THE HARNESSES FROM THE THORSBERG BOG: NEW EVIDENCE REGARDING CAVALRY EQUIPMENT OF THE ROMAN IRON AGE

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Abstract

The harnesses of the north European war booty bog finds comprise the only source of information about the mounted warriors in military context. Their equipment suggests that the Germanic military riders probably had the same fighting and riding style as the Roman cavalrymen. Nevertheless, qualitative analyses indicate that the mounted warriors belonged more to a military and social elite, than to a uniformly equipped cavalry.

Key words: harnesses Thorsberg, bog finds, cavalry equipment, Roman Iron Age, riding style, military organisation.

The Thorsberg Bog Find

There is no other archaeological site in the *barbaricum* that has such a great number of Roman Iron Age horse equipment than the Thorsberg bog find in northern Germany near Schleswig. The altogether 27 sets of harnesses which could be identified belong to two chronologically different deposits: the main offering in the C_{1b} in the first half of the third century and a later offering in C_2/C_3 about AD 300 (Lau 2007; 2008).

Germanic Harnesses of the Roman Iron Age

The harnesses consist of numerous objects, among which are characteristic fittings like bridles, bridle chains and nose fittings but also very unspecific mountings like buckles and strap-ends, which also could belong to belts and shoulder-belt. The only way to allot them to elements of bridles and saddles and assemble them to sets of harness is due to criterions like form and types as well as material, decoration and measures. Likewise, we get information about the find situation, bequeathed by the excavation diary of Conrad Engelhardt of the year 1860 and the catalogues of the royal collection of antiquities Flensburg of the years 1856–1861. All in all 15 bridles with bridle chains of so-called Vimose and Illerup type as well as 3 different bridles with propeller shaped fittings and leather reins belong to the main offering in the first half of the third century (Phase C_{1b}) (Plate II.1-2). These sets of bridles and saddle gear consist particularly of rich fittings like nose fittings, strap distributions and decoration fittings. The bridles show a grand range of variation of used fittings related to material and decoration as well as forms. While the elements of roman harness have been produced in mass productions the different elements of harness sets of barbarian horse equipment are coordinated and show considerable qualitative differences. They are individually designed and above average covered with silver and gold. As well, the harnesses of the C_{1b}– deposit of Illerup Ådal in western Jutland show a huge amount of precious metal as well as rich decorations. They are furthermore – concerning the find situation – connected with noble garnitures of swords, shields and personal equipment. It can be assumed that in these cases the equipment of warriors of the military elite was sacrificed (von Carnap-Bornheim and Ilkjær 1996, p.473).

Horse Equipment of the Military Elite

Qualitative analysis of the retrieved military equipment of Illerup Ådal show different levels of used material which can be implicate in different military and perhaps social ranges of the Germanic army. Claus von Carnap-Bornheim and Jørn Ilkjær (von Carnap-Bornheim and Ilkjær 1996, p.263 table 7) differ three military ranges: the military leaders with silver plated equipment, partially furnished with golden sheets, the so called „officers“, the second rank, with mainly bronze equipment, including bridles with bronze and iron bridle chains of the Vimose and Illerup type, and simple warriors with equipment of iron. There have to be done some critical remarks: in Thorsberg iron is achieved only exceptionally, so the simple bridles as well as the bridles with bridle chains of the Illerup type are considerably comparatively low. The compa-

rability between Thorsberg and Illerup has to be handled with care because only 60% of the archaeological site of Illerup was excavated until now. Furthermore, it is difficult to assign the composition of equipment of mounted warriors and foot soldiers as well as the proportion between the equipment of military leaders and warriors of lower grades to the real circumstances. Mounted warriors had a better chance to escape, so it is possible that their equipment is underrepresented at the place of finding. Also the intention and selection of the sacrificed objects are unknown, so it cannot be excluded that rich equipment has sacrificed rarely because of the value of the raw material or in contrast numerously because of a special ritual focus on the equipment of the military elite. These questions are unable to resolve from today's view. The sets of bridles of the C_{1b} deposit of Thorsberg exhibit the following average measures: twelve harnesses consist mainly of bronze (67%), while five harnesses show bronze with silverplating (22%) and further two bronze with silver plating and additional goldsheets (11%). So the proportion between bronze and bronze with precious metal is about 67%: 33%. Five sets of bridles feature silver plating all over the surface; these are the richest harnesses from Thorsberg bog. Two of these outstanding harnesses with gold sheets adverting to two mounted warriors of the highest military elite could be identified (Plate II.2). The bridles of Illerup Ådal show a proportion of 60% mainly bronze and 40% bronze bridles with silver plating. They don't feature any gold sheets, so the proportion of bronze to silver plated harness of Illerup and Thorsberg correspond, if the mainly silver plated bridles from Thorsberg and those, additional furnished with gold sheets, were add together. It is remarkable that the saddle gear from Illerup is more often plated with silver and additional gold sheets than the bridles, as well in Thorsberg the lateral strap ends consist more often of silver. So mainly bronze headgear appear together with silver plated saddle gear. The usage of precious metal at bridles was obviously reserved to a smaller circle of mounted warriors. Comparisons between the Thorsberg harness and other finding categories show relatively less application of precious metal at personal and military equipment. Reasons for it could also be practicability or different state indicating relevance of the different finding categories. It seems to be the equipment of bronze and precious metal of 33 warriors, a considerably major number then the 17 identifiable harnesses, but the harness has been furnished proportional more often with precious metal. It is arguable to what extent the equipment of harness furnished with precious metal is an evidence of a high military and furthermore social rank. The used precious metal as well as the enormous amount of bronze, needed for the production of harness, suggests that only the social elite could order such objects. In addition, harnesses consist to a large part of decorative non-functional elements without any importance for a victorious ending of a military conflict. As well roman harness are characterised by numerous decorative elements. In this regard a citation of Hadrian (117–138 AD about the riders of the VIth cohort Commagenorum (Mauretanien) might be interesting: "…the decoration of the horses and the decoration of the weapons equates to their pay...".

Mode of Action and Functionality of the Germanic Bridles

The main constructive elements of bridles and saddle gear are – next to the ornamental mouldings – due to their functionality. Therefore, a special style of riding and fighting as well as the need to achieve a specific behaviour of the horses at important military situations account for specific constructive elements of harness. As well it's possible to draw conclusions from the available elements of harness on the riding and fighting style of mounted warriors, which is not know from other sources. The constructive most significant element of the bridles is the curb in conjunction with nose fittings and so called *Kehlbergen* (throat guards), typical for bridles with bridle chains of the C_{1b}– deposits (Fig. 1). When pulling the reins a leverage results (Junkelmann 1992, p.15ff). On the one hand, the bar under the horse's chin was depressed against the chin; the angle of the bit was depressed into the palate/roof of the mouth. This effect is foremost intense in conjunction with nose fittings and so called *Kehlbergen* (throat guards), which were fixed around the jaw of the horses. So the horse is not able to open the mouth to avoid the pressure. We find the same principle at roman curb bits in conjunction with noseband and chin frame (Junkelmann 1992, p.20 ff fig.9). Both kinds of bridles are well thought-out constructions, which can be applied, flexible but in important situations make for an immediate obeying of the horses. The bit is not moved by riding with only one hand, when the reins lie at the horse's neck but when pulling the reins the horse will feel pain. The characteristic Germanic curbs are probably endpoint of a development of different bridles. Curb bits appear since the third century BC in Italy and in the region of lower Danube. Related to the Italian examples are finds from Normandy like Léry (Frey 1984, p.125 fig.4; Kull 1996, p.425ff, fig.6.7) and La Mailleraye-sur-Seine (together with simple bits) (Lequoy 1993, p.130 fig.12; Kull 1996, p.425ff fig.6.6), dated in middle and late La Tène. The development of the Germanic curb bits came probably

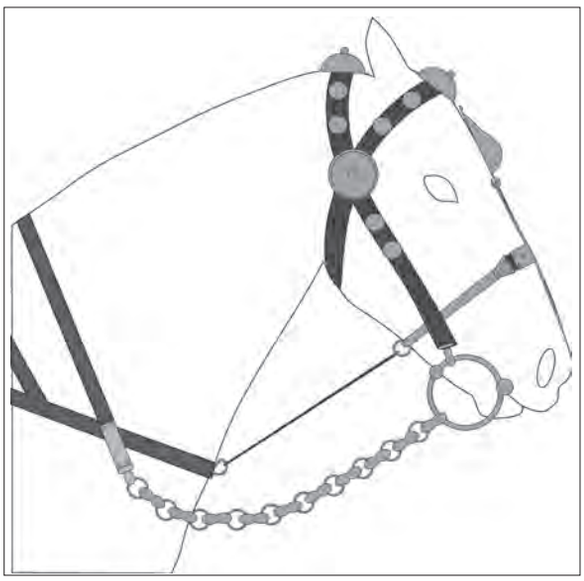

Fig. 1. Reconstruction of a bridle with bridle chains of the so-called Vimose type.

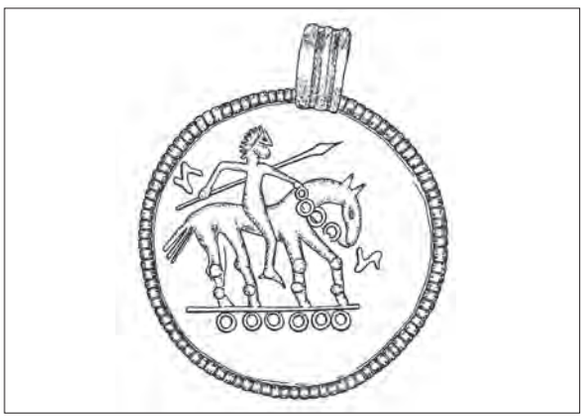

Fig. 2. Bracteates of Sundsvall, Sweden (after Imer 2007, p.381).

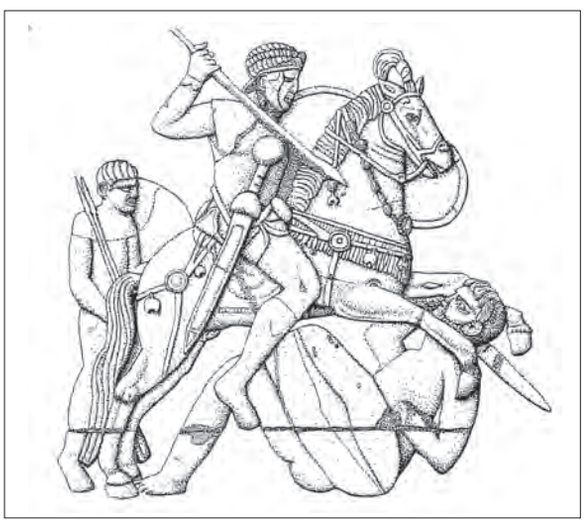

Fig. 3. Tombstone of T. Flavius Bassus, the late first century AD (Römisch-Germanisches Museum Köln) (drawing after Bishop 1988, p.69 fig.1).

about the transmission of bit and chin pole from the balcanic-Italian curb bridle to the local Gallic bits like a mixed bridle from Alesia makes clear (Krogh 1966, p.65 fig.7.2; Lawson 1978, p.155 and 157 fig.10, 6; ann. 65; 65a; Deyber 1994, p.291 fig.239; Kull 1996, p.426 fig.6, 4; 428 ann. 51).

As well, the function of the characteristic Germanic bridle chains has been discussed frequently in context with analysis of the Roman Iron Age harness. In most cases, it was assumed that they have decorative function or were made for protecting the horses´ neck (La Baume 1944, p.9; Baranowski 1973, p.477). Furthermore, the bridle chains have a specific function concerning the style of riding and fighting of Germanic warriors. Concerning the matter there are no direct sources for the Germanic mounted warriors, therefore we have to resort to secondary sources like illustrations from early migration period bracteates (Mackeprang 1952, tabl.2,2.10; Vierck 1978, p.279 fig.20.8; Axboe 2004, table 11) (Fig. 2). The illustrated riders carry a lance in one hand whereas the two reins lay loosely in the other hand. Instead of leather reins, we see chains of large loops, in all probability bridle chains. Such a riding style is well known from roman tombstones (Fig. 3). Mounted warriors of the roman army fought typically with lances (Junkelmann 1991, p.71; Adler 1993, p.240ff.; Schleiermacher 1999, p.61; Kemkes 2007, p.111). Due to the fact that the reins, hold just in one hand, could only be applied with reservations the usage of extra hard bridles was essential. The riders guide by using their weight and legs but also by laying the reins at the respective side of the horses' neck (so-called neck-reining) (Junkelmann 1992, p.11ff.). The riding style with the usage of just one hand can be compared with modern western riding style where the reins were hold loose high at the horses neck and not tightly like when classical riding. By a loose keeping of light leather reins vibrations result, which could be misunderstood by the horses as demand of changing the direction. These vibrations can be avoided by higher weight of the reins. Modern Western riders use rein weights as well as rein-chains. Only in conjunction with a westerncurb, similar to the Germanic curbs of the roman Iron Age, riding with only one hand is practised. While riding with both hands a so-called *Snaffle Bit* is used, comparable with a simple bit with two bit loops. A similar phenomenon could be found with the different usage of curbs and simple bits of the harness from the North-European war booty offerings. Bridle chains are together with curbs (e. g. Ørsnes 1988, tables 168-169) as well as leather reins are together with simple bits (ibid. tables 182.2; 183.2). This means that military riding and fighting with one-hand demands bridles with bridle chains and curbs as well riding with

both hands without fighting demands only simple bits with leather reins.

The usage of bridle chains is obviously functional, so why aren't they known from roman find contexts? Chains with eight-shaped, mostly iron links are well known, but they can belong to many other finding categories like foot chains, chains of vessels or for wagons. But some of them could be connected with harness like for example the chain from a horse grave, dated into the second half of the second century AD of Krefeld Gellep (Pirling 1986, p.244ff fig.2; 1989, no. 138 3569 plate 94) or an iron chain with a bridle from Kalkriese (Franzius 1995, p.159 fig.10).

Conclusion

Surely, the duties and riding as well as fighting styles of roman and Germanic mounted warriors cannot be directly assigned. As for Roman riders for Germanic riders different duties can be assumed like the functional different bridles show. The hard bridles with curb and bridle chains were used in military coherences by fighting riders. The simple bits with leather reins could be used with horses for carrying messages as well as drafting wagons for example. The high quality, the frequent usage of precious metal and the individual decoration as well as the huge amount of needed material for the production of the bridles with bridle chains indicate mounted warriors of the Germanic military and social elite, „officers" and military leaders, less members of an uniformly equipped cavalry.

Translated by author

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PAKINKTAI IŠ THORSBERGO PELKĖS RADIMVIETĖS – NAUJAS JOJIMO REIKMENŲ ROMĖNIŠKAJAME GELEŽIES AMŽIUJE TYRIMAS

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Santrauka

Nėra kito tokio archeologinio paminklo *barbaricum* kaip Thorsbergo pelkės radimvietė, kurioje rasta toks didelis skaičius romėniškojo geležies amžiaus žirgo aprangos reikmenų. Iš viso nustatyti 27 pakinktų rinkiniai, kurie priklauso dviem chronologiškai skirtingiems depozitams: pagrindiniam aukojimui C_{1b} periode III amžiaus pirmojoje pusėje ir vėlesniam aukojimui C_2/C_3 periode, apie 300 m. po Kr. Kamanos liudija platų naudotų apkalų pasirinkimą tiek žaliavos, tiek puošybos, tiek ir formos atžvilgiu (1 pav., II.1–2 iliustr.). Romėniškų pakinktų elementai buvo masinės gamybos rezultatas, o įvairios barbariškų žirgų aprangos pakinktų dalys rodo didelius kokybinius skirtumus. Jos yra sukurtos individualia maniera ir paprastai būna padengtos sidabru ir auksu. Thorsbergo kamanų rinkiniai iš C_{1b} periodo depozito rodo tokius skaičius: dvylika pakinktų susideda daugiausia iš žalvario (67%), kiti penki pakinktai yra žalvariniai su sidabro danga (22%), o dar dveji yra žalvariniai su sidabro danga ir auksinėmis plokštelėmis (11%). Taigi proporcija tarp žalvarinių ir žalvarinių su tauriuoju metalu detalių yra apie 67% : 33%. Penkių kamanų rinkinių visų detalių paviršiai padengti sidabru – tai turtingiausi pakinktai iš Thorsbergo pelkės. Dveji iš pastarųjų išskirtinių pakinktų su aukso plokštelėmis gali būti siejami su dviem raitais aukščiausio karinio elito kariais. Thorsbergo pakinktų ir kitų radinių kategorijų palyginimas rodo santykinai rečiau naudojus tauriuosius metalus asmeninei ir karinei aprangai. Aukšta kokybė, dažnai naudojami taurieji metalai ir individuali puošyba, taip pat didelis reikalingų žaliavų kiekis kamanų su grandinėmis gamybai liudija germanų karinio ir socialinio elito karius, „karininkus" ir karo vadus, ir mažiau vienoda apranga aprūpintą kavaleriją. Ypatingas jojimo ir kovos stilius, taip pat poreikis išgauti tam tikrą žirgų elgseną svarbiose karinėse situacijose vertė naudoti tam tikros konstrukcijos pakinktų elementus. Germaniškosios kamanos yra gerai sumanytos konstrukcijos, jos galėjo būti naudojamos paslankiai, tačiau svarbiose situacijose vertė žirgą staigiai paklusti. Ir kamanų grandinės turėjo ypatingą paskirtį, susijusią su germanų karių jojimo ir kovos stiliumi. Tiesioginių šaltinių apie germanų raituosius karius neturime, taigi kaip iliustraciją panaudojame antrinius šaltinius pagal ankstyvųjų tautų kraustymosi laikų brakteatus ar romėnų antkapinius akmenis. Jie rodo, kad karinis jojimas ir kova viena ranka laikant ietigalį reikalavo kamanų su grandinėmis ir apynasrio, tuo tarpu jojant laikantis abiem rankomis ir nekovojant pakanka paprastų žąslų su odinėmis vadelėmis. Romėnų ir germanų raitų karių kovos būdai negali būti nustatomi tiesiogiai (2, 3 pav.). Tiek romėnų, tiek germanų raitelių skirtingos prievolės galėjo versti naudoti funkciškai skirtingas kamanas. Sunkios kamanos su apynasriu ir grandinėmis buvo naudojamos mūšyje besikaunančių raitelių. Paprastos kamanos su odinėmis vadelėmis galėjo būti skirtos karinės žvalgybos žirgams, „žinių nešėjams", taip pat arkliams, traukiantiems vežimus.

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