



**Michael T. Fisher, Matthew W. Stolper<sup>1</sup>**  
**University of Chicago**

## **Achaemenid Elamite Administrative Tablets, 3 Fragments from Old Kandahar, Afghanistan**

### **1 Discovery and Rediscovery**

The site of Old Kandahar lies on a ridge about three kilometers west of the center of the modern town that was founded in the eighteenth century AD. The discovery there of Greek and Aramaic edicts of the Mauryan king Ashoka in the middle of the twentieth century drew attention to the site and stimulated an inference of Achaemenid presence there (Benveniste 1958:43f., Briant 1996:774, Shaked 2004:7; cf., e.g., Greenfield 1985:705). The Society for Afghan Studies (today, the Society for South Asian Studies) carried out excavations at Old Kandahar between 1974 and 1978, under the successive direction of David Whitehouse and Svend Helms.

In 1977, the excavators found two burned fragments of cuneiform tablets in the outworks of the citadel. The fragments were in ash and trash layers of a pit, in deposits that the final report attributes to a loosely bounded time interval, c. 700-300 BC, on the basis of ceramic compari-

<sup>1</sup>

Thanks are due to Dr. Omara Khan Masoudi, Director of the National Museum of Afghanistan, for permitting and facilitating the publication of these items; to the supporters of the Oriental Institute-National Museum of Afghanistan Partnership, including the Embassy of the United States in Kabul, Afghanistan; and to the supporters of the Persepolis Fortification Archive Project at the Oriental Institute of the University of Chicago, including the Andrew W. Mellon Foundation, the Farhang Foundation, the Getty Foundation, the Iran Heritage Foundation, the National Endowment for the Humanities, the National Geographic Society Committee for Research and Exploration, the PARSA Community Foundation, the Roshan Cultural Heritage Institute, the University of Chicago Women's Board, the Friends of the Persepolis Fortification Archive Project, and many private donors and organizations; to Pierre Briant and John Scheid for inviting a presentation of an earlier version of these remarks at the Collège de France on November 4, 2013; and to Pierre Briant, Henri-Paul Francfort, Wouter Henkelman, and Maureen Kovacs for comments, corrections, and bibliographical information.



sons with material from Pasargadae periods I-II (e.g., bowls with pronounced carination, Helms 1997:65f., 164, 298 fig. 56) and Mundigak periods VI-VII (e.g., heavy collared-rim bowls, Helms 1997:60f., 171, 303 fig. 66), as well as the presence of the tablet fragments.

Helms sent excavation photographs of the fragments to Edmond Sollberger at the British Museum. Sollberger could read only a few signs correctly, but he recognized that the larger fragment was part of an Achaemenid Elamite document comparable to administrative records from Persepolis. This was a feat of extraordinary epigraphic acumen, since very few images of Persepolis Fortification tablets had been published at the time, and none of them closely resembled the Kandahar fragments. Helms reported and illustrated the tablets in an unpublished preliminary report in 1978 (Helms 1978, *apud* Briant 1984:59, 109). He published Sollberger's characterization in 1984 and again, along with Sollberger's necessarily tentative and largely meaningless reading, in 1997 (Helms 1982:13, 1997:101, cf. 25, 28, 91).

Since then, the most important implications of these fragments have been stated often and aptly, namely, that they are scanty but substantial relics of a vanished archive; that they show that Elamite language and script were used in administrative recording across the entire breadth of Achaemenid Iran, from Susa to Arachosia; that they imply that administrative practices and institutions comparable to those documented by the Persepolis archives were also installed in Achaemenid Afghanistan (Briant 1984:59, 1996:462, 774, 784, 968; Vogelsang 1992:255-57; Stolper 2004:63; Allen 2005:117; Kuhrt 2007:814f.; Henkelman 2008:49, 78; Stein 2013:92; Stolper 2013:106 with fig. 2, Henkelman n.d., etc.)

In 2007, Amélie Kuhrt published a partial edition of the text on the larger fragment (2007:814f.), on the basis of notes from Stolper. No images and no detailed study of the fragments have been published until now. The responsibility for that lapse belongs to Stolper, to whom Helms sent field photographs of the tablets in 1982.

The years since 1980 have not been kind to antiquities, archaeology and museums in Afghanistan. The joint project of the National Museum of Afghanistan and the Oriental Institute encountered this reality when it began early in 2012 to create an inventory of the National Museum's collections and a digital database to manage the Museum's holdings and records (Stein 2012, 2013; Fisher and Stein n.d.). The circumstances are appalling. About 70% of the National Museum's original holdings were stolen or destroyed (Dupree 1996:42), about 150,000 objects, about ten times as many as were reported lost by the Baghdad Museum in 2003. Still worse, 90% of the Museum's records were also destroyed.

Members of the National Museum staff knew of the existence of the Kandahar tablet fragments. They thought that they, and perhaps other tablet fragments, were still somewhere in the Museum. Indeed, a box in the Ceramology Storeroom bore a hopeful label that said "including Cuneiform Tablets," but the box was empty.

In early 2013, as members of the Museum staff reorganized a storeroom that contained artifacts from the Graeco-Bactrian site of Ai Khanoum, they transferred objects of other provenances and other kinds to the respective appropriate curators. The Curator of Graeco-Bactrian



material, Atiq Hamdard, called attention to a cuneiform tablet fragment in a tray of small clay objects among crates of Islamic pottery. The fragment was initially thought to be an Iron Age artifact, and so it was given the misleading collection number 12.0-1.24, where the digits 0-1 indicate a Bronze Age or Iron Age item of unknown origin.

Michael T. Fisher, Field Director of the Oriental Institute-National Museum of Afghanistan Partnership, sent word of the fragment to Oriental Institute Director Gil Stein in Chicago. Stein showed the message to Stolper, who guessed that it might be one of the Kandahar fragments that Helms had found. Stolper sent scans of Helms's excavation photographs to Kabul. Fisher confirmed the identification and sent back new high-resolution images, including those published here with the kind permission of Dr. Omara Khan Masoudi, Director of the National Museum of Afghanistan.

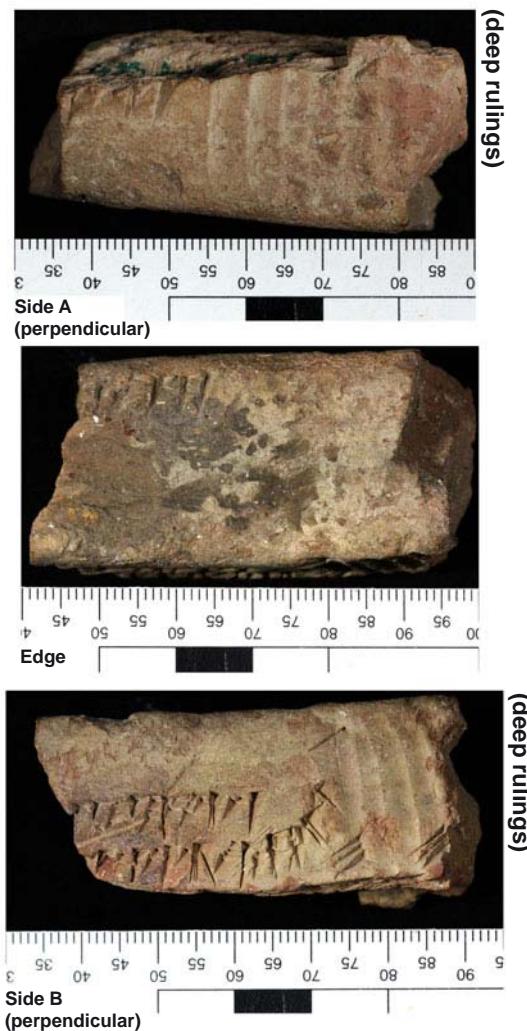
## 2

## Tablet Fragment SF 1399 = NMA 12.0-1.24 (Fig. 1)

### 2.1 Layout

The fragment cited in the excavation report and elsewhere by the field number SF 1399 measures about  $5.6 \times 2.6 \times 2.8$  cm. It has remains of cuneiform writing on both faces and on the preserved edge. It has no preserved seal impression. The excavation report refers to "grooves" on the surfaces, said to be "characteristic of the Achaemenid Elamite tablets of Persepolis" (Helms 1997:101). These are rulings made by pressing the length of a rounded stylus against the damp clay surface to make guidelines for writing. Striking from a cuneiformist's point of view is the orientation of the rulings and the writing. They run in two directions on each face, at right angles to each other. In most ordinary Mesopotamian scribal practice, this would be an error, but it has parallels in a few Elamite documents from the Persepolis Fortification Archive.

Fig. 1: Tablet fragment from Old Kandahar SF 1399 = NMA 12.0-1.24 (National Museum of Afghanistan)





**Two-Way Texts and Tablets at Persepolis** — Among about 6,200 Fortification tablets and fragments with Elamite texts recorded until now, about a dozen examples have lines of text laid out in two perpendicular orientations. No examples occur among the c. 2,200 published Elamite Fortification documents (Hallock 1969, 1978; Arfaee 2008) or among the c. 2,600 documents in the *Nachlass* of the late Richard T. Hallock now being prepared for authoritative publication by Wouter F. M. Henkelman under the auspices of the Persepolis Fortification Archive Project at the Oriental Institute. Even now, with a substantially enlarged sample, new details of the Persepolis Fortification Archive continue to emerge. As the comparison with the Kandahar fragment shows, “diplomatic” details—having to do with the relationship between the physical form of the documents and the organization and contents of their texts—may be consequential.

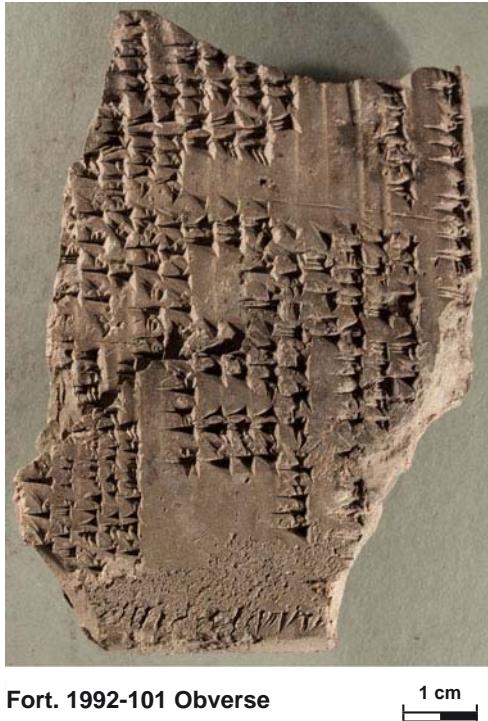
Almost all examples of Persepolis Fortification tablets with two-way text layout are from documents of Categories V and W, “Journals and Accounts” in the terminology established by Richard T. Hallock (1969:55-69). Documents of these kinds are regularly on rectangular tablets of various sizes and aspect ratios, often laid out in tabular ledger formats that leave areas of uninscribed space along the right margins, and sometimes the left margins, of the obverse and/or reverse. These uninscribed margins offered scribes larger open surfaces on which to continue, conclude or supplement the text than did the left or right edges of the tablet. Persepolis scribes used these open surfaces in several ways.

On Fort. 1992-101 (Category W, grain, years 15-17, [Fig. 2a](#))<sup>2</sup> the scribe first wrote four or more lines of a concluding summary in ordinary orientation, set off by a faint column-divider, in the open space along the right margin of the reverse, and then a final line of text in the remaining open space in perpendicular orientation. Similarly, on Fort. 0978-101 (Category T [L], grain, year 25, [Fig. 2b](#)), the scribe wrote the identifying subscript of a letter-order around the entire circumference of the left margin of the tablet. Later scribes at Persepolis who wrote letter-orders kept in the Treasury Archive resorted to the same expedient, which leaves the left edge of the tablet clear to display the vital seal impression of the sender: PT 13, 27, 38 (photographs in Cameron 1948:pl. viii, xviii, xxiv).

In another letter-order, Fort. 1740-001 ([Fig. 3a](#)), the last preserved lines of the rations to be issued are written on the right margin of the reverse, perpendicular to the main text, and later users of the document added an Aramaic epigraph to the left margin, also perpendicular to the main cuneiform text. On other Fortification documents, the scribe added text in open spaces along the right margin of the obverse or reverse, offsetting the lines to maintain tabular formats (Fort. 1203-101 [Category W, grain, years 14-18, [Fig. 3b](#)], Fort. 1691-101 [Category V, year 17, [Fig. 3c](#)], Fort. 1761-101 [Category W, grain, years 14-17, [Fig. 3d](#)], Fort. 1989-005 [Category V, wine (and grain in lieu of wine), years 20-22, [Fig. 3e](#)]), sometimes continuing the text from the face of the tablet onto the adjoining edge (Fort. 2043-101 [Category W, fruit, year 20, [Fig. 4](#)]).

<sup>2</sup>

Images and/or draft editions of some of the Fort. documents cited here may be viewed at the PFA Project display on the Online Cultural and Historical Research Environment (OCHRE, see <http://ochre.uchicago.edu/>).



Fort. 1992-101 Obverse



Fort. 0978-101 Obverse



Fort. 0978-101 Lower Edge



Fort. 0978-101 Reverse

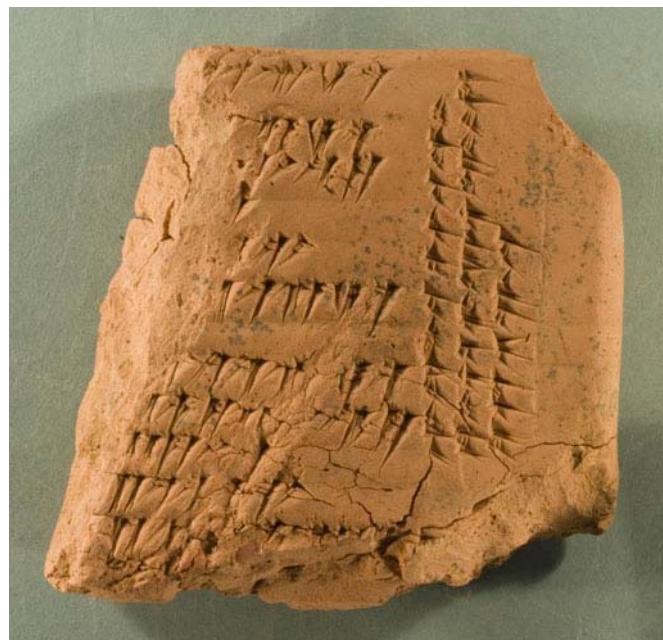


PF-NN 1740-001 Reverse



Fig. 2a: Fort. 1992-101 obverse (Persepolis Fortification Archive Project, Oriental Institute)

5



Fort. 1203-101 Reverse

1 cm

Fig. 3b: Fort. 1203-101 reverse  
(Persepolis Fortification Archive Project, Oriental Institute)



Fort. 1691-101 Obverse

1 cm

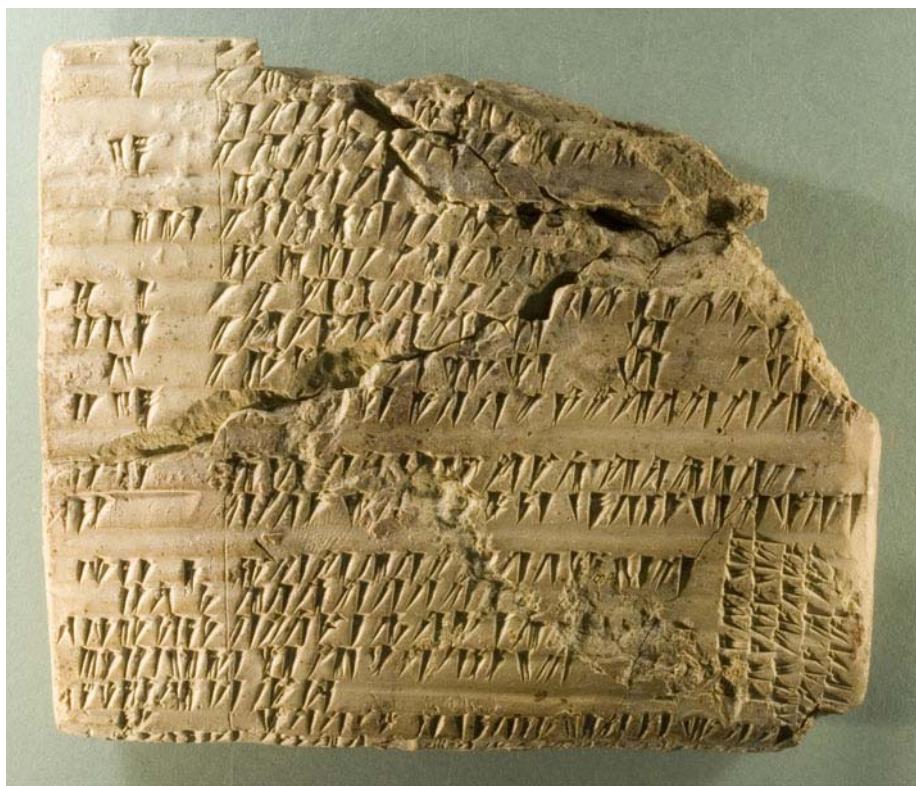
Fig. 3c: Fort. 1691-101 obverse  
(Persepolis Fortification Archive Project, Oriental Institute)



Fort. 1761-101 Reverse

1 cm

Fig. 3d: Fort. 1761-101 reverse  
(Persepolis Fortification Archive Project, Oriental Institute)



Fort. 1989-005 Reverse

1 cm

Fig. 3e: Fort. 1989-005 reverse  
(Persepolis Fortification Archive Project, Oriental Institute)



Fort. 2043-101 Reverse

1 cm



Fort. 2043-101 Right Edge

1 cm

Fig. 4: Fort. 2043-101 reverse and right edge  
(Persepolis Fortification Archive Project, Oriental Institute)



In some cases, the text in irregular perpendicular orientation is not simply a continuation or conclusion of the main text, but a distinct element of the contents, set off by the exceptional orientation. On Fort. 1883-101 ([Fig. 5](#)), an animal inventory (Category W) written on the tall, slender tablet characteristic of such documents, the lists of sheep and goats are oriented, as usual, parallel to the short side of the tablet, but the framing sections (introduction, totals, conclusion), are oriented parallel to the long sides in such a way that the framing texts on the obverse and reverse are upside-down with respect to each other. On Fort. 1989-005 ([Fig. 3e](#)), a document recording outlays of wine, the perpendicular text indicates amounts of grain registered in lieu of wine:

146 *bel* 22-na, 184 *bel* 21-na PAP 230 ŠE.BAR<sup>MEŠ</sup> *hu-el* GIŠ GEŠTIN<sup>MEŠ</sup>-na kurman PN-na ‘146 (BAR), 22<sup>nd</sup> year; 184 (BAR) 21<sup>st</sup> year; total 230 (BAR) of barley, counterpart<sup>2</sup> of wine, allocation of PN’ (lines 44-48, cf., with alternative, “Elamite,” syntax, ŠE.BAR<sup>MEŠ</sup> GIŠ *tarmu*<sup>MEŠ</sup> *hu-el-me* PF-NN 0316:09-11, see Hinz and Koch 1987:684)

Similarly, on Fort. 1203-101 and Fort. 1761-101 ([Figs. 3b, d](#)), the perpendicular text records a procedural irregularity, so that the irregular orientation highlights a departure from the expected conclusion (see Stolper n.d.):

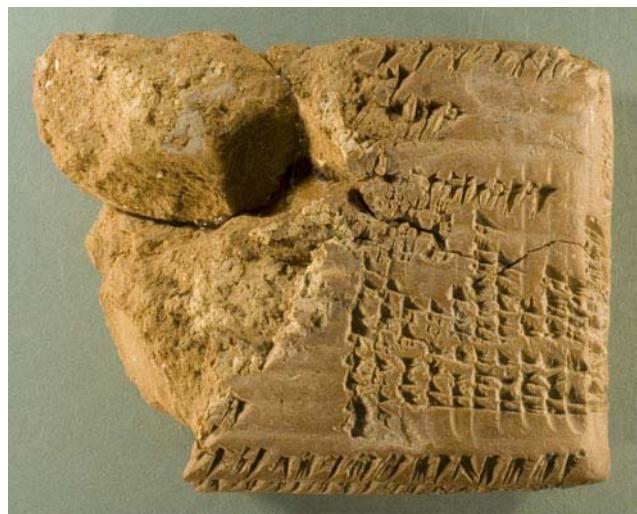
*halmi mušinna pitika mušinma inni tingiš meni* ŠE.BAR<sup>MEŠ</sup> *hi mazzimaz<zi>* *huttukka* ‘the sealed (document) of account was lost, they did not send it for (this) account, (but/so) then the withdrawal of this grain was done (= registered?)’ (Fort. 1203-101:01”-03”)

ŠE.BAR<sup>MEŠ</sup> *mušinna pitika inni tingiš meni* ŠE.BAR<sup>MEŠ</sup> *hi mazzimazzi* *huttukka* ‘the (record of) grain of (i.e., entered in) the account was lost, they did not send it, (but/so) then the withdrawal of this grain was done (= registered?)’ (Fort. 1761-11:29-21)

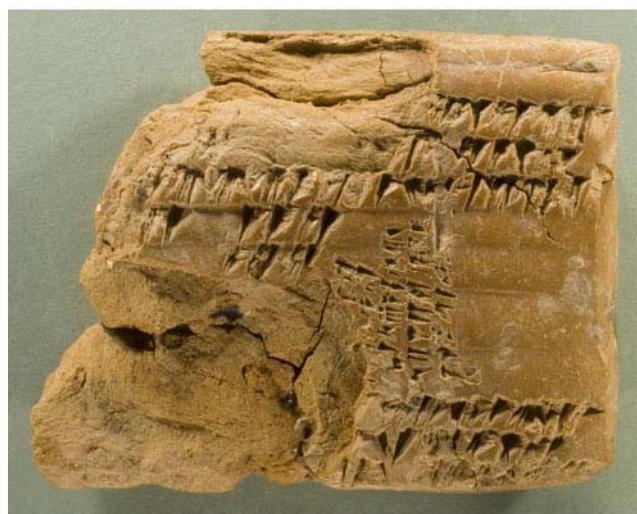
In some examples, the two-way layout was neither an expedient way of fitting in a text overrun nor a way of adding visual emphasis to a section of text, but a planned way of organizing tabulations on one tablet face and running text on the opposite face, oriented perpendicular to each other (Fort. 0661-101 [Category V, fruit, year 19, [Fig. 6a](#)], Fort. 1242-101 [Category W, fruit, years 18-19, [Fig. 6b](#)], Fort. 1265-101 [Category W, fruit, year 19, [Fig. 6c](#)], Fort. 1371-102 [Category W, fruit, year 19, [Fig. 6d](#)]). The headings of the tabulations on the reverses of Fort. 1242-101 and Fort. 1265-101 are identical, as far as they are preserved, naming the same person in the syntactically distinctive phrase *Mirinzana halmima* ‘according to [lit. in] a document [of] Mirinzana,’ reflecting Persian rather than Elamite word-order, a similarity that suggests that the two tablets are the work of a single scribe, perhaps composed in related circumstances.)



In some examples, text is added in space where the original rulings have been wiped away (e.g., Fort. 1761-101 [Fig. 3d], Fort. 1991-104 [Category W, animals, Fig. 7a]), but more examples have careful rulings in both orientations, like the fragments from Old Kandahar (e.g., Fort. 0005-101 [Category V or W, Fig. 7b], Fort. 1203-101 [Fig. 3b], 1691-101 [Fig. 3c], 1883-101 [Fig. 5], 2043-101 [Fig. 4]).



Fort. 1883-101 Obverse



Fort. 1883-101 Reverse

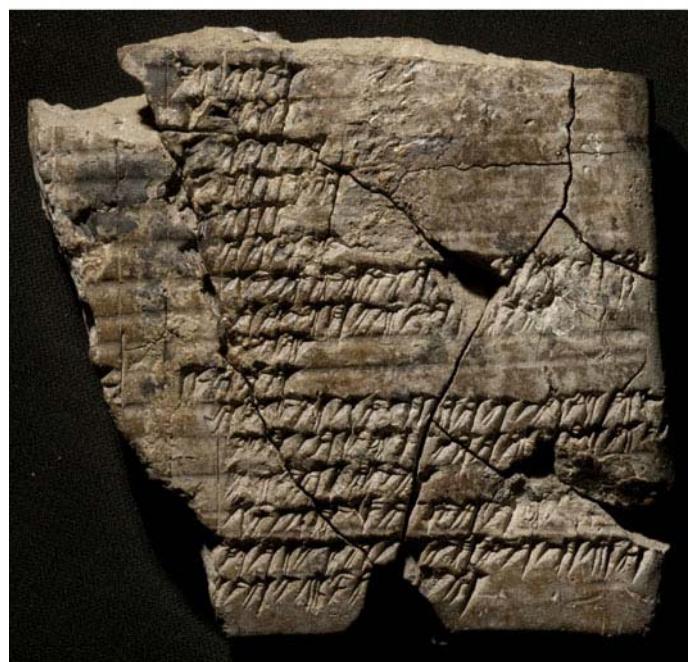


Fig. 5: Fort. 1883-101  
(Persepolis Fortification Archive Project, Oriental Institute)



Fort. 0661-101 Obverse

1 cm



Fort. 0661-101 Reverse

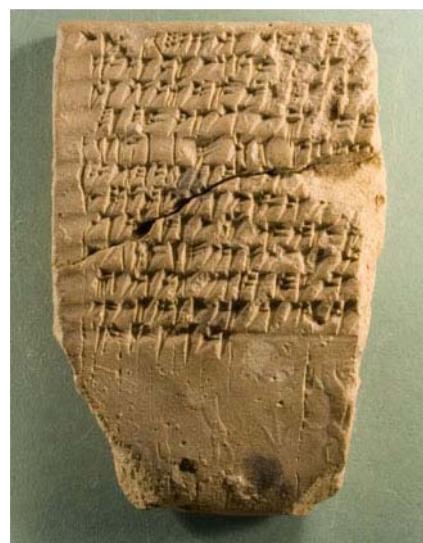
1 cm

Fig. 6a: Fort. 0661-101  
(Persepolis Fortification Archive Project, Oriental Institute)



Fort. 1242-101 Obverse

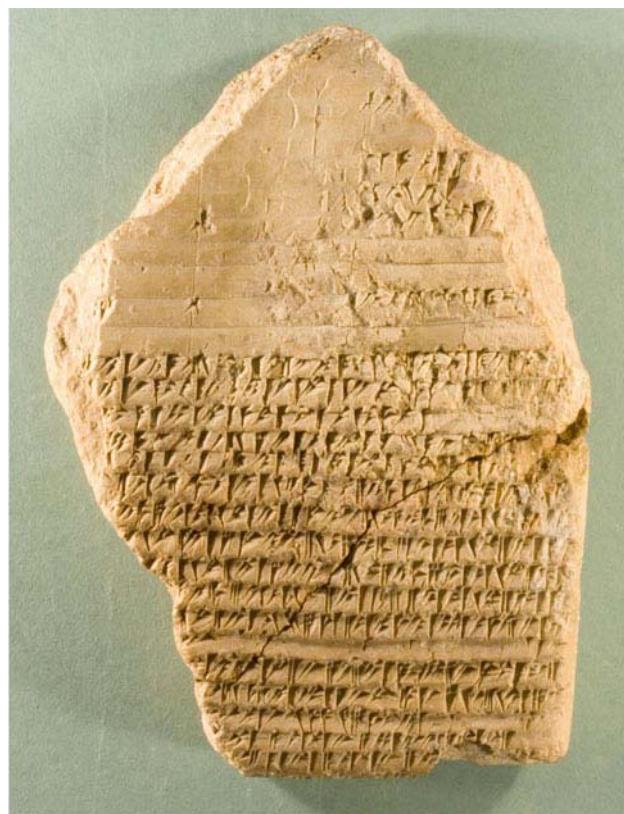
1 cm



Fort. 1242-101  
Reverse

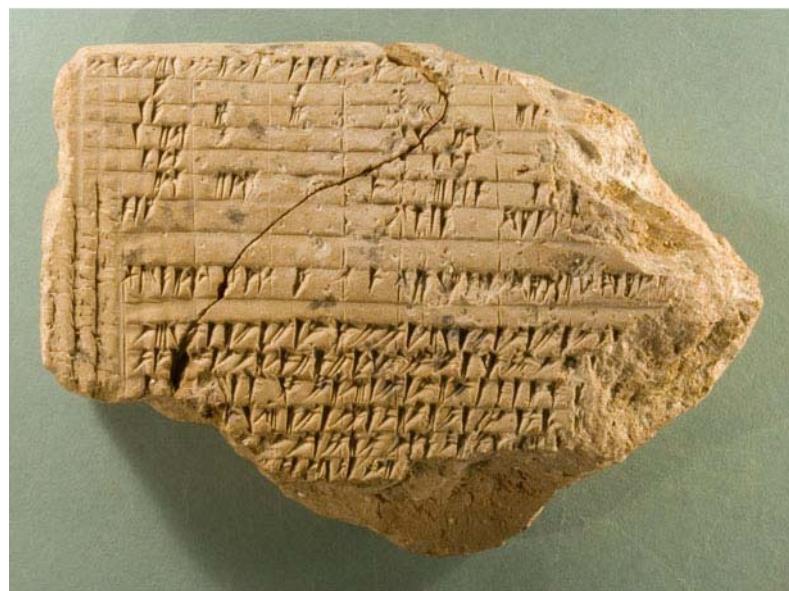
1 cm

Fig. 6b: Fort. 1242-101  
(Persepolis Fortification Archive Project, Oriental Institute)



Fort. 1265-101 Obverse

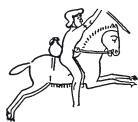
1 cm



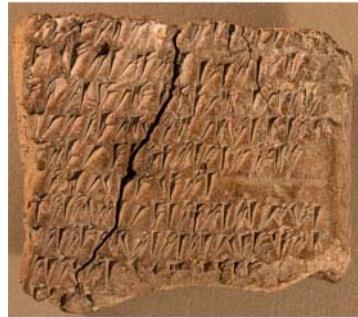
Fort. 1265-101 Reverse

1 cm

Fig. 6c: Fort. 1265-101  
(Persepolis Fortification Archive Project, Oriental Institute)



Fort. 1371-102  
Obverse



Fort. 1371-102  
Reverse

*Fig. 6d: Fort. 1371-102  
(Persepolis Fortification Archive Project, Oriental Institute)*



Fort. 1991-104  
Obverse?



Fort. 0005-101

*Fig. 7a: Fort. 1991-104 obverse? (Persepolis Fortification Archive Project, Oriental Institute)*

*Fig. 7b: Fort. 0005-101 obverse? (Persepolis Fortification Archive Project, Oriental Institute)*



## 2.2 Edition

The fragmentary state of the tablet fragment SF 1399 and the two-way layout of the text on it make it hard to be certain of the orientation and sequence of the preserved text. The upward turn of the second line on one face (here, Side B), apparently avoiding a previously inscribed area, suggests the following as the most likely sequence and reading.

### Transliteration

### Translation

#### Side A (Deep Rulings)

(01')	[ ]	(blank)
(02')	[ ]	(blank)
(03')	[ ]	(blank)
(04')	[ ]	(blank)
(05')	[ ]	(blank)
(06')	[ ]	(blank)
(07')	[ ]	(blank)

#### Side B (Deep Rulings)

(01'')	[ ]	
(02'')	「30」[ ]	30
(03'')	[ ]	
(04'')	[ ]	
(05'')	PAP 30 [ ]	Total 30

#### Side A (Perpendicular)

(01'')	[ ] x kur? <sup>2</sup> -taš	... workers?
--------	------------------------------	--------------

#### Edge

(01''')	[ ] x hi ŠA-ma	... including
---------	----------------	---------------

#### Side B (Perpendicular)

(01''')	[ ] x šu-tur da-ka <sub>4</sub>	... balance on deposit
(02''')	「ši? na? <sup>2</sup> 」 e-ri šu-tur da-ka <sub>4</sub>	... its? ... balance on deposit

## Comments

A 01''' Or: [hu]-「ut?<sup>2</sup>」-taš, 'he/they did'.

Edge Space for three or four lines follows 01'''.

B 02'''' Less likely: x <sup>GIŠI</sup>pír-ri (a fruit; cf. PF 0253).



## 3 Tablet Fragment SF 1400

The second excavated fragment, field number SF 1400, has not yet reappeared in the National Museum's collections. Helms's field photograph (**Fig. 8**) shows one surface from the right edge of a rectangular tablet, with the lower parts of three or four cuneiform characters and the ends of five more ruled lines.

No meaningful reading of the fragmentary signs can be offered. Possibilities include:

「 3/zí/ú ka<sub>4</sub>/ud mar/ra/ŠE.BAR<sup>MES</sup> ]

It is possible, but not demonstrable, that the two fragments are from a single tablet; they do not join.



Fig. 8: Tablet fragment from Old Kandahar SF 1400 (Svend Helms)

## 4 Contents and Comparanda

The phrase that appears twice in the preserved text of the fragment SF 1399, Elamite šutur daka (**Fig. 9**), rendered here as 'balance on deposit' occurs many times in Elamite texts from the Persepolis Fortification Archive, almost always in one of two contexts.

In the first place, it occurs at or near the end of balanced accounts of transactions done during a specified accounting period (one, two, or more years) with a particular commodity (grain, wine, fruit, etc.), under the administration of a single district center. These balanced accounts are usually near the end of ledgers of the kind that Hallock classified as Categories V and W, "Journals and Accounts." The normal framework of the balanced account (with some variations in detail and order) is this:

	x carry-over (usually El. <i>amma</i> , 'on hand')
+	x receipts (usually El. <i>haduš</i> , 'revenue')
=	x total on hand (El. <i>amma</i> )
-	outlays (El. <i>makka</i> , 'disbursed,' <i>mazzika</i> , 'withdrawn,' and other terms)
=	x balance (El. šutur daka or daka)

When the account deals with more than one year, the balance (šutur) from the first year is the carry-over in the second.



Fig. 9: SF 1399 Side B, detail  
(National Museum of Afghanistan)

In the second place, the phrase *šutur daka* is the distinguishing mark of another of Hallock's categories of Elamite Fortification documents, Category C2, which he called "Accounting Balances." Here, the phrase *šutur daka* labels a quantity said to be 'reckoned' (El. *hasika* or *aššaka*) or 'accounted for' (El. *mušan*, *mušime huttuk*). The phrase sometimes follows lists of receipts, expenditures and transfers. As Mark Garrison and Wouter Henkelman have recognized, these documents are to be understood as "field accounts," that is, calculations of interim balances on hand at regional centers—in effect, preliminary audits of information to be compiled in final accounts. Such interim balances and audits are sometimes mentioned in documents of other kinds (Stolper n.d.); in addition to the passages of Fort. 1203-101 and Fort. 1761-101, cited above, for example:

PN *ak akkayaše nanbe PN<sub>2</sub> halmi bel 21-na dakana inni nuku dunaš mara* (sic) 'PN and his associates say: "PN<sub>2</sub> did not give us a sealed document of what was carried forward on deposit from year 21 (i.e., verification of the starting balance for the accounting period concerned)"' PF 1957:37f. (Category V, cf. Brosius 2003:276);

*mušin hi bel 21-na MN 12 nan parka PN nuku dunuš GN partetašma mušin hi bel 15-na bel 16-na PN<sub>2</sub> inni tingiš* 'this account PN gave to us in<sup>?</sup> year 21, month MN, day 12, at the 'paradise' at Persepolis, but PN<sub>2</sub> did not send this (corresponding) account for<sup>?</sup> years 15 and 16' PF-NN 2280:55-57 (W, end of text, documenting livestock in years 17, 18, 19 and 20).

Many texts give a clear arithmetic foundation for Hallock's translation of *šutur* as 'balance,' either a starting balance or a balance carried forward after computation. Nevertheless, Elamite philologists find room for disagreement about this translation. Hallock (1969:15) surmised that the administrative meaning of *šutur*, '(accounting) balance,' shares a general semantic range of 'correctness' with the well-established meaning of *šutur*, 'right, rectitude, justice,' elsewhere in Elamite: in inscriptions of Darius I (DB El. §51 (~ Old Persian §63) iii 80, corresponding to



Old Persian *rštam*, Akkadian *dīnātu*; DNB El. 5, corresponding to Old Persian *rāštam*, Akkadian *kittu*) and in older Elamite royal inscriptions and personal names. The Elamite lexicon of Hinz and Koch (1987:1187) prefers to take this semantic range not as underlying, but as primary, treating *šutur* in Fortification texts as adverbial, rendering *šutur daka* as ‘richtig deponiert,’ and counterpart phrases similarly (e.g., *šutur ... mazzika*, ‘ordnungsgemäß ... entnommen worden,’ PF 0272:15).

It is difficult to reconcile the very general adverbial interpretation, ‘correctly,’ with the kinds of semantic differentiation that administrative records call for. Achaemenid Elamite uses of the nominal *šutur* in adverbial sense do indeed appear, both in the Bisotun inscription (*šutur GN inni lippugidda*, ‘I was not truly<sup>2</sup> at Babylon,’ DB El. §18 i 73, without counterpart in Old Persian or Akkadian) and in a Fortification text (*am šutur amda inni šinimak*, ‘now truly<sup>2</sup> he is not coming at present’ PF 1858:12 [Category T, letter]). Proposed translations of even these passages, however, require departure from an underlying notion of ‘correctness.’ That is, they use ‘truly’ in the sense of ‘actually,’ rather than in the sense of ‘appropriately.’ In the common usage of *šutur daka* in the administrative records of the Fortification Archive, the nuance of ‘correctness’ is still more inappropriate. In the balanced accounts of V and W documents, the phrase labels a line-item, and in C2 field accounts it labels a result. To characterize the arithmetic basis of this line-item or result, and not others, as ‘correct,’ or to characterize the handling of this quantity of commodities, and not others, as ‘correct,’ would be otiose and meaningless for recording purposes.

In all occurrences of *šutur daka* in Fortification texts, and in most other occurrences of *šutur* in other phrases, it is more straightforward to understand *šutur* as a nominal form in apposition to the itemized amount, rather than as an adverbial modifying the following verbal form; hence ‘x (amount) balance on deposit,’ rather than ‘x (amount) correctly (or: actually) on deposit.’

The other preserved phrase in the fragment SF 1499, *hi šā-ma* (Fig. 10), rendered here as ‘including,’ has a wider distribution in Persepolis Fortification documents. It is especially frequent, again, in journals and accounts, and again often in balanced accounts. In those contexts, it introduces breakdowns of totals on hand, that is, of line-items labeled with El. *amma*.



Fig. 10: SF 1399 Edge, detail  
(National Museum of Afghanistan)



## 5 Implications

In the light of these formal and contextual details, Sollberger's insight about the Kandahar fragments was even better founded than he could have known. The rectangular shape of the tablets from which the fragments came (at Persepolis, characteristic of journals and accounts and rare in documents of other kinds), the layout of the texts in perpendicular arrays (with close parallels in Persepolis journals and accounts), the repeated phrase *šutur daka* (regular in Persepolis balanced accounts) along with *hi ŠA-ma* (frequent in Persepolis balanced accounts)—the convergence of all these strongly implies that the fragments from Old Kandahar came from documents like the journals and accounts of the Persepolis Fortification Archive.

If they were alike in form and contents, they were also alike in function. If the extant Old Kandahar fragment does in fact come from a balanced account, that requires that there were revenues and expenditures to balance. As Amélie Kuhrt commented (2007:815), it implies “the existence of other texts on the basis of which the account was compiled, and the operation of bureaucratic procedures close to those of Persepolis,” and not only procedures, but also a regional population organized, supported, and controlled in ways similar to what prevailed in the region around Persepolis. To amplify the basis of this inference requires a restatement of the essentials of information flow in the Persepolis Fortification Archive.

Most of the Elamite Fortification documents are of two sorts, distinguished by physical characteristics, contents, and place in the information-handling sequence. The first sort includes memoranda of single, completed administrative transactions and of single bookkeeping items, including both records of assets and credits (most of Categories A-H) and records of debits, outlays and consumption (most of Categories J-S). Almost all are written on small, tongue-shaped tablets, formed around knotted strings, most of them with seal impressions representing the concurrence of parties to the transactions and/or authorizing officials. The second main sort includes the journals and accounts, most of them being records that compile, tabulate, summarize and digest information about assets and outlays drawn from the single-item memoranda. Almost all of these are on rectangular tablets in various ledger or tabular formats, most of them with seal impressions representing the central accounting personnel at Persepolis. Memoranda recording the execution of transactions, drawn up at many sites in the region around Persepolis, were gathered and sent to a central administrative office at Persepolis; there, they were collated and digested into ledgers. The memoranda were created early in the process, meant to be discarded after their contents were transcribed. The ledgers were created late in the process, to be held on file for an indefinite time. The Persepolis Fortification Archive as we have it represents an arrested moment in this information flow, a collection that combines unprocessed, ephemeral memoranda with processed, durable ledgers, set aside in dead storage (in more detail, and including other categories of documents, see Jones and Stolper 2008:36-37; Henkelman 2008:136-38).



On the basis of this understanding of the tens of thousands of tablets and fragments from the Persepolis Fortification, the appearance at Old Kandahar of a single fragment recording balances on deposit points to a similar recording process; hence, to a now-lost administrative archive, a sort of “Kandahar Fortification Archive;” hence, to a collection of primary documents from which balances were computed; hence, to stations where primary documents were produced and to a central institution where the information was compiled; hence, to an administrative province that this central institution monitored.

## 6 Kandahar and Arachosia

The identity of this inferred province and the identity of its center depend on the provenance of the tablet fragments. That the fragments came from a known excavated locus other than Persepolis, not from a collection or a market, makes them exceptional among Achaemenid Elamite administrative documents.<sup>3</sup> The secondary context in which the Old Kandahar fragments were found, ash and trash layers of a pit (Helms 1997:28, 292 fig 43 [locus 6, 503.10]), leaves room for uncertainty. Nevertheless, it is not likely that documents or fragments of this kind were transported very far from their source in antiquity to be discarded. It is very likely that when their useful life ended they were discarded locally. In the absence of reason to think otherwise we must adopt the working assumption that these fragments originated at or near the citadel of Old Kandahar.<sup>4</sup>

In that case, the citadel of Old Kandahar once stood in relation to Achaemenid Arachosia as the ‘fortress’ (El. *halmarraš*) of Persepolis stood in relation to Achaemenid Persia. This bolsters the view that Kandahar is the place called Kandaraš in the Persepolis documents (Koch 1993b:22ff.) rather than Ghandara (Bernard 1974:181 n.30; Hinz and Koch 1987:430; Bivar 1988:205; Vallat 1993:125f.); and it therefore bolsters the view that Kandaraš was the administrative and political center of Achaemenid Arachosia as implied, for example, by Persepolis Fortification texts

<sup>3</sup> On the Elamite tablet excavated at Qaṣr-i Abu Naṣr, near Shiraz, but probably originating at Persepolis, see Henkelman, Jones and Stolper 2006; Stolper 2014. The Achaemenid date of the tablets excavated at Armavir Blur, in Armenia, remains a matter of disagreement (Diakonoff and Jankowska 1990; Koch 1993a, Vallat 1995, 1997; Steve *et al.* 2002:485).

<sup>4</sup> The provenance of other items from Afghanistan bearing cuneiform script is uncertain or ill defined: a fragment of a Late Babylonian legal text with an Aramaic epigraph, apparently of late Achaemenid date, said to have been purchased at the bazaar of Saraj-Khwaja, near Kabul (Bottéro 1956:25-30, and for reservations on provenance *ibid.* 28, 30); a fragment of silver with two cuneiform signs of evident Elamite origin, of uncertain date and uncertain original provenance, part of a coin hoard of uncertain original composition attributed to the Achaemenid period, said to have been found in Kabul in 1933 (Schlumberger 1953:41 No. 12 and pl. V III, 12, cf. 45, and for reservations on composition of the hoard, *ibid.* 31 n. 3); a lost, perhaps non-existent rock inscription said to be in the vicinity of Takht-i Sangin, now in Tajikistan (Pitschikjan 1992:13).



that record issues of travel rations on the authority of governors at the travelers' point of origin (Category Q): for example, Bakabaduš (Ir. Bagabāduš) and Irdatakma (Ir. Artātaxma) authorized rations for travelers from Kandaraš to Susa (e.g., PF 1358, PF-NN 0431) and from Arachosia (El. Haraumatiš, e.g., PF 1351, PF-NN 1898) (the observations of Vogelsang 1985:82–85 require correction and completion; see, for now, Koch 1993b:22–31; on Kandahar as the political center of an Achaemenid “greater Arachosia,” Vogelsang 1985:91).

Furthermore, understanding the Old Kandahar cuneiform fragments as relics of a lost administrative archive bolsters the supposition that Kandahar was the seat of the men who appear in Aramaic inscriptions on chert mortars, pestles and plates discovered in the Treasury at Persepolis, men entitled ‘treasurer’ (Aram. *gnzbr*, transcribing Ir. \**ganzabara*), specifically ‘in Arachosia’ (Aram. *bhrwhwty*; Bowman 1970). Most commentators on these peculiar artifacts (perhaps a generation or more younger than the Fortification Archive) are in broad agreement (against the interpretation of the first editor of the inscriptions, Raymond A. Bowman), that these ‘treasurers’ supervised officials called ‘subtreasurers’ (Aram. *'pgnzbr*, transcribing Ir. \**hupaganzabara*) who were stationed at several places called ‘fortresses’ (Aram. *byrt*). In this consensus, the Aramaic texts written on symbolic sumptuary items that were held in the Persepolis Treasury imply a regional administrative organization in Achaemenid Arachosia that was broadly comparable to the one that the Elamite administrative tablets reflect in Persia, with a central treasurer overseeing several district centers (e.g., Bernard 1972:175; Briant, 1996:445f., 966; Greenfield 1983:705; Koch 1993b:26–7; Naveh and Shaked 1973:451; Stolper 2000:287). The Kandahar fragments add to this supposition the further nuance that in Arachosia, as in Persia, Aramaic was not the only language of the Achaemenid chancellery. If subsequent remains of a “Kandahar Fortification Archive” ever come to light, we can expect them to be at least trilingual (that is, to show at least one Iranian language transcribed in Aramaic and Elamite writing) and perhaps multilingual.

These are not new ideas. The full documentation of the Old Kandahar fragments given here simply adds support to existing general understandings of Achaemenid Arachosia. More ambitious steps remain to be taken elsewhere: first, a re-summary and re-synthesis of explicit evidence of contact between Persepolis and Arachosia as it continues to emerge from the growing corpus of Persepolis Fortification Archive; then, systematic comparison with evidence of similar contact between Persepolis and other nodes of control.

The most conspicuous term of comparison is the Achaemenid Elamite administrative document believed to come from Susa, MDP 11 308 (see Garrison 1996), recording provisions allocated to the royal court in terms that conform exactly to those of counterpart documents from the Fortification Archive and bearing the impression of a seal used on counterpart documents at Persepolis. Another terse Elamite administrative document (MDP 28 468) may also be of Achaemenid date, though it lacks seal impression, proper nouns or other specifics to confirm this supposition. The narrow implications of the presumed Susa tablet (e.g., Briant 2010:34) and of the Kandahar fragments are different but complementary. The Susa tablet is explicit evidence



for comparable handling of assets; some of the uninscribed clay sealings excavated at Susa, formed around knotted strings and bearing Achaemenid seals and generally comparable to items from the Persepolis Treasury (MDP 43 2202-03, 2226, 2230-31, etc., see Henkelman, Jones and Stolper 2004:38f.), may be seen in the same light. The Kandahar fragment is explicit evidence for comparable handling of information. It is likely that there once was a “Susa Fortification Archive” and it is probable that there once was a “Kandahar Fortification Archive,” but it is not necessary that either was identical in scale and scope to the Persepolis Fortification Archive and it is probable that they were different in scale and scope from each other. If there was not a palace complex like the one at Persepolis, and if the royal family did not maintain a comparable presence, then the records and transactions that once preceded the ledgers that the Kandahar fragments represent may have been less numerous and less diverse than those of Persepolis, involving different assets, people and offices. Even if the postulated archive and the administrative province that it served corresponded in form and expression to what can be discerned at Persepolis, cells of imperial administration probably connected with regional assets, organizations, and societies in different ways.

Our efforts at synthesis and comparison are doomed to be fragmentary, the boundaries of our inferences are doomed to be close, and the ancient realities and circumstances that we can imagine are doomed to be vague, but they can only be imagined through the lens of the Persepolis Fortification Archive. Seen through this lens, the Kandahar fragments and the Susa tablet allow us to glimpse imperial organization across the Iranian territories of the Achaemenid empire, regions whose separate histories we do not know even as well we know those of Babylonia, Egypt, Syria or Anatolia.

**Michael T. Fisher**

[mtf@uchicago.edu](mailto:mtf@uchicago.edu)

**Matthew W. Stolper**

[m-stolper@uchicago.edu](mailto:m-stolper@uchicago.edu)



## Abbreviations

Aram.	Aramaic
ARTA	<i>Achaemenid Research on Texts and Archaeology</i>
El.	Elamite
Fort.	Elamite tablet, fragment and/or text recorded by the Persepolis Fortification Archive Project
Ir.	Iranian
MDP 11	Scheil 1911
MDP 28	Scheil 1939
MDP 43	Amiet 1972
NABU	<i>Nouvelles Assyriologiques Brèves et Utilitaires</i>
PF	Elamite text published in Hallock 1969
PF-NN	Elamite text in draft editions by R.T. Hallock, cited from collated and corrected editions by W.F.M. Henkelman
PT	Elamite text published in Cameron 1948

## References

- ALLEN, Lindsay 2005. *The Persian Empire*. Chicago.
- AMIET, Pierre 1972. *Glyptique susienne des origines à l'époque des Perses Achéménides* (Mémoires de la Délégation Archéologique en Iran 43). Paris.
- ARFAEE, Abdolmajid 2008. *Persepolis Fortification Tablets, Fort. and Teh. Texts* (Ancient Iranian Studies Series 5). Tehran.
- BENVENISTE, Émile 1958. Une bilingue gréco-araméenne d'Aśoka IV: Les données iraniennes, *Journal Asiatique* 246: 36-48.
- BERNARD, Paul 1972. Les mortiers et pilons inscrits de Persépolis, *Studia Iranica* 1: 165-176.
- BERNARD, Paul 1974. Un problème de toponymie antique dans l'Asie Centrale: les noms anciens de Qandahar. *Studia Iranica* 3: 171-185.
- BIVAR, A.D.H. 1988. The Indus Lands, in John Boardman *et al.* (eds.), *Persia, Greece and the Western Mediterranean c. 525 to 479 B.C.* (Cambridge Ancient History, Second Edition, 4). Cambridge: 194-210.
- BOTTÉRO, Jean 1956. Deux curiosités assyriologiques. *Syria* 33: 17-35.
- BOWMAN, Raymond A. 1970. *Aramaic Ritual Texts from Persepolis* (Oriental Institute Publications 91). Chicago.
- BRIANT, Pierre 1984. *L'Asie centrale et les royaumes proche-orientaux du premier millénaire (c. VIII<sup>e</sup>-IV<sup>e</sup> siècles avant notre ère)*. Paris.
- BRIANT, Pierre 1996. *Histoire de l'empire perse de Cyrus à Alexandre*. Paris. (= Achaemenid History 10, Leiden).



- BRIANT, Pierre 2010. Suse et l'Élam dans l'empire achéménide, in Jean Perrot (ed.), *Le palais de Darius à Suse*. Paris: 22-48.
- BROSIUS, Maria 2003. Reconstructing an Archive: Account and Journal Texts from Persepolis, in Maria Brosius (ed.), *Ancient Archives and Archival Traditions*. Oxford: 264-283.
- CAMERON, George G. 1948. *Persepolis Treasury Tablets* (Oriental Institute Publications 65). Chicago.
- DIAKONOFF, I. M. and N. B. JANKOWSKA 1990. An Elamite Gilgameš Text from Argištihenele, Urartu (Armavir-blur, 8<sup>th</sup> Century B.C.), *Zeitschrift für Assyriologie* 80: 102-123.
- DUPREE, Nancy Hatch 1996. Museum Under Siege, *Archaeology* 49/2: 42-51.
- FISHER, Michael T. and Gil J. STEIN n.d. Aks of War: a Digital Museum Inventory for a War-Torn Afghanistan, *Proceedings of the 9<sup>th</sup> International Congress on the Archaeology of the Ancient Near East, 9-13 June, University of Basel, Switzerland*. Wiesbaden.
- GARRISON, Mark B. 1996. A Persepolis Fortification Seal on the Tablet MDP 11 308 (Louvre Sb 13078), *Journal of Near Eastern Studies* 55: 15-35.
- GREENFIELD, Jonas 1985. Aramaic in the Achaemenian Empire, in Ilya Gershevitch (ed.), *The Cambridge History of Iran, 2: The Median and Achaemenian Periods*. Cambridge: 698-713.
- HALLOCK, Richard T. 1969. *Persepolis Fortification Tablets* (Oriental Institute Publications 92). Chicago.
- HALLOCK, Richard T. 1978. Selected Fortification Texts, *Cahiers de la Délégation Archéologique Française en Iran* 8: 109-136.
- HELMS, Svend W. 1978. The British Excavations at Old Kandahar: Preliminary Report of the Work of 1977, submitted to the Afghan Institute of Archaeology. London and Kabul (unpublished).
- HELMS, Svend W. 1982. Excavations at 'the City and the Famous Fortress of Kandahar, the Foremost Place in All of Asia,' *Afghan Studies* 3-4: 1-24.
- HELMS, Svend W. 1997. *Excavations at Old Kandahar in Afghanistan 1976-1978, Conducted on behalf of the Society for South Asian Studies (Society for Afghan Studies): Stratigraphy, Pottery and Other Finds* (BAR International Series 686 = Society for South Asian Studies Monograph 2). Oxford.
- HENKELMAN, Wouter F. M. 2008. *The Other Gods Who Are: Studies in Elamite-Iranian Acculturation based on the Persepolis Fortification Texts* (Achaemenid History 14). Leiden.
- HENKELMAN, Wouter F. M. n.d. Imperial Paradigm and Imperial Signature, in Bruno Jacobs (ed.), *The Administration of the Achaemenid Empire—Tracing the Imperial Signature* (forthcoming).
- HENKELMAN, Wouter F. M., Charles E. JONES and Matthew W. STOLPER 2004. Clay Tags with Achaemenid Seal Impressions in the Dutch Institute of the Near East (NINO) and Elsewhere. **ARTA 2004.001** [<http://www.achemenet.com/ressources/enligne/arta/pdf/2004.001/2004.001.pdf>]
- HENKELMAN, Wouter F. M., Charles E. JONES and Matthew W. STOLPER 2006. Achaemenid Elamite Administrative Tablets, 2: The Qaṣr-i Abu Naṣr Tablet. **ARTA 2006.003** [<http://www.achemenet.com/ressources/enligne/arta/pdf/2006.003-Stolper-Jones-Henkelman.pdf>]
- HINZ, Walther and Heidemarie KOCH 1987. *Elamisches Wörterbuch* (Archaeologische Mitteilungen aus Iran Ergänzungsband 17). Berlin.
- JONES, Charles E. and Matthew W. STOLPER 2008. How many Persepolis Fortification tablets are there?, in Pierre Briant et al. (eds.), *L'archive des Fortifications de Persépolis* (Persika 12). Paris: 27-50.



- KOCH, Heidemarie 1993a. Elamisches Gilgameš-Epos oder doch Verwaltungstäfelchen?, *Zeitschrift für Assyriologie* 83: 219-236.
- KOCH, Heidemarie 1993b. *Achämeniden-Studien*. Wiesbaden.
- KUHRT, Amélie 2007. *The Persian Empire. A corpus of sources from the Achaemenid Period*. London and New York.
- NAVEH, Joseph and Shaul SHAKED 1973. Ritual Texts or Treasury Documents? *Orientalia NS* 42: 445-457.
- PITSCHIKJAN, Igor R. 1992. *Oxos-Schatz und Oxos-Tempel* (Antike in der Moderne 2). Berlin.
- SCHEIL, Vincent 1911. *Textes élamites-anzanites, quatrième série* (Mémoires de la Délégation en Perse 11). Paris.
- SCHEIL, Vincent 1939. *Mélanges épigraphiques* (Mémoires de la Mission Archéologique de Perse 28). Paris.
- SCHLUMBERGER, Daniel 1953. L'argent grec dans l'empire acheménide: à propos d'un trésor d'époque perse découvert à Caboul (Trouvaille du Tchaman-i Hazouri), in Raoul Curiel and Daniel Schlumberger, *Trésors monétaires d'Afghanistan* (Mémoires de la Délégation Archéologique Française en Afghanistan 14). Paris: 1-64.
- SHAKED, Shaul 2004. *Le satrape de Bactriane et son gouverneur: Documents araméens du IV<sup>e</sup> s. avant notre ère provenant de Bactriane* (Persika 4). Paris.
- STEIN, Gil J. 2012. The Oriental Institute-National Museum of Afghanistan Partnership, in Gil J. Stein (ed.), *The Oriental Institute Annual Report 2011-2012*. Chicago: 123-30.
- STEIN, Gil J. 2013. Oriental Institute-National Museum of Afghanistan Partnership and Cultural Heritage Protection Work, in Gil J. Stein (ed.), *The Oriental Institute 2012-2013 Annual Report*. Chicago: 89-97.
- STEVE, Marie-Joseph, François VALLAT and Hermann GASCHE 2002. Suse, in Jacques Briand and Michel Quesnel (eds.), *Supplément au Dictionnaire de la Bible* 73-74: 359-652.
- STOLPER, Matthew W. 2000. ganzabara, in Ehsan Yarshater (ed.), *Encyclopaedia Iranica* X/3 (New York): 286-289.
- STOLPER, Matthew W. 2004. Elamite, in Roger Woodard (ed.), *The Cambridge Encyclopedia of the World's Ancient Languages*. Cambridge: 60-94.
- STOLPER, Matthew W. 2013. Persepolis Fortification Archive (PFA) Project, in Gil J. Stein (ed.), *The Oriental Institute 2012-2013 Annual Report*. Chicago: 105-112.
- STOLPER, Matthew W. 2014. Achaemenid Elamite Tablet, in Ira Spar and Michael Jursa (eds.), *The Ebabbar Temple Archive and Other Texts from the Fourth to the First Millennium B.C.* (Cuneiform Texts in the Metropolitan Museum of Art 4). New York: 194-97.
- STOLPER, Matthew W. n.d. Investigating Irregularities at Persepolis, in Bruno Jacobs (ed.), *The Administration of the Achaemenid Empire—Tracing the Imperial Signature* (forthcoming).
- VALLAT, François 1993. *Les noms géographiques des sources suso-élamites* (Répertoire Géographique des Textes Cunéiformes 11). Wiesbaden.
- VALLAT, François 1995. Epopée de Gilgameš ou tablette économique de Persépolis? Ni l'un, ni l'autre! *NABU* 1995/46.
- VALLAT, François 1997. La lettre élamite d'Arménie. *Zeitschrift für Assyriologie* 87:258-70.



VOGELSANG, Willem 1985. Early Historical Arachosia in Southeastern Afghanistan, Meeting-place between East and West. *Iranica Antiqua* 20:55-99.

VOGELSANG, Willem 1992. *The Rise and Organization of the Achaemenid Empire, the Eastern Iranian Evidence* (Studies in the History of the Ancient Near East 3). Leiden, New York and Köln.

## **Arta**

Directeur de la publication : Pierre Briant

[arta.achemenet@louvre.fr](mailto:arta.achemenet@louvre.fr)

ISSN 2110-6118

© Musée du Louvre / Achemenet / Michael T. Fisher et Matthew W. Stolper