

**Abdol Majid Arfa'i - Tehran\*****PT 10a, Collated and Completed**

When George G. Cameron published the fragmentary Persepolis Treasury tablet PT 4-497 as PT 10a, he said that it was “so heavily corroded on the reverse that a reading proved impossible” (Cameron 1948: 99). His commentary refers to his copy of the text, but the published edition includes neither photograph nor autographed copy.

The tablet fragment remained in National Museum of Iran in Tehran, where it is housed today with the number BK 2150. Cameron did not include it among the Treasury tablets he collated in 1963 (see Cameron 1965).

What Cameron saw as corrosion proved to be dirt, so cleaning has exposed a legible, nearly intact reverse. Furthermore, the copy on which Cameron’s edition relied was erroneous, omitting an entire line of the obverse. That warrants a complete re-edition of the collated text, presented here.

\* Thanks are due to Mohammad-Reza Mehrandish, Director of the Iranian National Museum, for permission to re-publish this text. I am indebted to Arash Arfa'i for his help with the arithmetic proposal given in the commentary to lines 15 and 17.



This re-edition shows that PT 10a includes two extraordinary pieces of information about Achaemenid Elamite. First, the text confirms that the Achaemenid form of the Elamite word for “silver” is *lan*, an apparent homophone of *lan*, “offering, a specific offering [to a god],” and corresponding to Middle Elamite *lani*, as Achaemenid Elamite *lašda* “gold” corresponds to Middle Elamite *lansit*. Second, the text provides the first known attestations of an Achaemenid Elamite number, *liuli*, written as the denominator of a fraction.<sup>1</sup>

### PT 10a

Size: 64 x 53 x 21 mm.

Seal: PTS 1 (see Schmidt 1957: 18 and pl. 3), left edge.



### Transliteration

obverse

1. <sup>DIŠ</sup>bar<sup>1</sup>-ra-at-ka<sub>4</sub>-ma kán-za-bar-ra
2. tu<sub>4</sub>-ru-iš<sup>HAL</sup>tar-ka<sub>4</sub>-a-u-iš na-an.KI+MIN<sup>a</sup>
3. 28 kur-šá-um 6½ ba-su-ka<sub>4</sub>
4. la-an<sup>MEŠ HAL<sup>b</sup></sup>du-ka<sub>4</sub>-be<sup>HAL</sup>

<sup>1</sup> Editor’s note: transliteration of Achaemenid Elamite follows the conventions adopted by the Persepolis Fortification Archive project, rather than the simplified transliteration advocated by Hallock (1958: 257-61; 1969: 82-86).



5. *ra-a-ma-zí-ut-ra šá-ra-man-<sup>Γ</sup>na<sup>1</sup>*
6. *ap id-du UDU.NITÁ<sup>MEŠ</sup> a-[ak<sup>?</sup>]*
7. *GEŠTIN<sup>MEŠ</sup> šá-ak-ki-mi <sup>Γ</sup>AŠ<sup>?</sup>1[hi-ia-]*
8. *ma-zí-ka<sub>4</sub> te-<sup>Γ</sup>um<sup>1</sup>[-ip-te hu-taš-da]*
9. *<sup>AN</sup>ITI<sup>MEŠ</sup> <sup>AN</sup>c ha-[...-mar]*
10. *ku-<sup>Γ</sup>iš<sup>1</sup> [<sup>AN</sup>ITI<sup>MEŠ</sup> <sup>AN</sup> ]*



lower edge

11. [ ]
12. [ ]
13. [ ]
14. [<sup>14</sup> <sup>HAL</sup>LÚ<sup>MEŠ</sup> lu-ra-ka<sub>4</sub> x ba-su-ka<sub>4</sub> a-ak y]

reverse



15. *li-u-li-ir-mi-ki ap <sup>Γ</sup>pa-ri<sup>1</sup>[-ma-ak]*
16. *9 <sup>HAL</sup>LÚ<sup>MEŠ</sup> lu-ra-ka<sub>4</sub> 1 ba-su-ka<sub>4</sub>*
17. *a-ak <sup>Γ</sup>li<sup>1</sup>-u-li-ir-mi-ki ap pa-ri-ma-[ak]*



18. 9<sup>HAL</sup> LÚ<sup>MEŠ</sup> *lu-ra-ka*<sub>4</sub> 1 *ba-su-ka*<sub>4</sub><sup>d</sup>  
 19. *ap*<sup>e</sup> *pa-ri-ma-ak* PAP<sup>?f</sup> 32<sup>HAL</sup>  
 20. LÚ<sup>MEŠ</sup> *la-an*<sup>MEŠ</sup> <sup>g</sup> *hu-be*  
 21. <sup>HAL</sup> *pi*<sup>1</sup> *-da-pír-ma a-ak*<sup>HAL</sup>  
 upper edge  
 22. <sup>1</sup> *ak-ka*<sub>4</sub> <sup>1</sup> *-ia-še zi*<sup>1</sup> -  
 23. <sup>1</sup> *ka*<sub>4</sub> <sup>1</sup> *-ia*



- <sup>a</sup> *an.KI+MIN* written on right edge  
<sup>b</sup> <sup>HAL</sup> written over erasure of *na*  
<sup>c</sup> <sup>AN</sup> written over erasure  
<sup>d</sup> *ka*<sub>4</sub> written on right edge  
<sup>e</sup> *ap* written as AD.  
<sup>f</sup> PAP written over erasure.  
<sup>g</sup> <sup>MEŠ</sup> followed by erasure.

### Translation

<sup>1-2</sup> Tell Baratkama, the treasurer, Tarkawiš says: <sup>3-4</sup> “28 *karša*,  
 6½ shekels of silver, <sup>4-6</sup> is to be issued to plasterers(?) whose  
 apportionments are set by Ramazitra. <sup>6-7</sup> Sheep/goats and  
 wine are its (the silver’s) counterpart. <sup>7-8</sup> [They made] ... at(?)  
 Hiyamazika(?) <sup>9-10</sup> from month x to [month y].  
<sup>11-13</sup> [... ...]  
<sup>14-15</sup> [14 men, x shekel and y] *liuli*<sup>th</sup> each is to go to them, <sup>16-17</sup> 9  
 men, 1 shekel and 1 *liuli*<sup>th</sup> each is to go to them. <sup>18-19</sup> 9 men, 1  
 shekel each is to go to them. <sup>19-20</sup> Total 32 men. <sup>20-23</sup> Pidapirma  
 and his companion(s) made the accounting(?) of that silver.”



### Comments

- 3-6. Cameron's edition, based on his copy, omits line 6 of the tablet and therefore supplies an entire line with the operative phrase, *ap iddu*, after line 3. In line 5, Cameron read <sup>HAL</sup>*ak-ka<sub>4</sub>-be*, but he commented that the first sign more closely resembles *du-* or *ap-* (1948: 100). This comment is the basis of Hallock's corrected reading, *du-ka<sub>4</sub>-be* (1969: 682).
4. Cameron read *na* DINGIR<sup>MEŠ</sup>, leading him to restore <<sup>HAL</sup>LÚ<sup>MEŠ</sup>-*ip*>*-na* DINGIR<sup>MEŠ</sup>, “<to men> (of the?) god,” an unparalleled expression. As the photograph confirms, the first sign is not *na-* but *la-*; as the repetition in line 20 confirms, the word is *la-an*<sup>MEŠ</sup>; and as the context confirms, the meaning is “silver” (as Cameron confirmed when he read KÛ.BABBAR<sup>MEŠ</sup> in his supplied text in 4). This in turn confirms the long-conjectured interpretation of Middle Elamite *lani* as “silver,” in the sequence *la-ni la-an-si-ti-in-ni* “(made) of silver and gold” (M. Lambert 1965: 31, Steve 1967: 21; Hinz & Koch 1987: 815). On the homophonous *lan*, “offering,” see Henkelman 2005: 141-5; 2006: 113-238, with complete references and bibliography.
5. *Ra-a-ma-zí-ut-ra*, for Iranian (non-Persian) \**Raiva-ciθra*, as expected (not *-zí-is-ra* as in Cameron 1948: 99, followed by Hallock 1969: 747; Mayrhofer 1973: 223 *sub* 8.1399; Hinz & Koch 1987: 1019 Tavernier 2007: 278 *sub* 4.2.1332).
- 7f. Restoration after Cameron 1965: 172, discussing Fort. 1963-3. Word division and interpretation uncertain.



9. As Cameron indicated, the month might be ı (Ha[dukannaš]), ıx (Ha[šiyatiš]), or x (Ha[namakaš]).

15, 17. If *-ir-mi-ki* is a variant of *-irmaki* (written once *-ir-me-ki*), then *liuli*, if correctly read, must be a numeral, otherwise unattested, the denominator of a fraction. See Cameron 1948: 38f. for a list of fractions attested in the Treasury tablets, all written with the numerator expressed with a numeral rather than a word.

Here, the loss of text in lines 9f. and line 14 makes it impossible to establish the numeral intended with complete certainty, but it is nevertheless possible to make a proposal. First, the number of months indicated in lines 9f. must be an integer. Second, if lines 11-13 do not itemize workers and their rations (but state, for example, the total number of months), then line 14 lists 14 men (that is 32 [total, line 19] minus 9 [line 16] minus 9 [line 18]). If that is so, the only combination of a number of months and a value for *liuli* that yields the required result is 4 months and *liuli* = 8, thus:

14 men at $3\frac{6}{8}$	=	52 $\frac{1}{2}$ shekels/month
9 men at $1\frac{1}{8}$	=	10 $\frac{1}{8}$ shekels/month
9 men at 1	=	9 shekels/month
<hr style="border: 0.5px solid black;"/>		
Total		71 $\frac{5}{8}$ shekels/month
× 4 months	=	286 $\frac{1}{2}$ shekels
	=	28 <i>karša</i> 6 $\frac{1}{2}$ shekels
		(the amount in line 3)



If so, then *liuli-rmiki* would be an Elamite synonym for Iranian \**aštōva-*, represented in the Treasury texts as *ašdumaš*, (Cameron 1948: 42; Tavernier 2007: 455 sub 4.4.18.1).

A weakness of this suggestion, however, is that it requires the expression of a fraction in lines 14f. as  $\frac{6}{8}$ , rather than as  $\frac{3}{4}$ , despite the well-attested use in Persepolis Treasury texts of Elamite *zaš(šu)maš*, for Iranian \**caçu(š)va-*, “ $\frac{1}{4}$ .”

- 21ff. Cf. <sup>HAL</sup>*pi-da-bar-ma* Fort. 1963-4:x+14, 1963-8:x+6; <sup>HAL</sup>*pi-ud-da-bar-ma* PT 15:29f., 18:26f., 22:23f., as corrected by Hallock 1960: 97). In each case, the name occurs in a phrase of the form *KÛ.BABBAR<sup>MEŠ</sup> hi piddabarma ak akkayaše mušin zikkip* (or: *huttiḫ pirru muššika* (or: *muššaš*, or: *muššašda*), “this silver was accounted for by Pitaparma and his colleagues, accountants, together (or: they accounted for it)” (except that 1963-4 does not continue with *pirru mušša-*). I surmise that the conclusion of this text has similar meaning, but I do not find a likely restoration or parallel passage.

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