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FURTHER DISCUSSION OF *PA-SA-RO* ON PYLOS TA 716: INSIGHTS FROM THE AGIA TRIADA SARCOPHAGUS

Nicholas G. Blackwell, Thomas G. Palaima

Summary

The Linear B word unit *pa-sa-ro* is a confounding *hapax* that appears as the first word on tablet Ta 716 from the Palace of Nestor at Pylos. We argue that the Linear B term is related to *ψαλόν* in later Greek. The use of *ψαλόν* in the historical era suggests an open, U-shaped item – akin to a headstall or cavesson – for controlling an animal's head, typically a horse. The pair of *pa-sa-ro* on Pylos Ta 716 are ritual instruments necessary for leading and controlling sacrificial victims (the identity of which is not recorded) to slaughter. The *pa-sa-ro* are listed first followed by pairs of two other ceremonial implements, *wa-o* 'hammer axes' and *qi-si-pe-e* 'sacrificial' knives. Palaima and Blackwell (2020) translate *pa-sa-ro* as a "bridle device." Here, we increase our understanding by probing the precise form of the Mycenaean object through an unexpected source: fourteenth-century BCE iconography from Crete. An overlooked feature on the well-known bull sacrifice painting on the Agia Triada sarcophagus can plausibly be interpreted as an image of a *pa-sa-ro*. This identification also signals the type of animal likely intended for slaughter at Pylos using the equipment recorded on Ta 716. It adds another temporal marker to the sequence of ritual actions that led to the moment of sacrificial slaughter on the Agia Triada sarcophagus.

INTRODUCTION

Pylos tablet Ta 716 came to light in the Linear B archives complex at the Palace of Nestor. The now much-discussed document belongs to a group of administrative records comprising twelve other Ta-series tablets (Palaima 1999, 2-4) and Un 718 – collectively attesting to state-sponsored sacrifices and feasts soon before the palace's ultimate destruction (Killen 1998; Palaima 2000; 2004; Stocker, Davis 2004, 189-193). Ta 716 is noteworthy among the Pylian archival materials in listing three pairs of items: two bridle-like devices (Mycenaean *pa-sa-ro* /*psalōl*), two hammer-axes (*wa-o*), and two sacrificial knives (*qi-si-pe-e* /*k^wsi^pehel*, singular **qi-si-po*). Though Farmer and Lane (2016) questioned the sacrificial character of the entries on Ta 716, these items attest to a multi-step procedure in a ritual sacrifice (Speciale 1999; Palaima 2004; Palaima, Blackwell 2020) comparable to later Greco-Roman practices (Aldrete 2014). The instruments are in fact listed in the chronological sequence of their ceremonial use. Officiants used these implements first with the *pa-sa-ro* to lead an animal to sacrifice and to control the movement and positioning of its head, and then with the *wa-o* to stun it and to sever its vertebrae, and then finally with the **qi-si-po* to slit its throat.

In this article we revisit Ta 716 to investigate *pa-sa-ro* (*ψαλόν* in later Greek), which appears in the first entry on the tablet's upper line: "*pa-sa-ro*, *ku-ru-so*, *a-pi*, *to-ni-jo* 2" (Fig. 1a-b). Taken frequently in previous scholarship as "chain" or even "ring" and earlier still as "peg" or "nail" (Palaima, Blackwell 2020, 73-77; Palaima 1999, 15 and notes 20 and 54), *pa-sa-ro* works better as an open-shaped "bridle", with no association with "chains", based on etymological and textual reasoning. Palaima and Blackwell (2020, 69 and 77 for a concise history of interpretations of *a-pi*, *to-ni-jo*) translated the entire entry as two "bridle devices with golden laminate on both sides", in contrast to Farmer and Lane's (2016, 62) "chains around" or "rings between the throne(s)". This article tackles the precise makeup of the item identified as a *pa-sa-ro* by considering a Cretan iconographical detail that mirrors our general understanding of the two examples inventoried on Ta 716.



Fig. 1a. PY Ta 716. Courtesy of The Pylos Tablets Digital Project and Program in Aegean Scripts and Prehistory UT Austin, by permission of the Department of Classics, University of Cincinnati.



Fig. 1b. Detail of PY Ta 716, showing *pa-sa-ro* and its description. Courtesy of The Pylos Tablets Digital Project and Program in Aegean Scripts and Prehistory UT Austin, by permission of the Department of Classics, University of Cincinnati.

This paper explores what Pylian scribe Hand 2 (Palaima 1988, 59-68, 177, 182, 186, 188-189) meant when recording *pa-sa-ro* on Ta 716, within the context of other Ta-series tablets listing fire utensils, mainly metallic vases (tripods; ewers; short, squat, rather open-shaped two-handled jars; and footed bowls? *pi-je-ra₃*?) (Melena 2014, 146-149; Petrakis 2022) and *ca.* 30 pieces of ceremonial furniture made out of rare woods and elaborately decorated with inlaid figural images using precious materials (Palaima 1999, 13-14; Bernabé, Luján 2008, 202-205). The basic meaning of *pa-sa-ro* is a restraining device for a sacrificial animal. This conclusion stems from the word's linguistic development and the other Ta 716 items (*e.g.*, hammer axes and ritual knives) more definitively associated with animal slaughter. Occurrences of *ψαλόν* (and the related form *ψαλίς*) in the historical era (see Taillardat 1978 for a thorough treatment of related forms in the historical period) suggest an open, U-shaped item – akin to a head-stall or cavesson – that enabled one to control an animal's head, typically a horse (for an overview of ancient horse gear, see Littauer 2002; cf. also Bernabé, Luján 2016, 570, for the proposal that Linear B *qe-ro₂* and *qe-ro* develop in later Greek into *ψάλιον* and *ψαλόν*, referring to horse bridles). Rawling's (2002, xix) glossary of technical terms for ancient vehicles and harnesses defined *ψαλόν* as the “metal element of bridle, separate from bit and having the effect of a muzzle or a rigid noseband.” A bridle is “a means of controlling the horse by the head...with or without bit”; and a bit technically consists of a “mouthpiece and cheekpieces” (Rawling 2002, xv-xvi). The terminology related to horse restraints, particularly bridles and bits, has been central to the understanding of *pa-sa-ro* (Palaima, Blackwell 2020, 71-76). Although the *function* of *pa-sa-ro* on Ta 716 within the Ta series is contextually apparent, the device's *form* remains somewhat ambiguous given the lack of archaeological examples and the fact that there is no ideogram corresponding to *pa-sa-ro* in the text. Despite this question of appearance, the gilded decoration (*ku-ru-so*) of the two *pa-sa-ro* on Ta 716 highlights their conspicuous, and presumably ceremonial, nature.

What exactly does “bridle device” (*pa-sa-ro*) convey? Is it a conventional bridle used on a horse, or, given the cultic assemblage listed on Ta 716, is it something more special? Mycenaean equid sacrifice is apparent in several non-palatial funerary contexts, notably at Dendra (with multiple Late Helladic [LH] III paired horse burials

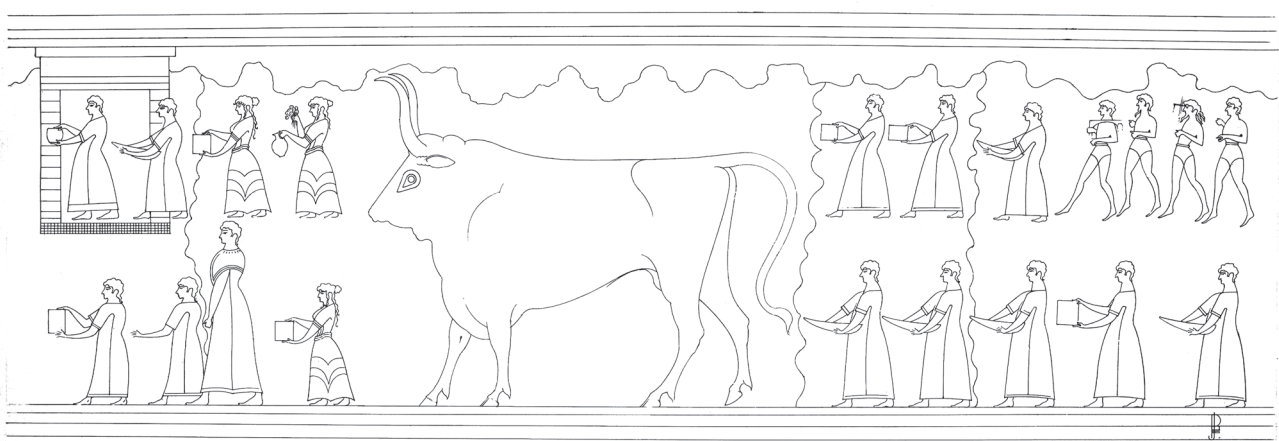


Fig. 2. Reconstruction by Piet de Jong of the vestibule wall painting from the Palace of Nestor's megaron, depicting a large bull without headgear (Lang 1969, pl. 119). Courtesy of Department of Classics, University of Cincinnati and the American School of Classical Studies at Athens, Archives, Pylos Excavation Records, Piet de Jong Collection (#86). Photography: Jennifer F. Stephens & Arthur E. Stephens.

including one associated with a knife), Aidonia, Kokla, Nauplion, Argos, Marathon and Archanes (Persson 1931, 110; Sakellarakis 1970, 157-161; Pelon 1976, 228-230; Pappi, Isaakidou 2015, 473-477). These horse burials “possibly indicate a regular practice in the north-east Peloponnese” during the LH III period (Pappi, Isaakidou 2015, 477). The lack of horse remains at the Palace of Nestor (Halstead, Isaakidou 2004) stands in contrast to this Argolid funerary evidence. Although Pylians may have engaged in horse sacrifice as well, no traces of the practice exist that might link the Ta 716 equipment with the slaughter of equids. Does Ta 716's *pa-sa-ro* therefore reflect a standard horse bridle or something else, perhaps a ‘bridle’ that *resembled* traditional headgear while designed for another type of animal? The word ‘bridle’ serves as the starting point for understanding the Mycenaean word, but *pa-sa-ro*'s *hapax* status and the gilding of a component part signify an extraordinary pair of objects reserved for ritual or public ceremonial display and not plain functional headpieces.

The faunal remains from the Palace of Nestor include cattle, red deer, and sheep/goat, with the greatest concentration of bones being those of slaughtered cattle, some deliberately burnt (Halstead, Isaakidou 2004; Stocker, Davis 2004). Besides these physical remains and the inclusion of sacrificial oxen in the Pylian Linear B tablets (Palaima 1989, 103-110), there is a preponderance of evidence illustrating Pylos' interest in bovines. Bulls appear as a conspicuous part of the decorative features in the palace's megaron complex, within both the vestibule and the throne room. Piet de Jong's reconstruction of the vestibule's (room 5) wall painting fragments shows a procession where all depicted figures move toward the hearth room's entrance (Fig. 2) (Lang 1969, 38-40, 192-193, pl. 119; for a modified reconstruction, see McCallum 1987, 78-86, pls. VIIla-b). The scene portrays a large bull accompanied by a group of people at a smaller scale, most of whom carry an unidentified object. The painting's location, the bull's suprascale size in comparison with the human figures in the procession, and the procession's solemnity and uniform direction underscore the scene's ritual and sacrificial nature. No slaughtering paraphernalia, however, appear. Furthermore, headgear, such as a *pa-sa-ro*, does not adorn the sacrificial bull, at least on the preserved portion of its head (fragment 18 C 5; Lang 1969, 39, 193, pls. 52, 135). Perhaps because of the sharp contrast in scale between the people and the bull, the artist(s) did not illustrate any of the attendant human beings as physically leading the animal forward. The compositional design of the procession implies such action. Given the abbreviated scene, the absence of a *pa-sa-ro* on the bull is unsurprising. A *pa-sa-ro* is also absent on a sacrificial bull portrayed on a LH II-III A1 lentoid seal from tholos 1 at Tragana, Messenia (CMS I no. 264; Sakellariou 1964, 299). The bull is supine on a sacrificial table, suggesting that the animal is

dead and ready for the butchery process. A comparable seal from Mycenae (CMS I no. 80: Sakellariou 1964, 96) depicting an official butchering a similarly-positioned boar supports this interpretation. The lack of headgear on the Tragana sacrificial bull aligns with that composition's post-kill emphasis, for a *pa-sa-ro* would make little sense given the timing of the scene.

Returning to the palace, wall painting fragments from the hearth room (room 6) indicate another bovine depiction ("the Shoulder of a Bull [19 C 6]" in Lang 1969, 194). McCallum's (1987, 94-96, pl. X) reconstruction of a trussed bull on an altar is no longer viable (Egan 2019, 438 n. 77), and no traces of a *pa-sa-ro* exist on this preserved piece. The palace's interest in bulls is apparent beyond the megaron. Noteworthy is a fragmentary terracotta bovine figure, which Pylian authorities seemingly stored in an upper-level, eastern storeroom of the palace (Egan 2019, 435). Officiants may have brought the object (and perhaps others like it) out of storage for ceremonies, including bull sacrifices (Egan 2019, 423 n. 9, 436-441). On Un 718 an individual who may be the *wanax* of Pylos offers a single bull to a feasting event (Palaima 2004, 230-231), recalling the association between political authority and bull sacrifice evident in the megaron vestibule. Moreover, it is pertinent here to look at the text of Pylos Ta 711, the all-important lead document of the Ta series.

Ta 711's opening line defines the overall inventory as being made on the occasion when the *wanax* either 'appointed' a person named *au-ke-wa* to the position of *da-mo-ko-ro* or conducted a burial ritual for the same individual who had held the position of *da-mo-ko-ro* (see succinctly Duhoux 2008, 314-317; Weihartner 2005, 139-140; Palaima 2012, 349-350). Since the *da-mo-ko-ro* is thought to be a provincial governor (Nakassis 2013, 176 n. 85), we are dealing here with ceremonies affecting individuals at the highest level of political power in the state of Pylos. On Ta 711, the inventory begins with entries of three specific ritual vessels (single-handled ewers or jugs, ideogram *203) known as *qe-ra-na* (Vandenabeele, Olivier 1979, 246-252; Melena 2014, 147). Two of these are described as being of the type associated with the **wa-na-se-u*, i.e., "having to do with the *wanasseus*, an official connected with the *wa-na-sa*, the feminine correlate to *wa-na-ka*" (Palaima 2020, §24-30 and fig. 3). Both of these *qe-ra-na* are described as *qo-u-ka-ra*, i.e., technically with a bull's head or perhaps βουκράνιον in the strict sense of the skull of a sacrificed male bovine. Representations of bull and other animal heads, some of which might be bucrania (e.g., CMS II.8.1 no. 208: Gill *et al.* 2002, 346), are common on Aegean seals (Crowley 2013, 55, 239). Yet there are no bull's-head-decorated vessels in Aegean iconography or the archaeological record that could shed light on the Ta 711 metal vessels. (We exclude here, of course, stone bull's-head rhyta, where the entire vessel is a bull's head; cf. Rehak 1995.) Whether these *qe-ra-na* incorporated bull-headed 3D attachments (perhaps on the handle) or 2D representations on the body is uncertain, but the bovid decoration seems meaningful within the ritual context of the Ta series.

The importance of bulls at Pylos goes back to the early Mycenaean era, as finds from the LH IIA Griffin Warrior tomb demonstrate. A bronze finial in the shape of a bull's head, perhaps a symbol of authority and religion, came to light in this un plundered burial, alongside gold signet rings that included representations of horns and a bull (Davis, Stocker 2016, 651-652, figs. 9, 11, 15). Pylos' longstanding use of bovines in politically-associated ceremonies further implies that cows or bulls were most appropriate for the extraordinary *pa-sa-ro* equipment listed on Ta 716.

Pa-sa-ro refers to a cultic object necessary for leading large animals like bulls to slaughter, but is a yoke a more logical device for this task than a bridle? The standard and practical means of restraining, controlling and directing an animal may have differed from the ceremonial method, especially given the need to restrict movements of the sacrificial animal's neck and head during the sacrifice. In terms of the 'tools' or 'weapons' used in hunting and sacrificing animals in later Greek religion, Burkert (1983, 19) stresses that "what was allowed and necessary in one realm was absolutely forbidden in the other."

The golden laminate or gilding of some components of the *pa-sa-ro* on Ta 716 suggests the sacrifice of a valuable commodity, and compares favorably to Homeric sacrifice in *Od.* 3. 425-426, 437-438 where gilding of a bull's horns occurs prior to public slaughter. We should emphasize here that we are not suggesting that the Homeric epics can be used as guide books to Mycenaean society. However, given (a) the long (pre)history now posited for oral song performance (on linguistic evidence within extant Homeric poetry for Greek hexameter song tradition in

the period before our extant Linear B texts, see concisely Maslov 2011, 377-379 with counter arguments) and (b) the conspicuous exceptionalism in the Greek Aegean, namely that (as noted by Burkert 1985, 119-123) “there is no priestly caste with a fixed tradition, no Veda, and no Pyramid texts; nor is there any authoritative revelation in the form of a sacred book”, the epics do reflect actual social behaviors and sociopolitical structures and religious practices. Some of these behaviors, structures and practices are undoubtedly as longstanding as are fossilized terms and artifacts like boar’s tusk helmets, tower shields and thrusting spears (Sherratt 1990). The main point of contention is whether such references to objects and social practices can be used *to date the poems* and pertinent thereto when to date the insertion of the physical objects into the oral poetic tradition that was vibrant during the Mycenaean palatial period (Bennet 2014, 209-210 *et passim*). Whether such permanent additions occurred during the period of the Shaft Graves (MH III-LH I) or during the high point of palatial culture (LH III A-III B) or in the immediate post-palatial phase (post LH III C 1), the references to Bronze Age artifacts and their use within society are genuine and secure.

In what follows, Linear B and Homeric references to the components of horse-restraining devices offer comparative context for the elements that we are proposing for the *pa-sa-ro*. Such items have various parts that we consider relevant to the form and function of the Mycenaean *pa-sa-ro*. Again some of the Homeric passages may well have originated in post-Mycenaean times, but they still constitute our earliest written documentation for customary social practices that can reasonably be retrojected. We then turn to a well-known image in Aegean painting, the bull sacrifice scene on the Agia Triada sarcophagus. An odd – and insufficiently explained – feature in that painting gives us a visual clue within a sacrificial context as to what a ceremonial *pa-sa-ro* might be. Recognition of this item advances our understanding of the Ta 716 tablet and sheds new light on Aegean sacrificial imagery.

CONTEXTUALIZING *PA-SA-RO*: LINEAR B AND HOMERIC CONSIDERATIONS

In inventorying the ritual items of the Ta series, the tablet-writer’s main concern was to describe each object or set of objects in a way that would make it possible to ensure that the items taken out of storage for use during the sacrificial and banqueting rituals could be identified later (for reconstructions of how the scribe proceeded to record this inventory, see Palaima 1999, 4-16, 24-26). These rare items had ritual significance and all were expertly crafted. Moreover, all the items were needed for future ceremonies. These items therefore had to be checked by autopsy for their integrity, one by one, when they were brought back into storage after the conclusion of the ceremonial actions. The header tablet for the entire Ta 711 inventory declares that an individual named *pu₂-ke-qi-ri* literally looked at (*o-wi-de* ‘thus he saw’) the items and undoubtedly was responsible for noting any damage to the items upon their return. Ritual events were serious matters and violations of ritual could have catastrophic results for key individuals and society as a whole. Given the frustrating inventory brevity of Ta 716, we cannot definitively answer the question of why there are two of each of the three ritual implements. Ironically, two main lines of answering are that: a) the ceremony at hand called for the ritual slaughter of two sacrificial victims, for example, because the ceremony involved the two main provinces of Pylos and the two *da-mo-ko-ro*; or b) the ritual was so important that back-up instruments were ready to hand in case an instrument malfunctioned or was otherwise observed to be defective.

The items in the Ta series are all understandably of high-quality and some, if not all, have a status as mnemonic keepsakes or ‘heirlooms’ (Palaima 1999, 26-27; 2003, 198-199; 2019, 594, 596-598). Thus particular inlay materials and decorative motifs are noted for the *thronoi* (thrones or chairs), *thrānuwes* (stools), and metal vessels (Bernabé, Luján 2008, 222-227). The ideogramless items are more functional: fire-management tools and the *pa-sa-ro* bridle paraphernalia.

Such rare objects were made of materials that were of great value. In the Hittite realm, sealing devices and written and sealed transactional records were used to discourage theft and embezzlement of high-value items or parts of them, according to the account by Justus (1994-1995). Imagine the value of a piece of intricately carved figural ivory inlay from a Mycenaean *thronos*. Besides thwarting theft, in whole or part, it was also vital to look for

component parts lost due to damage or handling within a time frame when a search for the recovery of the missing parts might still be successful. In such circumstances, it is understandable that the tablet-writer noted the gold decoration of components of the two *pa-sa-ro*. Insofar as the gold is concerned, the pair of *pa-sa-ro* would seem to be a matching set.

Alternative interpretations of the phrase *ku-ru-so*, *a-pi*, *to-ni-jo* on Ta 716 are discussed succinctly in Palaima, Blackwell 2020, 76-77. Besides the problem of the misidentification of *pa-sa-ro* as ‘chains’ (and earlier still as ‘pegs’ or ‘rivets’), a main ambiguity is whether the element *to-ni-* in *to-ni-jo* is related to the noun *θρόνος* (cf. English ‘throne’ or ‘chair’) or the verb *τείνω* ‘stretch’ (cf. English ‘tendon’ or ‘tension’). A second interpretive difficulty for us is how the noun *ku-ru-so* /*khrusos*/ ‘gold’ works grammatically in the phrase. Starting from the point that we established, namely that *pa-sa-ro* means ‘a bridle device’, the interpretation of the phrase as *lamphitoniōil* (comitative dative) /*khrūsōil* (adjective of material) “con fasciatura d’oro” = ‘with gold laminate or overlay or plating’ (Del Frio 1990, 328-330) becomes compelling. Del Frio emphasizes that the gold foil works as a veneer or inlay on some inflexible elements of the *pa-sa-ro*.

Several scraps of evidence give us confidence that we are correct in this particular line of reasoning. First in the Linear B texts themselves, we have references to leatherworking (Bernabé, Luján 2008, 221-222; 2016, 567-575) for specialized purposes on Pylos tablets Ub 1315 and 1318 from Room 99 of the so-called Northeastern Building (Bendall 2003). Other tablets from this space deal with suits of armor (series Sh) and chariot wheels (series Sa) and with groups of men (18, 18 and 5 in number) assigned to work on horse-chariots (<*i*>-*qi-ja-i*), wheels (*a-mo-si*) and halters/feedsacks (*po-qe-wi-ja-i*) (An 1282) (Nikoloudis 2012, 286; Ventris, Chadwick 1973, 512, 519-522). On Ub 1315, among reasonably and securely identified items (Duhoux 2008, 336-337; Bendall 2003, 218; Bernabé, Luján 2016, 568-571), we have the following accounted for: five sets of reins with their paraphernalia/equipment (*a-ni-ja*, *te-u-ke-pi*), sixteen red-dyed treated hides (*di-pte-ra*, *e-ru-ta-ra* = /*diphtherai eruthrail*), three reins relating somehow to the leather-stitchers (*ra-pte-ri-ja a-ni-ja*), five new reins without headbands (*ne-wa*, *a-ni-ja*, *a-na-pu-ke* = /*newai anēai anampukes*/), nine headbands (*a-pu-ke* = /*ampukes*/), and eleven pairs of new halters/feedsacks (*ne-wa po-qe-wi-ja*) perhaps of cart animals (*a-pe-ne-wo* genitive plural). On Ub 1318 (Ruipérez, Melena 1990, 251; Bendall 2003, 219; Bernabé, Luján 2016, 572-575), we have the distribution to five individuals of a variety of animal-hide products: red-dyed treated hides (*e-ru-ta-ra*, *di-pte-ra* = /*eruthrai diptherail*) and hides specified as pig (/ *huewail*), deer (/ *elapheail*), goat (*a₃-za* = / *aig^aal*/), bovine? (/ *wirinoil*?) (on the precise meaning of *wi-ri-no* here, cf. Bernabé, Luján 2016, 573-574) and as destined for use as packsaddles, saddle belts, sandals, straps for baskets, and straps or coverings for yokes. Rooms 99 and 100 also yielded considerable fragments of ivory (Bendall 2003, 187, 190, 194-195).

Our point here is that the Mycenaeans had a sophisticated and palatially monitored leather-working industry at Pylos with a wide variety of specialized products. The three clearest items connected with restraining and controlling and maintaining large animals are *po-qe-wi-ja* (= halter/feedsacks derived from the root in Greek *φείβω* ‘pasture, feed, nourish’ of animals; Beekes, 2010, s.v., 1561-1562), *a-ni-ja* (= leather ‘reins’ *stricto sensu*) and *a-pu-ke* (= leather headbands, which, from the specification that certain *a-ni-ja* were /*anampukes*/ = ‘without headband’, would imply that *ampukes* could accompany leather reins, or not, as sets; cf. Bernabé, Luján 2016, 570).

Given that our Linear B documentation is haphazardly preserved and incomplete at every site, it is reasonable to postulate that *pa-sa-ro* fits into this scheme of animal restraining and guiding paraphernalia by, as it were, standing outside it. That is to say, *pa-sa-ro* must be rather special and made up of component elements, leather straps and non-leather parts, that facilitate restraint or control and enhance appearance. For other kinds of leather use, straps would have secured (1) the bronze or leather plaques (*o-pa-wo-ta*) or platelets (*qe-ro*) that make up body armor and its shoulder guards; (2) the protective cheekpieces (*pa-ra-wa-jo*) and chinstraps of helmets; and (3) various parts of chariots (*i-qi-ja*) and hauling wagons (cf. *a-pe-ne-wo*). We should also proleptically note that dyeing leather ‘red’ is well attested. Leather straps and leather ties fastened leather reins to animal headgear proper. Leather straps were also threaded through cheekpieces and otherwise adjusted for proper fit around the animal’s head, snout

and mouth. The Knossos Sd series (Bernabé, Luján 2008, 221-222) includes horse equipment designated as “horn plaques fixed on straps” and ivory and leather “horse blinkers” (eye pieces). Finally, we should keep in mind that animal headgear can be bit-less, relying on its leather strap components to control the head of the animal without any metallic mouth insert.

When we turn to the Homeric evidence, we find that ivory is mentioned only twice in the *Iliad*; both passages (*Il.* 4. 141-142 and 5. 583) include what Kirk (1985, 346; 1990, 117-118) calls “horse-trappings”.

Iliad 4. 141-145 is relevant for emphasizing the precious nature of the animal head control gear, whether of horses used by warrior nobility or in connection with ritual animal sacrifice. It also underscores the value that stored objects made with precious materials have for the upper-class human beings who make use of them and, as it were, put them on public display. In the *Iliad* passage that follows, the word *agalma* is used of a decorated ivory equine cheekpiece that delights a *basileus*:

- 141 ὥς δ' ὅτε τίς τ' ἐλέφαντα γυνὴ φοίνικι μίγῃ
Μηονίς ἢ ἐ Κάειρα παρήϊον ἔμμεναι ἵππων
κεῖται δ' ἐν θαλάμῳ, πολέες τέ μιν ἠρήσαντο
ἵππῃς φορέειν: βασιλῆϊ δὲ κεῖται ἄγαλμα,
145 ἀμφοτέρων κόσμος θ' ἵππῳ ἐλατῆρι τε **κῦδος** (*Iliad* 4. 141-145)

As when some woman stains an ivory with red,
A Maeonian or a Carian woman, to be a cheekpiece of **horses**
It lies in an inner chamber, and many noble horsemen have sought/prayed
To bear it; but it lies stored as an object of delight (*agalma*) for a king
Twofold: an ordered adornment (*kosmos*) for a horse and for its driver **a source of praise** (*kudos*)
(trans. Palaima)

Elsewhere *agalma* is used of a pleasing gift offered to a deity with the purpose of obtaining favor by bringing the god delight. In *Odyssey* 3. 438, a bull whose horns are adorned with gold by a bronzesmith before being sacrificed at Nestor's Pylos is called an *agalma*; in Herodotus 5. 60, a tripod is an *agalma*.

We may compare the exquisite staining of the ivory cheekpiece by specialist Anatolian ivory-working women in *Iliad* 4 with the *pa-sa-ro*'s gold veneered, laminated or inlaid elements on Ta 716. Furthermore, an early Mycenaean (LH I) horse-bridle cheekpiece excavated at Mitrou in East Lokris offers another striking comparison. Made of deer antler, the Mitrou bridle fragment “has a surface decoration of two juxtaposed incised and partially compass-drawn patterns that must have been intended as meandering steep wave bands” (Maran, Van de Moortel 2014, 533, figs. 6-7). The piece highlights the conspicuous and specialized nature of animal headgear in the archaeological record, also attested in the later Homeric epics. In *Iliad* 5. 582-583, the Greek warrior Antilochus wounds the charioteer (ἡνίοχον, literally ‘rein-holder’) Mydon in the elbow with a hurled stone and we are told that the reins, white with ivory, fell from his hands to the ground and in the dirt:

- ἐκ δ' ἄρα χειρῶν
ἡνία λεύκ' ἐλέφαντι χαμαὶ πέσον ἐν κονίῃσιν (*Iliad* 5. 582-583)

and from his hands then
the reins, white with ivory, fell to the ground in the dust (trans. Palaima)

The ivory here would seem to refer again to some decorative apparatus adorning the reins for controlling the chariot horses.

In *Odyssey* 23. 200-201, Odysseus describes the intricate bed he crafted for himself and Penelope as ornately designed with gold, silver and ivory and that on it he stretched a thong or strap (historical Greek *ἵμάς*) of oxhide (literally of a **bovine**) that was brilliant (*φαιινόν*) with red-purple dye (*φοίνικι*).

δαιδάλλων χρυσῷ τε καὶ ἀργύρῳ ἥδ' ἐλέφαντι:

ἐκ δ' ἐτάνυσσα ἱμάντα **βοῦς** *φαιινόν φαιινόν* (*Odyssey* 23. 200-201)

Intricately crafting it with both gold and silver and ivory:

And I stretched out a strap of **oxhide** gleaming with red-purple dye (trans. Palaima)

We can imagine the splendiferous contrast of red-dyed leather reins and bridle and gleaming white ivory.

With this Linear B and Homeric evidence in mind, let us now turn our attention to iconography.

REPRESENTATION OF A *PA-SA-RO* ON THE AGIA TRIADA SARCOPHAGUS?

The Agia Triada sarcophagus is more than a century and a half older than most Linear B tablets. The records connected with the main final destruction at Pylos come from LH III C1, roughly 1170 BCE (Vitale 2006, 190-191, 200 table 2; Vitale, Stocker, Davis forthcoming). The sarcophagus, found in a stone-built funerary structure dubbed tomb 4 (La Rosa 1999), belongs to the island's final palatial era in early Late Minoan IIIA2 (*ca.* 1370-1360 B.C.) (La Rosa 2000, 997; Burke 2005, 403 n.2, 410-411; for a slightly earlier range of the absolute date, see La Rosa 2010, 503). Mycenaean or mainland-inspired architecture appears at the site and elsewhere on Crete at this time, and the Knossian references to the Linear B toponym *pa-i-to* may refer to Agia Triada – the primary center in the Mesara following the Neopalatial period (Burke 2005, 408-410; D'Agata 2005, 110; La Rosa 2010, 497; Lefèvre-Novaro 2020, 1057, 1062). D'Agata (1999, 54; 2005, 110) recognized the complexity of the Mesara's Mycenaeanization in Late Minoan IIIA1-III A2 early through analysis of both ceramics and funerary evidence, noting that the region's localized materials and practices melded with outside ones. Agia Triada, in particular, had close ties to final palatial Knossos and its leadership, which in turn had strong connections with Mainland Greece. It is understandable, therefore, how the painted Agia Triada sarcophagus reflects, as Burke (2005, 403) describes it, “an emergent Mycenaean ideology” at the site and an “expression of power by sophisticated Mycenaean elites.” Despite its find location in south-central Crete and its inclusion of Minoan and numerous Egyptian characteristics (Watrous 1991, 291; Hiller 1999, 364-367; Brekke 2010; Cucuzza 2011), the Agia Triada sarcophagus uses Mycenaean iconography (*e.g.*, chariots, female drivers, griffins, and simple garments on figures, Burke 2005, 414-415), validating its comparison here to tablet Ta 716 from Pylos.

Burke (2005, 417), furthermore, persuasively concluded that the painted sarcophagus is “better classified within the sphere of Mycenaean art.” We cannot expect, however, that the sacrificial ritual depicted on the fourteenth-century larnax matched *precisely* that of late thirteenth or early twelfth century Pylos. Variation in religious practice is expected diachronically and spatially, yet highly specialized equipment like a *pa-sa-ro* might endure – whether passed down generationally or through continued production and use of the object type – within a ritualized context. The ‘heirloom’ or keepsake tripods of Cretan origin (of unknown date) listed on other Pylos Ta tablets provide an example of this phenomenon (Palaima 2003, 198-199; 2019, 594).

The famed Agia Triada bull sacrifice scene incorporates an overlooked feature directly underneath the sacrificial bull's head (Fig. 3). The area is only partially preserved, though modern conservation (Levi 1956) has restored missing portions of the painting. The image depicts a trussed bull immediately after its throat has been slit (or pierced according to Petrakis 2021, esp. 355-362). The bull bleeds into a receptacle resting on the ground. Debate remains about the exact vessel type, often identified as a rhyton stuck in the ground, and whether the same vessel reappears on the sarcophagus' libation scene on the opposite side (Long 1974, 36, 62-63; Burke 2005, 413 n. 50; Lis, Van Damme 2020, 190, 192; cf. Koehl 2006, 263, 274). Two thick red lines run diagonally down from the bull's head, pointing toward the receptacle on the ground. Traditional interpretations take these features as distinct streams of blood drip-



Fig. 3. Detail of the stone Agia Triada sarcophagus depicting a bull sacrifice, Agia Triada, Final Palatial Period; Π 396, Αρχαιολογικό Μουσείο Ηρακλείου (Heraklion Archaeological Museum); © ΥΠΟΥΡΓΕΙΟ ΠΟΛΙΤΙΣΜΟΥ ΚΑΙ ΑΘΛΗΤΙΣΜΟΥ – Ο.Α.Π. [Hellenic Ministry of Culture and Sports - Hellenic Organization of Cultural Resources Development (HOCRED)].

ping from the throat and mouth (Nilsson 1950, 229; Sakellarakis 1970, 180-181; Long 1974; 62-63, 67; Immerwahr 1990, 101; Marinatos 1986, 24-25, fig. 15; 1993, 34; Burke 2005, 413). Such interpretation requires some pleading to account for the gravity-defining bloodstreams falling diagonally. Perhaps the design reflects blood spurting out of the bull's neck (Petrakis 2021, 361), although the double stream and thickness of the lines seem excessive. Other explanations for this oddity might include a deliberate disregard for realism or simply that the scene's complexity demanded artistic liberty to cram the sacrificial scene into a confined place (Sakellarakis 1970, 181). Though the hue seems to signify blood, it is crucial to note that other restraining devices in this scene – the straps tethering the bull to the table and binding the animal's limbs together – are also red. The distinctive marks on the bull's body and legs are not blood streaks, so color alone cannot determine the diagonal feature's identification.

Further clues emerge from the sarcophagus' short, side panels, each portraying a chariot with two female drivers; griffins pull one chariot while agrimia or wild-goats (Nauert 1965, 91-92) draw the other. Both chariot scenes include red or reddish reins and head-controlling gear on the creatures (for color images, see Dimopoulou-Rethemiotaki 2005, 173, 178-179). Headgear resembling a traditional horse bridle and two sets of reins are conspicuous in the agrimi painting. In the griffin chariot panel, the reins and straps are more obscure due to the composition's dark red background. Still, it is possible to distinguish two, thick, light-red lines under the griffins' heads, seemingly attached to their necks. Furthermore, as noted above, two Pylian Linear B tablets, PY Ub 1315 and PY Ub 1318, mention red leather (*e-ru-ta-ra di-pte-ra*), indicating that Mycenaean artisans dyed leather in this distinctive hue (Del Frio, Nosch, Rougemont 2010, 348, 360; Luján 2019, 2, 13 n. 35; for more on the Mycenaean use of red dye, see Nosch 2004).



Fig. 4. Detail of the stone Agia Triada sarcophagus depicting a bull sacrifice and emphasizing the red straps including the potential *pa-sa-ro* below the bull's head. © Tina Ross, modified from the Alison Frantz Photographic Collection, CR9, American School of Classical Studies at Athens, Archives.

Mycenaean artisans also unsurprisingly employed red when portraying dog collars and leashes in the wall paintings at Pylos, Tiryns, and Orchomenos, including the famous boar hunting frescoes from the latter two sites (Rodenwaldt 1912, 113-114, 123, figs. 47, 55, pls. 13-14; Lang 1969, 70, 103-104, 120-121, pls. 15, 116, 122; Immerwahr 1990, 129-132; Schlag 2000, 139). The employment of red restraints on the Agia Triada bull seems to illustrate leather straps more accurately than previously recognized. Moreover, we should not forget the *Iliad* reference (4. 141-142) to an ivory horse cheekpiece that was **stained red** (ἐλέφαντα γυνή φοίνικι μίηνη...παρήϊον ἔμμεναι ἵππων) and the *Odyssey* reference (23. 201) to a **red-dyed** bovine leather thong or strap (ἱμάντα βοῶς φοίνικι φαεινόν).

The thick red lines in the bull sacrifice scene appear to form an oblong, upside down U. The painting is not well preserved but it is clear that the diagonals meet around their mid-sections before a distinct gap exists between their lower ends. The feature's upper element is more difficult to deduce; it is curved, seemingly connecting the two diagonals. This rounded end, however, is black with hints of red hue near the right diagonal. Is the black dot deliberately part of this feature or is it one of the speckled marks that occur elsewhere on the bull? We suspect that the black dot represents speckling and that an artist painted over it when adding the red oblong feature. Elsewhere on the animal, the artist used red paint overtop other colors, most obvious with the criss-crossed body straps, a portion of which masks the tip of the bull's black tail (Fig. 3). Did the artist likewise employ red to cover, in part, the black speckling when painting the oblong feature? Better preserved is a narrow extension from the left diagonal, and seemingly the entire oblong object, that runs up to the bull's snout area. Finally, a splattering of red, poorly preserved, appears immediately above the receptacle on the ground, and these blots are good candidates for representing blood. Fig. 4 emphasizes the red color of these features and the aforementioned straps by keeping the rest of the painting in grayscale. Restored sections of the overall scene appear in a lighter hue. For the diagonal feature underneath the bull's head, a dark red conveys the original painted areas while our suggested reconstructed portions are more transparent. The reddish blotting – outlined in Fig. 4 to avoid distorting the depiction as preserved – differs starkly from the diagonal feature above it.

The open U form and length of the two lines – generally corresponding to the size of the bull's cheeks from snout to ears – are perhaps a sacrificial headstall or restraining device. The feature strikingly resembles our current understanding of *pa-sa-ro* on Ta 716. The lower ends of the two thick diagonals fail to meet. They terminate in minor tip protrusions. While these extensions might suggest blood dripping, such an explanation makes little sense if the elongated lines are bloodstreams. Blood does not congeal in midair, making it difficult to account for the

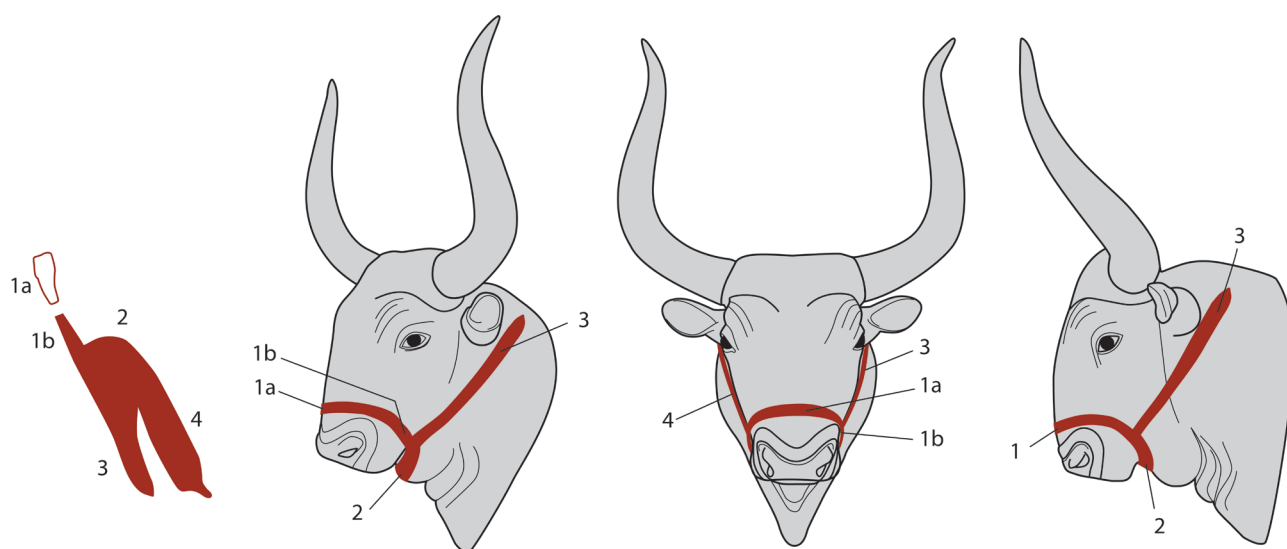


Fig. 5. Possible positioning of a *pa-sa-ro* on a bull head and its relation to the oblong feature on the Agia Triada sarcophagus © Tina Ross.

sudden change in thickness of the red lines. This critical detail, in addition to the unusual diagonal design, offers a strong case against the identification of flowing blood. The best explanation for the oblong red feature, therefore, is a partially detached *pa-sa-ro*, dangling from the slaughtered animal's snout.

In its original position on the bull's head, the *pa-sa-ro* must have had a noseband, which Rawling (2000, xviii) defines as "one of the straps of the headstall" that "usually encircles the nose and jaw." Fig. 5 provides a hypothetical reconstruction for how one might place the Agia Triada *pa-sa-ro* on a bull's head, including the use of a noseband. Such a strap *may* appear on the sarcophagus painting, yet the image's preservation and conservation make it difficult to discern the scene's various pigments without scientific inquiry. This area of interest is marked with an outline in our reconstruction of the Agia Triada scene (Fig. 4; see also Fig. 5, label 1a) to emphasize its uncertainty.

Returning to the text of Ta 716, although on balance we think that Del Frio's (1990, 328-330) interpretation of *ku-ru-so*, *a-pi*, *to-ni-jo* as 'with gold laminate or overlay' is slightly more probable – mainly because it better suits the use of *ku-ru-so* as a dative of material, it is pertinent to note again here that Palmer (1963, 358) translated *a-pi to-ni-jo* as strands on one side and the other or as "double stranded." This would make good sense here if we add a further clarification by identifying the strands as red leather straps. We wish to point out here that accepting Del Frio's reading does not rule out that the *pa-sa-ro* was double-stranded. It is natural with animal head-controlling apparatuses to have two straps, one on either side of the head. The particular entry on Ta 716 simply means that the party or parties responsible for the Ta inventory made note of the costly gold element of the *pa-sa-ro* as something that needed to be checked as still intact when the item was returned after the ceremony was conducted.

Ta 716's *pa-sa-ro* would therefore consist of two strands – apparently connected at one end and open at the other to judge by later uses of ψαλόν – that ran along either side of the animal's face. In its original position, the rounded end of the Agia Triada *pa-sa-ro* would have been positioned underneath the neck as a "throatlash" (Fig. 5, label 2) (Rawling 2002, xix), thereby enabling the long sides to run up and along the cheeks (Fig. 5, labels 3-4). For the *pa-sa-ro*-feature to function properly, an additional strap (not shown in the sarcophagus painting) may have been necessary to connect the two open *pa-sa-ro* ends behind the bull's head, ears, and horns, thus bringing the cheekpiece ends together. Alternatively, one could have stretched the straps behind the head and tied the two ends together. Finally, there must have been some kind of leash tethered to the *pa-sa-ro* that allowed an officiant to lead or pull the sacrificial animal. Yet it is uncertain where this rein attached to the *pa-sa-ro* device, for the Agia Triada scene offers no further clues. The use of nose rings on bovids is attested elsewhere in ancient art including a pair of Old Hittite terracotta bulls from Boğazköy (Neve 1965, 48-50, figs. 12-14; Littauer,

Crouwel 2002, 365; Littauer 2002, 499). There is no evidence that a *pa-sa-ro* included a nose ring, but tethering a lead rope to such a component is one way to lead a bovid.

The Agia Triada bull scene thus seemingly includes a sacrificial item otherwise attested by one Linear B tablet. The fact that a U-shaped object occurs in a slaughter scene and corresponds to Ta 716's *pa-sa-ro...a-pi to-ni-jo* further strengthens *pa-sa-ro*'s ritual connotations – already evident by the other items listed on Ta 716. Why the Agia Triada artist depicted a *pa-sa-ro* warrants further discussion. If doubts exist about the plausibility of portraying such a ritual item, keep in mind that other head-restricting gear for griffins and wild-goats – not horses – occurs on the same sarcophagus. Those red straps (on non-traditional draught animals) bolster our identification of a bridle or muzzling device on the sacrificial bull. Unlike the other tethering straps crossing diagonally on the body of the Agia Triada bull or the restraining straps on the griffins and agridia, the *pa-sa-ro* is partially detached as the result of the sacrificial act. Since it is displaced from the position of its original use, it has confounded modern viewers. Moreover, taking the red diagonals as a *pa-sa-ro* does not eliminate the scene's portrayal of bloodletting and collection. That component is merely less conspicuous and more focused in the area of the ritual vessel that receives the blood. That receptacle on the ground and the splattering of amorphous red blots above it confirm the practice.

The *pa-sa-ro*'s illustration on the Agia Triada sarcophagus further marks the timing of the ritual event and the bull's condition (on concern for chronology of sacrificial acts in display images in Classical Greek art, see Bundrick 2014, 653-655 *et passim*). The key element of the slaughter is over, and the bull is dead (cf. Cromarty 2008, 15). Other parts of the scene support this conclusion. In addition to the blood retrieval, a female figure, probably a priestess, washes her hands in a basin or *lekane* with her back turned to the carcass after the death blow (perhaps by her) (Nauert 1965, 95; Lis, Van Damme 2020, 190-191). The detached *pa-sa-ro* truly underscores the point. While the head-restraining device enabled an official to lead a bull to the sacrificial table, the object became unnecessary and probably a hindrance during the physical slitting of the animal's neck, an action that proved to be the ultimate death blow. The unhinged *pa-sa-ro* thus communicated the precise moment of the ritual to ancient viewers, who understood that the bull, though bleeding out, had died. A musician behind the table and another attendant touching (?) the bull's rear also emphasize the moment of death. The musician's double flute might have mitigated shrieks and gasps of the dying animal. For a Homeric comparison of sacrificial sounds, Kirk (1990, 200 s. line 6.301) notes that "a ritual female shriek or wail [ὄλολυγή]...[a]t *Od.* 3. 450...accompanies the axe-blow that paralyzes the sacrificial animal before its throat is cut." Simultaneously, the attendant's hands offered stability—in addition to the tethering of the bull's body on the table and the binding of its limbs—against sudden jolts by the victim that may have occurred during the slaughtering procedure. By representing a group of blood drops below and the loosened *pa-sa-ro* in a state that would also indicate that the animal had been sacrificed, the artist alludes to what Burkert (1983, 12) calls the "threefold unchangeable rhythm" of sacrificial ritual, with preliminary and closing rites "framing a central action clearly marked as the emotional climax by a piercing scream, the 'Ololygē'".

IMPLICATIONS OF MYCENAEAN *PA-SA-RO*

The *hapax* Mycenaean word *pa-sa-ro* will remain somewhat enigmatic until further examples of the lexical unit appear in Linear B. For now, three distinct observations support our interpretation of *pa-sa-ro* as a ceremonial head-restraining or muzzling device in Mycenaean sacrifice: 1) the word's etymology and later meanings indicate the restriction and control of movement of an animal's head; 2) the unmistakable association of *pa-sa-ro* with other sacrificial equipment – hammer axes and knives – on Ta 716; and now 3) a compelling representation of the device in an early to mid fourteenth-century painting of a bull sacrifice.

The Agia Triada scene illustrates an open-U-shaped feature with two long ends that resemble cheekpieces and that presumably ran originally along either side of the head. Although *pa-sa-ro*'s later use suggests a "bit" and cheekpieces and mouthpieces are known from the Mycenaean world (Harding 2005; Aravantinos 2009, 49-53, figs 3, 20; Maran, Van de Moortel 2014), this translation is too vague for *pa-sa-ro* and has equine connotations

that seem out of place with sacrificial ritual at the Palace of Nestor. Moreover, no mouthpiece or bit appears in the detailed Agia Triada scene. We propose that *pa-sa-ro* may be a ritual bridle without a proper bit; it could restrain an animal's head using cheekpieces, a throatlash, and a noseband.

Linear B tablet Ta 716, the Agia Triada sacrificial scene, and the *Odyssey's* description (3. 438) of a ritual preparation all emphasize, for practical and conspicuous purposes, the adornment of an animal victim's head. Ta 716's *pa-sa-ro* has golden laminate on either side; such cheekpiece gilding would have been highly visible when positioned on an animal in contrast with red-stained leather strapping. The dangling red cheekstraps below the Agia Triada bull likewise advertise the *pa-sa-ro's* prominent character. The quantity of burnt cattle bones from the Pylian palace (Halstead, Isaakidou 2004; Stocker, Davis 2004) and the visual association of a head-restraining device on the slaughtered Agia Triada bull imply that Pylos' *pa-sa-ro* was, in all likelihood, designed for bovines. The rarity of the *pa-sa-ro*, at least in the fragmentary archaeological and written records, and its elaborate decoration on Ta 716 further signal the object's association with a highly valuable animal. Aldrete (2014, 28 n.1) confirms that in Roman sacrificial ritual "[w]hile cows, calves and bulls were perhaps not the most common sacrifices, they were among the most expensive and prestigious, as well as featuring prominently in a number of special rituals." And finally, Naiden (2007, *passim*) thoroughly documents, using literary *testimonia* and iconographical evidence, that large animals like bulls or calves required serious use of effective restraining devices.

This study contributes to our understanding of Late Bronze Age iconography, sacrifice, and Linear B in notable ways. The first point is the possible connection of Mycenaean *pa-sa-ro* with what would be the object's only representation, at present, in Aegean art. The depicted object on the Cretan sarcophagus resembles the current linguistic take of *pa-sa-ro*, discussed in greater detail by Palaima and Blackwell (2020, 70-76). Secondly, the traditional interpretation of the two, thick, diagonal red lines as bloodstreams in the Agia Triada scene seems unlikely. Rather, a distinct *pa-sa-ro* on the sacrificial bull fits well within the sarcophagus' detailed portrayal of specialized equipment, especially the ritual vessels (Lis, Van Damme 2020, 189-192) and the double ax stand. Thirdly, the partially detached *pa-sa-ro* also accentuates the timing of the slaughter and the bull's lifelessness. Finally, there are Pylian implications. Our interpretation of the Agia Triada *pa-sa-ro* strengthens the notion that bulls were the intended sacrificial victims of the so far unique Ta 716 ritual equipment. This conclusion sheds further light on the late thirteenth-early twelfth century palatial event in Messenia that prompted the recording and ritual use of the items listed on the Ta tablets.

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