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From the Persepolis Fortification Archive Project, 5
The Aramaic Epigraph *ns(y)ḥ* on Elamite Persepolis Fortification Documents

1 Introduction

Fig. 1: Fort 1982-101 Reverse

Persepolis Fortification tablets with cuneiform texts in Achaemenid Elamite sometimes also bear short texts in Aramaic script and language. The word *ns*(*y*)*ḥ* appears in more than a third of them (**Fig. 1**), on documents produced in the latest attested stages of information handling that are represented by the excavated form of the Persepolis Fortification Archive. These notations, we propose, refer to a further stage, one that produced documents that are no longer extant.[1]

1 Earlier versions of parts of these remarks were presented in 2009 at the 219th meeting of the American Oriental Society (Albuquerque, New Mexico) and in 2012 at the Annual Meeting of the American Schools of Oriental Research (Chicago,

2 Terminology

The Aramaic epigraphs of Persepolis have well-known Assyrian and Babylonian counterparts. Some of the Mesopotamian examples were published even before the cuneiform scripts could be read. Despite long discussion there is no consensus on what to call them. "Docket" and "endorsement" are the most common terms in English-language scholarship on Neo- and Late Babylonian cuneiform tablets. The authoritative Fitzmyer and Kaufman, for example, observing the confusing inconsistency of usage, adopt both "docket" and "endorsement" under the descriptive heading "epigraphs" (1992:36, 44-51, cf. Kaufman 1989:97). "Docket" in this sense, however, departs not only from common contemporary English usage, but also from the usage of English-language scholarship on Neo-Assyrian documents. There, "docket" commonly applies to a kind of document of specific shape and contents, whether in Assyrian, Aramaic, or both. The term "endorsement," on the other hand, implies a function that few if any of the Aramaic texts added to cuneiform documents can have had (*pace* Fales 2000:117).

In his compendium of the Neo-Assyrian examples, Fales (1986) applied the term "epigraph" broadly to include not only Aramaic notations on primary Assyrian texts but also monolingual Aramaic texts and bilingual Aramaic-Assyrian texts on clay tablets. Fales 2000 re-introduced "endorsement" to refer specifically to Aramaic notations on Assyrian cuneiform tablets, but Fales et al. 2005:600 used "epigraph" and "label" in this descriptive meaning, while interpreting the texts in functional terms as "endorsements." For the Neo-Babylonian examples, Jursa (2005:5 with n. 25) uses "epigraph," while referring to the classified list compiled by Zadok (2003:558-78), where they are called "endorsements" (similarly Röllig 2002:22 n. 230; otherwise Cussini 1995: 22f., summarized by Frame 2001:107f. n. 12).

Terms for the examples in the Persepolis Fortification Archive have also varied. Hallock called them "glosses" (followed, e.g., by Azzoni 2008:253), Bowman (1970:19) called them "dockets" and characterized them as "brief abstracts," Henkelman called them "dockets (also 'endorsements' or 'notes')" (2008:91), and Lewis called them "epigraphs" (1994:28).

Lacking an ordinary English counterpart that carries the nuance of the common German term, "Beischrift," we prefer "epigraph." It is non-committal as to function and it departs only a little from common usage.

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3 Aramaic Epigraphs on Neo-Assyrian and Neo-Babylonian Tablets

About 100 examples on Neo-Assyrian cuneiform tablets are known. Most are from the late seventh century BC. They are often incised on the tablets, scratched in when the clay was somewhat dry. They are less often written in ink with pen or brush. Almost all are on legal documents.[2] They exhibit little formal variation (Fales 2000:117; Röllig 2002:23). The largest groups from single sites are 61 from Dūr Katlimmu (about 1 in 4 texts from 18 or more different find-spots, corresponding to 39 or more different text-groups), and 32 from Nineveh.[3]

More than 280 examples on Neo-Babylonian and Late Babylonian tablets are known. Most are from the late sixth through late fourth centuries.[4] They are sometimes drawn with a stylus in the damp clay, sometimes incised, but over time progressively more often written in ink with pen, brush, or stylus. Most are on legal documents, both in private legal archives and in temple administrative archives, but more than 40 are on administrative records and letter-orders. They exhibit wider formal variation than Neo-Assyrian examples.[5] The largest single archival groups are 94 from the late fifth-century Murašû Archive from Nippur (about 1 in 8 known texts), 42 from the mostly late sixth-century Ebabbar administrative archive from Sippar, and 34 from the late fifth-century Kasr Archive from Babylon.[6]

2 An exception is the extispicy report SAA IV 162, see Fales 2000:95 n. 30.

3 In general, see Fales 2000, Radner 2011. On 32 examples from Nineveh (not including the extispicy report): Fales 2000:92ff. On 8 examples from Burmarina/Tell Shiukh Fawqani: Fales et al. 2005:623f., 627-29. On 61 examples from Dūr Katlimmu/Tell Šēḫ Ḥamad: Röllig 2002, Radner 2002. On one example from Till Barsip/Tell Aḥmar: Dalley 1997:90, 96, Fales 2000:105f.

4 See Oelsner 2006, correcting and supplementing Zadok 2003:558-578. The earliest example may be from 728 BC (BRM 1 22, so Oelsner 2006:34, but for doubts about the date, Frame 2001:107), the latest from 151/150 BC (TCL 13 246, see Oelsner 2006:61).

5 Briefly, Zadok 2003:574ff. §6.6. This observation applies even if only examples on legal documents are considered.

6 On the uneven concentration of Neo- and Late Babylonian epigraphs, and its import (if any) for cultural inferences, see Joannès 2009:218ff.

4 Aramaic Epigraphs on Persepolis Fortification Tablets

With two possible exceptions,[7] the Persepolis Fortification Aramaic epigraphs (PFAE) are written in ink with brushes in spaces left open by the cuneiform texts, sometimes over the impressions of seals, hence after the cuneiform texts were written and the tablets were sealed. Most of them are short, a single word or a few words, numbers, or a date. Compared to the Neo-Assyrian and Neo-Babylonian examples, they are notable in several respects. They are on administrative tablets, so their purposes differed in at least some respects from most Mesopotamian examples. They come from a short time interval (the sixteen years of the dated Elamite Aramaic Fortification texts, 509-493 BC), and from a single place (Persepolis and its vicinity), so paleographic and formal variations do not reflect temporal or regional differences. And there are many of them.

The MA thesis of Nasgowitz (1966:102ff. n. 3, 178ff.) mentioned 41 examples, on the basis of Raymond A. Bowman's manuscript in progress on the Aramaic material in the Fortification Archive (Bowman n.d.). In his treatment of the Aramaic texts on stone mortars and pestles from the Persepolis Treasury Bowman mentioned the presence of "dockets" on the administrative tablets, but he did not estimate their number (1970: 19). The introduction to Hallock's edition of 2,087 Elamite Fortification texts mentioned that 44 of the published documents had "Aramaic glosses" written in ink (Hallock 1969: 82), and the editions of Elamite documents included readings of 31 of these (cf. Vattioni 1979:143f. Nos. 216-267). Hallock's publication of 33 more Elamite Fortification texts indicated the presence of one more example, unread (1978:119, PFa 8, RAB XXXIX). The marginal notes in Hallock's own copy of Hallock 1969 include the observation of a previously overlooked two-line "Aramaic gloss" on PF 0208, also unread, but failed to remark on an overlooked epigraph on PF 2011. Hallock's draft editions of 2,551 more Elamite Fortification texts (along with draft editions of 9 others by Charles E. Jones), now collated and revised by Wouter F. M. Henkelman for authoritative publication by the Persepolis Fortification Archive Project at the Oriental Institute, include readings or observations of 56 more Aramaic epigraphs.

Thus, by the time of Hallock's death in 1979, he and his collaborators had recorded 112 Aramaic epigraphs on 4,680 Elamite Fortification tablets, about 1 epigraph in 40 Elamite documents (cf. Lewis 1994:28). At Bowman's death in 1980, his manuscript on the Aramaic Fortification material (see Azzoni 2008) treated 83 of these epigraphs, including examples associated both with published and with unpublished Elamite texts. Hallock's and Bowman's readings of the epigraphs do not always agree. There are also other suggestions that Hallock and Bowman looked at these documents in different ways and in partial isolation from each other.

As of late 2014, the Persepolis Fortification Archive Project has recorded 147 more Aramaic epigraphs on about 1,400 more Elamite Fortification tablets and fragments. The overall rate of

7 PFAE 2200-101, two lines of Aramaic incised on a fragment on which only part of an Elamite date formula survives, and conceivably the traces that Bowman characterized as "crude scratches" on PF-NN 2590 (RAB 76).

incidence, about 1 epigraph in 25 recorded Elamite documents, is somewhat exaggerated by the fact that all items with epigraphs are recorded, no matter how fragmentary the Elamite or Aramaic texts. Nevertheless, the running total, 259 epigraphs among about 6,200 Elamite tablets and fragments examined, constitutes the largest single known archival cluster of Aramaic epigraphs on cuneiform tablets.[8]

5 Sequence of Elamite Recording in the Persepolis Fortification Archive

Aramaic epigraphs appear on Elamite documents belonging to almost all of the 32 formal and functional categories (labeled A through W) and subcategories (labeled C1 through C6, L1 through L3, etc.) that Hallock defined according to form, function and contents (1969:13-69). These categories and their sequential arrangement broadly reflect the flow of information through the Persepolis Fortification recording system (Jones and Stolper 2008:29ff.; with more detail and precision, Henkelman 2008:102-109 and 136-138; briefly, Henkelman 2011:99f.). For purposes of this discussion, the great majority of the Elamite documents can be considered in two groups.[9]

— The first main group includes most documents of categories A-S, memoranda of transactions seen as single administrative events. In general, categories A-G deal with movements of commodities among administrative sites and categories H-S deal with outlays to users and consumers. Almost all are visually distinctive, written on small, roughly tongue-shaped tablets with flattened left edges and rounded right edges, sometimes on roughly conical tablets, almost all formed around knotted strings, and usually bearing impressions of one or more seals (e.g., PF 0855, **Fig. 2**).

8 Images of many of the epigraphs are available on line through the applications InscriptiFact (http://www.inscriptifact.com/) and OCHRE (http://ochre.lib.uchicago.edu/); OCHRE also presents editorial information on many of them, including draft editions of many of the accompanying Elamite documents. Not considered here are monolingual Aramaic tablets with two texts in different hands, in some cases one of them incised with a stylus or inked stylus and the other added with an inked pen or brush, although these are arguably cases of Aramaic epigraphs added to primary Aramaic records (e.g., PFAT 043, 054, 091, 124, 135, 156, 174; see Azzoni 2008:256f.). PF-NN 1604 = PFAT 148, a document with one line of Elamite and five lines of Aramaic, poses the question which is the main text and which the secondary epigraph (below, **Fig. 7**).

9 The statements that follow reflect a wide consensus within which there is some variation. Vallat 1997 presents the most sharply dissenting view (somewhat modified by Vallat 2008). Despite the towering authority of its author in matters of Elamite language and epigraphy, it is an untenable reconstruction of archival behavior and information processing in the Persepolis Fortification Archive, both on specific grounds (see, e.g., Henkelman 2008:140-153) and on grounds of the structure of the argument. If, as Vallat argues, the system that he reconstructs is too complex to have been sustained by the Persepolis administration, the flaw is not in the system but in the reconstruction.

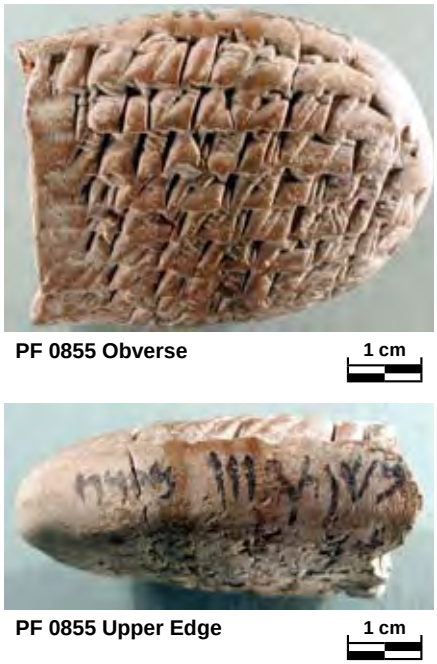
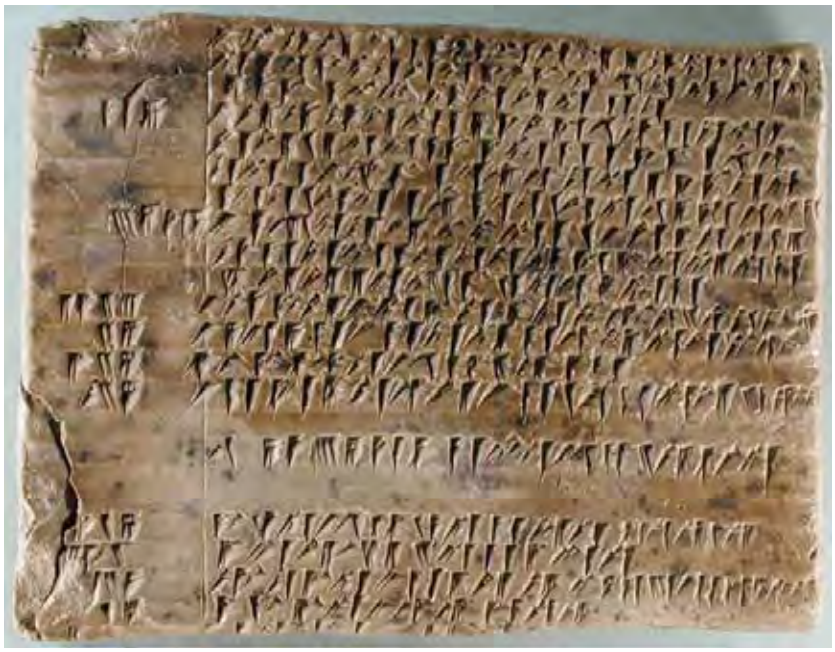


Fig. 2: PF 0855 (category L1) Obverse and Upper Edge with epigraph

— For purposes of this discussion, most documents of category T can be associated with this first group. These are letter-orders, sent by figures of high administrative and/or social rank, whose seals appear on the tablets. Most are orders for outlays of the kind recorded in memoranda of categories H-S, and most are on tongue-shaped tablets similar to the memoranda. Like Mesopotamian letter-orders, these are to be considered primarily as administrative, not epistolary documents. The presence of these outgoing letter-orders at Persepolis indicates that they were returned as evidence that the acts they authorized were proper, even if irregular or unscheduled, and as evidence that the acts that were ordered had been completed. That is, in their last use, they served purposes comparable to those of memoranda.

— The second main group includes most documents of categories V and W. These are registers of information of the kinds recorded in memoranda of categories A-S. The registers compile, summarize, and digest transactions over accounting periods ranging from half a year to as much as seven or eight years. Each compiles transactions in a single commodity done in the hinterland of a single district center under the responsibility of a group of named administrators. That is, for the archive-keepers at Persepolis these four variables—commodity, location, responsible administrators, and date—are the simple bases for organizing a large array of detail (Henkelman 2008:126ff.). These registers are also visually distinctive, being written on rectangular tablets without embedded strings (e.g., PF 1955, **Fig. 3**). Their sizes and layouts vary with the commodity involved, the volume of information recorded, and/or the degree to which the details of serial transactions (typically listed in "journals," category V) are reduced to totals and balances ("accounts," category W, see Brosius 2003; Henkelman 2008:136-38). The seals impressed on these registers are specific to them, rarely used on memoranda, and then on documents of only a few categories.



PF 1955 Obverse

1 cm

PF 1955 Reverse

1 cm

Fig. 3: PF 1955 (category V) Obverse and Reverse with epigraph

— Documents that do not fall into these broad categories include a comparatively small number of letters that are not letter-orders; labels (category U) with texts written on small, irregularly shaped clay objects that were attached to containers of documents; a few records of administrative investigations; and texts that include elements of more than one category.

According to the prevailing understanding of the dynamics of the Persepolis Fortification Archive—at least of its Elamite component—memoranda of individual administrative events on documents of categories A-S were drawn up at about 150 places in the regions around Persepolis. They were gathered and sometimes audited at about twenty district centers. At the ends of variable accounting periods they were collected, along with letter-orders of category T, and sent to Persepolis. There, they were collated and transcribed in journals of category V, each compiling and summarizing transactions in one commodity in one region during the accounting period, and/or digested in accounts of category W, producing totals and balances for the accounting period.

The memoranda and letters, after they provided source data for the registers, were to be discarded. The registers were to be kept on file for ten to twelve years or more, as the preserved form of the Archive indicates. Hence, line-item correspondence of preserved memoranda of categories A-S or letter-orders of category T with preserved entries in journals of category V is very rare (Hallock 1978:113f.).

Differences in the physical quality of the tablets and the care and neatness with which they are inscribed reflect both the level in the administrative hierarchy at which the documents were created and the intended life-spans of the documents. Thus, on-the-spot records of outlays, especially the travel ration documents (category Q), though often well-formed texts on well-formed tablets, sometimes appear on crudely formed tablets of poorly cleaned clay, with pebbles and other inclusions, sometimes of exceptional form, and sometimes written in rough, careless hands. Records of monthly rations (category L), drawn up at regional distribution centers at some remove from actual outlay and consumption, are usually on well-formed tablets, carefully laid out and engrossed. Journals and accounts (V and W) are regularly on well-formed tablets with dense, clean fabric, carefully written, though sometimes in hands that are, to modern eyes, more neat and elegant than easily legible.

To distinguish the two broad groups of Elamite documents as "primary" records—i.e., memoranda that were not based, or not necessarily based, on other written sources—and "secondary" records—i.e., registers based on other records, mostly but not exclusively written—in a loose adaptation of the terminology developed by Sumerologists and Assyriologists for discussing Mesopotamian administrative archives (so Jones and Stolper 2008:30), is convenient but reductive. It does not do justice to the timeline of activities that produced the documents, a timeline that involves at least two stages (local and district) for the memoranda and at least two stages

(serial compilation and balanced totals) for the registers. Nor does the primary/secondary characterization take into account other aspects of information handling in the region around Persepolis, such as the movement of auditors and accountants in the field (attested, e.g., in the often discussed letter PF 1858, see Koch 1990:222f.; Aperghis 1997: 283, 1999:163; Brosius 2003:276f., Henkelman 2008:346f.), or field audits of interim balances at district distribution centers, recorded on tablets that are sometimes marked with seals otherwise used only on the registers compiled at Persepolis (category C2, Mark Garrison, personal communication; Mikołajczak 2010). For present purposes, however, it is most significant that the memoranda and letters belong to the early stages of recording and the registers belong to the late stages.

6 Distribution of Aramaic Epigraphs

Where dates are preserved, late-stage registers with epigraphs deal with the earlier years covered by the Archive (years 15-21 of Darius I). Most early-stage memoranda and letter-orders with epigraphs (documents that had probably not yet been collated and compiled when the Fortification Archive was deposited in its excavated form) belong to the later years (years 20-28 of Darius I). This conforms to the overall chronological distribution of Elamite documents in the Persepolis Fortification Archive as a whole (Henkelman 2008:174).

Considering the documents in the broadest functional and procedural classes, the distribution of epigraphs is roughly even, but the rate of incidence is sharply different. Memoranda of individual transactions (categories A-S) have 105, almost evenly divided between records of movements of goods (A-G, 48) and records of outlays (H-S, 46), with 11 on memoranda of undetermined categories. Letter orders authorizing outlays have 23. Hence, a running total of 126 epigraphs are on about 5,000 early-stage documents recorded until now, about 1 epigraph in 40 documents. Registers from the late stages (categories V and W) number 130 (50 V, 66 W, the remainder on registers of undetermined categories) on about 1,000 items recorded until now, about 1 epigraph in 8 documents. One epigraph is on a label (category U).

Sorting the epigraphs more narrowly, however, the distribution is uneven. Of epigraphs on registers, as indicated, fewer are on serial lists of transactions (V) than on tabulated and digested accounts (W). Of epigraphs on early-stage documents, about two-thirds are concentrated in three groups of categories and subcategories:

— Categories C1-C6, records of deposits, balances on hand, and exchanges (38 examples, about 1 in 12 of about 440 recorded C documents), mostly C1, records of deposits of fruit and cereal (31 examples, e.g. PF 0215, **Fig. 4a-c**).

Fig. 4a-b: a. PF 0215 Obverse; b. PF 0215 Reverse (scale 2:1)
(Persepolis Fortification Archive Project, Oriental Institute)

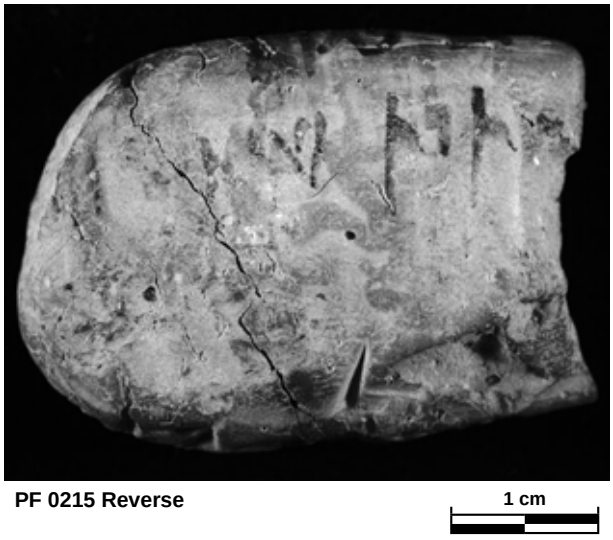


Fig. 4c: PF 0215 Reverse, polarizing and red filters (scale 2:1)
(Persepolis Fortification Archive Project, Oriental Institute)

— Categories K and L, records of outlays of monthly rations (23 examples, about 1 in 45 of about 1,000 recorded K and L documents).

— Category T, letters (22 examples, about 1 in 11 of about 230 recorded examples of letters and letter-orders), all letter-orders, almost all of them authorizing outlays of monthly rations of the kind that would ordinarily be recorded in documents of category L (e.g. Fort. 1740-001, **Fig. 5a-c**, cf. Fisher and Stolper 2015 Fig. 3a).

Fig. 5a: Fort. 1740-001 Reverse
(Persepolis Fortification Archive Project, Oriental Institute)

Fig. 5b-c: b. Fort. 1740-001 Upper edge, cross-polarizing and infrared filters; c. Fort 1740-001 Reverse, cross-polarizing and infrared filters (Persepolis Fortification Archive Project, Oriental Institute)

Eleven categories have only one or two examples. Conspicuous among these is the category with the largest number of recorded documents, Q, records of rations for travel parties, with a single epigraph (PF 2050) among about 850 recorded documents.[10] Four categories and sub-

10 Other categories with one example are: C4? (records of dispositions of sheep and goats as *baziš*, probably mistranslated as "tax" (Fort. 2178-101, see Appendix, 1); C5 (records of exchanges of one commodity for another); U (labels). Other categories with two examples are: A (records of transportation of commodities), C6 (miscellaneous records of deposits), D (miscellaneous receipts), F (records of grain set aside for seed or fodder), G (records of commodities taken in as revenue), H (records of outlays to officials as daily, monthly, or travel rations), K1 (monthly rations for persons with religious functions), S1 (rations for animals).

categories have, as yet, no examples.[11] In terms of function and procedure, some distinctions among categories are over-determined,[12] so the complete absence of epigraphs from such categories is best seen as a sampling phenomenon.

Broadly speaking, epigraphs are found in nearly all classes of documents but they are common only in a few classes. Hence, the majority of epigraphs were added to cuneiform documents in a few regular circumstances.

There is a strong but not exclusive association between some categories of Elamite documents and some forms of Aramaic epigraphs.

— Of 20 documents with epigraphs that record outlays of monthly rations for work groups (category L) and 17 letter-orders with epigraphs authorizing such outlays (T), at least 17 of the epigraphs begin by specifying regnal year and month (*bšnt # byrḥ* MN) (sometimes adding that the rations were received), at least 3 others indicate year only and 2 others month only. That is, about two-thirds of the epigraphs on documents recording information of this kind focus on date of the transaction.

— Of 31 documents with epigraphs that record deposits of commodities, mostly fruit to be disbursed (category C1), epigraphs on at least 13 indicate the recipient, the commodity, and the regnal year, in consistent form (*zy* PN commodity *šnt #*), 1 (PF 2023) has the same formula without regnal year, and 3 more contain the same information but in different order. That is, more than half the epigraphs on documents recording information of this kind reproduce every substantive element of the Elamite text except the amounts deposited.

— Of 7 documents with epigraphs that record commodities expended for the king's table (category J), the epigraphs on at least 4 indicate only the commodity, in a single word, and epigraphs on 2 others add a personal name.

— Most strikingly, of 130 late-stage registers with epigraphs (categories V and W), the epigraphs on at least 96 (more than two-thirds) include the participle *nˀsîḥ* either alone or repeated, and rarely in longer context. With one uncertain exception (below, Appendix 1), epigraphs of this type do not appear on early-stage documents.

Broadly speaking, most but not all epigraphs on memoranda and letters highlight one or more of the main variables used to organize information in registers—date, commodity, occasionally responsible officials, but not administrative locus; epigraphs on most but not all registers that are organized on the basis of these variables omit this information.

11 B (records of deliveries of commodities), C3 (records of fractional deductions from large quantities of wine), K2 (records of monthly rations for named persons with titles other than religious), L3 (records of miscellaneous monthly rations).

12 K1, K2 and L3 are distinguished only by formal criteria, not to be distinguished functionally from other records of monthly rations. Categories A and B are distinguished by the use of specific verbs. C6, D, and R are *ad hoc* groups of miscellany; H includes special cases of outlays otherwise represented by categories K, L and Q; K1 includes special cases of outlays of the kind represented by categories K3 and L.

7 Indications of Function

Epigraphs on memoranda that record individual transactions do not indicate the amounts of commodities involved, information that would be crucial for compiling registers and striking balances. An epigraph on a register that refers to the total amount of the commodity involved (PF 2072, **Fig. 6a-o**) does so in a context that implies uncertainty about the result.

PF 2072 provides one of the few explicit indications of the role of an epigraph in information handling. The Elamite register concludes with a grand total of grain paid out; the number was written over an earlier, erroneous total. The Aramaic epigraph states a similar but slightly smaller amount (Hallock 1969:644; Henkelman 2008:92; Jones and Stolper 2008:33). The epigraph is also written over a partial erasure, leaving open the questions of which correction was made first and why the resulting totals are close but not exactly identical.[13] Nevertheless, the fact that a process of review and revision was recorded in both languages and scripts implies that at least some of the people who wrote the Aramaic epigraphs consulted the Elamite cuneiform entries, and that after the registers were drawn up at least some of them were subject to rechecking and further processing. A few other fragmentary epigraphs probably reflect similar procedures (Fort. 0634-101 and Fort. 1385-101, below; Fort. 1909A-101, Appendix, 7).

13 In the Babylonian example Frame 2001:101ff., mentioned as a point of comparison by Jones and Stolper 2008:33, the Aramaic epigraph provides information that is not present in the Babylonian text. No doubt this offers "a rare glimpse of the interplay of alphabetic and cuneiform writing" (Jursa 2004:159) in the same way that PF 2072 offers "a rare case of visible Elamite-Aramaic interaction" (Henkelman 2008:92). Nevertheless, it is not so clear that the Aramaic epigraph on the Babylonian tablet documents "a later stage in the processing and use of information" (Jones and Stolper 2008:33), for the epigraph is deeply incised and the photograph shows no sign that the tablet had been re-moistened to accommodate the epigraph, so it appears that the epigraph was written at the same time as the Babylonian cuneiform text.

PF 2072 Obverse

1 cm

PF 2072 Reverse

1 cm

Fig. 6a-b: a. PF 2072 Obverse; b. PF 2072 Reverse
(Persepolis Fortification Archive Project, Oriental Institute)

PF 2072 Upper Edge 1 cm

PF 2072 Left Edge 1 cm

PF 2072 Obverse 1 cm

Fig. 6c-e: c. PF 2072 Upper Edge; d. PF 2072 Left Edge; e. PF 2072 Obverse, polarizing and red filter (Persepolis Fortification Archive Project, Oriental Institute)

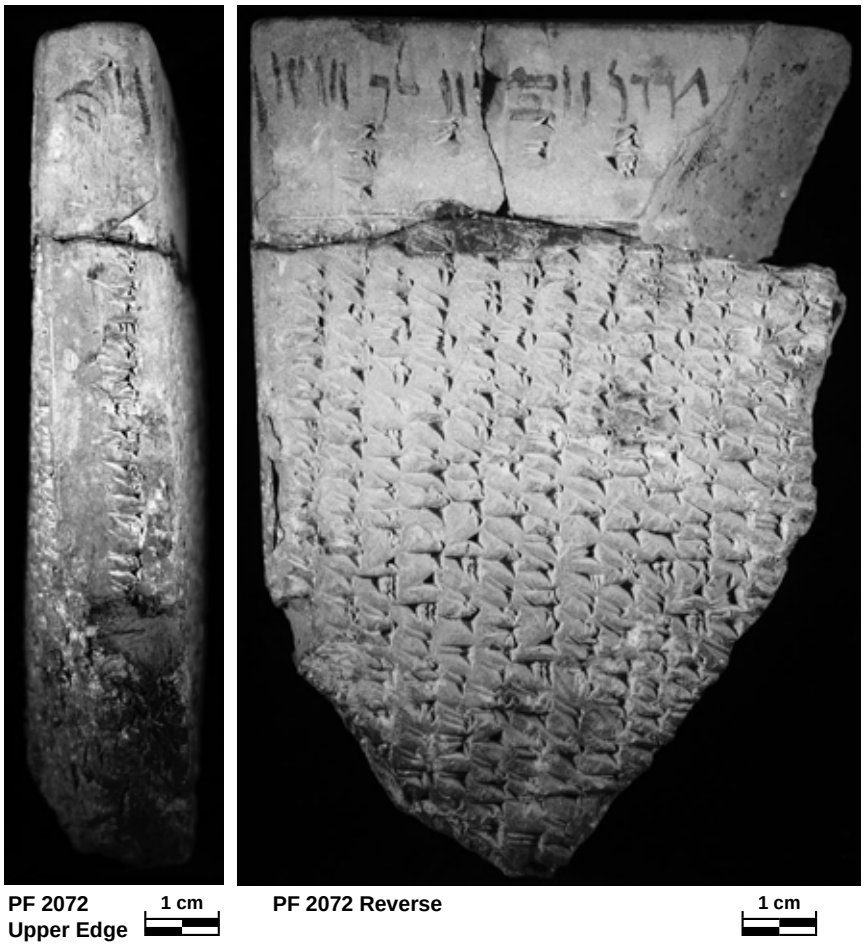


Fig. 6f-g: f. PF 2072 Upper Edge, polarizing and red filters; g. PF 2072 Reverse, polarizing and red filters (Persepolis Fortification Archive Project, Oriental Institute)

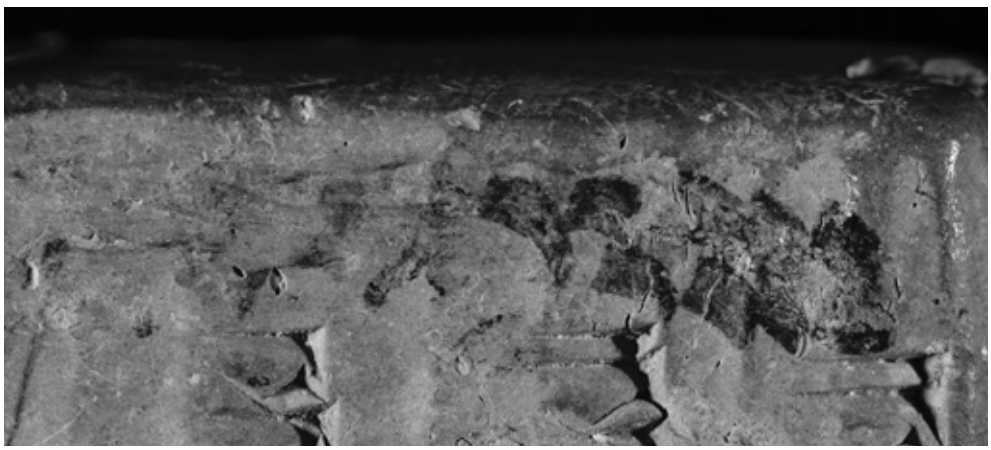


Fig. 6h: PF 2072 Obverse, detail, polarizing and red filters (Persepolis Fortification Archive Project, Oriental Institute)

Fig. 6i: PF 2072 Obverse, detail, polarizing and red filters
(Persepolis Fortification Archive Project, Oriental Institute)

Fig. 6j: PF 2072 Obverse, detail, polarizing and red filters
(Persepolis Fortification Archive Project, Oriental Institute)

Fig. 6k: PF 2072 Obverse, detail, polarizing and red filters
(Persepolis Fortification Archive Project, Oriental Institute)

Fig. 6l: PF 2072 Reverse, detail, polarizing and red filters
(Persepolis Fortification Archive Project, Oriental Institute)

Fig. 6m: PF 2072 Reverse, detail, polarizing and red filters
(Persepolis Fortification Archive Project, Oriental Institute)

Fig. 6n: PF 2072 Reverse, detail, polarizing and red filters
(Persepolis Fortification Archive Project, Oriental Institute)

Fig. 6o: PF 2072 Upper Edge, detail, polarizing and red filters (Persepolis Fortification Archive Project, Oriental Institute)

PF 2072 thus implies that both Aramaic and Elamite were media available to Iranian-speaking Persepolitan accountants or archivists who did this processing. Functionally literate Persepolitans were not functionally monolingual. This is also implicit in the extraordinary PF-NN 1604 (**Fig. 7a-e**), a label (category U). The reverse has a single line of Elamite, indicating only regnal year (in the way that Aramaic epigraphs sometimes do); the obverse and lower edge have five poorly preserved lines of Aramaic, leading various commentators to remark that the Aramaic is the principal document and the Elamite is the epigraph (e.g., Hallock's marginal note quoted by Henkelman 2008:92 n. 204). Some, if not most of the accounting clerks of Persepolis were expected to handle an Aramaic label for a batch of documents as easily as an Elamite label.

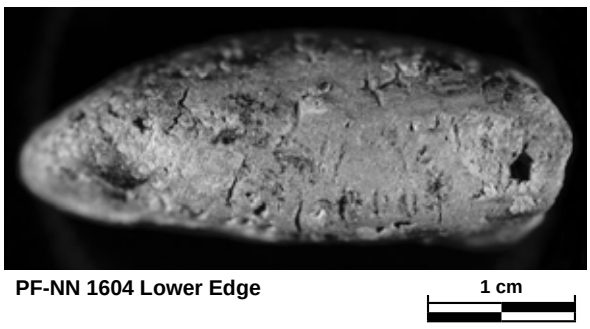


Fig. 7a-d: a. PF-NN 1604 Obverse, cross-polarizing filters; b. PF-NN 1604 Lower Edge, polarized light; c. PF-NN 1604 Obverse, cross-polarizing and red filters; d. PF-NN 1604 Lower Edge, cross-polarizing and red filters (scale 2:1) (Persepolis Fortification Archive Project, Oriental Institute)

PF-NN 1604 Reverse

Fig. 7e: PF-NN 1604 Reverse
(Persepolis Fortification Archive Project, Oriental Institute)

The epigraph on PF 2043 (**Fig. 8a-d**), a record of monthly rations (category L1) points in a similar direction. It reads: (01) *lzkrn ḥtmyʾ* (02) *ʾlh lʾ hʿlw bhmrʾ* (03) *ʿd ytḥzwn ʾykʾ hmrʾ*. Because of the awkward phrasing, and the exceptional use of the preposition *ʾykʾ* (ordinarily 'where'),[14] translation requires a measure of conjecture: 'for memorandum: these seals [that is, sealed documents] have not been entered in the account until they are seen as[?] the account.' It seems reasonable to infer from this that a single epigraph was a working note to label a group of such documents being read in order to be collated in a register, and that it was added to the tablet during the process of collation at Persepolis. This would be consistent with the use of *zkrn*, 'memorandum,' and its cognates elsewhere in Imperial Aramaic to refer to secondary administrative records, compiling or reporting other documents (the Memphis shipyard journal [Porten and Yardeni 1993 C3.8], the epistolary report on the reconstruction of the Elephantine temple [Porten and Yardeni 1986 A4.9], the list of memoranda Porten and Yardeni 1993 C3.13, the report of the Edict of Cyrus in Ezra 6:3-5, and perhaps [in the phrase *l⌜d?⌝krn*] in a late Aramaic administrative register from Bactria [Naveh and Shaked 2012 C4:52]). If this is the correct understanding of the epigraph on PF 2043, it is equally likely that terser epigraphs on similar texts also mark groups of documents sorted by date or commodity, whether at Persepolis or elsewhere.

14 Not the only example of a preposition in unexpected use in Persepolitan Aramaic; elsewhere *ʿl* appears where *l-* is expected. See, e.g., PFAT 56 (Azzoni, n.d.).

Fig. 8a-d: a. PF 2043 Right Edge, cross-polarizing filters; b. PF 2043 Reverse, cross-polarizing filters; c. PF 2043 Right Edge, cross-polarizing and red filters; d. PF 2043 Reverse, cross-polarizing and red filters (scale 2:1) (Persepolis Fortification Archive Project, Oriental Institute)

A similar sorting practice is implicit in the epigraph on PF 0820 (**Fig. 9a-b**), a record of two months' rations for a local administrator, stating that 'the year did not come' (*šnt' l' 'th*[15]), referring to the fact that the year date was missing[16] and/or to uncertainty about how to enter ration expenditures that the text indicates are for the last month of one regnal year and the first month of the next.

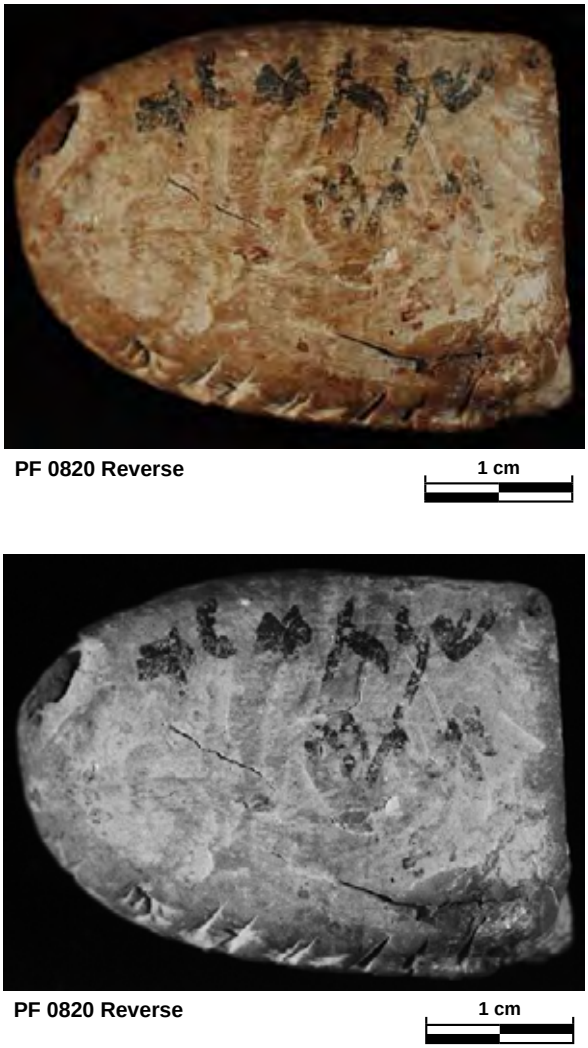


Fig. 9a-b: a. PF 0820 Reverse, cross-polarizing filters; b. PF 0820 Reverse, cross-polarizing and red filters (scale 2:1) (Persepolis Fortification Archive Project, Oriental Institute)

15 The awkward lapse in gender agreement between the feminine noun *šnt'* and the verb *'th* reveals a rudimentary grasp of Aramaic grammar among at least some of Persepolitan scribes (see Azzoni n.d.).

16 This notation of missing information has counterparts in the Elamite texts of registers that refer to information based on oral sources, to missing documents, to incomplete interim summaries, and to investigations or interrogations of district officials.

Variations in length, form and placement of the Aramaic epigraphs and variations in the correspondence between their contents and the contents of the accompanying Elamite texts strongly suggest that there was also some variation in the use of the epigraphs and/or some freedom of form and practice for the people who wrote them, making it unwise to infer rules and regularities from a few examples. Nevertheless, some general remarks are warranted.

First, there are strong indications that the epigraphs were written later than the Elamite texts that they accompany, and in some cases strong indications that they were written late in the process of handling information. There are no strong indications that they were written early in the process.

Second, the contents of most epigraphs on memoranda and a few on registers respond to the organizing criteria of late-stage archival compilations, in which documented transactions were organized by commodity, date, place and responsible officials. Of these four criteria, a minority of epigraphs indicate more than one.

Third, epigraphs on memoranda do not indicate amounts involved in the transactions, even those that repeat the other main contents of the Elamite records. Amounts in epigraphs on some registers refer to totals. Hence, epigraphs were useful for sorting documents, and sometimes reflect arithmetic verification but they were not useful for the compilation and entry of specific transactions.

Fourth, the frequent characterization of such epigraphs as "filing notes" is vague and potentially misleading. As a general matter, most or all of the epigraphs are *ad hoc* products of the handling of documents in the archival process, not meant to serve either as primary records of substantive information or as keys to the recovery of filed information. Their *ad hoc* character accounts in part for the facts that they are numerous, that they do not all sort into well-defined formal or functional types, that they are concentrated among a few formal types of Elamite documents, and that most are terse but a few are rich to the point of redundancy with the cuneiform texts (Lewis 1994:28, Henkelman 2008:92 n. 206).

8 The Epigraph *ns(y)ḥ*

At least 96 epigraphs on Fortification tablets and fragments include the participle *nˀsîḥ* (**Table 1**). It is most often written *nsḥ* but at least 17 times plene, *nsyḥ*.[17] At least 8 times the word is repeated, *nˀsîḥ nˀsîḥ*, on one line or on two, sometimes written in two different hands (below).[18]

Only 6 epigraphs have *nˀsîḥ* in longer context. None of the epigraphs with the word *nˀsîḥ* appear on memoranda, letters, or labels. With one exception, they appear on registers with texts of categories V and W, or else on fragments of rectangular tablets of the kinds character-

17 In 10 examples of single use and 3 examples of double use broken text makes it impossible to determine whether the word is spelled *nsḥ* or *nsyḥ*.

18 The epigraph on Fort. 0239-101 (category W), with *nˀsîḥ* repeated on two lines, in two distinct hands, is preceded by a large mark that resembles an oversized lamedh. Cf. Fort. 2048-101, with a similar mark.

istic of registers. The exception is on a document that is also exceptional in shape and contents (Fort. 2178-101, below, Appendix 1). The registers marked with these epigraphs are not distinguished by other exceptional properties. They deal with all of the main commodities handled by the administration that produced the Persepolis Fortification Archive, namely, grain, fruit, wine and livestock. They bear impressions of seals that are commonly applied to other registers, and not ordinarily applied to memoranda, although only a fraction of all the seals used on registers appear on documents with the epigraph.[19]

Tablet	Category	Seals[20]	Contents	Year	Epigraph	Surface	Comment	
PF 1955	V	PFS 0027*	grain	20	*n⌈s⌉ḥ*	reverse		1
PF 2005	W	PFS 0012a, PFS 0118	wine		*nsḥ*	reverse		2
PF 2011	W		sheep/goat	18-20	*nsyḥ*	reverse	Epigraph omitted in Hallock 1969.	3
PF 2075	W	PF 0120	grain	18	*nsḥ*	reverse		4
PF 2084	W	PFS 0027*	sheep/goat	15-17	*nsyḥ*	obverse		5
PF-NN 0052	W		grain	17-19	⌈*n*⌉*sḥ*	reverse		6
PF-NN 0759	W	PFS 0012a	grain	23	*nsḥ nsḥ*	reverse		7
PF-NN 2273	W	PFS 0012a, PFS 0118	wine	15-17	⌈*nsḥ*⌉	lower edge		8
PF-NN 2278	W	PFS 0012a	grain	15-17	*nsḥ*	obverse		9
PF-NN 2337	V	PFS 0027*	grain	19	*nsḥ*	obverse		10
PF-NN 2592[21]	W				*nsḥ* / *nsḥ*	reverse?		11
PF-NN 2669	W	PFS 2089*	NAGA.TUR	15-17	*nsḥ ḥṭ*	reverse	See Appendix, 6.	12
Fort. 00Z3-101	W		grain		*nsyḥ*	reverse		13
Fort. 0015-102	W				[*n*]⌈*s*⌉*ḥ*	right edge		14
Fort. 0104-101	W?			19-21	*nsy*⌈*ḥ*⌉	reverse		15
Fort. 0113-101	W	PFS 0120	wine	19	*nsḥ*	reverse		16
Fort. 0117-002[22]	V				*nsḥ*	reverse		17
Fort. 0120-101	V	PFS 0120	grain?	20	*nsyḥ*	reverse		18
Fort. 0208-101	W				[*n*]⌈*s*⌉*yḥ* ⌈*n*⌉[*sy*?*ḥ*]	reverse		19
Fort. 0239-101	W		grain	19-22	*ns*[*y*?*ḥ*] / *ns*⌈*yḥ*⌉	obverse	Oversized lamedh precedes first *ns*[*y*?*ḥ*].	20

19 Of about 80 seals that appear on registers of all sorts, only 10 appear on registers marked with epigraph *ns*(*y*)*ḥ*. These include the seals that appear most frequently on registers of all sorts (e.g., PFS 0012a, PFS 0027*, PFS 0118, PFS 0120) but also uncommon seals that appear (until now) only on registers marked with the epigraph (PFS 2089*, PFS 2106*, PFS 2249*).

20 Empty entry indicates either a well-preserved tablet without seal impression or a fragment without preserved seal impression.

21 Fragment; no preserved seal impression, scanty preserved Elamite text.

22 Fragment; no preserved seal impression, scanty preserved Elamite text.

Fort. 0326-101	W	PFS 0120	fruit	20	n⌜sḥ⌝	obverse		21
Fort. 0343-101	W	PFS 0120	cattle	18	nsḥ	reverse	Over seal impression.	22
Fort. 0424-103	W				nsyḥ mn ʾ t²wr²y	reverse	See Appendix, 5.	23
Fort. 0433-101	W	PFS 0012a	grain	18	nsḥ / nsḥ	reverse		24
Fort. 0504-101	W		grain	16	⌜n⌝syḥ	reverse		25
Fort. 0590-101	W	PFS 0120	grain	21	n⌜sy²ḥ⌝	obverse		26
Fort. 0600-101[23]	W	PFS 0012a	grain?		[ns]⌜y⌝ḥ	reverse	Over seal impression.	27
Fort. 0610-101	W	PFS 0012a	grain	15-17	nsḥ	reverse		28
Fort. 0610-102[24]	V or W	(traces)		15?	nsḥ	reverse		29
Fort. 0613-101	W		grain		nsḥ nsḥ	reverse		30
Fort. 0627-101 +1390-101[25]	V or W				nsḥ	reverse		31
Fort. 0652-101[26]	V	PFS 0120			n⌜s⌝ḥ	reverse		32
Fort. 0659-101[27]	V or W				n⌜s⌝[ḥ]	reverse		33
Fort. 0954-101	W	PFS 0027*?	wine	15-17	n⌜sy⌝ḥ	upper edge	Over seal impression.	34
Fort. 1227-101	V	PFS 0120	wine	21	nsḥ	reverse	See Appendix, 8.	35
Fort. 1244-101	W	PFS 0012a			nsyḥ	reverse		36
Fort. 1249-101	V		wine	15-21	nsḥ	reverse		37
Fort. 1258-101	W	PFS 0120	grain	17-19	nsyḥ	reverse		38
Fort. 1267-101	W	PFS 0027*	grain	17-18	ns[ḥ]	reverse		39
Fort. 1274-101	W	PFS 0120	wine		nsḥ	obverse		40
Fort. 1279-102	V	PFS 0027*	grain	20-21	nsyḥ	reverse		41
Fort. 1282-101	W		grain		z²ph / nsyḥ	reverse	See Appendix, 4.	42
Fort. 1287-101	V		grain	17-18	n⌜s⌝[(y)ḥ]	reverse		43
Fort. 1298-101	V		grain		n⌜s⌝[(y)ḥ]	reverse	Very faint traces.	44
Fort. 1304-101	V	PFS 0027*, PFS 2106*	grain	10+x	⌜nsḥ⌝	reverse		45
Fort. 1323-101	W	PFS 0012a			n⌜s⌝[(y)ḥ]	obverse		46
Fort. 1324-101	W	PFS 0012a	grain	15-17	nsḥ / zy bḥtyš	obverse	See Appendix, 2.	47
Fort. 1331-101	W	PFS 0120?	livestock		nsḥ	reverse		48
Fort. 1343-101	W	PFS 0118	grain	15-16	nsḥ	reverse	Over seal impression.	49
Fort. 1345-101	V	PFS 0027*, PFS 2106*	grain	15?-20	nsḥ	reverse		50
Fort. 1346-101	W	PFS 0012a, PFS 0118	grain	15-17	nsyḥ	reverse		51

23 Fragment; scanty preserved Elamite text.

24 Fragment; traces of unidentified seal impression, scanty Elamite text.

25 Fragment; no preserved seal impression, scanty Elamite text.

26 Fragment; scanty Elamite text.

27 Fragment; scanty, mostly illegible Elamite text.

Fort. 1354-101	W	PFS 0012a, PFS 0118			[*n*]⌈*s*⌉*ḥ*	reverse		52
Fort. 1361-101	V	PFS 0027*		19	*nsḥ*	reverse		53
Fort. 1368-101	W		donkeys	20-21?	*nsḥ*	reverse		54
Fort. 1377-101	W		grain		[*n*]⌈*sḥ*⌉	reverse		55
Fort. 1383-103	W		grain	15-17	[*n*]⌈*s*⌉*ḥ*	reverse		56
Fort. 1388-103[28]	V or W				*nsḥ*	reverse		57
Fort. 1409-102	V	PFS 0120	grain	20	*nsḥ*	reverse	Faint traces.	58
Fort. 1455-004	W	PFS 2089*	grain	15-17	⌈*nsḥ*⌉	obverse		59
Fort. 1587-103[29]	V or W				⌈*n*⌉*sḥ*	reverse?		60
Fort. 1660-101	W				*ns*⌈*ḥ*⌉	reverse		61
Fort. 1685-101	W		wine	16-17	⌈*n*⌉[*s(y)ḥ*]	reverse		62
Fort. 1719-101	V		grain	15-18	*nsḥ*	reverse		63
Fort. 1734-101	W		grain		⌈*ns*⌉*ḥ*	obverse		64
Fort. 1776-101	V		grain		*n*⌈*s*⌉[*(y)ḥ*]	reverse		65
Fort. 1779-101	V or W		grain		⌈*ns*⌉*ḥ*	obverse		66
Fort. 1784-101	V	PFS 2106*	grain	18-19	*nsḥ*	obverse		67
Fort. 1786-101	W	PFS 0012a	wine	15	⌈*n*⌉*sḥ*	reverse		68
Fort. 1793-101	V	PFS 0057*	grain	21-22	*nsyḥ*	reverse		69
Fort. 1885-101	W	PFS 0120	fruit	18	*nsḥ*	reverse		70
Fort. 1892-101	W		grain	15	[*n*]⌈*s*⌉*ḥ*	reverse		71
Fort. 1899-101	W	PFS 0120	fruit	18	⌈*nsḥ*⌉	obverse		72
Fort. 1916B-101	W	PFS 0027*, PFS 2106*	grain	19	*ns*⌈*ḥ*⌉ *mšz rmn*?*drk* / *nsḥ mg*?*s*?*k*?[...]	obverse / reverse	Over seal impression. See Appendix, 3.	73
Fort. 1922B-101	W	PFS 0012a	grain	15-17	[*n*]*sḥ*	obverse		74
Fort. 1938B-101	W	PFS 120	wine	20	⌈*nsḥ*⌉	reverse		75
Fort. 1953-101	V		grain	18-20	*nsy*⌈*ḥ*⌉	reverse		76
Fort. 1955-101	W		grain	15-16	*nsḥ nsḥ*	obverse		77
Fort. 1960-101	W		wine	17-21	*nsḥ*	reverse		78
Fort. 1971-101	V	PFS 0027*, PFS 2106*	grain		*nsḥ*	obverse		79
Fort. 1974-101	V	PFS 0120	grain	21	*ns*⌈*ḥ*⌉	reverse		80
Fort. 1982-101	W	PFS 1633*	grain	15-17	*nsḥ*	reverse		81
Fort. 1984-101	V	(traces)	grain	17-18	*nsḥ*	reverse		82
Fort. 1989-002	V?	PFS 0027*	grain?		*n*⌈*sḥ*⌉	reverse		83
Fort. 1991-102	W		grain		*nsy*⌈*ḥ*⌉	obverse		84
Fort. 2011-102	W	PFS 0120	sheep/goat	19	*nsḥ*	left edge		85
Fort. 2015-101	V	PFS 2249*	grain	20-21	*nsḥ*	reverse		86

28 Fragment; scanty, mostly illegible Elamite text.

29 Flake from tablet surface; no preserved seal impression, scanty Elamite text.

Fort. 2045-101	V	PFS 0027*	grain	19-20	n⌈sḫ⌉	reverse		87
Fort. 2047-002	W	PFS 0120	fruit	21	nsyḫ	obverse		88
Fort. 2048-101	W	PFS 0012a	grain	19-20	n²s²ḫ² ly² ns⌈ḫ⌉	obverse		89
Fort. 2049-102	W	PFS 0012a	wine	15-17	nsḫ	reverse		90
Fort. 2166-101	W	PFS 0012a, PFS 0118	grain	14-17	n²s²ḫ²	reverse	Faded, uncertain.	91
Fort. 2171-102	W	PFS 0012a, PFS 0118	grain		ns⌈ḫ⌉	reverse		92
Fort. 2178-101	C4?		livestock	22	nsḫ ˀl mšk 1	reverse	See Appendix, 1.	93
Fort. 2202-101	W	PFS 0012a	oil	15-17	nsḫ	reverse		94
Fort. 2261-102	W	PFS 0012a	grain	18-20	nsḫ	obverse		95
Fort. 2271-101	W	PFS 0012a	wine	18	nsyḫ	reverse		96

Table 1: Persepolis Fortification tablets with the epigraph ns(y)ḫ

8.1 Comparanda: Epigraphs Without *nᵊsîḥ* on Registers

About one-fourth of the epigraphs on registers (32 out of 130) lack the word *nᵊsîḥ*. Some are faint (e.g., PF-NN 1416), fragmentary (e.g., PF-NN 2590, PF-NN 2591, Fort. 1978-103, 2036-101), or still resist reading and interpretation (e.g., Fort. 0124-101, 1691-101, 1715-101). One, as indicated, records a recalculated total (PF 2072, above).

Two consist of the single word *yḥṭ*, once alone (Fort. 1406-101), once repeated (Fort. 1859-102), that is, used in ways that parallel uses of the single word *nᵊsîḥ*. Other uses of *yḥṭ*, however, do not lead to a likely meaning in this administrative context that would elucidate the parallel uses of *nᵊsîḥ*.[30]

Other epigraphs on registers echo epigraphs on memoranda by indicating the accounting period, e.g.

— [...] *šnt* 10+3+2 '[...] year 15 [= El. line 29]' PF 1940 (V)[31]

— *šnt* ⌈20⌉+[x] 'year 20+x' Fort. 0298-101 (V, **Fig. 10a-b**)

— *šnt* 10+3+3+⌈3⌉ 'year 19 [= El. lines 05', 11', etc.]' Fort. 1952-101 (V)

— [(...) *šnt* 10]+3+3+3 '[year 10]+9 [= El. lines 05', 12', etc.]' Fort. 2355-101 (V)

— [š]*nt* 10+3+3 'year 16' PF-NN 2587 (V or W)

— [š²n²][t²] 10+3+3 '[year²]16 [= El. line 52']' PF-NN 0065 (V)

30 In Syriac, Mandaic and Christian Palestinian Aramaic the root conveys a meaning of 'abort, miscarry' (Comprehensive Aramaic Lexicon, http://cal1.cn.huc.edu s.v. *yḥṭ* accessed 10 January 2014); Biblical Aramaic, Qumran Aramaic 'set down (foundations), fix firmly', (*ibid.* s.v. *yḥṭ* #2), and now late Achaemenid Imperial Aramaic from Bactria 'impose (a charge)?' (Naveh and Shaked 2012:74).

31 Traces on the obverse may be remains of another epigraph, ⌈*nsḫ*⌉.

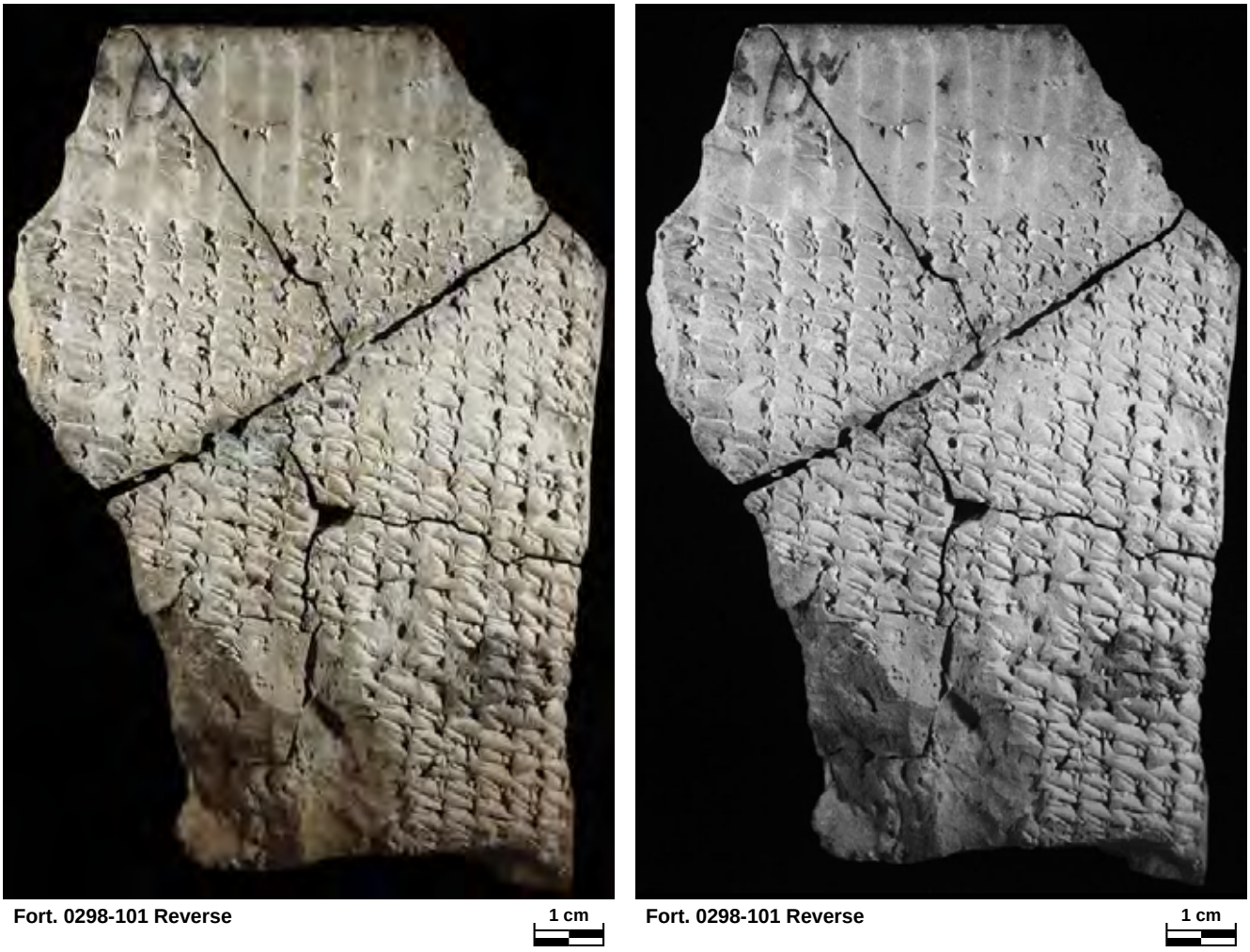


Fig. 10a-b: a. Fort. 0298-101 Reverse, polarizing filter; b. Fort. 0298-101 Reverse, polarizing and red-filters (Persepolis Fortification Archive Project, Oriental Institute)

Some of these add the name of the responsible administrator, e.g.:

— *bnw šnt* 10+3[+3+3+3] 'PN[?], year ⌜19[?]⌝ [= El. line 04'']' PF-NN 0080 (V)

— *mzdyšn šnt* 10+3+3+2 'Mazdayašna [= El. line 01''], year 18' Fort. 0497-101 (V, **Fig. 11a-b**)

— *mzdyšn šnt* [...] 'Mazdayašna, year [...]' Fort. 1310-101 (V)

— *rm*⌜*y*⌝*wg šnt* ⌜x⌝ 'Ramayauka [= El. line 08'], year x' Fort. 0592-101[32]

At least two examples note amounts of commodities, in longer but damaged contexts with uncertain relationships to the preserved Elamite texts. Like the most nearly comparable epigraph, on PF 2072 (above), these are likely to have arisen from a process of arithmetic verification:

— [...]+[?]3+3+3 ⌜*ḥ*⌝ 2 *lyg*[ʾ][33] *zy šn*⌜*t*[?]⌝ / 10+3+3 '[x[?]]+9 *ḥ*(*ophen*), 2 *log*s of year 16' Fort. 0634-101 (V) (**Fig. 12a-d**)

— [...] ⌜20⌝+3+3 *lgy*ʾ *zy* 10[?] [...] / [...] *grwn* 2[+x[?]] '⌜26⌝ *log*s for 10[?] [...] / 2[+x[?]] *griwa* [...]' Fort. 1385-101 (**Fig. 13a-d**)[34]

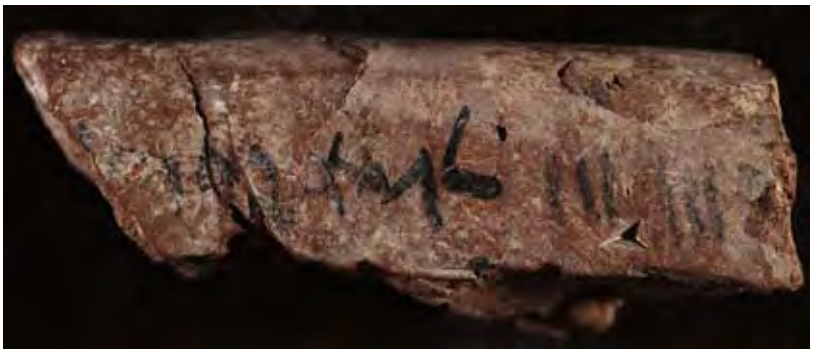
32 Perhaps also [...] ʾ*t* Fort. 1978-103 (W), if the Aramaic represents a PN given elsewhere in Elamite as *Atti*.

33 For *lgy*ʾ.

34 The Elamite text of Fort. 0634-101 indicates that it is one of a series tablets: [AŠ]*tup-*⌜*pi* x⌝*-hi-me-man-na*, left edge, evidently for *tuppi hi* x*-me-man-na*, 'this (is) the x[th] tablet,' where x = 3 or 6. The left edge of Fort. 1385-101 has the beginning of a similar indication, [AŠ]*tup-pi* ⌜x x ⌝. No such notation is preserved in the Elamite text that accompanies a probable third example of this sort of epigraph, Fort. 1909A-101, below, Appendix, 7.

Fig. 11a-b: a. Fort. 0497-101 Reverse, polarizing filter; b. Fort. 0497-101 Reverse, polarizing and infrared filters (Persepolis Fortification Archive Project, Oriental Institute)

Fig. 12a-d: a. Fort. 0634-101 Lower Edge, cross-polarizing filters; b. Fort. 0634-101 Obverse, polarizing filter; c. Fort. 0634-101 Lower Edge, cross-polarizing and red filters; d. Fort 0634-101 Obverse, polarizing and red filters (Persepolis Fortification Archive Project, Oriental Institute)

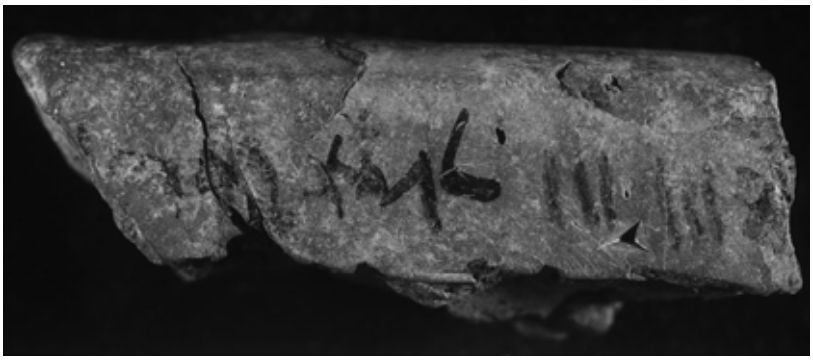


Fort. 1385-101 Reverse

1 cm

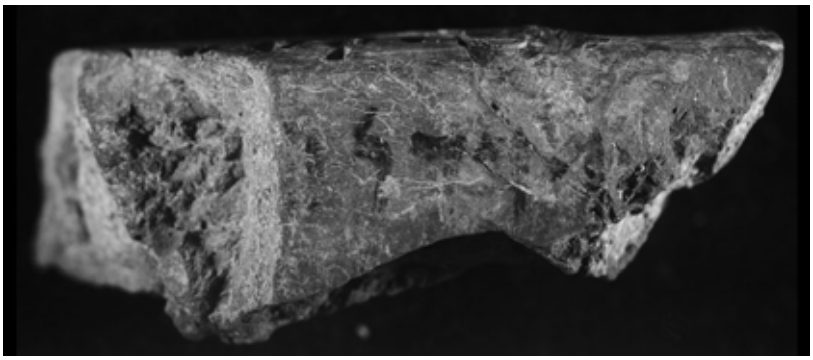
Fort 1385-101 Obverse

1 cm



Fort 1385-101 Reverse

1 cm



Fort 1385-101 Obverse

1 cm

Fig. 13a-d: a. Fort. 1385-101 Reverse, cross-polarizing filters; b. Fort 1385-101 Obverse, cross-polarizing filters; c. Fort. 1385-101 Reverse, cross-polarizing and red filters; d. Fort. 1385-101 Obverse, cross-polarizing and red filters (scale 2:1) (Persepolis Fortification Archive Project, Oriental Institute)

8.2 Epigraphs with *n³sîḫ* Repeated

In eight or more instances, the word *n³sîḫ* is written twice on the same tablet, in some cases on the same line, in others one above the other. In at least some cases, it is written in two different hands—that is, either by different people, or by the same person at different times—but poor preservation or small differences sometimes prevent confident judgment.

— Fort. 0208-101: *n³sîḫ* twice on a single line, probably in a single hand (**Fig. 14a-b**).

— Fort. 0613-101: *n³sîḫ* twice on a single line, in similar or same hands (**Fig. 14c-d**).

— Fort. 1955-101: *n³sîḫ* twice on a single line, probably in a single hand (**Fig. 14e-f**).

— PF-NN 0759: two *n³sîḫ* separated by space on a single line, in a single hand (**Fig. 14g-h**).

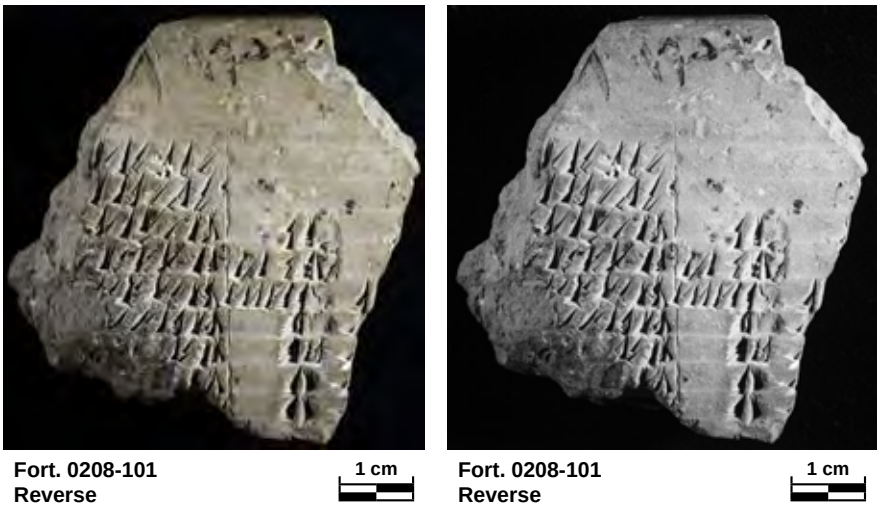


Fig. 14a-b: a. Fort. 0208-101 Reverse, polarizing filter; b. Fort. 0208-101 Reverse, polarizing and red filters (Persepolis Fortification Archive Project, Oriental Institute)

Fig. 14c-d: c. Fort. 0613-101 Reverse, polarizing filter; d. Fort. 0613-101 Reverse, polarizing and red filters (Persepolis Fortification Archive Project, Oriental Institute)

Fig. 14e-f: e. Fort 1955-101 Obverse, polarizing filter; f. Fort. 1955-101 Obverse, polarizing and red filters (Persepolis Fortification Archive Project, Oriental Institute)

Fig. 14g-h: g. PF-NN 0759 Obverse, polarizing filter; h. PF-NN 0759 Obverse, polarizing and red filters (Persepolis Fortification Archive Project, Oriental Institute)

— Fort. 0239-101: one *nˀsîḥ* over another, probably in different hands (**Fig. 15a-c**).

— Fort. 0433-101: one *nˀsîḥ* over another, perhaps in different but similar hands, perhaps in a single hand at different times (**Fig. 15d-e**; Stolper 2015).

— Fort. 2048-101: in uncertain phrase *nˀsˀḥˀ lyˀ nsˀḥˀ*, all on a single line, the final word is smaller and perhaps in a different hand (**Fig. 15f-i**).

— PF-NN 2592: one *nˀsîḥ* over another, probably in a single hand (**Fig. 15j-k**).

Fort. 0239-101 Obverse

1 cm

Fort. 0239-101 Obverse

1 cm

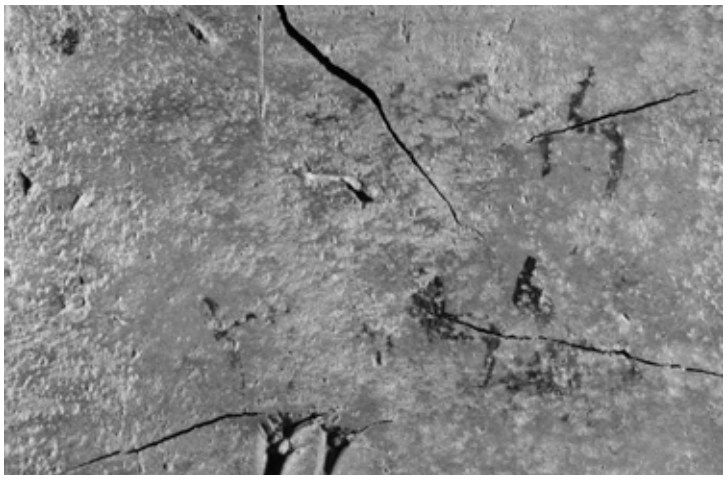


Fig. 15a-c: a. Fort. 0239-101 Obverse, polarizing filter; b. Fort. 0239-101 Obverse, polarizing and red filters; c: Fort. 0239-101 Obverse, detail, polarizing and red filters (Persepolis Fortification Archive Project, Oriental Institute)

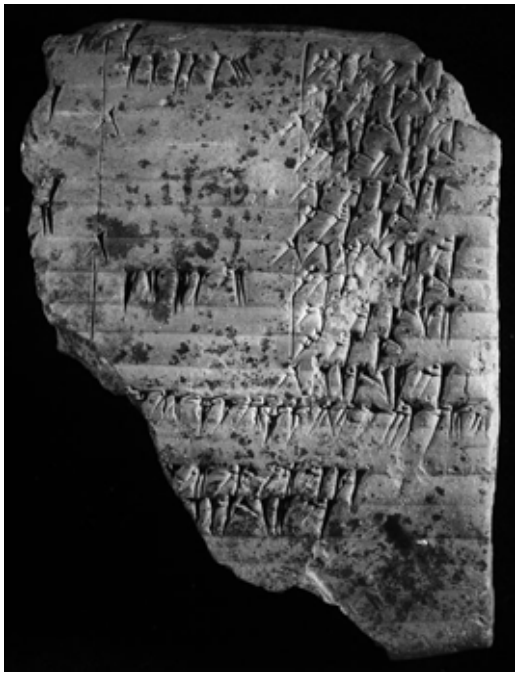
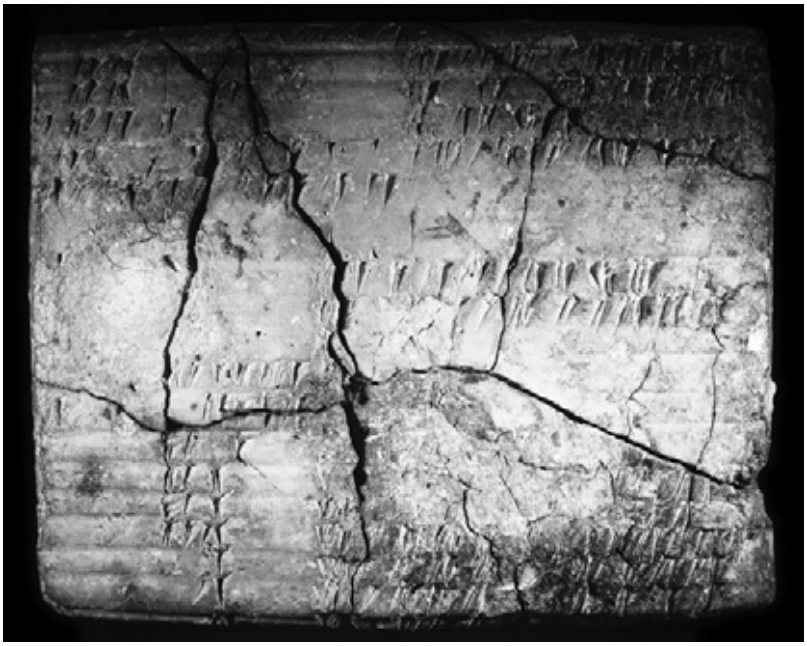


Fig. 15d-e: d. Fort. 0433-101 Reverse, polarizing filter; e. Fort. 0433-101 Reverse, polarizing and red filters (Persepolis Fortification Archive Project, Oriental Institute)

Fort. 2048-101 Obverse

1 cm



Fort. 2048-101 Obverse

1 cm

Fig. 15f-g: f. Fort. 2048-101 Obverse, cross-polarizing filters; g. Fort. 2048-101 Obverse, cross-polarizing and red filters (Persepolis Fortification Archive Project, Oriental Institute)

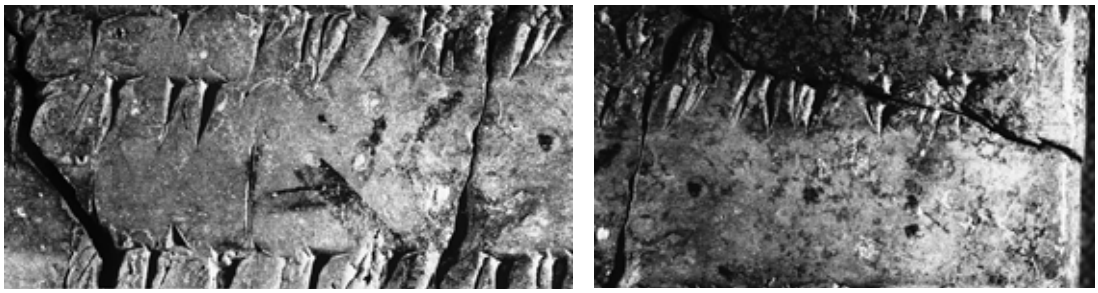


Fig. 15h-i: h. Fort. 2048-101 Obverse, detail, cross-polarizing and red filters; i. Fort. 2048-101 Obverse, detail, cross-polarizing and red filters (Persepolis Fortification Archive Project, Oriental Institute)

Fig. 15j-k: j. PF-NN 2592 Reverse, polarizing filter; k. PF-NN 2592 Reverse, polarizing and red filters (Persepolis Fortification Archive Project, Oriental Institute)

— Fort. 1916B-101 (**Fig. 18a-g**, below, Appendix, 3) *nˀsîḥ* on obverse, separated from additional text in another hand; another *nˀsîḥ* on reverse, on line with additional text in same hand.

8.3 Epigraphs on Registers with *nˀsîḥ* in Context

Few epigraphs include *nˀsîḥ* in a longer context. Only one of them can be read and interpreted with a measure of confidence to help interpret the meaning of the operative term. That epigraph, however, appears on a unique document, not a register, but a text that deals with the delivery and assignment of livestock, written on a tablet of extraordinary form. The epigraph on the reverse reads

> *nsḥ ʿl mšk* 1 'n. on one skin' Fort. 2178-101 (**Fig. 16a-c**, below, Appendix, 1; and for 'accounts' drawn up on skins, see the remarks on Fort. 1909A-101 [Appendix, 7], Fort. 1975-101 and related texts, below)

Other epigraphs with *nˀsîḥ* in longer context offer no independent clarification.

nsḥ / *zy bḥtyš* Fort. 1324-101 (**Fig. 17a-e**, below, Appendix, 2)

(Obverse) *nsˀḥˀ*
mšz rmnˀdrk
(Reverse) *nsḥ mgˀsˀkˀ* [...] Fort. 1916B-101 (**Fig. 18a-g**, below, Appendix, 3)

zˀph / *nsyḥ* Fort. 1282-101 (**Fig. 19a-f**, below, Appendix, 4)

nsyḥ mn / *ʾtˀ*/*gˀwrˀy* Fort. 0424-103 (**Fig. 20a-d**, below, Appendix, 5)

nsḥ ḥṭ PF-NN 2669 (Fort. 2177-10, **Fig. 21a-f**. below, Appendix, 6)

nˀsˀḥˀ lyˀ nsˀḥˀ Fort. 2048-101 (**Fig. 15h-i**)

8.4 Meaning

All told, epigraphs appear almost twice as frequently on late-stage registers as on early-stage memoranda. Three quarters of the epigraphs on registers consist of or include the word *nˀsîḥ*. When the published corpus of Elamite Fortification texts included only four examples and even when the texts of the Hallock *Nachlass* added five more examples it was possible to see the epigraphs with *nˀsîḥ* formally as constituting one class of epigraphs among many, and to see them functionally as reflecting an occasional, optional circumstance or activity. But now at least 96 examples are recorded, more than a third of the known epigraphs on Elamite Fortification tablets. With one exception they are on registers; none are on the memoranda from which the registers were to be composed. It is plain that Aramaic *nˀsîḥ* marks a circumstance or activity that is particular to the latest attested stages of information handling at Persepolis, a circumstance or activity that was, if not regular, at least frequent. The occasional repetition of the word, sometimes in different hands, once on opposite faces of the document, implies an activity or circumstance in two or more steps.

The formal identification of *nˀsîḥ* is clear: it is a passive participle of the first form of a verb, from a common Semitic root. The meaning in context, however, is not clear, because close comparanda are lacking. The root *nsḥ* is surprisingly scarce in Old and Imperial Aramaic. It does not

occur elsewhere in legal or administrative texts. It is attested only in literary contexts, with literal meanings 'tear (out)' or 'remove' (Greenfield 1971:57; Hoftijzer and Jongeling 1995:734).

Bowman's manuscript treats only one example, PF-NN 2592, a fragment of a register with very little surviving cuneiform text, on which the word is repeated, one occurrence above the other on successive lines.[35] He translated the word as 'deducted.' He proposed that it referred to the entries written in Elamite opposite the Aramaic words (Bowman n.d.:947 on No. LXXVIII = PF-NN 2592, first edited by Charles E. Jones), implying that person who wrote the Aramaic comment read the Elamite document. He did not, however, explain how he envisioned the handling of commodities or the handling of information in a way that makes the Aramaic comment a meaningful addition to the document. If he had seen some of Hallock's other examples, where the epigraph does not align with a particular entry, or if he had seen examples where the epigraph is written upside-down or perpendicular with respect to the cuneiform text,[36] he could not have maintained this interpretation.

An underlying meaning like 'removed' is general enough to allow a range of administrative nuances, but none that make sense in the context of the Persepolis registers. It surely does not describe the tablets on which the epigraphs appear, which were plainly not removed. It does not gloss an Elamite term indicating amounts withdrawn, e.g. *mazzika*, since the epigraphs are positioned in ways that do not associate them with particular entries, and the gloss would in any case add nothing to an entry. It does not describe the balance on hand at the end of the journal or account, since balances were regularly carried forward from year to year and/or converted from one commodity into another, not 'removed.'

For useful comparanda, we must look beyond Imperial Aramaic. First, as Black cogently argued, in Standard Babylonian scribal usage (hence, earlier than and contemporary with the Persepolis Fortification Archive) the nuance of the cognate verb *nasāḫu* is more often 'to copy' than 'to excerpt, epitomize' (Black 1985). Then, in later Aramaic (Nabatean, Syriac,

35 Bowman's testy comment that "Hallock claims to have but did not send eight large rectangular tablets containing the word *ns(y)ḥ*" evidently refers to the four published examples (PF) and four others on Hallock's unpublished documents (PF-NN).

36 Aramaic epigraphs on Persepolis Fortification tablets are often oriented upside-down with respect to the cuneiform, as are Aramaic epigraphs on Babylonian tablets (Jursa 2005:5 n. 25). This results from an ancient assumption about consistent layout. The two scripts run in opposite directions, but when they are oriented with reference to the same starting place, the left side for cuneiform, the right for Aramaic, they are upside-down with respect to each other. For the same reason, the monolingual Aramaic Fortification texts on roughly tongue-shaped or subtriangular tablets are more often oriented with the flat end to the right than to the left. Similarly with epigraphs on the edges of tablets, e.g., Frame 2001:101, 106, where the autographed copy and photographs show the effect clearly, cf. *ibid*. 108. This convention or habit apparently did not prevail in Assyria. An exception among Fortification texts is Fort. 1916B-101 (below and Appendix, 3), where the epigraph (or epigraphs) on the obverse and reverse are right-side-up with respect to the cuneiform but flush to the left edge of the tablet.

Mandaic) the verbal root *nsḥ* has a secondary meaning, 'to copy,' from which various substantives meaning 'copy' are derived (Kaufman 1974:78; The Comprehensive Aramaic Lexicon [http://cal1.cn.huc.edu] s.v. *nsḥ* #2, accessed 19 December 2014).[37] Indeed, the Comprehensive Aramaic Lexicon now lists 'copy' as a meaning of the verb in eastern Imperial Aramaic.

To interpret *nˀsîḥ* in the Persepolis epigraphs as 'copied'—with the proviso that the nuances of 'copying' are likely to involve not only transcription, but also reformatting or digesting—is consistent with an overall understanding of the epigraphs as products of and references to the handling of documents, rather than the handling of commodities. It surely does not label the tablets on which it appears as archival copies of other cuneiform tablets; no true duplicates have been found in the Persepolis Fortification Archive, and the epigraph appears on well-formed tablets with clear seal impressions, sometimes written over the seal impressions, tablets that are not likely to be duplicates of lost or damaged originals. It is not likely that the epigraph labels tablets as durable clay Elamite copies of perishable Aramaic originals, supposing that scribes who collated memoranda made lists in Aramaic and then engrossed them in final Elamite versions; it would be unnecessary to mark the final version as the copy, and to do so in Aramaic rather than in Elamite, rather than checking off the earlier drafts as 'copied.'

Rather, only the converse is plausible: Elamite first, then Aramaic (so Razmjou 2008:55). On this interpretation, registers written in Elamite were checked for accuracy and sometimes corrected, as PF 2072 (above) suggests. Fair copies were made in Aramaic on leather or other perishable materials—as the epigraph on Fort. 2178-101 (above, and below, Appendix, 1) makes explicit—and the Elamite models were marked as 'copied.'

9 Conclusion

That most of the extended contexts of *nˀsîḥ* in epigraphs on registers, and most of the contrasting examples—that is, epigraphs without *nˀsîḥ* on registers—add little or no firm information or implication is frustrating. The many uncertainties of reading and interpretation mentioned above make it abundantly clear that until a full edition and functional study of all the Aramaic epigraphs in the Fortification Archive is complete, conclusions about this single but significantly frequent epigraph are provisional. With these reservations, some interim interpretations may be restated by way of summary:

— Most or all of the Aramaic epigraphs on clay tablets in the Persepolis Fortification Archive were products of the handling of information, not substantive records of information.

37 This is not the only case in which Aramaic terms are used in the Persepolis Fortification Archive with meanings attested in later dialects but previously absent from the Imperial Aramaic corpus. Examples from the epigraphs include *ḥzwr* 'apple[?],' and *tḥmr*, (meaning uncertain), the latter also appearing in monolingual Aramaic Fortification texts.

— A few epigraphs on registers imply that they were written as part of a process of arithmetic verification, by scribes who could read Elamite and write Aramaic.
— The large number of epigraphs with the word *nˀsîḥ* implies that the word indicates a frequent, perhaps regular, procedure.
— Comparison with earlier Akkadian and later Syriac usage encourages the interpretation of *nsḥ* in scribal and administrative contexts as 'copy.'
— The epigraph on Fort. 2178-101 indicates that *ns(y)ḥ* refers to copying documents onto leather, in Aramaic script and language.
— The repetition of *nˀsîḥ* in different hands on a single tablet and once on opposite faces of a single document, indicates that the 'copying' might involve two steps, transposing information in two sittings, by two different individuals.

Many commentators have remarked on Elamite Fortification documents that refer to "scribes on leather" (El. *tippip* KUŠ^{MEŠ}*-ukku*). At least one text mentions the implied contrast, a "scribe on clay" (El. *tipira halat-ukku*). These terms, like the Neo-Babylonian counterparts *ṭupšarru* and *sepīru*, and like Neo-Assyrian illustrations of paired scribes writing on tablets and sheets or rolls, suggest professional specialization by medium and language. Nevertheless, such specialization was clearly not absolute. The epigraphs, again like their Babylonian and Assyrian counterparts, imply functional biliteracy, not a great surprise in the literate support personnel at the polyglot court of a continental empire.

As it happens, both Elamite terms appear among entries collected on a single register, on a tablet that also has a fragmentary epigraph in ink:

> PN ^{HAL}*tipira* ^{AŠ}*halat-ukku* '(grain rations for) PN, scribe on clay' Fort. 1909A-101:15 (below, Appendix, 7); PN *ak* 1 *akkayaše* PAP 2-*bedda* ^{HAL}*tuppip* KUŠ^{MEŠ}*-ukku mušin zikkip* '(grain rations for) PN and his 1 colleague, altogether 2, scribes on leather, accountants' *ibid*. rev. 16'.
>
> With the latter entry compare the reference to PN *hiše tipira* KUŠ^{MEŠ}*-ukku mušin zikkira* 'PN, as he is named, a scribe (writing) on skin(s), an accountant,' Fort. 1975-101:14', also to PN *tuppira* KUŠ^{MEŠ}*-ukku mušin zikkira* ^{AŠ}*kapnuškima*, 'PN, a scribe writing on leather, an accountant in the treasury,' Fort. 1872-103:04, Fort. 2016-101:08' and 10'; and the letter PFa 27, addressed to 'accountants (^{DIŠ}*mušin zikkip*), mentioning a 'document of leather' (^{AŠ}*tuppi* KUŠ^{MEŠ}*-*⌜*na*⌝) before ordering the addressees to 'look at the sealed document and do an accounting' (^{HAL}*numi* ^{AŠ}*halmi ziyaša mušimme huttaš*) (collations courtesy of W. F. M. Henkelman[38]).

38 And cf. Henkelman 2008:161f. n 355 and 2010:694 stressing the nuance of 'inspecting' or 'reviewing' documents in the verb *ziya-* 'see, look' (rather than, e.g., *bera-* 'read'). In the same vein, another letter mentions the absence of an account on a clay document ([*mu*]*šimme* ^{AŠ}DUB^{MEŠ} *hal-la-*⌜*tan-na*⌝ *ukku inni-e nimak* Fort. 1945-102:11-13) and apparently instructs the recipient of the letter to write an account on a leather document (*am nu mušin* ... ^{AŠ}DUB^{MEŠ} KUŠ^{MEŠ} *ukku-na tal*[*liš*?] *ibid*. 13-15).

These explicit references to 'accountants' writing on leather confirm that 'accounts' (*mušin*), that is, late-stage administrative records compiling, tabulating and digesting records of administrative activity, included not only Elamite records on clay tablets (where the term *mušin hi*, 'this account' often labels a whole document) but also Aramaic records on leather. It is therefore probable that the epigraph *nˀsîḥ* marks a process of preparing such 'accounts' on leather, on the basis of information copied from accounts and journals on clay. But if so, when and why was this copying from Elamite tablets to Aramaic skins done?

Was it done regularly at the time that the registers were compiled in Elamite, as an immediate procedure of checking and verification? Probably not, to judge by the case discussed by Hallock (1969:56 and 531 n.m), where comparison between the journal entry PF 1944:32-36 and the underlying primary record PF 1223 reveals a significant omission in the journal entry, such that the amount entered is correct but the information omitted makes the entry appear erroneous. A systematic review of the contents, of the kind suggested by the term 'copied,' would have detected such an error, but a simple arithmetic check of the totals would not.

If we consider the primary concern of the Archive as a whole not to be to keep accurate data on minute details of stocks and expenditures, but rather to police the administrative system (Jones and Stolper 2008:46f.), was the checking and copying indicated by the epigraph *nˀsîḥ* done on a regular cycle of auditing the performance of district centers? Or else, was it done as a common procedure at the ends of district supervisors' terms of service?

If this concern for policing was based on a realistic expectation that irregularities would occur, was this checking and copying instead an *ad hoc* process of gathering information for the investigation of lapses? That view is made attractive by the extraordinary document PF 2084, where the epigraph *nˀsîḥ* appears on the obverse, beside an account tabulating livestock and oil withdrawn from various storehouses. The continuation of the account on the reverse refers to irregular or incomplete information and unfinished accounting. The end of the text turns from tabular accounting to an administrative order in epistolary form, perhaps a quoted letter from a superior, ordering an investigation (*numi mil hapiš*, line 24, see Stolper n.d.).

A similar collocation occurs in a fragmentary journal of wine outlays, Fort. 1227-101 (category V, below, Appendix, 8), in which the phrase 'it (or: he) was not investigated' (*mile inni hapika*) was added to three of the entries. The comparatively small, shallow signs and the flush-right position of these notes indicate that they were added later than the entries themselves, but before the tablet was completely dry. The epigraph *nˀsîḥ* also appears on the reverse of the same fragment.[39]

39 Attention should be drawn in passing to the problem of interpreting 'copies' (El. *battiziknuš*, representing Ir. **patičagniš*, also reflected in Biblical Aramaic *pršgn* [Tavernier 2007:410]) mentioned in at least two memoranda, that is, not in connection with late-stage information handling, but in connection with interim records and/or investigation (*haltap hi battiziknuše rabbaka* ŠÀ-*mi dak* 'the tablet, including its bound copy (or: its copy bound [to it]) was deposited (i.e., submitted or filed for later compilation?)' PF 0231 [category C1], PF-NN 1871 [category C2]).

These passages suggest that at least some of the registers, and some of the Aramaic copies, were not only compilations of information for later reference, but also tools for ongoing policing and recording. It is plausible, even likely, that biliterate accountants used both formats together.

We use the awkward expression "biliterate" advisedly, since "bilingual" may be an overstatement of the situation for many of the clerks who kept the Persepolis Fortification Archive. Functional biliteracy need not imply real bilingualism, but perhaps only what is sometimes called asymmetrical bilingualism, a situation in which users of one language can perform only basic tasks in another. To produce and use Aramaic epigraphs on Elamite cuneiform documents did not require every accountant to have thorough knowledge of the grammar and lexicon of both languages. For at least some, it would have been sufficient to know the scripts, the correspondences of basic lexicon, the recording formats and common formulae, and the administrative procedures. Aramaic and Elamite notation and language interacted on a range of functional and social levels in the environs of Persepolis.[40] Like the Elamite documents, the Aramaic Fortification documents reflect a range of comfort and familiarity with historically correct grammar on the part of Iranian-speaking writers. The staffs of the upper-level administrators and court personnel surely included clerks who produced documents in Imperial Aramaic that would pass muster with modern scholars (see, e.g., Tavernier n.d.). No doubt the accountants writing on leather sent from Babylon to Persepolis according to Fort. 1909A-101:16'ff. (Appendix, 7) were fluent, but at least some of the writers of the monolingual Aramaic texts in the Archive committed basic grammatical lapses (see Azzoni n.d.).[41] The epigraphs on the Elamite tablets are, for the most part, written in fine and competent hands. The scribes who made the copies indicated by the epigraph *nˀsîḥ* might have been fluent. But the knowledge of Aramaic language required to use the epigraphs in processing the documents need not have been great.

If Aramaic copies of registers were meant for longer term and more compact storage than the Elamite originals, it is likely that they were not full and exact translations, transposing the format and items of the tablet to another medium and script. It is more likely that they were documents in which the essential information on accounting period, commodities, location, responsible personnel, and balances was excerpted, digested, and reformatted. 'Copies' of this kind would fall within the range of meaning of Aram. *zkrn*, 'memorandum' (above).[42]

40 *Pace* Lewis 1994:28, who saw a "linguistic barrier between [Aramaic] and Elamite ... too strong to produce much intermingling." Despite his negative statement, Lewis showed characteristic insight in raising "the tantalizing questions about which language is influencing the other."

41 In the same vein, the single Fortification tablet in Greek script (see Stolper and Tavernier 2007:3f., 20) is neatly written, but it requires no knowledge at all of Greek grammar and very little knowledge of Greek lexicon.

42 Whether some of the late Achaemenid administrative lists written in Aramaic on leather documents from Bactria (Naveh and Shaked 2012 C1-C4) may be thought of as such tertiary copies or digests, rather than as Aramaic counterparts to the Elamite compilations from which the tertiary copies were made, is a topic for another occasion, along with comparisons of other administrative practices and terminology in Bactria and Persepolis.

The Persepolis Fortification Archive as we have it is an incomplete representation of the handling of administrative information. The memoranda and registers represent two stages, the first bringing information from the surrounding region into Persepolis, the second compiling and storing information at Persepolis. The epigraph *nˀsîḥ* as interpreted here implies a further stage, beyond the field of view afforded by the tablets, producing perishable documents, now lost. In that case, the nuance of 'copied,' might extend not only to 'epitomized,' but even to 'superseded' (like Arabic *nasaḫa*, 'annul, supersede, abrogate,' and its cognates [Lane 1893/1968:2788, Burton 1992:1009]), as the cuneiform tablet and its source data were relegated to dead storage, or to a backup file, and the Aramaic copy became the record of reference.[43]

43 Evocative here is the proverb cited by Lane 1893/1968:2788, *nasaḫa l-šaybu l-šabāba*, 'old age succeeded to the place of youth.' We are indebted to Kevin van Bladel for bringing this usage to our attention.

Appendix Selected Persepolis Fortification Documents with Aramaic Epigraphs

Fort. 2178-101 Obverse 1 cm

Fort. 2178-101 Reverse 1 cm

Fort. 2178-101 Reverse 1 cm

Fig. 16a-c: a. Fort. 2178-101 Obverse; b. Fort. 2178-101 Reverse, polarizing filter; c. Fort. 2178-101 Reverse, polarizing and red filters (Persepolis Fortification Archive Project, Oriental Institute)

1. Fort. 2178-101

Obverse

(01) *be-ul* 20+2-*um-me-man-na* ^{AN}ITI^{MEŠ} ^{AN}*tur-na-*

(02) *ba-iz-zí-iš-na* 10 ^{AN}*na-an pír-ka*$_4$ ^{AŠ}

(03) *pír-ri*$^{!}$*-tuk-kaš hi-še* ^{AŠ}*ú-ma-nu-iš* ^{HAL}*ni*$^{?}$*-ma*

(04) *taš*$^{?}$ ^{HAL}*har-re-e-na* ^{HAL}*ka*$_4$*-a-sa-bat-ti-iš-*

(05) *na* UDU.NÍTA^{MEŠ} *ap-pa ba-zí-ia-iš* ^{HAL}*zí-*

(06) *iš-šá-bar-tan-na hi-še* ^{AŠ}*ka*$_4$*-a-šá-ru-ma* ^{HAL}*da-*

(07) *ad-du-man-ia* ^{AŠ}*ka*$_4$*-a-*⌈*šá*⌉*-*[*ru*]*-*⌈*ma*⌉ ^{AŠ}⌈*ha*⌉*-da-rak*$_0$*-*<*ka*$_4$> *hi-*

(08) *še hu-*⌈*pír-ri x x x* ⌉[*kur*$^{?}$]*-*⌈*ma*$^{?}$*-ka*$_4$$^{?}$ x UDU.$^{?}$⌉

(09) ⌈NITÁ$^{?}$⌉ [ ]⌈*x*⌉[ ]

Reverse

(01') ⌈*x x x x x ma x x x x x x x x*⌉ [ ]

(02') *an*$^{?}$ *ki*$^{?}$ *x* ^{AŠ}⌈*ni*$^{?}$⌉*-ma taš*$^{?}$ ^{HAL}*ma-ra-za-na* ⌈^{HAL}⌉

(03') *ak-*⌈*ka*$_4$⌉*-ia-na-um-na hu-pír-ri hi kur-*

(04') *ma-ka*$_4$ *ku-ud-da* UDU.NITÁ^{MEŠ} *hu-be* ^{HAL}*pi-ka*$_4$$^{?}$*-ra*

(05') *hi-še* ^{AŠ}*ka*$_4$*-a-šá-ru-ma tin-gi-iš-da*

Reverse *nsḥ ʿl mšk* 1

Translation

(01-03) 22nd year, 5th month, 10 days elapsed, (at) a village named Pirritukkaš,(03-04) attached$^{?}$ to (the place$^{!}$) Nima$^{?}$, of the overseer of livestock, Harrena, (05-06) sheep that are for the share$^{?}$ (of$^{?}$ a person) named Ziššabartanna, at (the) *kāšaru*, (06-08) were allocated$^{?}$ to Daddumanya, at (the) *kāšaru* (at the place) named Hadarakka.

(01'-04') (...at GN), attached$^{?}$ to (the place) Nima, were allocated to$^{?}$ Maraza, (to$^{?}$) one of$^{?}$ the colleagues (scil., of Harrena$^{?}$). (04'-05') And then (the person) named Pikara$^{?}$, at the *kāšaru*, brought those sheep.

Reverse Copied on one skin.

Comments

Category C4$^{?}$

7.8 × (4.5) × 1.9 cm

Flat left end, rounded right end, no string holes at corners.

No seal impression.

Cf. PF 0271 (C4: Harrena at Pirritukkaš, sheep, *baziš*); PF 2025 (C4, exceptional shape, format and contents); PF-NN 2291 (W [J]: Daddumanya and Harrena at Pirritukkaš, wine); PF-NN 2356 (V: Dadumanya *bazikara* and Harrena at Pirritukkaš).

(03) *–ri*[!]- written as HU.

(03) *Nima-* (or: *Kakma-* but not *ir-ma-*, hence not *irmataš* for *irmatam*). HAL in line 3 vs. AŠ in line 02': *sic*. GN Nima PF 0294 only.

(04, 02') *taš*: cf. *sunkime amminnu karadalari* [DIŠNUMUNMEŠ *nu*]*kami taš* 'that very[?] kingship has been attached[?] to our family for a long time' DB El. i 34 (~ OP §12), where the meaning and grammatical analysis of *taš* are obscure.

(05) *baziyaš*: otherwise unattested in this form; adjectival derivative in *–ya-*, from Ir. **baji-*, 'portion, tribute,' corresponding to Elamite *baziš-na* (e.g., PF 0272:03f.). On *baziš*, Tuplin 2008:326ff., 384.

(05f.) *Ziššabartanna*: Ir. **čiça-* + ?; otherwise unattested. Clear *–tan-* discourages emendation as Ziššabarna, i.e., Tissaphernes.

(07) Hadarak<ka(š)>: Tavernier 2007:384.

(06, 07, 05') *kāšaru-*: otherwise unattested; perhaps not a place name, but a common noun designating a locus, formed with **gaitha-* (otherwise written *ka$_4$-a-sa-*)?

(03') *akkayanam-na*: *akkaya-* (< Ir. **haxāya-*), 'colleague, companion,' Ir. genitive plural *-ānām*, in partitive construction, with El. *–na* to agree with the preceding *Maraza-na*, reflecting dative use of underlying Iranian genitive-dative?

Cf. GN AŠ*Akkanayanam* PF-NN 0042:15f., PF-NN 2192:30f., parsed by Tavernier 2007:382 as **haxāyānām*, genitive masculine plural, and *da-za-ra-na-um* HALEŠŠANA-*na kutiša* 'he transported (mules?) to royal palaces' PF-NN 1950:04f., where *dazaranam* evidently represents OP *tačarānām*, genitive plural with dative sense.

(04') *Pikara* (or: *Pitra*, cf. Babyl. Pitria 'paternal,' Tavernier 2007:276): otherwise unattested. In view of following *hiše*, 'his name,' a personal name (i.e., not to be read as a common noun *halpik(a)ra*).

Exceptional terminology, personal names and even morphology make the particulars obscure enough to defy confident translation and synopsis. The text deals with the allocation and delivery of livestock. The tablet is unsealed, hence the text is probably not the record of a regular administrative transaction, but perhaps rather a field report on irregular or inadequately documented receipts and subsequent turnovers of required payments of livestock, of the kind ordinarily documented by texts of category C4.

Fort. 1324-101
Obverse

1 cm

Fort. 1324-101
Obverse

1 cm

Fort. 1324-101
Right Edge

1 cm

Fort. 1324-101
Lower Edge

1 cm

Fort. 1324-101
Obverse

1 cm

Fig. 17a-e: a. Fort. 1324-101 Obverse; b. Fort. 1324-101 Obverse, polarizing and red filters; c. Fort. 1324-101 Right Edge; d. Fort. 1324-101 Lower Edge; e. Fort. 1324-101 Reverse (Persepolis Fortification Archive Project, Oriental Institute)

2. Fort. 1324-101

Obverse

(01') [ ]-⌜ka$_4$⌝ [ ]

(02') [ ] ⌜maz$_0$⌝-zí-ka$_4$

(03') [ŠE].BAR^{MEŠ} da-ka$_4$

(04') [ ] ⌜ha⌝-du-iš be-ul 10+7-na

(05') [ ] x

(06') [ ]⌜hu?⌝-be ^{AŠ}an-tur-an-⌜ti-ia⌝ ^{AŠ}nu-

(07') [ ]-x-ma kur-mán ^{HAL}pu-uk-te-iz-za-na

(08') [ ] x-da-na ^{HAL}ul-li-ra

(09') [ ]-iš?-du-na? hu-be ^{GIŠ}tar! - (erasure)

(10') [ ]-ma hu!?-el x li? x in?

(11') [ ]-x-mar du-⌜iš x⌝ x da-ti-x ⌜^{AŠ}ba-ir⌝-šá ^{HAL}ka$_4$-zik!-ka$_4$ du-iš

Lower Edge

(12') [ ] KI+MIN ^{AŠ}ma-kur?-ki-iš KI+MIN KI+MIN ^{HAL}KI+MIN

(13') [ ]-be-na šá-ra-ma KI+MIN KI+MIN ^{AŠ}za-ak-ku-uk-ka$_4$-du?

Reverse

(14') [šu?]-tur? da-ka$_4$ be-ul 10+5

(15') [ ] ⌜ab-ba-ka$_4$-na-še ⌝

(16') [šá]-si-ka$_4$ ha šá-ir-ra-ma-ak

(17') [ha-du]-iš be-ul 10+6-na

(18') [ ] ⌜ab⌝-ba-ka$_4$-na-še

(19') [ ] x x

(20') [ ] ⌜ x šu-tur⌝ da-ka$_4$ be-ul 10+7-na

(21') [ ] ⌜ab-ba⌝-ka$_4$-na-še

(22') [šá]-⌜si-ka$_4$⌝ ha šá-ir-ra-ma-ak

(23') [ ]

(24') [ ] ⌜hal⌝-mi ^{HAL}ir-du-mar-ti-ia-na!-ma!

(25') [ha]-du-iš be-ul 10+5-na

Obverse nsḫ

zy bḫtyš

Synopsis

Fragmentary account of grain on deposit, taken in as regular annual revenue, and deducted as handling charge during years 15, 16 and 17.

Comments

Category W

(4.6) × (5.8) × 1.6 cm

PFS 0012a right edge.

(11') -*šá* ... *du-iš* on right edge.

(12') ^{HAL}KI+MIN on right edge.

(13') ^{AŠ}*za-ak-ku-uk-ka$_4$-du*$^{?}$ (or: -*na*?!) on right edge. Perhaps an exceptional spelling of *Čakauka-, otherwise written Zakkam(uk)ka, Zakauka, etc. (Tavernier 2007:153).

(25') 10+5 (sic).

Obverse *bḫtyš*: possibly an Aramaic transcription of Ir. GN *Baxtiš, transcribed in Elamite as Baktiš (but not preserved in the Elamite text).

Fort. 1916B-101 Obverse 1 cm

Fort 1916B-101 Lower Edge 1 cm

Fort. 1916B-101 Reverse 1 cm

Fort. 1916B-101 Upper Edge 1 cm

Fort 1916B-101 Left Edge 1 cm

Fig. 18a-e: a. Fort. 1916B-101 Obverse; b. Fort 1916B-101 Lower Edge; c. Fort. 1916B-101 Reverse; d. Fort. 1916B-101 Upper Edge; e. Fort 1916B-101 Left Edge (Persepolis Fortification Archive Project, Oriental Institute)

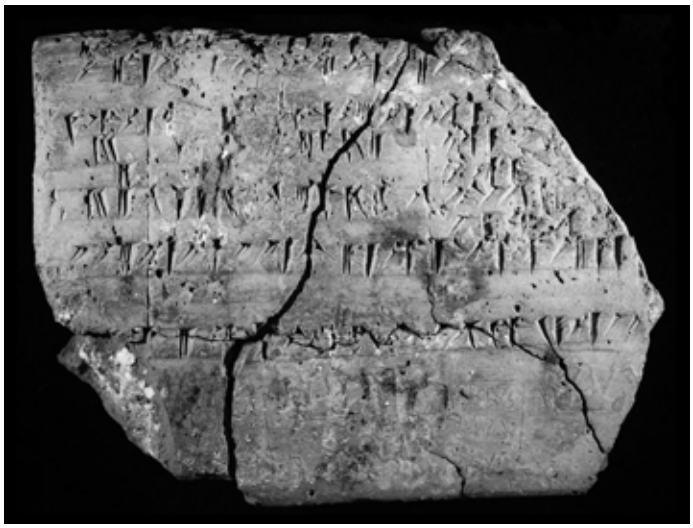


Fig. 18f-g: f. Fort. 1916B-101 Obverse, polarizing and red filters; g. Fort. 1916B-101 Reverse, polarizing and red filters (Persepolis Fortification Archive Project, Oriental Institute)

3. Fort. 1916B-101

Obverse

(01) [ ] 7 QA / *mi-⌜ši⌝-na* ^{AŠ}*be-ul* 10+⌜8?-*na*⌝-*ma* [*da-ka*$_4$]

(02) [ ] / *ha-du-iš* ^{AŠ}KI+MIN 10+⌜9?⌝-*um-⌜me-na*⌝ [*ha du-ka*$_4$]

(03) ⌜10+3⌝ / ⌜*am*⌝-*ba-ráš-na* ^{HAL}*za-a-tar-⌜ri?⌝-[iš?*]

(04) ⌜x⌝+7 / ⌜*pa*⌝-*mi-ráš-na* ^{HAL}*ka*$_4$-*x-*[ ]

(05) ⌜1? ME 60?⌝+2 / ⌜^{HAL}*ti*⌝-*ud-da* ⌜*hu*⌝-*ut-ti-⌜ip x x*⌝ [ ]

(06) 3 ME ⌜60⌝+4 / ^{AŠ}⌜*x-x-ba?*⌝ ^{HAL}*ir-da-man-ti-⌜ia-mar*⌝ [ ]

(07) 3 ME ⌜60?⌝+9 2 BAR / ^{AŠ}*ku-un-tar-ru-iš* ^{HAL}*ba-nu-uk-ka*$_4$-⌜*mar*⌝ [ ]

(08) ⌜20?+2⌝ / ⌜^{AŠ}*za*⌝-*na-na* ^{HAL}*mi-ut-*^{ra}*rad du-⌜iš*⌝[ ]

(09) 4 2 BAR / ^{AŠ}⌜*pan*⌝-*du-ma-na* ^{HAL}*mar-ka*$_4$-*šá* [ ]

(10) / [ ]

(11) PAP 1 ŠI 8 ME 40+2 2 BAR 7 QA / *am-ma ir kut-tin-na hi* ŠÀ-⌜*ma*⌝ [ ]

(12) 1 ŠI 5 ME 80+9 9 QA 20-*kur ma-ak-ka*$_4$ *a-ak ap-pa* ⌜*am*⌝ [ ]

(13) 2 ME 10+4 / ⌜*šu-tur*⌝ *da-ka*$_4$ *mar-da* ⌜*nu*⌝-[*tuk-ka*$_4$]

(14) PAP *hi* 30+4 ⌜1 BAR 7 QA⌝ 20-*kur* ⌜*maz*$_0$-*zí*⌝-*ka*$_4$ *mar-⌜da*⌝ [*nu-tuk-ka*$_4$]

(15) [ ] ⌜ *x x x x* ⌝ [ ]

(16) ^{HAL}*an-man-taš* [ ]

Lower Edge

(17) *-šá-na* ⌜*ha? x x* ⌝ [ ]

(18) ⌜ *x x x x x x x* ⌝ [ ]

Reverse

(19) ⌜ *x* ⌝ [*x*] ⌜*ri x* ⌝ [ ]-*ma ha x* [ ] ⌜*x* ⌝ [ ]

(20) *kur-taš-⌜be gal-li in*⌝*-ni du-iš* ⌜AŠ? ⌝ [ ]

(21) (blank) [ ]

(22) *nu-ti-ka*$_4$ *ha* ⌜*du-ka*$_4$⌝ *maz*$_0$*-zí-ka*$_4$ ŠE.BAR^{MEŠ} *x* [ ]

(23) 80 / [ ] / 3 ME 70+2 ŠE.BAR^{MEŠ} HAL.[A^{MEŠ} x *bat-ti-ka*$_4$*-na-iš*]

(24) 2 / [ ] / ŠE.GAL^{MEŠ} [KI+MIN]

(25) PAP 80+2 / PAP 4 ⌜ME 80?⌝ / PAP 3 ME 70+2 PAP *hi* ^{AŠ}*be-⌜ul*⌝[ ]

(26) ^{HAL}*šá-⌜x x x*⌝ [ ]

(27) ^{HAL}*ú-na-ra* ^{HAL}*an-man-taš* GUD^{MEŠ} *du-pi-e-ma* [*nu-tuk-ka*$_4$]

(28) [ ] (blank)

(29) [ ] (blank)

(30) [^{AŠ}*tup*]*-pi* 2-⌜*um-me*⌝*-man-na tar-⌜mak*$_0$*?*⌝ ^{AŠ}*be-ul* 10+9*-na* ^{AŠ}*x-*[ ]

Obverse (01) *ns*⌜*ḫ*⌝

(02) *mšz rmn*^{ʔ}*drk*

Reverse *nsḫ mg*^{ʔ}*s*^{ʔ}*k*^{ʔ}[...]

Synopsis

The second and final tablet (line 30) of a grain account (lines 22-24), beginning with an accounting of amount on hand at the beginning of year 18[?], calculated from the amounts entered on the first tablet (line 01); continuing with the regular allocated revenue for year 19 (line 02) and additions from other sources (lines 03-09) yielding a total of 1,842 2/3 *artabe* and 7 QA (line 11), of which 1,589 *artabe* and 9½ QA are expended or in a current account (line 12), leaving a balance of 214 *artabe* carried forward as balance and stored as seed[?] and another 34 1/3 *artabe* 7 ½ QA withdrawn and stored as seed (lines 13-14). The reverse mentions workers who did not receive rations (line 20, cf. Hallock 1969:56f.). The conclusion tabulates amounts of two cereals set aside, received as revenue, and withdrawn (lines 19-27, cf. Hallock 1969:55f.), and notes cereal set aside as the property (GUD^{MEŠ}) of regional administrators (line 27), in a form familiar from other grain journals and accounts.

Comments

Category W

(8.5) × 6.4 × 1.9 cm

PFS 0027* left edge.

PFS 2106* reverse, upper edge.

Cf. PF-NN 2290, 2299, 2337, 2370 (same seals, similar format).

(03, 07) Zatarriš at Kunturriš (= Kuntarriš): PF 1970 [W]).

(06) Irdamantiya (Ir. *arta-vant-?), otherwise unattested.

(09) Markaša at Pandumana: PF-NN 2487:26ff.

(13f.) *marda*: Ir. **varda*, 'seed' (Hinz and Koch 1987:878; Tavernier 2007:413), regularly in the phrase *marda nutukka*, corresponding to NUMUN^{MEŠ} *nutika*, 'set aside for seed.'

(15) Traces permit ⌜*ul-la-ma-na*⌝ (as in, e.g., PF 1955:24).

(27) *Unara anmantaš*: cf. PF-NN 2040:45.

(30) *tarmak* (perhaps rather *kutmak*): 'completed.'

Obverse One line of Aramaic, faint and poorly preserved, is written at line 05 of the cuneiform text, in the open space after the number in the left column. Another line of Aramaic, well preserved, is written at the otherwise empty line 10 of the cuneiform text, in the left column. If personal names are represented, might *mšz* be an Ir. hypocoristic in *-*aiča* (corresponding to El. *–ezza*) of a name formed with **Maθa-*, and the following word an Ir. name formed with **Ramna-*?

Reverse The epigraph is written over the seal impression, by a different hand from the one that wrote the epigraph on the obverse. If a personal name is represented, the source is not evident.

Fort. 1282-101 Obverse 1 cm

Fort. 1282-101 Lower Edge 1 cm

Fort. 1282-101 Reverse 1 cm

Fort. 1282-101 Left Edge 1 cm

Fig. 19a-d: a. Fort. 1282-101 Obverse b. Fort. 1282-201 Lower Edge; c. Fort. 1282-101 Reverse; d. Fort. 1282-101 Left edge (Persepolis Fortification Archive Project, Oriental Institute)

Fort. 1282-101 Reverse

1 cm

Fort. 1282-101 Obverse

1 cm

Fig. 19e-f: e. Fort. 1282-101 Reverse, polarizing and red filters; f. Fort. 1282-101 Obverse, polarizing and red filters (Persepolis Fortification Archive Project, Oriental Institute)

4. Fort. 1282-101

Obverse

(01) [*nu*]-*ti-ka*$_4$ *ha du-ka*$_4$ *pi-ir ha du-ka*$_4$ ⌜*maz*$_0$⌝-[*zí-ka*$_4$]

(02) [ ] X ME / 1 ŠI 7 / / [ ]

(03) [ ] ⌜10⌝+2 / 3 ME 50 / / [ ]

(04) [ ] / / / [ ]

(05) [ ]1 ME ⌜10⌝+2 / 1 ŠI 1 ME 20 / / [ ]

(06) [ ] 10+1 / 4 ME / 50+8 / [ ]

(07) [ ] / / / [ ]

(08) [ ] 10? / 7 ME / / [ ]

(09) [ ] ⌜*x*⌝ / 2 ME / / [ ]

(10) [ ] / / / [ ]

(11) [ ]⌜*x x*⌝-*an-du-iš* ⌜HAL*zí*?⌝-*iš*-⌜*šá*?⌝-*ak-ka*$_4$-*ma šá*-[*ra-man-na*]

(12) [ ] / 6 ŠI 40? / / [ ]

(13) [ ]⌜1⌝ ŠI 1 ME 10+4 / / [ ]

(14) [ ]⌜1⌝ ŠI 6 ME 50 / / [ ]

(15) [ ] / / [ ]

(16) [ ] 30 / / [ ]

(17) [ ] 30+6 / 10+6 / [ ]

Lower Edge

(18) [ ] ⌜*x*⌝ [ ]

(19) [ ] ⌜6 *x*⌝ [ ]

Reverse

(20) [ ] 6 ⌜ME⌝ [ ] [ ]

(21) [ ] [ ]

(22) [ ]-⌜*an*?⌝- *du-iš* HAL*da-te-iz*-[*za*]⌜ *x x* ⌝ [ ]

(23) [ ] ME / 1 ME / 4 ME 10+2 [ ]⌜*x*⌝ [ŠE.BAR^{MEŠ}]

(24) [ ] ⌜10+1⌝ / / 1 ME / [ ]⌜ŠE.⌝[GAL^{MEŠ} *ir*? *kut*?]-

(25) [ ] / / / / *tin-na* [ ]

(26) [ ] 40+1 / 1 ME / 4 ME 10 / / ŠE.⌜BAR⌝[^{MEŠ}]

(27) [ ] 20+1 / /⌜4 ME 60⌝+4 / / ŠE.⌜GAL⌝[^{MEŠ} *ir*? *kut*?]-

(28) [ ] / / / / *tin*-⌜*na*⌝[ ]

(29) 8 ME 70+9 / 8 ŠI ⌜7? ME⌝ 90 / / / ŠE.BAR[^{MEŠ}]

(30) 9 / 3 ME 2 / / / ŠE.⌜GAL⌝[^{MEŠ} *ir*? *kut*]-

(31) / *tin*-⌜*na*⌝[ ]

(32) ⌜PAP⌝ *hi* ^{AŠ}*hi-ra-an* HAL*ni-da-ka*$_4$-*u-da šá-ra-man-na* ⌜GUD⌝[^{MEŠ} *du-e-ma nu-tuk-ka*$_4$]

(33) 1 ŠI 30+3 / 1 ME 5 / / [ ]

(34) / / / [ ]

(35) 1 ŠI 30+3 / 1 ME 5 / / [ ]

(36) [PAP] ⌜*hi*⌝ ^{AŠ}*šá-la* ^{HAL}*kar-ki-iš šá-ra-man-na* GUD^{MEŠ} [*du-e-ma nu-tuk-ka*$_4$]

Left Edge

(37) [ ] ⌜*x* 4 *x x*⌝ [ ]

(38) [ ] *nu*[?]*-ti-iš-da* [ ]

Reverse (01) *z*[?]*ph*

(02) *nsyḥ*

Synopsis

Tabular account of cereals stored (column i), received (as revenue, ii), received in addition[?] (iii), and withdrawn (iv), in four sections: at [...]anduš, under the control of Ziššakkama (01-11); at [...]anduš, [under the control[?]] of Datezza (12-22); at Hiran, under the control of Nidakauda—a total set aside for his own use[?] (23-32); at Šala, under the control of Karkiš, a total set aside for his own use[?].

Comments

Category W

(9.2) × 7.7 × 1.9 cm

No preserved seal impression.

(32) *ni-* (in *ni-da-*) clearly not *ir-*.

Upper Edge Uninscribed, unlined, no seal impression.

Reverse Aramaic upside-down with respect to cuneiform, in uninscribed columns iii and iv, at lines 26-29. Imperial Aramaic *zph*, 'loan' offers no sense in context; other possible readings, *sph* or *qph*, have no evident meaning.

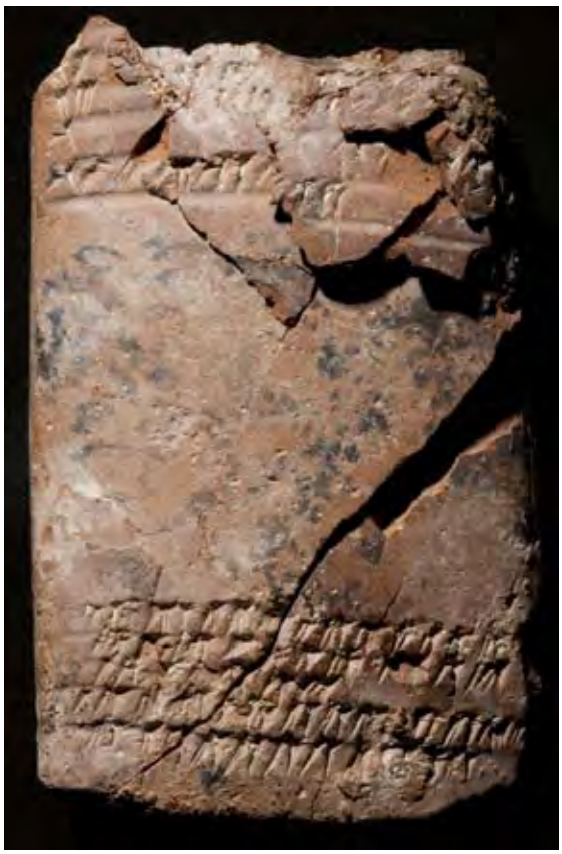
Obverse Uncertain traces of another possible epigraph, faded and broken.

Fort. 0424-103 Obverse

1 cm

Fort. 0424-103
Right Edge

1 cm



Fort. 0424-103 Reverse

1 cm

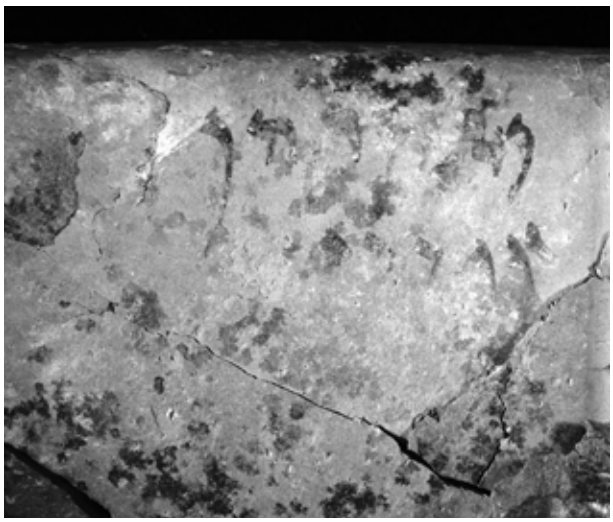


Fig. 20a-d: a. Fort. 0424-103 Obverse; b. Fort. 0424-103 Right Edge; c. Fort. 0424-103 Reverse; d. Fort. 0424-103 Reverse, detail, polarizing and red filters (Persepolis Fortification Archive Project, Oriental Institute)

5. Fort. 0424-103

Obverse

(01) [*ha-sa*]-⌜*na*⌝ *pi-ir hal-pi-ka*$_4$ *pi-*⌜*ti-ka*$_4$⌝ [PAP UDU.NITÁ^{MEŠ}]

(02) [*maz*$_0$]-⌜*zí*⌝-*ka*$_4$

(03) 10+1 20+⌜3⌝ 20+8 PAP ⌜50⌝+2 [^{HAL}]*x-na-x-*[*x*]

(04) 10+3 10+2 ⌜50⌝+7⌈ 2-ŠU PAP 80+2⌈ 2-ŠU ^{HAL}*mi-iš-x-*[*x*]

(05) 10 7 ⌜10⌝+[7 2]-ŠU PAP 30+4 2-ŠU ^{HAL}*ir-da-za-*[*x*]

(06) 2 10 ⌜10⌝+7 [2]-ŠU PAP 20+9 2-ŠU ^{HAL}*mi-ra-*⌜*x*⌝

(07) 20+9 20+9 1-[ŠU PAP] 50+8 1-ŠU ^{HAL}*pár-ti-x*

(08) 50+4 1 50+7 1-ŠU [PAP 1 ME] [10]+2 1-ŠU ^{HAL}*pár-x-x*

(09) 30+5 20 1-ŠU PAP [50]⌜+5⌝ 1-ŠU ^{HAL}*kak*$^{?}$-⌜*x-x-x*⌝

(10) 5 2-ŠU PAP ⌜5⌝ 2-ŠU ^{HAL}⌜*x-te-na*⌝

(11) 9 2 1-ŠU PAP 10+⌜1 1⌝-ŠU ^{HAL}⌜*man-za-na*⌝

(12) (blank)

(13) PAP PAP PAP PAP [*be*]-*ul* 10+5-[*um*]-*me-man-na*

(14) ⌜PAP⌝ [ ] (erasure) *x x*

(15) 2 1-ŠU PAP ⌜2 1-ŠU⌝ [ ]-*mi-iš-*⌜x-*ka*$_4$$^{?}$⌝

(16) 4 PAP ⌜4⌝ [ ]-*da-x*

(17) 5 2 1-ŠU PAP ⌜7 1⌝[-ŠU *x*]-*x-šá*

(18) 6 2 2-ŠU PAP ⌜8 2-ŠU⌝ [ ]

(19) 9 ⌜x 2-ŠU⌝ PAP ⌜*x x x x*⌝[ ]

(20) 2 [ ] ⌜3⌝[ ]

(21) PAP [ ] [ ]

Reverse

(01') [ ] ⌜*x x x x*⌝ [ ]

(02') ⌜20⌝+4 ⌜10+3 2-ŠU⌝[PAP 30+7 2-ŠU] x ⌜^{HAL}*x-ti*$^{?}$-*x*⌝

(03') 20+3 9 ⌜2-ŠU⌝ [PAP 30+2] ⌜2-ŠU⌝ ^{HAL}*man-za-x*

(04') PAP ⌜ PAP$^{?}$ *x x*⌝

(05') PAP *hi* ⌜^{HAL}*x*⌝-*te-*⌜*x*⌝-*bar*$^{?}$-*za*$^{?}$

(06') ^{HAL}*mi-iš-šá-ba-*⌜*da*$^{?}$⌝ ^{HAL}*x x x x x x*

(07') *ia-*⌜*x*⌝-*iš* ^{HAL}*x x x x-ud-da*

(08') ^{AŠ}⌜*x x x x x x*⌝

(09') ^{AŠ}*ú-*⌜*x x x*⌝-*sa* ^{AN}⌜ITI^{MEŠ}⌝ *mi-ia-*⌜*kán*⌝-*na-*

(10') *na* 2 ^{AN}*na-an pír-ka*$_4$ ⌜*tin-gi-iš*⌝

Reverse (01) *nsyḥ mn*

(02) *'t*$^{?}$*/gwr*$^{?}$*/dy*

Synopsis

Columns: adults (i), slaughtered in addition[?] (ii), transferred (iii), total sheep and goats withdrawn (iv = [i+ii+iii]), personal name (iv).

Entries (3-12) for year 15. Something (lost) sent, month XII, 2nd day.

Comments

Category W

Cf., e.g., PF 2011f.

6.7 × (9.9) × 1.8 cm

No preserved seal impression.

(13) *–me-man-na* on right edge.

(09'f.) Cf. *me-da-su-na-še bel* 20-*nama* ^{AN}ITI^{MEŠ} *Markašanaš-ma* 2 *nan parka tingiš* 'they[?] sent its confirmation[?] in year 20, in month VIII, 2 days elapsed' PF 2011:38-40, and see Hinz and Koch 1987:906, Tavernier 2007:508.

Reverse Aramaic in ink, parallel to left edge, in open space between lines 05' and 06'. If the final word is to be read *ʾgwry*, then 'copied from an ostracon?' If *ʾtwry*, then 'copied from Assyrian (i.e., Aramaic)'?

PF-NN 2669 Obverse 1 cm

PF-NN 2669 Lower Edge 1 cm

PF-NN 2669 Reverse 1 cm

PF-NN 2669 Left Edge 1 cm

Fig. 21a-d: a. PF-NN 2669 Obverse; b. PF-NN 2669 Lower Edge; c. PF-NN 2669 Reverse; d. PF-NN 2669 Left Edge (Persepolis Fortification Archive Project, Oriental Institute)

Fig. 21e-f: e.PF-NN 2669 Reverse, cross-polarizing and red filters; f. PF-NN 2669 Reverse, detail, cross-polarizing and red filters (Persepolis Fortification Archive Project, Oriental Institute)

6. PF-NN 2669 (Fort. 2177-010)

Obverse

(01) *mu-ši-*⌜*in hi* NAGA.TUR^{MEŠ}⌝*-na* ^{AŠ}*ti-ra-iz-zí-*⌜*iš x x* ⌝ [ ]

(02) 20+ /1 / NAGA.TUR<^{MEŠ}> ^{HAL}*ti-ti-kaš-be du-šá* 7 ME ⌜*x*⌝[ ]

(03) 2 ME /2 / KI+MIN ^{HAL}*har-ri-ia-za-na du-iš-da*$^{!?}$ ⌜^{HAL} *za–u-mi-ip*⌝ [*ap du-nu-iš*]

(04) 20 / / KI+MIN ^{HAL}*ú-ma-ia* ⌜GIŠ⌝*mi-ik-tam*$_6$ *ha hu-ut-taš-da*

(05) 20+/5 / KI+MIN *nu-ti-ka*$_4$

(06) PAP 2 ME 60+/8 / NAGA.TUR^{MEŠ} *ma-ak-ka*$_4$ ^{AŠ}*be-ul* 10+5$^{!}$*-na*

(07) (blank)

(08) 20+/3 8/ QA NAGA.TUR^{MEŠ} ^{HAL}*ti-ti-kaš-be du-šá* ^{HAL}*kur-taš zip-pi-ma ap du-nu-*⌜*iš*⌝

(09) 2 ME / / KI+MIN ^{HAL}*har-ri-ia-za-na du-iš* ^{HAL}*za-u-mi-ip ap du-nu-iš*

(10) 10+/1 / KI+MIN *nu-ti-ka*$_4$

(11) (blank)

(12) [PAP] ⌜2⌝ ME 30+/4 8/ QA NAGA.TUR^{MEŠ} *ma-ak-ka*$_4$ ^{AŠ}*be-ul* 10+6$^{!}$*-na*

(13) [ ] (blank)

(14) [ ] /5 1/ QA NAGA.TUR<^{MEŠ}> ^{HAL}*ti-ti-kaš-be du-šá* ^{HAL}*kur-taš zip-pi-ma ap du-nu-<iš>*

(15) [ ] NAGA.TUR<^{MEŠ}> ^{HAL}*har-ri-ia-za-na du-iš* ^{HAL}*za-u-mi-ip*

(16) [ ] *ap du-nu-iš-da*

(17) [ ] NAGA.TUR<^{MEŠ}> ^{HAL}*ú-ma-ia du-šá mi-ik-tam*$_6$ <*ha*> *hu-ut-taš*

(18) [ ] ⌜KI+MIN⌝ [ ] *nu-ti-ka*$_4$

Lower Edge

(19) [PAP]⌜NAGA.TUR^{MEŠ} *ma-ak-ka*$_4$ ^{AŠ}*be-ul*⌝ 10+7-*na*

Reverse

(20) [*nu-ti-ka*$_4$ *ha*] ⌜*du-ka*$_4$⌝ *pi-ir ha du-ka*$_4$ ⌜*maz*$_0$*-zí*⌝*-ka*$_4$

(21) [ ] /80+6 / / 1 ME 60+4 / NAGA.TUR^{MEŠ} ^{AŠ}*be-ul* 10+5-*na*

(22) [ ]1 /80 / / 30 / KI+MIN ^{AŠ}KI+MIN 10+6-*na*

(23) [ ]⌜10⌝+1 / 40 / / 70 / KI+MIN ^{AŠ}KI+MIN 10+7-*na*

(24) [ ] (blank)

(25) [ ] 4 ME 2 NAGA.TUR<^{MEŠ}> *hal-mi* ^{HAL}*ir-du-mar-ti-ia-na-ma*

(26) 80+6$^{!}$ KI+MIN *ha-du-iš* ^{AŠ}*be-ul* 10+5-*na*

(27) 4 ME 80+8 KI+MIN *am-ma*

(28) 2 ME 60+8 KI+MIN *ma-ak-ka*$_4$

(29) (erasure)

(30) 2 ME 20$^{!}$ KI+MIN *šu-tur da-ka*$_4$

(31) 80 KI+MIN *ha-du-iš* ^{AŠ}*be-ul* 10+⌜6-*na*⌝

(32) 3 ME KI+MIN *am-ma*

(33)	2 ME	30+4 8 QA	KI+MIN	*ma-ak-ka*$_4$
(34)		60+5 2 QA	KI+MIN	*šu-tur da-ka*$_4$
(35)		40	KI+MIN	*ha-du-iš* ⌜AŠ*be-ul*⌝ 10+7-*na*
(36)	1 ME	5 2 QA	KI+MIN	*am-ma*
(37)	1 ME	5 2 QA	KI+MIN	*ma-ak-ka*$_4$ AŠ*ti-ra-zí-iš* HAL*mar-gi-na*
(38)			⌜*tu-ma*⌝*-ra* HAL*mi-iš-ba-tur-ma*? *ul-*[*li-ri-ri*]	

Reverse *nsḫ ḫṭ*

Translation

(01) This account (is for) NAGA.TUR at Tirazziš [...]

(02-06) 21 (BAR) (of) NAGA.TUR overseers received [and gave to workers as *zippi* (supplementary rations)]; 202 (BAR) (of) ditto Harriyazana received [and gave to] workers at heavy labor?; 20 (BAR) (of) ditto—Umaya used it for (processing?) fruit; 25 (BAR) of ditto was set aside. Total 268 (BAR) of NAGA.TUR was disbursed, year 15!.

(08-12) 23 (BAR) 8 QA (of) NAGA.TUR overseers received and gave to workers as *zippi* (supplementary rations); 200 (BAR) (of) ditto Harriyazana received and gave to workers at heavy labor?; 11 (BAR) (of) ditto was set aside. [Total 2]34 (BAR) 8 QA (of) NAGA.TUR was disbursed, year 16!.

(14-19) [x+]5 (BAR) 1 QA (of) NAGA.TUR overseers received and gave to workers as *zippi* (supplementary rations); [x] NAGA.TUR Harriyazana received and to workers at heavy labor?; [x] NAGA.TUR Umaya received and used it for (processing?) fruit; [x] ditto was set aside. [Total x] NAGA.TUR was disbursed, year 17.

Reverse

(20) [(i) set aside], (ii) (revenue) received, (iii) additional? (revenue) received, (iv) expended.

(21-23) [(i) x], (ii) 86, (iii) (0), (iv) 164: NAGA.TUR, year 15.
[(i) x]+1, (ii) 80, (iii) (0), (iv) 30: ditto ditto 16.
[(i) x]+11, (ii) 40, (iii) (0), (iv) 70: ditto ditto 17.

(Summary)

(25) 402 (BAR) (of) NAGA.TUR, according to a sealed (document) of Irdumartiya.

(26) 86 (BAR) (of) ditto, revenue, year 15.

(27) 488 (BAR) (of) ditto available.

(28) 268 (BAR) (of) ditto disbursed.

(29) (erasure)

(30) 220 (BAR) (of) ditto balance on deposit.

(31) 80 (BAR) (of) ditto, revenue, year 16

(32) 300 (BAR) (of) ditto, available.

(33) 234 (BAR) 8 QA (of) ditto disbursed.

(34) 65 (BAR) 2 QA balance on deposit.

(35) 40 (BAR) (of) ditto, revenue, year 16.

(36) 105 (BAR) 2 QA (of) ditto available.

(37) 105 (BAR) 2 QA (of) ditto disbursed.

(37-38) Tirazziš. Margina, grain handler; Mišbaturma, his delivery-man.

Comments

Category W

9.9 × 6.9 × 1.7 cm

PFS.2089* left edge.

Fort. 2177-010 was designated PF-NN 2669 by Charles E. Jones 1982. Jones's draft edition, collated and updated here, will be published in a definitive edition by W. F. M. Henkelman.

(01 and passim) NAGA.TUR (SUM+IR[?].TUR in Hallock 1969:85, 752 and Hinz and Koch 1987:1102, but NAGA in Hallock's marginalia in his own copy of Hallock 1969): a crop or food product; edible, hence not the plants from which lye or soda ash are produced (Akkadian *uḫūlu*, Neo-Assyrian *qīltu*). If NAGA (Nisaba) is an exceptional learned substitute for ŠE, then the specification TUR and the implied contrast with ŠE.GAL (Hallock 1969:756; Hinz and Koch 1987:1147) remain unclear.

(06) Text: *be-ul* 10+4-*na*.

(08) -⌜*iš*⌝ on right edge.

(12) Text: *be-ul* 10+5-*na*.

(14) *du-nu-*<*iš*> on right edge

(26) Text: 80+5.

(30) 20[!] over erasure of 80+8.

(37) Margina (collocated with Umaya): PF 2079:04.

Reverse. The Aramaic is written in ink, upside down with respect to the cuneiform text. Perhaps (after Syriac) 'copied exactly?'.

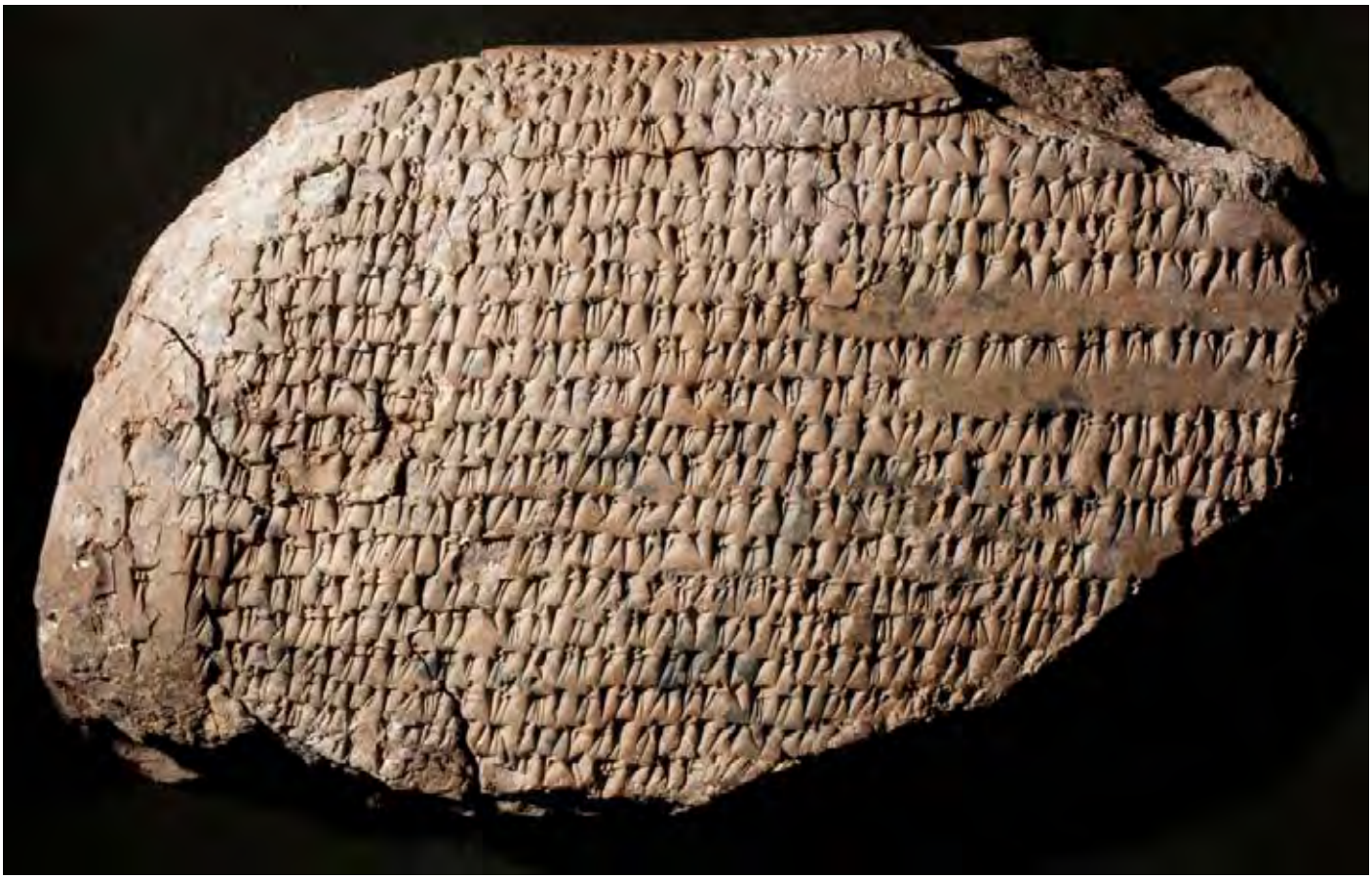


Fig. 22a: Fort. 1909A-101 Obverse
(Persepolis Fortification Archive Project, Oriental Institute)

Fort. 1909A-101 Reverse

1 cm

Fort. 1909A-101 Upper Edge

1 cm

Fig. 22b-c: b. Fort. 1909A-101 Reverse; c. Fort. 1909A-101 Upper Edge (Persepolis Fortification Archive Project, Oriental Institute)

Fort. 1909A-101 Reverse

1 cm

Fig. 22d-e: d. Fort. 1909A-101 Reverse, polarizing and red filters; e. Fort. 1909A-101 Reverse, detail, polarizing and red filters (Persepolis Fortification Archive Project, Oriental Institute)

7. Fort. 1909A-101

Obverse

(01) [/ *hal-mi* HALPN-*na*] ⌜*li*⌝-*ka*$_4$ 20+9 HALLÚMEŠ HAL*kat*$_7$-*ba-du-kaš nu-ma-kaš* AŠ*rák*$_0$-[*ka*$_4$-*an*]

(02) [ ] *x be-ul* 10+⌜6⌝-*na un-ra* 3 ⌜*du-iš*⌝

(03) [/ *hal-mi* HALPN]-*na li-ka*$_4$ ⌜HAL*kur*⌝-*taš* HAL*ha-ri-maš nu-*⌜*ma-kaš* AŠ*rák-ka*$_4$-*an x x* ⌝ [ ]

(04) [*be*]-*ul* 10+6-⌜*na*⌝ 10 HALLÚMEŠ 3-*na* 5 SALSALMEŠ-«*na*» 2-*na* PAP 10+5 HAL⌜*kur-taš*⌝[ ]

(05) [/ *hal-mi* PN]-*na* ⌜*li-ka*$_4$ HAL⌝*mi-iš-šu-uk-ka*$_4$ *hi-še du-iš* 3 ANŠE.KUR.RAMEŠ *be-er-na ma-*⌜*ki*⌝-[*iš-da* ANITIMEŠ]

(06) [AN*ba-gi-ia-ti*]-*iš a-ak* AN*mar-*[*ka*$_4$]-*šá-na-iš be-ul* 10+6-*na un-ra na-zir*$_0$-*na* 3 QA *ma-ki-iš-da*

(07) [/ *hal-mi*] ⌜HAL⌝*ir-še-na-na li-*⌜*ka*$_4$⌝ HAL*ma-mi-iz-za hi-še du-iš* 4 ANŠE.KUR.RAMEŠ *be-er-na ma-*⌜*ki*⌝-[*iš-da* ANITIMEŠ]

(08) [*be*]-⌜*ul*⌝ 10+6 *un-ra na-zir*$_0$-*na* 3 QA *ma-ki-iš-da*

(09) [/ *hal-mi*] HAL*ir-še-na-na li-ka*$_4$ HAL*ma-ap-pír-ri-ia du-iš ba-*«*ba*»-*is*-KI+MIN *mu-zir*$_0$-*ri-ia-ip ma-ki-iš-*[*da* ANITIMEŠ]

(10) [/]-⌜x-*iš*⌝ *be-ul* 10+6-*na un-ra na-zir*$_0$-*na* 20-*kur ma-ki-iš-da*

(11) [ ]⌜4⌝ / *hal-*⌜*mi* HAL*hi*⌝-*ú-mi-*[*iz-za*]-*na li-ka*$_4$ HAL*ra-ba-en*?-*da hi-še áš-šá-u-uk*?-*ka*$_4$? HAL*hi-ú-mi-iz-za šá-ra-ma* ⌜*gal*⌝ [*du-iš* ANITIMEŠ]

(12) [ ] / AN⌜*sa*⌝-[*mi-ma*] *a-ak* ⌜AN⌝*mi-kán-na-iš be-ul* 10+6-*na* HAL*ra-ba-en*?-*da* 4 *du-iš* 1 HAL*ú-ba*?-*iš-*⌜*ma*⌝ [*du-iš*]

(13) [ ]⌜6⌝ / *hal-mi* ⌜HAL*hi-ú-mi-iz-za*⌝-*na li-ka*$_4$ HAL*ba-ši-ak-ka*$_4$ *hi-še áš-ba-u-uk*?-*ka*$_4$ HAL*hi-ú-mi-iz-za šá-*⌜*ra*⌝-[*ma gal du-iš* ANITIMEŠ]

(14) [ ] / AN*sa-mi-ma a-ak* AN*mi-*⌜*kán*⌝-*na-iš be-ul* 10+6-*na* ANITIMEŠ-*na* 3 *du-iš*

(15) [ ] 5 / HAL*ti-ip-du-uk-ka*$_4$ ⌜*hi-še*⌝ HAL*ti-pi-ra* AŠ*ha-la-at-uk-ku* HAL*ma-sa-uk-ka*$_4$ *da-ma* x [ ]

(16) [ ] / ⌜AN⌝*ha-ši-ia-ti-iš be-ul* 10+6-*na* HAL*hi-su-te* 2 QA *du-iš* 3 HAL*pu-hu ap-pi-*⌜*ni*⌝ [*un- ra* 1 QA *du-iš*]

(17) [ ] 9!? / ⌜HAL⌝*ma-ú-pár-na hi-še a-ak* 5 HAL*ak-ka*$_4$-*ia-še i-da-ka*$_4$ AŠ*ba-pi-ru-iš-mar* AŠ[ ]

(18) [ ]⌜*du-iš*⌝ 1 *na-an* ANITIMEŠ *mi-kán-na-iš be-ul* 10+6-*na ap-pi* ⌜*un-ra* 1⌝ [QA 20-*kur du-iš*]

(19) [/ *hal-mi*] HAL*ú-na-pa* AŠ*ti-*⌜*da*?⌝ *hu-ut-ti-ra-na li-ka*$_4$ 1 HAL⌜LÚ⌝[MEŠ]

(20) [ ]⌜ *x x x* ⌝ *šá* [ ] 2 ME 20+7 HALLÚMEŠ⌜ *x x x* ⌝ [ ]

Reverse

(01') [ ] ⌜na-an⌝ [ ] ⌜x⌝ [ ]

(02') ⌜1 QA 20-kur⌝ / HAL kur-du-mi-iš ⌜hi-še a-ak 2 HAL ak-ka4⌝-ia-še ⌜x⌝ [ ]

(03') / AŠ šu-šá-an HAL EŠŠANA-ik-ka4 la-ak-ka4 ⌜gal du⌝-iš 1 na-an AN⌜ITIMEŠ x x⌝ [ ]

(04') 2 7 QA / HAL za-ku-um-ba hi-še a-ak 3 HAL ak-ka4-ia-⌜še i⌝-da-ka4 HAL kur-taš ap-pa ⌜ x x x x ⌝ [ ]

(05') / gal du-iš 1 na-an AN ITIMEŠ mi-kán-na-⌜iš⌝ 2-me-man-na be-ul 10+6-na ⌜ap⌝-pi un-ra 1 ⌜QA 20-<kur> du-iš⌝ [ ]

(06') / 9 HAL pu-hu ap-pi-ni un-ra 1 QA ⌜du-iš hal-mi⌝ HAL EŠŠANA-na ku-iz-za

(07') 3 QA / HAL at-ti-ia hi-še HAL pír-ra-da-zí-⌜iš NUMUN??⌝MEŠ AŠ iš-bar-taš-mar HAL zí-iš-šá-u-ú-iš-ik-ka4 [ ]

(08') 3 QA / HAL man-ú-uk-ka4 hi-še a-ak 1 HAL ak-ka4-ia-še HAL zí-iš-šá-u-ú-iš-⌜ik-<ka4>-mar⌝ HAL EŠŠANA-ik-ka4 la-⌜ak-ka4 gal⌝ [du-iš 1 na-an AN ITIMEŠ]

(09') / mi-kán-na-iš be-ul 10+6-na un-ra 1 QA 20-kur du-iš hal-mi HAL zí-iš-šá-u-ú-iš-na ku-iz-za

(10') 2 QA 20-kur / HAL ir-te-na hi-še HAL zí-iš-šá-u-ú-iš-ik-ka4-<mar> AŠ šu-šá-an ⌜la-ak-ka4⌝ gal du-iš 1 na-an ⌜AN ITIMEŠ⌝ [ ]

(11') / HAL hi-su-ud-da 1 QA 20-kur du-iš 1 HAL pu-hu 1 QA du-iš hal-mi HAL zí-iš-šá-u-ú-iš-na ku-iz-za [ ]

(12') 1 QA / HAL du?-ti-iz-za hi-še HAL ma-da HAL zí-iš-šá-u-iš-ik-ka4-mar AŠ ma-taš ⌜la⌝-ak-ka4 gal du-iš 1 na-an [AN ITIMEŠ]

(13') / be-ul 10+6-na hal-mi HAL zí-iš-šá-u-ú-iš-na ku-⌜iz-za⌝

(14›) 7 QA 20-kur / HAL kin-na-da-ad-da hi-še UDU.NITÁMEŠ HAL ba-te-ip AŠ ba-pi-ru-iš HAL ba-ka4-ba-na-ik-ka4-mar HAL mi-iš-⌜da?⌝-[ ]

(15') [ ] / gal du-iš 1 na-an AN ITIMEŠ sa-mi-ma be-ul 10+6-na HAL hi-su-⌜te⌝ 1 QA 20-kur du-iš 6 HAL pu-hu un-ra 1 QA [du-iš]

(16') [ ] / HAL i-ti-be-na? hi-še a-ak 1 HAL ak-ka4-ia-še PAP 2-be-ud-da HAL tup-pi-ip KUŠMEŠ-uk-ku mu-ši-in zik-⌜ki⌝-[ip]

(17') [ ] / ⌜AŠ ba-pi⌝-ru-iš HAL ba-ka4-ba-na-ik-⌜ka4-mar AŠ ba⌝-ir-šá-iš HAL zí-iš-šá-u-ú-iš-ik-ka4 ⌜la⌝-ak-ka4 gal ⌜du⌝-[iš 1 na-an AN ITIMEŠ]

(18') [ ] / [AN mi]-kán-na-iš 2-⌜me-na⌝ ap-pi un-ra 1 ⌜QA⌝ 20-kur du-iš 2 HAL pu-hu ap-pi-ni [ ]

(19') [ ] ⌜x x⌝ [ ] ⌜x⌝-na?-nu-iš-ra HAL zí-iš-šá-u-⌜ú-iš da?-ma! x⌝ ra x [ ]

(20') [ ] gal du-iš 1 na-an AN ITIMEŠ ⌜mi?⌝-[ ]

Upper Edge

(21') [ ] x AŠ tup-pi hi-⌜ma⌝ AŠ rák0-ka4-an HAL [ ]

Reverse [...] ⌜x ⌝ 3+2 ḫ 3+⌜x?⌝

Translation

(01-02) [x (grain?), a sealed document of PN having been delivered], 29 Cappadocian men, *numakaš*, at (the place) Rakkan [received (as rations), during x days of month MN], of year 16. Each received three (QA). (=L1?)

(03-04) [x (grain), a sealed document of PN] having been delivered, Areian? workers, *numakaš* at (the place) Rakkan [received (as rations) during x days of Month MN], of year 16: 10 men at 3 (QA), 5 women at 2 (QA), total 15 workers. (= L1)

(05-06) [5 (BAR) 4 QA (of grain), a sealed document of PN] having been delivered, (a person) named Miššukka received. 3 mature? horses consumed (it). (During) months VII and VIII of year 16, each consumed 3 QA daily. (= S1)

(07-08) [x (grain), a sealed document] of Iršena having been delivered, (a person) named Mamizza received. 4 mature? horses consumed it. (During) [month MN] of year 16, each consumed 3 QA daily. (= S1)

(09-10) [x (grain), a sealed document] of Iršena having been delivered, Mappirriya received. Egyptian ducks consumed (it). (During) [month(s) MN] of year 16, each consumed ½ QA daily. (= S1)

(11-12) 4 (BAR) (of grain), a sealed document of Hiumizza having been delivered, (a person) named Rabaenda?, an *ašša'ukka*? for whom Hiumizza is responsible, [received (it as)] rations. (During) months [XI] and XII or year 16 Rabaenda? received 4 (BAR). 1 (BAR) Ubašma? [received]. (= K2)

(13-14) 6 (BAR) (of grain), a sealed document of Hiumizza having been delivered, (a person) named Bašiakka, an *ašba'ukka*? for whom Hiumizza is responsible, [received] as rations. (During) months XI and XII of year 16, he received 3 (BAR) monthly. (= K2)

(15-16) 5 (BAR) (of grain), (a person) named Tipdukka, a scribe (writing) on clay, whom Masakka assigns [received. (During) 10 days? of month] IX of year 16, he himself received 2 QA, their[1] 3 boys [received each 1 QA]. (= K2)

(17-18) 9 (BAR) (of grain), (a person) named Mauparna and 5 companions with him [sent?] from Babylon (to) [...], received. (During) 1 day of month XII of year 16, they [received] each 1 [½ QA]. (= Q)

(19) [x (grain), a sealed document] of Unapa, the inspector?, having been delivered, 1 man [...]

(20) [...] 227 men ...

Reverse

(01') [...] day(s) [...

(02'-03') 1 QA ½ (of grain) (a person) named Kurdumiš and his 2 companions sent [from ...] to the King at Susa, received as rations. (During) 1 day of month [...] (= Q)

(04'-06') 2 (BAR) 7 QA (of grain a person) named Zakumba and his 3 companions with him, workers who [...] received (as) rations. (During) 1 day of second (intercalary) month XII of year 16, they each received 1 ½ QA. Their 9 boys each received 1 QA. He carried a sealed document of the king. (= Q)

(07') 3 QA (of grain a person) named Attiya, an express courier ... from Sardis to Ziššawiš [...] (= Q?)

(08'-09') 3 QA (of grain a person) named Manukka and his 1 companion sent from Ziššawiš to the King, [received (as)] rations. [(During) 1 day of month] XII of year 16 each received 1 ½ QA. He carried a sealed document of Ziššawiš. (= Q)

(10'-11') 2 QA ½ (of grain a person) named Irtena, sent from Ziššawiš to Susa, received (as) rations. (During) 1 day of month [MN of year 16] he himself received 1 QA ½, 1 boy received 1 QA. He carried a sealed document of Ziššawiš. (= Q)

(12'-13') 1 QA (of grain a person) named Dutizza[?], a Mede sent from Ziššawiš to Media, received (as) rations. (During) 1 day of [month MN] of year 16. He carried a sealed document of Ziššawiš. (= Q)

(14'-15') 6 QA ½ (of grain a person) named Kinnadadda, (and[?]) Babylonian drovers of sheep (traveling) from Bakabana to Mišda[...] received (as) rations. (During) 1 day of month XI of year 16 he himself received 1 ½ QA, 6 boys each [received] 1 QA. (= Q)

(16'-18') [5[?] QA (of grain)] (a person) named Itibena[?] and his 1 companion, a total of 2 in all, scribes (writing) on leather, accountants, sent from Bakabana (at) Babylon to Ziššawiš at Persepolis, received (as) rations. [(During) 1[?] day of] second (intercalary) [month] XII, they each received 1 QA ½ , their two boys [each received 1 QA]. (= Q)

(19'-20') [x (grain)] ... whom Ziššawiš assigns[?] ... received (as) rations. (During) 1 day of month [...]

(21') [...] in this tablet. Rakkan [...]

Reverse [x]+5 *ḫ*(*ophen*) 3+[x *log*s[?]]

Comments

Category V

(17.4) × (10.5) × 3.0 cm

Seal traces left edge.

(01, 03) *numakaš*: 'irrigation worker(s)' (Hallock 1969:53, 739, following Gershevitch) vs. 'yarn-spinner(s)' (Hinz and Koch 1987:1009; Tavernier 2007:427). Cappadocian *numakaš*: cf. PF-NN 1382, letter-order from Maraza.

(05-06) Cf. PF-NN 2335:55'-60': S1 entries, recording receipts of grain by Miššukka and men responsible for horses (*aššabbattiš*), for groups of 24 and 25 mature[?] horses, consumed during 1 and 2 months of year 17, at 3 QA daily, on authorization of a sealed document of Iršena.

(09) Mappirriya = Maparriya, PF-NN 1887?

(11-13) *ašša'ukka/ašba'ukka*: evidently formed with *ašša-/ašba-* ~ Ir. *asa-/asba-*. Unlikely *–ka* hypocoristic on *aššabattiš/ašbabattiš*, 'horse master.'

(19) *ti-*⌈*da*[?]⌉: or ⌈*ti-ut*⌉-. For *ti-ud-da hutti-*, 'report-maker' (Hinz and Koch 1987:341, Henkelman 2008:102 n. 229, or partial calque on *tidabatti-*, Ir. **didapati-*, 'fortress officer'?

(04'-06') All numbers clear; arithmetic total = 1 (BAR) 5 QA.

(07') ⌈NUMUN[?MEŠ]⌉: the traces suggest this unlikely reading, and no parallels suggest another.

(16') *I-ti-be-na*[?]: sic, not *–ul*, i.e., not a transcription of Akkadian Itti-Bēl.

(21') The fragmentary line on the upper edge is set off from the preceding text by an uninscribed space equivalent to about one line.

Reverse. The Aramaic epigraph is written in ink parallel to the left edge.

Fort. 1227-101 Obverse

1 cm

Fort. 1227-101 Lower Edge

1 cm

Fig. 23a-b: a. Fort. 1227-101 Obverse; b. Fort. 1227-101 Lower Edge (Persepolis Fortification Archive Project, Oriental Institute)

Fort. 1227-101 Reverse 1 cm

Fort. 1227-101 Right Edge 1 cm

Fig. 23c-e: c. Fort. 1227-101 Reverse; d. Fort. 1227-101 Right Edge; e. Fort. 1227-101 Reverse, detail, cross-polarizing and red filters (Persepolis Fortification Archive Project, Oriental Institute)

8. Fort. 1227-101

Obverse

(01) [$^{AŠ?}ba^{?}$]-⌜$na^{?}$⌝-ra-ti-iš be-ul 20+1-na

(02) [ku$^{?}$]-⌜ti$^{?}$-ra$^{?}$ a-ak⌝ 3 ⌜^{HAL}ak⌝-ka_4-ia-še i-da-ka_4 ^{HAL}EŠŠANA-ik-[ka_4]

(03) [ ] ⌜hu-pi-be gal du-šá⌝ 1 na-<an> ^{AN}ITI^{MEŠ} ^{AN}tur-na-ba-[zí-iš]

(04) [un]-⌜ra 1⌝ QA du-ma-iš ^{AŠ}KASKAL^{MEŠ} ha(-)šá-iš-da

(05) [^{GIŠ}ši]-⌜kak^{MEŠ} ku⌝-ti-ra a-ak 3 ^{HAL}ak-ka_4-ia-še i-da-ka_4 ^{HAL}⌜EŠŠANA⌝-[ik-ka_4]

(06)]⌜^{AŠ}da⌝-ti-iš mu-šá-iš-da hu-pi-be gal du-šá ⌜1⌝

(07) [^{AN}ITI^{MEŠ} ^{AN}]⌜tur-na⌝-ba-zí-iš be-ul 20+1-na un-ra 1 QA du-šá

(08) [ ] ⌜^{GIŠ}⌝ši-kak^{MEŠ} ku-ti-ra a-ak 5 ^{HAL}ak-ka_4-ia-še i-da-ka_4

(09) [ ] ⌜x x⌝-ki-ip ^{AŠ}KASKAL^{MEŠ} ha(-)šá-iš-da gal du-šá 1 na-an

(10) [^{AN}tur-na-ba]-⌜zí⌝-iš be-ul 20+1-na ^{AŠ}hal-mi ^{HAL}EŠŠANA-na ku-ti-iš

(11) [ ] ⌜x x x⌝ du-ma ^{AŠ}ir-ma-tam_6 ^{HAL}sa-ra-ku-zí-iš-na

(12) [ ] ^{AŠ}hu-⌜ud-du⌝-KI+MIN ^{HAL}EŠŠANA-na ^{AŠ}bat-ra-ka_4-taš ku-iz-za ^{AN}

(13) [ITI^{MEŠ} ^{AN}]⌜tur⌝-na-ba-⌜zí-iš⌝ be-ul 20+1-na mi-ul-e in-ni ha-pi-ka_4

(14) [ ] ⌜da$^{?}$⌝ hi-še⌜$^{AŠ?}$x⌝-ri-a-iz$^{?}$-zí-iš ^{AŠ}ir-ma-tam_6 ^{HAL}ma-um-na-ak-

(15) [ ] ⌜x x⌝ du-šá ^{AŠ}⌜hu⌝-ud-du-KI+MIN ^{HAL}EŠŠANA-na ^{AŠ}bat-ra-ka_4-taš

(16) [ ] ⌜^{AN}ITI^{MEŠ}⌝ ^{AN}tur-⌜na-ba⌝-zí-iš be-ul 20+1-na mi-ul-e in-ni ⌜ha⌝-[pi-ka_4]

(17) [ ] ⌜x⌝ hi-še ^{AŠ}ka_4-⌜ru-x⌝[ ] ir-ma-tam_6 ^{HAL}u-iš-pír-šá-na hu-pír$^{!?}$-[ri

]

(18) [hu]-⌜ud-du-KI+MIN⌝ [^{HAL}EŠŠANA]-na ^{AŠ}bat-ra-ka_4-taš ku-iz-za ⌜x x⌝ [

]

(19) [^{AN}]⌜tur-na⌝-ba-zí-iš ⌜be-ul⌝ 20+1-na mi-ul-<e> in-ni ⌜ha-pi⌝-[ka_4]

(20) [ ] blank

Lower Edge

(21) [ ] ⌜^{GIŠ}GEŠTIN⌝^{MEŠ} ⌜x x x⌝ [ ]

(22) [ ] ⌜x x⌝ [ ] x ^{AŠ}tup-[pi]

(23) [ ] x [ ] x x [ ]

Reverse

(24) [ ] x x [ ]

(25) [ ] x x [ ]

(26) [ ] x x x x [ ]

(27) [ ] ^{GIŠ}GEŠTIN^{MEŠ} ⌜x x x⌝ [ ]

(28) [ ] ⌜9⌝ 4 ⌜QA⌝ ^{GIŠ}KI+MIN ki-ut-ka_4

(29) [ ] ^{GIŠ}KI+MIN šu-tur da-ka_4 be-ul 20+1-na

(30) [ ] ⌜x⌝ QA ^{GIŠ}KI+MIN maz_0-zí-ka_4 ^{HAL}man-iš-ka_4-ra ^{HAL}ap-pi-ši-⌜ia-ti⌝-

(31) [ ] iš hi-še ^{HAL}ul-li-ri-ri ^{HAL}ba-na$^{?}$-ra-ti-iš ^{HAL}ma-

(32) [ ] ra-za šá-ra-ma be-ul 20+1-na

Right Edge

(01') [...] *hu-ud-du*-KI+MIN ^{HAL}EŠŠANA-*na*

Reverse *nsḥ*

Translation

(01) [.... At Ba]naratis$^{?}$, year 21.

(02-04) [x (wine) PN, spear$^{?}$]-bearer$^{?}$, and his 3 companions with him, [traveling] to$^{?}$ the King, these (men) received (as) rations. (During) 1 day of month V [of year 21] they receive 1 QA each. They verified$^{?}$ the road. (= Q?)

(05-07) [x (wine) PN], spear-bearer, and his 3 companions with him, [traveling to$^{?}$] the King [...], they accounted for the road—these (men) received (as) rations. (During) 1 [day of month] V of year 21 each received 1 QA. (= Q)

(08-10) [x (wine) PN], spear-bearer and his 5 companions with him [...] ... (who) verified$^{?}$ the road, received (as) rations (during) 1 day [of month] V of year 21. They carried a sealed document of the King. (= Q)

(11-13) [x (wine) ...] ... (at) the estate of Sarakuziš. [...] He$^{?}$ brought it for royal stores (at) Pasargadae. [Month] V of year 21. It (or: he) was not investigated. (= A$^{?}$)

(14-16) [x (wine)—] (a person named) [PN] (at) GN, (at) the estate of Mamnakka [...] he received (it$^{?}$), [and brought it$^{?}$] for royal stores (at) Pasargadae. [...] Month V of year 21. It (or: he) was not investigated. (= A$^{?}$)

(17-19) [x (wine)—] (a person) named [PN] (at) GN, (at) the estate of Ušpirša he [received (it)$^{?}$] and brought (it) for [royal] stores at Pasargadae. [Month] V of year 21. It (or: he) was not investigated. (= A$^{?}$)

(20-26) [blank and destroyed]

(Summary)

(27) [x] wine ⌜on hand$^{?}$⌝ [...]

(28) [x]+ 9 (*marriš*) 4 QA ditto expended.

(29) [x] ditto balance on deposit, year 21.

(30) [x]+x QA ditto withdrawn.

(30-32) <Allocation by >? Maniškara; (a person) named Appišiatiš, his delivery-man; (at) Banaratiš?; under the control of Maraza. Year 21.

(01') [...] royal stores.

Reverse Copied.

Comments

Category V

(11.5) × 10.3 × 2.5 cm

PFS 0120 reverse

(01) Restored after line 31.

(02, 05) End: or *–ik-*[*ki-mar*]?

(04, 09) Cf. PN ^{GIŠ}*ši-kak*^{MEŠ} *kutira* ... ^{AŠ}KASKAL^{MEŠ} *ha*(-)*šašda* PFa 22:02-07 (Q).

(06) Cf. PN *šukurrum kutira ... datiš mušiš* PFa 19:04-09 (Q). See Henkelman 2002:20f.

(11) Cf. ^{AŠ}*Barakanka-ma* ^{HAL}*Šarakuziš irmatammema* PF-NN 1254 (D); and wine to be issued to Sarakuziš, for royal supplies (*hudduhuddu sunkina huttašni*) PF-NN 0013 (T) (but Tavernier distinguishes Sarakuziš from Šarakuziš [2007:309, 329]).

(13, 16, 19) *mile inni hapika:* added in smaller, shallower script; see Stolper n.d.

(31) Cf. GN [^{AŠ}*x-*(*x*)]*-na-ra-ti-iš* PF-NN 0122:09-11 (F).

Reverse Aramaic epigraph in ink, in open space below seal impression, right side up with respect to cuneiform.

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Fig. 24: Epigraph on Chicago mailbox, July, 2012

Abbreviations

Aram.	Aramaic
ARTA	*Achaemenid Research on Texts and Archaeology*
El.	Elamite
Babyl.	Babylonian
Fort.	unpublished Persepolis Fortification tablets and Elamite texts recorded by the Persepolis Fortification Archive Project[44]
Ir.	Iranian
MN	month name
PF	Elamite Persepolis Fortification texts published in Hallock 1969
PFa	Elamite Persepolis Fortification texts published in Hallock 1978
PFAE	Aramaic epigraphs on Persepolis Fortification tablets[45]
PFAT	Persepolis Fortification tablets with monolingual Aramaic texts and/or the Aramaic texts on them
PF-NN	Elamite Persepolis Fortification texts cited from draft editions by Richard T. Hallock, collated and corrected by Wouter F. M. Henkelman[46]
PFS	Persepolis Fortification Seal, cited according to Garrison and Root 1998, with updates by Mark B. Garrison
RAB	Aramaic Persepolis Fortification texts, epigraphs, or seal inscriptions cited from the unpublished draft editions of Bowman n.d.

Assyrian and Babylonian cuneiform texts are cited by the abbreviations of *The Assyrian Dictionary of the Oriental Institute of the University of Chicago* (CAD).

Draft editions of many unpublished Persepolis Fortification texts and tablets cited by the sigla Fort., PFAE, PFAT, and PF-NN are displayed on line by the Persepolis Fortification Archive Project at the Online Cultural and Historical Research Environment (OCHRE, see https://oi.uchicago.edu/research/ochre/projects.html). Many of the draft editions are not yet collated and corrected. High-quality images of many of these tablets are available on line from InscriptiFact, see http://www.inscriptifact.com/).

44 Cited in the form Fort. 0000-000, where the first four digits indicate the box from which the tablet came (see Hallock 1969:1, Jones and Stolper 2008:37ff.) and the last three digits are an arbitrary identification number reflecting the order in which the tablets were cataloged or read. Tablets without preserved records of the boxes from which they came are assigned to box 0000. Tablets from boxes whose original numbers are lost are assigned to boxes 00X1-0X13 and boxes 00Z1-00Z6.

45 Epigraphs on tablets with Elamite texts identified with the siglum Fort. are cited in the form PFAE 0000-000, where the digits are as indicated in the previous note.

46 Cited according to the numbers Hallock assigned, reflecting the order in which he read the texts. Texts and tablets with PF-NN numbers above 2,595 were originally selected, read, and numbered by Charles E. Jones.

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