Hortobagy-Arkus<sup>47</sup> and newly in Slovakia. This find has one more verge with plant ornament and it is dated to 8<sup>th</sup> century.

The find from Kal (Fig. 8:5) has parallel type in Komárno, grave 121. Komárno find has different geometrical decoration<sup>48</sup>, so our find with plant, concretely a leaf decoration is unique. It was produced in the end of 8<sup>th</sup> century.

The decoration from Lštění, Zámostí and strap-end from Tismice (Fig. 8:6, 14, 23) – all with plant decoration, two of them also with spotted/dotted background, are connected with the Komárno and Blatnica (Slovakia) milieu (production centre is supposed near or in Komárno). The decoration with loop from Lštění has analogies also in Mikulčice<sup>49</sup> and no so exact in Keszthely. The decoration Nr. 36 from Tismice with silver foil (quite unique technique) and plant ornament is very exclusive, and it belong to the same production centre as the above mention pieces (Fig. 8:24).

Some archaeological objects found in the Bohemian territory document the following plundering by the Slavonic tribes in the territory of the Avar Khaganate after its destruction 795–6 (Tismice??).

The others horse decorations could document the appearance of 'foreign' troop from the territory of Avar Empire (for example situation in Kal). Some of the pieces could change the function and be used as a decoration of belt.

Site	Type of site	Nr.of harness decoration	Dating (production)	
Bělčice, Be	?	1 jingle-bell	8 <sup>th</sup> - beg. 9 <sup>th</sup> cent.	
Bošín	settlement	1 gilded *	End of 8 <sup>th</sup> -beg. 9 <sup>th</sup>	
Broučkov u Kouřimi	Settlement	1 small piece	8 <sup>th</sup> cent.	
Dolánky	Hill-fort	3 *(1 unpublished)	8 <sup>th</sup> cent.	
Dobřichovice	settlement	1*	8 <sup>th</sup> - beg. 9 <sup>th</sup> cent.	
Hostim	Hill-fort	1*	8 <sup>th</sup> cent.	
Kal	Hill-fort	4*	8 <sup>th</sup> cent.	
Kosoř/Praha Zličín	Undated Hill-fort	1*	8 <sup>th</sup> cent.	
Kováry-Budeč	Hill-fort 9th cent.	2-3 *	End of 8 <sup>th</sup> begin. of 9 <sup>th</sup> cent. (production)	
Lštění/ <u>Čtyřkoly</u>	Hill-fort	1 gilded*	End of 8th begin, of 9th cent.	
Lipany	Settlement	3, min. 1 gilded 1*(unpublished)	8 <sup>th</sup> cent.	
Nepřevážka	Sorroundings hill-fort	1 gilded *	8 <sup>th</sup> cent.	
Nová Ves I	Settlement	2-3 *	8 <sup>th</sup> cent.	
Nová Ves II	Settlement	1	8 <sup>th</sup> century	
Praha- Šárka	Hill-fort	2	8 <sup>th</sup> -1th third of 9 <sup>th</sup> cent.	
Počaply	Hill-fort 10th cent.	1	Production 8 <sup>th</sup> cent.	
Podhůří	Hill settlement	1 gilded luxurious+ jingle -bell	8 <sup>th</sup> cent.	
Sv. Jan pod Skalou	Hill settlement	1 + 1 jingle-bell 8 <sup>th</sup> cent.		

<sup>&</sup>lt;sup>45</sup> Profantová 2010, 219, Abb. 5-map.

<sup>&</sup>lt;sup>46</sup> Profantová / Vích 2012, 201, obr. 2-4.

<sup>&</sup>lt;sup>47</sup> Die Awaren, Abb. 87.

<sup>&</sup>lt;sup>48</sup> Profantová 2003, 542–3, obr. 2.

<sup>&</sup>lt;sup>49</sup> Profantová 2004, obr. 4, 5; Profantová 2010, Abb. 25:6.

Tismice	Hill-fort	9, + 2 jingle-bells, *	8 <sup>th</sup> century
Zámostí	Hill-fort	1 *	8/9 <sup>th</sup> cent

Tab. 2. The numbers of horse harness decorations from Bohemia, data after Profantová 2010, and 2015a; Profantová / Vích 2012 and unpublished. \* mean drawings in fig. 8

### IV. Graves with horses

There are documented the graves of horsemen or horse-grave. Unfortunately, all minimally 3 cases are early finds or undocumented ones. The burial of horse from Přerov nad Labem (yard Nr. 62 in square) preserved part of yang horse skeleton (7–12 months old)<sup>50</sup> and wooden and all-iron metalwork bucket (taxus, H.168 mm, 5 hoops] of Moravian type with broken out trapezoid bucket mounts, and also brass mount of sheath dagger or knife (H. 53 mm) and knife (Fig. 9, knife is lost). Grave can be dated to the Early Middle Ages (9<sup>th</sup> century and beginning 10<sup>th</sup> century is quite probable)<sup>51</sup>. The all-iron metalwork bucket are in Bohemia rare, one is known from Kolín duke grave others from the two graves from Kouřim (duke and child, Nr. 120 with sword and spurs, and Nr. 132, 9<sup>th</sup> century)<sup>52</sup>. The taxus wood was used for buckets in Bohemia (9<sup>th</sup>- beg. 10<sup>th</sup> century) as well as in the graves from Late Avar Period in Komárno (the bucket was given specially to horse in graves). The radiocarbon dating from bones has not been made yet.

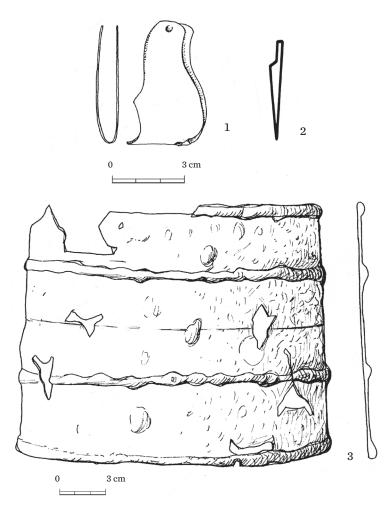


Fig. 9. Přerov n/L, náměstí. The grave of horseman, 1. brass; 2–3. iron. The bucket is important for dating of grave. Drawing L. Rasslová, Institut of archaeology Prague, v.v.i. Unpublished.

<sup>&</sup>lt;sup>50</sup> Specification: R. Kyselý, Institut of archaeology Prague, v. v. i.

<sup>&</sup>lt;sup>51</sup> Profantová 2004.

 $<sup>^{52}\,</sup>$  Šolle 1959, 470, obr. 78:3,4, and Košta / Lutovský 2014.

In the 150 cm deep grave from Praha/Prague-Lysolaje behind a head of man has preserved incomplete vessel decorated with comb-formed oblique puncture and wavelet decoration. This vessel has plastically formed shoulders. This decoration has analogy in pot from grave 16/2003 in Roztoky-Žalov<sup>53</sup> as well as in the pot in Prague- Dolní Liboc/Vokovice- Šárka<sup>54</sup> and in Middle-eastern Bohemia.

The man lay hunched up above the horse. The horse was oriented with head to the Northwest.

The bowl can be safely dated to the late 9<sup>th</sup>-1<sup>st</sup> half of 10<sup>th</sup> century<sup>55</sup>. The 2 horsemen's graves from Libice nad Cidlinou/u cukrovaru<sup>56</sup> were a part of burial ground mostly dated to the 10<sup>th</sup> century. But there were also found earrings from the Avar Khaganat Period (1<sup>st</sup> half of 8<sup>th</sup> cent.)<sup>57</sup>.

Grave 41 has also skeleton of horse on back and above him a man skeleton oriented by head to East. Its orientation is different from the graves dated to  $10^{th}$  century. Grave 82 was only a half of horse skeleton with "head turned on the back and bended forelegs" and above him a man skeleton without any other finds<sup>58</sup>.

The grave of horseman is also mentioned from Kal in eastern Bohemia, near early medieval hill-fort with a lot of mounts from Avar Kaghanat Period, without any other documentation. The similar case is known from Dobřichovice in Middle Bohemia, the skeleton of horse was undated.

The ritual graves of horse are known as well as from Moravia (Nemilany, Dolní Věstonice, Krčmaň near Olomouc, Břeclav-Pohansko)<sup>59</sup> but without archaeological equipment and quite often also without connection to the man burial. The age of horses in Nemilany is variable – young, mature and old. The burial grounds with horse burials are dated to 9<sup>th</sup>–1<sup>st</sup> third of 10<sup>th</sup> century.

The interpretation of the knowledge is quite discussion, probably we can meet with an especial ritual, possibly influenced from south-eastern Europe.

### V. Conclusions

Riding the horse was necessary for war as well as for diplomacy. The concentrations of finds interpreted as parts of horse harness and spurs show us – more strategical hill-forts or places.

This role was held in Bohemia by Rubín hill (Dolánky), newly also Kal (probably plundered by army)<sup>60</sup>,Toušeň and Tismice in end of 8<sup>th</sup> – beginning of 9<sup>th</sup> century. Similar role was played by Kouřim, Kolín, Levý Hradec and Čěšov hill-fort during 9<sup>th</sup> and the first half of 10<sup>th</sup> century.

The character of some unpublished settlements – concretely Tišice with 3 finds of spurs with hooks is unclear yet, probably in this case is in connection of ford through Elbe river.

The number of sites with hooked spurs with short prick (21- 22) was higher than the sites with spurs with plates and short prick (16). Spurs with plates prevail in graves of 2<sup>nd</sup> half of 9<sup>th</sup> and beginning of 10<sup>th</sup> century<sup>61</sup>. It is a strong difference from the Moravia region. Explanation of this could be influenced by level of research of burial grounds, but not exclusively. The important is also shorter interval of burying with spurs during 9<sup>th</sup> century in Bohemia.

The quite large concentration of spurs with hooks is newly also in lower reaches of the river Berounka, in the way leading in western direction to Bavaria.

The situation had changed during the wars of Charlemagne against Avars in the end of 8<sup>th</sup> century. The spurs of various forms (bronze decorated item with long arm, spurs with eyelets, then with plates with rivets and short prick) started to be imported from the west and as well as some weapons (especially swords). The contacts with Carolingian empire were quite often, and not only peaceful.

The military campaigns were in the years 805–806 (against Canburg hill-fort). Carolingian troops plundered Elbe territory in Middle Bohemia for 40 days<sup>62</sup>. Some luxurious finds of Carolingian origin could be in connection with this event: luxurious bronze spur from Skorkov,

<sup>53</sup> Tomková a kol. 2012, obr. 120, also other obr. 7:1.

<sup>54</sup> Sláma 1977, Taf. 22:4.

<sup>55</sup> Korený 2010, obr. 1.

<sup>&</sup>lt;sup>56</sup> Píč 1909, 120.

<sup>&</sup>lt;sup>57</sup> Profantová 1992, Taf. 5:4.

<sup>&</sup>lt;sup>58</sup> Turek 1946, 54.

<sup>&</sup>lt;sup>59</sup> For example Přichystalová-Kalábek 2014, chapt. 9, tab. 2.

<sup>60</sup> Profantová 2003.

<sup>61</sup> Profantová in print, Tabel 4.

<sup>62</sup> Chronicon Moissiancence Ad A. 805, Pertz Ed. 1826, 307-308.

bronze loop from sword set from  $Hradsko^{63}$ , some coins of Charlemagne, for ex. Kostelní Hlavno,  $Tismice^{64}$ .

Silver and bronze wires, casts and a forging form for production of repoussage decoration of harness could be evidence of local production after Avar cultural pattern or of presence of craftsman from the Carpathian basin.

The emergence of elites in Bohemia in the last third of the 8<sup>th</sup> and the 1<sup>st</sup> half of the 9<sup>th</sup> century is evidenced by combination of archaeological finds such as hooked spurs, cast belt fittings or saxes and other weapons as well as the building of the oldest hill-forts (Kal, Tismice, Klučov, Dolánky and so on)<sup>65</sup>. Differences in the elite's groups are partly recognisable in 2<sup>nd</sup> half of 9<sup>th</sup> century, in the connection of exploration of elite inhumation graves. The double grave from Kolín was the highest status one. The residence of some dukes are known from the last third of 9<sup>th</sup> and 1<sup>st</sup> half of 10<sup>th</sup> century (Levý Hradec, Němětice).

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