

A Sasanian Equestrian Muzzle from Roman Augusta Vindelicum (Augsburg)?

Paul A. Yule

During his Heidelberger years from 1989 to 2001 and after, Felix Blocher proved not only to be an excellent Near Eastern archaeologist, but also was a true friend. His integrative nature made Felix a model of collegiality. Not contributing to his *Festschrift* would certainly incriminate me as being ungrateful. I dedicate this note for his intellectually open spirit in the field of ancient Near Eastern archaeology.

Introduction

In Greco-Roman times incipiently and recently much has been written about how to train aggressive horses and protect other horses and persons from them (e.g. Lawson 1978; Moore 2004; Garcés / Graells 2011; Giannelli 2015, 110–112; Yule 2019). Regarding this topic the range of human imagination is endless. Roman serial finds of horse tack, such as bits and nose bands abound, but exotic equipment also occurs. Legionary cavalry (comprised of citizens) existed in addition to *auxilia* (comprised of non-citizens) cavalry units recruited in and outside of Italy (e.g. the Numidian or the Pannonian cavalry) partially explains the variety in the find inventory. Excavated in Bavaria, a rare piece of protective horse equipment (Fig. 1a & 1b) resembles finds known from the Sasanian Fars in terms of form and purpose. As excavated, no bridle was preserved. In a dissertation on Roman horse tack (Simon Ortisi 2003, 45, Abb. 64), citing the basic work on ancient Near Eastern horse tack of Potratz of 1966, the subject of this note first was assigned to the category *Maulkörbe* (muzzles, chamfrons), an artefact class which emerge in different parts of southern Europe centuries before the Roman period. The Augsburg horse muzzle differs from other early examples in different ways. First, it has neither a bowl-like basket which encloses the animal's muzzle, nor does it protect the eyes. It is formed of a simple vertical band framed by flanking side struts. The band which fits over the bridge of the animal's nose, closes its muzzle and is suspended in place by means of a leather band fitted to two flanking slots, right and left.

Description of the muzzle

This ferrous equestrian muzzle (width 20.5 cm × height 23.1 cm × pres. breadth 6.8 cm, original breadth c. 12 cm, 293 g), is smithed, not cast. The iron ranges from 0.3 to 0.5 cm in thickness. Originally, the two side struts joined the vertical one. The back area of the muzzle at the animal's throat is broken and incomplete. The right strut is broken and is shorter than the left one; both bend to the left. The muzzle was pressed together laterally, as evidence by a fold. No traces of decoration, gilding or use-wear are extant, but the surface originally may well have been polished, as was the habit with armour (Matyszak 2018, 56). The surface is intact. This artefact was freed of corrosion products. Evidently the workmanship is of good quality. The iron is homogeneous. The inv. no. of the find: is 1987,2951. Presently, it is stored in the Archäologisches Zentraldepot Augsburg.

Find circumstances

In 1987, while a biotope was being built in the south-eastern part of Stephansgarten in Augsburg, the *Stadtarchäologie* salvage-excavated several rooms of a stone house which yielded Roman mosaics. Excavation took place in the Äusseres Pfaffengässchen 23. The context consists of a deep pit, most likely around a cistern or a well (however, in this area of the city, the groundwater is only reached at a depth of about 10 m). The pit first was seen as a discolouration from about 1 m below the present surface. Overall, it was excavated to a depth of 5 m; its lower edge was not reached. The muzzle was recovered at 3 m depth in spit (*Planum*) 15 in the excavation surface (*Fläche*) 1C. Spits 16 to 20 lay below this. Excavation find no. 1126 was excavated 20.11.1987.

Dating

The filling of the pit can be dated to late antiquity mainly because of three stratified datable coins. The most recent coinage, a nummus of Galerius Maximianus (inv. no.: 1987, 3080), gives a terminus post quem of 299 for the backfilling. Also coins of Probus (1987, 3106) and Aurelian (1987, 3097) are certainly from this context, because at this depth there was only this pit / cistern. The late-antique dating also fits the salvaged pottery. L. Bakker's preliminary report of 1987 refers to the entire find spectrum of the excavation. At that time, he did not present an evaluation of individual findings. The localisation of the Roman forum (which originated after the end of the fort in 69/70) goes back to A. Schaub (2001), who published the results of a 1997/98 sounding and his research of older excavation documentation (the older research located the forum near the later cathedral). The find-spot lies in the southern part of Stephansgarten (Schaub 2001, 36 fig. 8.3). Stone robbery can be observed in the entire Roman city (Gairhos 2016, 116). In the same essay he also mentions the forum again (ibid. 120–121).¹

¹ Present whereabouts: temporary exhibition "Römerlager. Das römische Augsburg

Xenophon's mention of a stall muzzle

Archaeologists and cultural historians are well aware of ancient mention of the horse muzzle, prominently in the 5th chapter of Xenophon's (c. 430–c. 353 BCE), *On horsemanship*. This treatise belongs to the earliest extant works on horse care and training in any literature, obviously pre-dating the publication by B. Hrozný in 1931 of a Hittite ritual training text, that by the trainer Kikkuli of the land of Mittani (regarding what must have been a chariot horse: Starke 1995, Nyland 2009). Several terms, both ancient and modern, have survived to refer to a muzzle, with different shades of meaning and for different purposes (Yule 2019, 191–192). Xenophon advises to place a Κημός on the animal's head during stable grooming (depictions and discussion in Greek vase painting see Moore 2004). That particular tack has a different purpose than the Augsburg muzzle.

Sasanian comparanda, the context in Susa

The muzzle under discussion finds its closest parallels in the Fars (Fig. 2a & 2c). R. Ghirshman explained that he began to clear a broad surface in Susa, where in 1950 he reached niveau / couche IV of the *Ville Royale, secteur ouest* (1952a, 7–9 & 1952b, 2 map, no. 5) which he assigned to the early Sasanian period. Ghirshman divided level IV into phase IVb, which is early, and IVa, which is late. Only the remains of a horse's head were preserved and near it a bronze and an iron muzzle (“licou” and “tétière” (i.e. bridle / halter), G.S. 2425 & G.S. 2428). In addition, a leverage bit (G.S. 2426), sword, lance head (G.S. 2427: Ghirshman 1977, 3 fig. 1) as well as a large belt buckle came to light, these four in iron (idem 1952b, 9; Steve et al. 2005, 509). Ghirshman sums up, that near the ramparts the team excavated an interred war horse (1952b, 9), but the finds are not identifiable in any plan, profile or field photo (including the plan in Steve et al. 2005, 511–512 fig. 8). He assigned the horse tack to level IV and attributed its destruction to Šāpūr II, whose long reign extended from 309 to 379 CE (ibid. p. 7–8).

While completing the drawing of the plan of the Parthian residence of the *Ville Royale chantier A* level IV in Susa H. Gasche re-dated this level to the late Parthian period (Gasche 2002, 184 fig. 1b; 185 fig. 2a). He rightly held Ghirshman's level IV Sasanian graves (such as the horse grave, the finds of which are represented in Fig. 2) to be intrusive into the walls and debris of the Parthian residence (ibid., 183; Steve et al. 2005, 511–512 fig. 8). “... the end of the Parthian epoch ... witnesses no doubt the last combat at Susa before the abandonment of (this) part of the city” (idem 2005, 508–509). And the horse burial with its tack seems best to be attributed along with the other Sasanian grave intrusions into the Parthian residence.

in *Kisten*” in Augsburg's *Zeughaus*, Zeugpl. 4 (<http://kunstsammlungen-museen.augsbuerg.de/roemisches-museum>).

The function

Ghirshman explained that the “licous” were worn, “... on the animal’s head” when it was led into the stable by means of a rope, probably in reference to Xenophon’s grooming description mentioned above. However, he then notes that, “For this, the bridle / halter has a row of points which, when one pulled on the line, stuck the skin above the nostrils and forced the horse to obey” (Ghirshman 1977, 2). This description conflates his explained function of a halter, a muzzle and the cheek pieces of a bit. The rows of points apply to those on a bit with cheek-pieces at both ends (e.g. Littauer 1969, 290 fig. 1; Herrmann 1989, 760). Ghirshman illustrated the two artefacts from Susa upside down, because he understood their basic function to be that of a halter instead a muzzle (Herrmann 1989, 760), for which he used the term “muserolle”. Missing is the noseband, as in our Figs. 2 and 3. In reality since one can wear such muzzles only one way, this positioning in Ghirshman’s fig. 1 vexes. Although he cites the Sasanian silver horse rhyton in the Cleveland Museum to support his interpretation of the two muzzles from Susa as bridles, even his low resolution photo clearly depicts a bridled horse with its legs folded beneath it which dons a muzzle (Ghirshman 1977, pls. II & III; Herrmann 1989, pls. VI & VII). The Augsburg and the two Susa muzzles all differ in function from a Roman or Sasanian bridle noseband which is designed to prevent the horse from locking its mouth open to avoid the bit and the hand (Littauer 1969, 292 note).

Confusing in Ghirshman’s essay is also the associated heavily corroded iron leverage bit from Susa (Fig. 2b) which, like the muzzles, also is not depicted in the position in which it was used inside the horse’s mouth (corrected in Herrmann 1989, 786 g 4d and in Yule et al. 2007, 542, and Pl. 46b). Also, at the upper end, next to the spoon, a ring is missing on both sides with which to fasten the upper and lower reins. It is impossible to see if any stubs exist in the corroded mass. Fig. 2d shows a complete example excavated from Noruzmahale in northern Iran. Ghirshman published neither the bit nor the two muzzles to scale, and the sizes of all three are unknown. The dimensions would give some idea of the size of the horse or at least its head. Compared to Fig. 3, how the leverage bit Fig. 2b from Susa functioned is understandable when they are juxtaposed. Ghirshman states that the bit, G.S. 2426, might belong together with the iron muzzle, G.S. 2428, but the meagre context documentation cannot support this notion (see above).

Horse muzzles originally made of metal appear in royal Sasanian reliefs at sites including Naqš-i Rostam (Herrmann 1989, 783 fig. 1a=790 & pl. 1=791 pl. II a) and at Dārāb of the 230’s and 240’s. L. Trümpelmann does not describe one at Dārāb nor does it appear in his final drawing of this relief (1975, 13, Taf. 1). G. Herrmann emends this relief description on the strength of Trümpelmann’s Taf. 7 and 8 which show a royal rider, his mount as well as horse

tack including the muzzle just at the animal's muzzle (Fig. 3). The local site topography makes a detail photo of the relief inconclusive (Fig. 4).

Such horse muzzles are more easily recognisable in Sasanian silver depictions including the aforementioned Cleveland rhyton (ibid. 795 pl. VI, citing Ghirshman 1977, pl. II), a silver phiale in the Metropolitan Museum (Fig. 5=Herrmann 1989, 806 pl. XVII; Harper 1978, 28–30 cat. no. 7), another in the Bibliothèque Nationale, Paris (Ghirshman 1962, 212 Abb. 253), one in the Forughi collection (Stöllner et al. 2004, 797 cat. no. 519) and finally one in the Smithsonian Institution (Harper / Meyers 1981, 216 pl. 15) which unfortunately share only dealer provenances. On the strength of these and the Sasanian reliefs Herrmann explains the biting to consist of a dropped noseband/muzzle (German: Zaum) and a cheeked bit (1989, 758). The metallic noseband was attached to the cheek strap of the bridle. She identified the noseband and cheeked bit in all of Ardašir's equestrian reliefs (regarding the identity of the rider cf. Levit-Tawil 1992, 165, 171). She distinguishes, "... an additional strap running down the centre front of the horse's nose" (1989, 758) which is present most notably in the Naqš-i Rostam and Dārāb reliefs.

Discussion

The Augsburg muzzle is paradoxical. On the one hand it is a simple piece of ferrous equipment; on the other, one expects a high quality horse tack since cavalry is associated with the knightly class. While the Romans based much of their cavalry equipment on that of the Celts, local customs and styles easily could override such influences. In any case, ancient riders, including Roman ones, loved impressive, showy awe-inspiring equipment (Plutarch *Life of Crassus* 24). An unseemly candidate as parade armour, the simple and functional Augsburg muzzle protects others from being bitten and protects the animal's vulnerable mouth presumably while riding from being slashed.

On stratigraphic grounds, the comparisons from Susa are considered to be of Sasanian, not Parthian date, but for reasons slightly different than Ghirshman cited. Roman coins stratified with the Augsburg muzzle provide a terminus for it at the end of the 3rd century. The Susa and Augsburg muzzles are roughly contemporary.

Regarding if the muzzle was worn in the field, another earlier equestrian bowl-like muzzle of 'Apulian-Macedonian type' (Yule 'type 1') is relevant to the question of the method of wearing of early frontlets. Dated by its context to the 4th century BCE, it was excavated in a grave context in the La Pedrera necropolis in Catalonia (Graells 2008, 136 fig. 48). The occurrence of a bit together with the muzzle suggests that they might have been worn together while riding. They appear to be locally made there, and were not bartered

(ibid. 157). But such finds raise as many questions as they answer about the use.

The muzzle from Stephansgarten is not a noseband integral to Roman or Sasanian bridles, but rather is an accessory. In comparison to the overwrought chamfrons of the 15th and 16th centuries (e.g. de la Boisselière 2005, 154–163), it is simple. It brings to mind the shiny metallic decorative muzzles worn by draught horses at the Oktoberfest in Munich, but these are not aggressive war horses. Practical experience shows that such horses pose no biting danger during parades and their muzzles are only decorative.

How did it come to Roman Raetia Secunda? In the late 2nd and 3rd centuries large forces such as the Legia Parthica I, Parthica II and Parthica III continually engaged Sasanian ones in Mesopotamia. Presumably, most of the legionnaires derived from Syria and Mesopotamia. Highpoints of these wars include the multiple Roman sacking of the Parthian capital, Ctesiphon (south-east of present-day Baghdad) and later, the Shahanshah's capture of the emperor Valerian and his army at Edessa (today Urfa in eastern Anatolia) in 260. However, while we can cast the Roman military historical situation, the occurrence and use of what seems to be a Sasanian import in Raetia Secunda depends on the fate of an individual and many were highly mobile within diverse parts of the empire.

Acknowledgments

I thank Michaela Hermann, who on 29.09.2016 generously allowed me to examine and record the artefact under discussion, as well as for a permission to publish it. The section on the provenance and dating derives from her. Thanks go also to Rémy Boucharlat, a veteran at Susa, who gave my discussion of the Susian find circumstances direction. Gail Brownrigg (independent scholar) provided diverse tips which influenced the content of my essay. Bruno Overlaet provided an entire collection of photos of the Dārāb reliefs – a key help in our identification of the equipment.

Bibliography

- Bakker, L.
1987 Römische Mosaikreste im Klostergarten von St. Stephan in Augsburg. *Das archäologische Jahr in Bayern 1987*, 121–123.
- de la Boisselière, E. & G.
2005 *Éperonnerie et parure du cheval de l'antiquité à nos jours* (Brussels).
- Egami, N. / Fukai, Sh. / Masuda, S.
1966 *Dailaman II. The excavations at Noruzmahale and Khoramrud 1960* (Tokyo).

Levit-Tawil, D.

1992 The Sasanian rock relief at Darabgird – a re-evaluation. *JNES* 51/3, 161–180.

Müller, K. / Lipps, J.

2016 Zur archäologischen Überlieferung römischer Monumentalarchitektur in der raetischen Provinzhauptstadt Aelia Augusta. In: S. Gairos / M. Hermann (eds.), *Römische Monumentalarchitektur in Augsburg*. Augsburger Beiträge zur Archäologie (Augsburg) 113–135.

Garcés, I. / Graells, R.

2011 Ancient bronze horse muzzles of the Iberian peninsula / bozales y museros de bronce en la península ibérica. *Gladius* 31, 7–42.

Gasche, H.

2002 Une résidence parthe dans le quartier nord de la Ville Royale de Suse. *Akkadica* 123/2, 183–189.

Ghirshman, R.

1952a *Cinq campagnes de fouilles à Suse (1946–1951)* = Mémoires de la Mission archéologique en Iran. Mission de Suse. Rapports préliminaires 1 (Paris).

1952b Cinq campagnes de fouilles à Suse (1946–1951). *Revue d'Assyriologie et d'archéologie orientale* 46/1, 1–18.

1962 *Iran. Parther und Sasaniden* (München).

1977 Le harnais de tête en Iran. In: M. Rosen-Ayalon (ed.), *Studies in memory of Gaston Wiet* (Jerusalem) 1–5.

Graells, R.

2008 Mistophoroi Ilergetes en el siglo IV AC: el ejemplo de las tumbas de caballo de la necropolis de la Pedrera (Vallfogona de Balaguer-Térmens, Catalunya, España). *Jahrb. RGZM* 55, 81–158.

Harper, P.

1978 *The royal hunter art of the Sasanian empire* (New York).

Harper, P. / Meyers, P.

1981 *Silver vessels of the Sasanian period, vol. 1: royal imagery* (New York).

Herrmann, G.

1989 Parthian and Sasanian saddlery: new light from the Roman west. In: L. de Meyer / E. Haerinck (eds.), *Archaeologia Iranica et Orientalis, miscellanea in honorem Louis Vanden Berghe* (Gent) 757–809.

Kuhoff, W. / Hermann, M.

2010 *Römische Archäologie, Stadtlexikon Augsburg*, uploaded 25.03.2010, downloaded 23.02.2019, <https://www.wissner.com/stadtlexikon-augsburg/artikel/stadtlexikon/roemische-archaeologie/5193>.

Lawson, A. K.

1978 Studien zum römischen Pferdegeschirr. *Jahrb. RGZM* 25, 131–172.

Littauer, M.

1969 Bits and pieces. *Antiquity* 43, 172, 289–300.

Matyszak, P.

2018 *Legionary the Roman soldier's (unofficial) manual* (London).

Moore, M.

2004 Horse care as depicted on Greek vases before 400 B.C. *Metropolitan Museum Journal* 39, 35–67.

Nyland, A.

2009 *The Kikkuli method of horse training* (Sydney).

Potratz, J.A.H.

1966 *Die Pferdetrensen des Alten Orient*. *Analecta orientalia* 41 (Rome).

Schaub, A.

2001 Zur Lokalisierung des Forums von Augusta Vindelicum. In: L. Bakker (ed.), *Augsburger Beiträge zur Archäologie Sammelband 2000* (Augsburg) 27–41.

Simon Ortisi, C.

2003 *Studien zum römischen Pferdegeschirr aus Pompeji, Herculaneum und den Vesuvvillen: Metallzäume, Trensen und Kandaren*. Dissertation, LMU München: Fakultät für Kulturwissenschaften, https://edoc.ub.uni-muenchen.de/3456/1/Simon_Ortisi_Christina.pdf (downloaded 01.01.2016)

Starke, F.

1995 *Ausbildung und Training von Streitwagenpferden, eine hippologisch orientierte Interpretation des Kikkuli-Textes*. *StBoT* 41 (Mainz).

Steve, M.-J. / Vallat, F. / Gasche, H.

2005 Suse, *Supplément au dictionnaire de la bible* 13. Sophonie–Targum (Paris) 359–652 (also published in 2002 as Steve, M.-J. / Vallat, F. / Gasche, H. Suse, *Supplément au dictionnaire de la bible* 74 (Paris) 360–652).

Stöllner, T. / Slotta, R. / Vatandoust, A.

2004 *Persiens antike Pracht Bergbau – Handwerk – Archäologie, 2 vols.* (Bochum).

Trümpelmann, L.

1975 *Iranische Felsreliefs, B. Das sasanidische Felsrelief von Dārāb. Reihe II*. *Iranische Denkmäler* (Berlin).

Yule, P.

2019 A rare Roman horse frontlet. In: J. Fouquet / S. Herzog / K. Meese / T. Wittenberg (eds.), *Argonautica Festschrift für Reinhard Stupperich*. *Boreas* 12 (Marsberg / Padberg) 188–197.

Yule, P. / Franke, K. / Meyer, C. / Nebe, G. / Robin, C. / Witzel, C.

2007 Zafār, capital of Ḥimyar, Ibb province, Yemen, first preliminary report: 1998 and 2000, second preliminary report: 2002, third preliminary report: 2003, fourth preliminary report: 2004. *ABADY* 11, 479–547

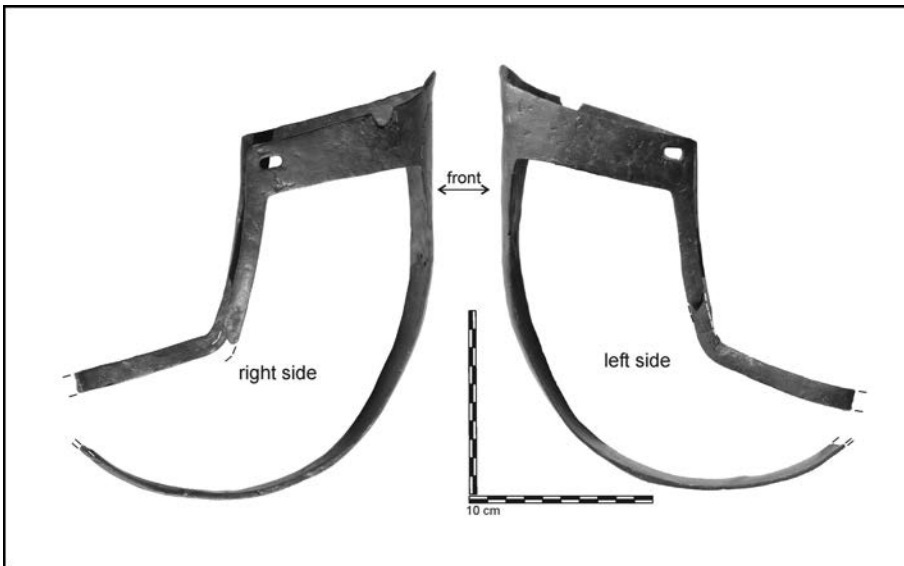
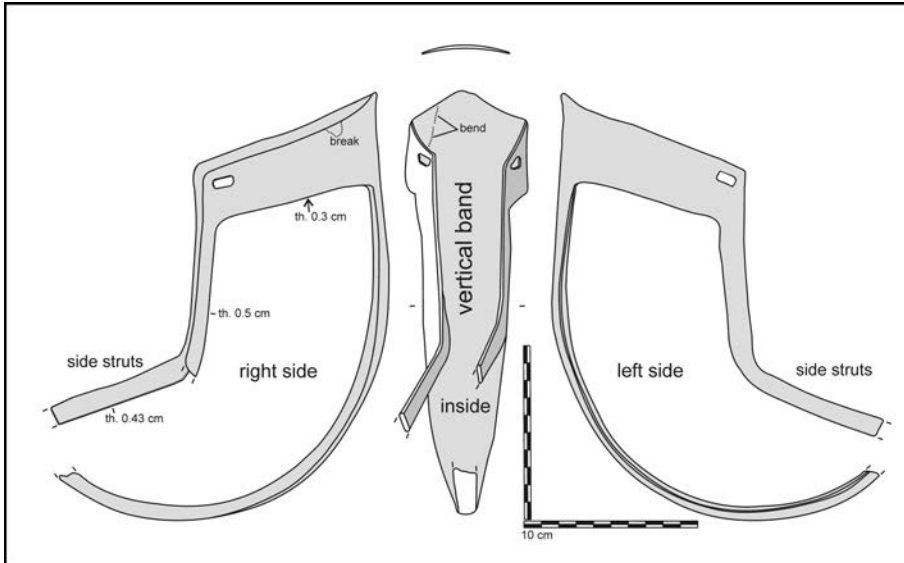


Fig. 1a: Drawing of the equestrian muzzle, find no. 1126 from Stephansgarten, Augsburg; 1b: Photo (both Yule).

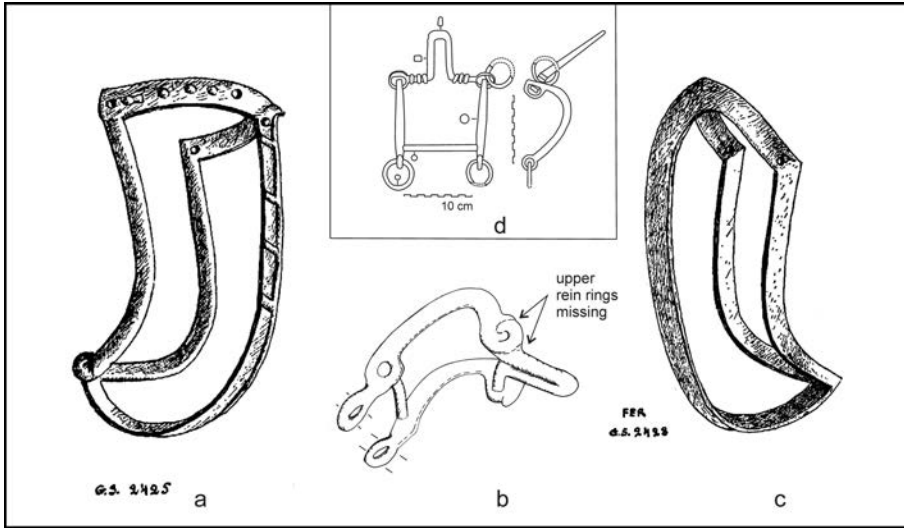


Fig. 2: Muzzles and a leverage bit from Susa, Ville Royale chantier A, level IV, a bronze, b and c iron (Ghirshman 1977, 3 fig. 1, 2b re-drawn, none to scale), d Parthian-Sasanian bit from Noruzmahale tomb B-IV (re-drawn after Egami et al. 1966, pl. XL18).

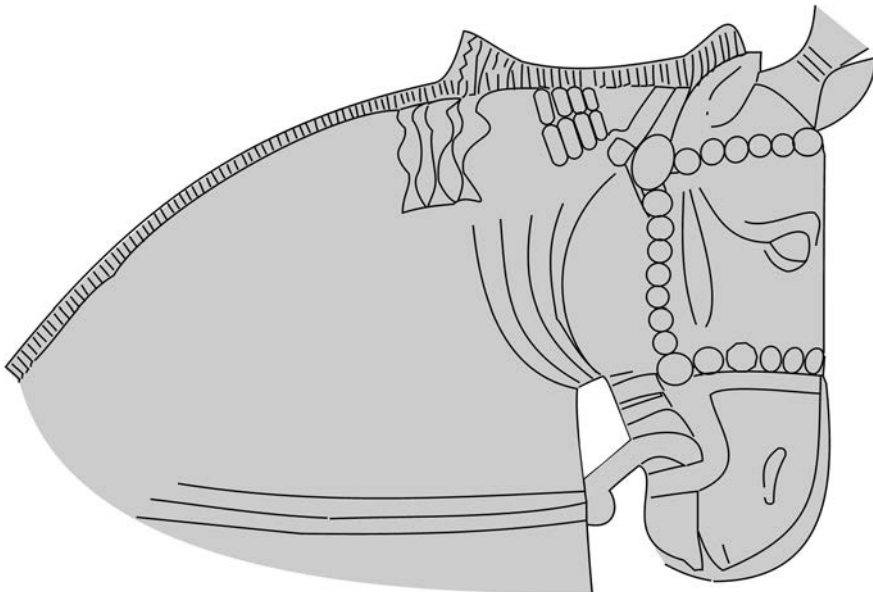


Fig. 3: The bridle and muzzle of Ardašir's horse at Dārāb (re-drawn after Herrmann 1989, 784 fig. 2, horse head c. 1 m high).



Fig. 4: Detail photo of the Dārāb relief
(E. Smekens, L. Vanden Berghe's photographer).



5 cm

Fig. 5: Detail of a Sasanian silver phiale, mid-5th–mid-6th century (Metropolitan Museum of Art, Fletcher Fund, 1934, 34.33).