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From the Persepolis Fortification Archive Project, 3

The First Administrative Document Dis- covered at Persepolis: PT 1971-1*

Ernst Herzfeld's field photographs from the 1932 excavation season at Persepolis include three pictures of a large fragment of a cuneiform tablet (Herzfeld Nos. 32.85 a & b [= Oriental Institute No. 12979] and 32.86 a [= No. 12978]; see **Fig. 1**).¹ The photographs were made in the year before the discovery of the first Persepolis Fortification tablets in March,

* We are indebted to Wouter Henkelman, Mark Garrison, and Matthew Stolper for their comments and corrections. Responsibility for errors of substance or judgement remains with the authors. Abbreviations used: PT = Persepolis Treasury text; PTS = Persepolis Treasury seal.

¹ See Dusinberre 2005: 152 Table 1 and 160 Table 2, where the fragment in these photographs is mistakenly identified as a Fortification tablet.



1933, and about four years before the excavation of the first Persepolis Treasury tablets in 1936 (Schmidt 1939: 33-37; 1957: 4f.).

Although this was the first cuneiform tablet discovered by the Oriental Institute's excavations at Persepolis, there is no mention of it in the publications of Herzfeld or of Erich Schmidt, who succeeded him as director of the excavations, or in those of George G. Cameron or Richard T. Hallock, who undertook the publication of the many Treasury and Fortification tablets found later. Perhaps Herzfeld was not excited by a fragment with a text that was mostly numbers and "dittos" and a few words that would have been incomprehensible in 1932, accompanied by the merest traces of a seal impression.

It is tempting to infer from these photographs that Herzfeld made trial excavations in the Treasury as early as the season of 1932, but no records of such an effort survive. Schmidt makes no mention of such activity. Cameron and Hallock were apparently unaware that Herzfeld had found this fragment.

In 1971, when the fragment was rediscovered in the Oriental Institute museum's storage, Hallock recognized it as a Treasury tablet and designated it PT 1971-1, conforming to the nomenclature that George Cameron had used for Persepolis Treasury tablets that had been relocated in the stores of the National Archaeological Museum in Tehran (PT 1957:1-5, PT 1963:1-20, see Cameron 1958 and 1965). After reading the text with Hallock in 1978, Charles Jones identified it as the tablet in Herzfeld's field photographs. What follows is a collated edition and discussion of the text by Yie, based on the unpublished edition by Jones.



Fig. 1: Herzfeld's field photographs
Nos. 32.85 a (top), and 32.86a (middle), 32.85b (bottom) (Image Oriental Institute).



Fig. 2: PT 1971-1 (Image Persepolis Fortification Archive Project).



PT 1971-1

10,4 × 3,4 × 2,9 cm

seal: PTS 0005* (left edge)

Transliteration

Obverse

[...]

(01') HAL¹ú¹-[ra-tin-da šá-ra-man-na](02') hu-pi-[be du-ma-iš ... AN¹ITI¹MEŠ¹AN](03') šá-ak-[ra-zí¹[-iš ...](04') [AŠ¹]be-ul 20-[um-me¹]-[...](05') [x+]² HAL¹LÚ¹MEŠ¹ un-ra 5 [pan-su-kaš 1 ši-iš-maš <2> 9-ir-ma¹]-[ki](06') [HAL¹]¹ KI¹+MIN KI+MIN 4 KI+MIN ši-iš-maš 9-ir-ma-ki

Lower Edge

(07') [HAL¹KI+MIN]¹ KI+MIN 3 KI+MIN 2 ši-iš-maš 2 9-ir-ma-ki(08') [HAL¹KI+MIN KI+]¹ MIN² 3 KI+MIN ši-iš-maš

Reverse

(09') [HAL¹pu]-[hu¹ KI+MIN 2 KI+MIN 2 ši-iš 9-ir-ma-ki(10') [HAL¹]¹ KI¹+MIN KI+MIN 2 KI+MIN 2 9-ir-ma-ki(11') [(0)] 29 HAL¹KI+MIN KI+MIN 1 KI+MIN 2 ši-iš-maš(12') [(0)] HAL¹KI+MIN KI+MIN 1 KI+MIN 9-ir-ma-ki(13') [SAL¹SAL¹MEŠ¹ KI+]¹ MIN KI+MIN 2 KI+MIN 2 ši¹-[iš-maš 9-ir-ma-ki]

[...]

Translation

(obv.) [...]

(01'-02') U[ratinda being responsible for allocating (rations)], the[y received]. (02'-04')

Third [month ...], 20th year.(05') [x+]2 men each 5+ $\frac{1}{3}$ + $\frac{2}{9}$ shekels;(06') [x] men each 4+ $\frac{1}{3}$ + $\frac{1}{9}$ shekels;(low.ed. 07') [x] men each 3+ $\frac{2}{3}$ + $\frac{2}{9}$ shekels;



(08')	[x]	men	each	$3+\frac{1}{3}$ shekels;
(rev. 09')	[x]	boys	each	$2+\frac{2}{3}+\frac{1}{9}$ shekels;
(10')	[x]	boys	each	$2+\frac{2}{9}$ shekels;
(11')	29	boys	each	$1+\frac{2}{3}$ shekels;
(12')	[x]	boys	each	$1+\frac{1}{9}$ shekels;
(13')	[x	women]	each	$2+\frac{2}{3}[\frac{1}{9}]$ shekels;
	[...]			

Comments

Cf. PT 61, PT 64, PT 65, PT 66, PT 67, and especially PT 69 and PT 70.

- 01' Uratinda appears in the function marked by the Elamite term *šaramanna* in Persepolis Treasury documents dated between XI/19 Xer. (PT 45) and IV/1 Art. I (PT 77).
- 03' Spellings of the month name *Sakurizziš* (transcribing Iranian **θāigračīs*) with *šá-* rather than the common *sa-* appear in at least three Persepolis Fortification texts but in no other Persepolis Treasury texts (Hallock 1969: 750, Tavernier 2007: 87 [2.4.11.12]).
- 05' 1 *šišmaš* " $\frac{1}{3}$ " with explicit numerator (unlike *šišmaš* alone, line 06'): similarly PT 70:13. The pattern of rates of payment in lines 06'-12', all multiples of $\frac{1}{9}$ shekel, requires the emendation <2> *9-irmaki*, ' $\frac{1}{9}$,' supported by comparison with PT 69 and PT 70. The converse error, «2» *9-irmaki* occurs in PT 70:8 (see Hallock 1960: 100).
- 09' *9-ir-ma-ki*: written on the right edge.
- 12' Erasure of 1[?] precedes *9-irmaki*.



Seal Impression

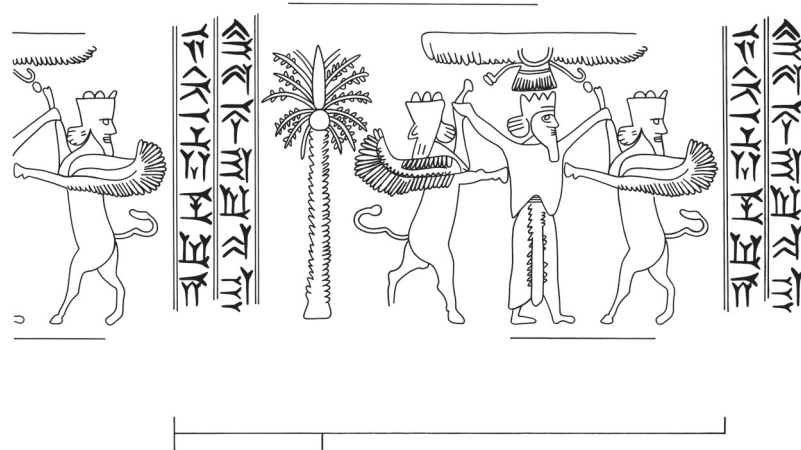


Fig. 3: PTS 0005* (collated drawing by Mark B. Garrison).

In the recorded sample of inscribed tablets and uninscribed labels (sealings) from the Persepolis Treasury there are more impressions of the seal PTS 0005* (Schmidt 1957: 20f. and pls. 1-2, 4; cf. Schmitt 1981: 24 *sub sxa*) than of any other seal. Impressions of PTS 0005* appear on at least 38 uninscribed labels, on at least 23 inscribed tablets and fragments (Schmidt 1957: 20f.) and probably on at least 3 other tablet fragments. The earliest dated occurrence is in VIII/19 Xer. (PT 34), and the latest is in XIIb/5 Art. I (PT 79).

PTS 0005* (Fig. 3) preserves a scene of heroic encounter. A hero is holding two winged human-headed bull creatures by the foreleg. He is bearded and wears a Persian court robe and a dentate crown. Directly above his head is a winged symbol, with a central disc, bird's wings, square tail, and hooked tendrils. Its upper part is not preserved. At the left of the scene is a date palm. A paneled monolingual inscription in Old



Persian, with case lines, aligned on the vertical axis of the seal, is in the terminal field. It reads:

x-š-y-a-r-š-a	Xerxes
: xš : v-z-r-k	Great King

The impression of *PTS* 0005* on the left edge of *PT* 1971-1 preserves the lower part of the date palm, the ends of the panel with three case lines, and faint remains of the ends of the inscription.

PTS 0005* is deeply and carefully carved. The carving style is the Persepolitan Court Style. The seal is part of a small corpus of seals that come from the Persepolitan archives and bear royal-name inscriptions. The owners of these seals, when they can be known definitely, are mid-high rank administrators (see Garrison [forthcoming]).

Apart from uninscribed labels, impressions of *PTS* 0005* are found only on memoranda. Like other seals on memoranda, the ownership of *PTS* 0005* is difficult to establish because, unlike letter orders with sender's seal, seals on memoranda may be associated with various individuals over time. The chronological sequence of *šaramannas* in memoranda with *PTS* 0005* shows, however, that they are also treasurers when this seal is used. *PTS* 0005* is likely an office seal associated with the treasury.

Where enough text is preserved to make such a determination, tablets relating to grain rations and impressed with *PTS* 0005* usually record transactions involving *Uratinda*.² Among them are *PT* 69 and *PT* 70, the published texts most similar to *PT* 1971-1.

The Persepolis Treasury texts (Cameron 1948, 1958, 1965; Arfa'i 2008), with few exceptions, deal with payments made or to be made in silver in place of food. The silver payments sometimes represent full rations but more often fractional rations, the balance to be paid in com-

² Pers.comm. M.B. Garrison. The exceptions are *PT* 39 and *PT* 40, which involve *Mawiš*.



modities. Hallock classified and analyzed letter orders and memoranda of payments according to the commodities underlying the payments: “sheep texts,” in which silver is paid in lieu of sheep; “wine texts,” in which silver is paid in lieu of wine (once, beer); “sheep and wine texts,” in which silver is paid in lieu of sheep and wine;³ and “grain texts,” in which silver is paid in lieu of grain (Hallock 1960: 92-96). In grain texts, explicit reference to grain ($\text{\$E.BAR}^{\text{ME}\ddot{\text{S}}}$) is uncommon.⁴ Cameron’s collations confirmed the explicit reference of PT 39:5 (Cameron 1958: 170 n. 34 cited by Hallock 1960: 94), his collation of PT 69:7 supported the probable explicit reference there (Hallock 1960: 95), and Hallock demonstrated the shared characteristics that compel the understanding that more than thirty other Treasury documents are to be classified as grain texts even without explicit mention of the commodity.⁵

PT 1971-1 shares these characteristics: the preserved text lists allocations to men and boys (and the lost part of the text can be presumed to list counterpart allocations to women and girls), like the grain texts, but unlike the wine and sheep texts. Its highest rate of allocation to men is higher than the highest rates in wine texts and sheep texts (5 shekels in PT 1971-1:5; $\frac{2}{3}$ in wine texts;⁶ 3 in sheep texts); and its date falls in the eight-month range of the other grain texts (Hallock 1960: 94).

The most nearly comparable grain texts are PT 69 and PT 70. In the preserved text of PT 1971-1, the numbers of groups of men and boys and the ratios among the pay rates of the groups correspond to those in the

³ Hallock’s surmise that PT 10a belongs among the sheep and wine texts (1960: 93f. nn. 7f.) has been confirmed (Arfa’i 2008).

⁴ $\text{\$E.BAR}^{\text{ME}\ddot{\text{S}}}$ presumably denotes barley (see Henkelman 2010: 750-3), except for those cases where it is used as a generic term for cereals.

⁵ But admitting the possibility that some may refer to flour or other cereal products (Hallock 1960: 95).

⁶ Cf. $3 \frac{1}{2}$ shekels in PT 45:9f. (Hallock 1960: 93).



counterpart passages of PT 69 and PT 70 (see **table 1**). But PT 1971-1 differs in two respects: first, it records rations for month III of year 20 (that is, of Xerxes), rather than month IV, as PT 69 and PT 70 do; second, the basic allocation, of which all allocation are multiples, is $\frac{5}{9}$ shekel, twice the $\frac{5}{18}$ shekel basic allocations of PT 69 and PT 70.

PT 69				PT 70				PT 1971-1			
line	rcpt(s)	rate*	rate**	line	rctps.	rate*	rate**	line	rctps.	rate*	rate**
09	men	$2+\frac{2}{3}+\frac{1}{9}$	$\frac{50}{18}$	08	men	$2+\frac{2}{3}+\frac{11}{9}$	$\frac{50\frac{1}{18}}$	05'	men	$5+\frac{1}{3}+\frac{2\frac{1}{9}}$	$\frac{50\frac{1}{9}}$
10	"	$2+\frac{2}{9}$	$\frac{40}{18}$	09	"	$2+\frac{2}{9}$	$\frac{40}{18}$	06'	"	$4+\frac{1}{3}+\frac{1}{9}$	$\frac{40}{9}$
11f.	"	$1+\frac{2}{3}+\frac{2}{9}+\frac{1}{18}$	$\frac{35}{18}$	10f.	"	$1+\frac{2}{3}+\frac{2}{9}+\frac{1}{18}$	$\frac{35}{18}$	07'	"	$3+\frac{2}{3}+\frac{2}{9}$	$\frac{35}{9}$
13	"	$1+\frac{2}{3}$	$\frac{30}{18}$	12	"	$1+\frac{2}{3}$	$\frac{30}{18}$	08'	"	$3+\frac{1}{3}$	$\frac{30}{9}$
14f.	boys	$1+\frac{1}{3}+\frac{1}{18}$	$\frac{25}{18}$	13	boys	$1+\frac{1}{3}+\frac{1}{18}$	$\frac{25}{18}$	09'	[bo]ys	$2+\frac{2}{3}+\frac{1}{9}$	$\frac{25}{9}$
16	"	$1+\frac{1}{9}$	$\frac{20}{18}$	14	"	$1+\frac{1}{9}$	$\frac{20}{18}$	10'	"	$2+\frac{2}{9}$	$\frac{20}{9}$
17	"	$\frac{2}{3}+\frac{1}{6}$	$\frac{15}{18}$	15	"	$\frac{2}{3}+\frac{1}{6}$	$\frac{15}{18}$	11'	"	$1+\frac{2}{3}$	$\frac{15}{9}$
18f.	"	$\frac{1}{2}+\frac{1}{18}$	$\frac{10}{18}$	16f.	"	$\frac{1}{2}+\frac{1}{18}$	$\frac{10}{18}$	12'	"	$1+\frac{1}{9}$	$\frac{10}{9}$
20	women	$1+\frac{1}{9}$	$\frac{20}{18}$	18	women	$1+\frac{1}{9}$	$\frac{20}{18}$	13'	[women]	$2+\frac{2}{3}[\frac{1}{9}]$	$\frac{25}{9}$
21f.	girls	$\frac{1}{2}+\frac{1}{18}$	$\frac{10}{18}$	19	girls	$\frac{2}{3}+\frac{1}{6}$	$\frac{15}{18}$				
23	"	$\frac{2}{9}+\frac{1}{18}$	$\frac{5}{18}$	20f.	"	$\frac{1}{2}+\frac{1}{18}$	$\frac{10}{18}$				
				22f.	"	$\frac{2}{9}+\frac{1}{18}$	$\frac{5}{18}$				
base			$\frac{5}{18}$				$\frac{5}{18}$				$\frac{5}{9}$

Table 1: Classes of recipients and rates of silver payments in PT 69, PT 70 and PT 1971-1.
 (* = rate as expressed in text; ** = rate in common fractional expression)

Hallock demonstrated a temporal pattern in the rates of silver payment found in the grain texts from the Treasury. He began with the observation that the basic unit of payment of full rations must be twice the basic allocation recorded in grain texts where silver payments are made in lieu of half rations. Thus, where allocations are in multiples of a half shekel, for example, the full rations were equivalent to multiples of one shekel.



Correspondingly, in PT 69 and PT 70, where the silver payments are made, exceptionally, in lieu of one-third rations, the basic unit of payment of full rations must be three times the basic allocation recorded in the text. Thus, in PT 69 and PT 70, the basic allocation of $\frac{5}{18}$ implies that full rations were equivalent to multiples of $\frac{5}{6}$ shekel. Hallock found that the unit of payment changed from month to month during the eight-month span of the grain texts, showing a sharp rise from month IX ($\frac{5}{6}$ sh.) to month X ($1\frac{1}{4}$ sh.), a slight abatement in month XII and I ($1\frac{1}{9}$ sh.), a second peak in month II ($1\frac{1}{4}$ sh.), a drop in month III (1 sh.), and a return in month IV to the level of the previous month IX ($\frac{5}{6}$ sh.) (Hallock 1960: 95).

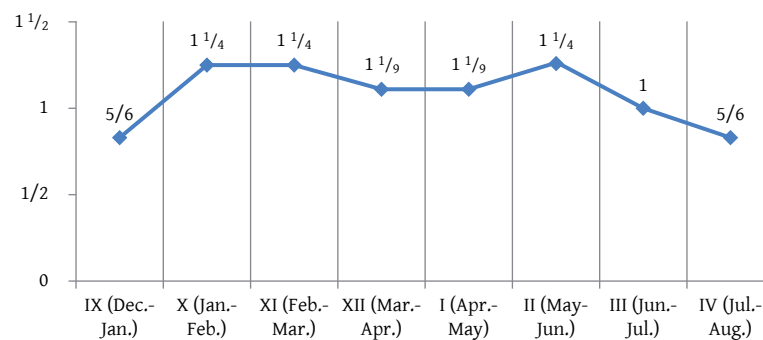


Table 2: Variation in the Unit of Payment (in shekels) after Hallock 1960: 95.

Hallock speculated that the extraordinary concentration of the grain texts in a period of eight months, in marked contrast to the even temporal distribution of all other kinds of Treasury texts over thirteen years, reflects a shortage of grain induced by extraordinary political or military circumstances. Within these eight months, however, the rise and fall in the silver equivalent of grain is consistent with the ordinary circumstance of relatively scarce grain before a grain harvest in May and June, and relatively abundant grain afterward.⁷

⁷ As suggested obliquely by Aperghis 1997: 281. Wheat is harvested in modern northern Färs



Unless PT 1971-1 departs sharply from this otherwise consistent trend and cogent pattern, its exceptional features allow two interpretations.

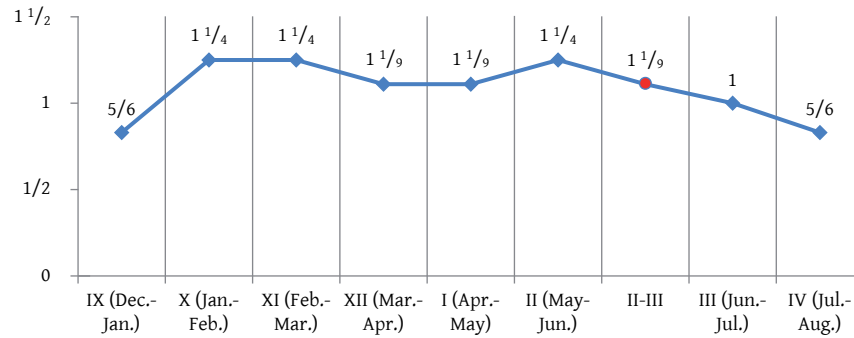


Table 3: Variation in the Unit of Payment (in shekels), Option 1.

On the first option, PT 1971-1 records a payment of a half ration in silver, unlike PT 69 and PT 70 but like all the other grain texts. In that case, the implied basic unit of a full ration is 1 1/9 shekel, suggesting that the silver equivalent of grain dropped from the high of 1 1/4 shekels found in twelve grain texts from month II first to the 1 1/9 shekels found here and only later to the 1 shekel found in the other five texts from month III.

at the beginning of summer, late June; barley is harvested a few weeks earlier, late May (Lambton [1953] 1969: 366; Miller 1982: 78-80; Abbas Alizadeh, personal communication).

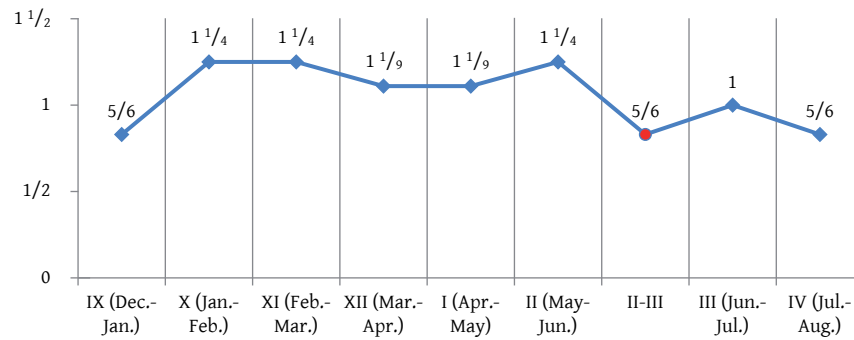


Table 4: Variation in the Unit of Payment (in shekels), Option 2.

On the second option, PT 1971-1 records a payment of a two-thirds ration in silver, unlike all the other Treasury texts. In that case the implied basic unit of a full ration is $\frac{5}{6}$ shekel, suggesting that the rate already dropped in month III to the level attested in PT 69 and PT 70, from month IV.

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Bibliography

- APERGHIS, G.G. 1997, Surplus, exchange and price in the Persepolis Fortification Texts, in: J. Andraeu, P. Briant & R. Descat (eds.), *Économie antique. Prix et formation des prix dans les économies antiques* (EAH 3), Saint-Bertrand-de-Comminges: 277-90.
- ARFA'Í, A.M. 2008, PT 10a, Collated and Completed, **ARTA 2008.001**.
- CAMERON, G.G. 1948, *Persepolis Treasury Tablets* (OIP 65), Chicago.
- 1958, *Persepolis Treasury Tablets Old and New*, *JNES* 17: 161-76.
- 1965, *New Tablets from the Persepolis Treasury*, *JNES* 24: 167-92.
- DUSINBERRE, E.R.M. 2005, Herzfeld in Persepolis, in: A.C. Gunter & S.R. Hauser (eds.), *Ernst Herzfeld and the Development of Near Eastern Studies, 1900-1950*, Leiden: 137-80.
- GARRISON, M.B. [forthcoming], The Royal-Name Seals of Darius I, in: W.F.M. Henkelman, C.E. Jones, M. Kozuh, C.E. Woods (eds.), *Extraction and Control, Festschrift for M.W. Stolper*.
- GARRISON, M.B. & ROOT, M.C. 2001, *Seals on the Persepolis Fortification Tablets*, vol. 1: *Images of Heroic Encounter* (OIP 117), Chicago.
- HALLOCK, R.T. 1950, New Light from Persepolis, *JNES* 9: 237-52.
- 1960, A New Look at the Persepolis Treasury Tablets, *JNES* 19: 90-100.
- 1969, *Persepolis Fortification Tablets* (OIP 92), Chicago.
- HENKELMAN, W.F.M. 2010, Consumed before the King. The Table of Darius, that of Irdabama and Irtaštuna, and that of his Satrap, Karkiš, in: B. Jacobs & R. Rollinger (eds.), *Der Achämenidenhof* (Classica et Orientalia 2), Wiesbaden: 667-775.
- LAMBTON, A.K.S. 1953 [2nd ed. 1969], *Landlord and Peasant in Persia*, London.
- MILLER, N.F. 1982, *Economy and Environment of Malyan, a Third Millennium B.C. Urban Center in Southern Iran* (diss. Michigan; UMI 8215051).
- SCHMIDT, E.F. 1939, *The Treasury of Persepolis and Other Discoveries in the Homeland of the Achaemenians* (OIC 21), Chicago.
- SCHMIDT, E.F. 1957, *Persepolis*, vol. 2: *Contents of the Treasury and Other Discoveries* (OIP 69), Chicago.
- SCHMITT, R. 1981, *Altpersische Siegel-Inschriften* (SÖAW 381), Vienna.
- TAVERNIER, J. 2007, *Iranica in the Achaemenid Period* (ca. 550-330 B.C.) (OLA 158), Leuven – Paris – Dudley.

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