

**24) Zappan and zabar (“copper, bronze”) in Elamite** – In *NABU* 2004.1 (note 28), G. Giovinazzo responded to my paper in *Achaemenid History* XIII, 2003: 101-72. In this publication, I argued that Achaemenid-Elamite (AE) *šumar* does not mean “Schafstall,” as the *Elamisches Wörterbuch* (EW) claims, but refers to the tombs or burial mounds (*vel sim.*) of deceased royal and noble Persians, including those of Cambyses and Hystaspes. Four unpublished Persepolis Fortification texts on *šumar* are given in my paper, along with some comments on grammar, lexicon and prosopography. In this context (p. 104), I listed various groups of workers associated elsewhere with a certain supply official, saying that these included “*kurtasš appa zappan nutip* (‘workmen who [are] caretakers/handlers of copper’ [this interpretation of *zappa-* is not irreconcilable with that of Vallat 2002: 137-8]).” Giovinazzo claims to have been very surprised about this statement.

First, Giovinazzo points to the fact that F. Vallat (*Akkadica* 123: 137-8) does not discuss the meaning “copper” for *zappan*. This is true, but I only claimed that Vallat’s interpretation could possibly be reconciled with mine. As *zappan* was of secondary importance to my paper, I did not elaborate on the issue then, but I will try to make up for that omission here. Vallat amply discusses the Elamite verbal root *zappa-*, which occurs from Middle Elamite onwards and is, e.g., attested in Darius’ Bīsotūn inscription (DB<sub>e</sub> III.43, *zap-pi-iš*) where it indeed must mean “faire prisonnier” (*vel sim.*). Earlier, the editors of the EW had taken the same stand (s.v. *zap-pi-iš*, “er nahm gefangen”), but they had also related Neo-Elamite <sup>GIŠ</sup>*za-ap-pan* and AE <sup>GIŠ</sup>*za-ap-pan nu-ti-ip* to the same root. This relation is not stated explicitly, but clear from the slightly awkward translations “Joch” and “Jochwarte(?)” by which the EW seems to suggest that *zappan* is the instrument by which one is captured, detained or suppressed (cf. Germ. “unterjochen;” see also the entry on <sup>AŠ</sup>*za-ap-pi*). I think that the implicit ‘argumentation’ of the EW (which may have escaped Vallat o.c. 138) is principally correct, but that the translation is misguided.

For the EW the determinative <sup>GIŠ</sup> necessarily implies a vegetal object or product (a “Joch” would be made of wood). Yet, as Giovinazzo rightly notes, it is agreed upon nowadays that in later Elamite <sup>GIŠ</sup> can precede a whole range of materials (including stone and *zabar*, “copper/bronze”). If *zappa-* means something like “to take prisoner,” *zappan* could well mean “fetter.” This contention is endorsed by the Old-Persian version (DB<sub>p</sub> III.88) of the aforementioned passage of the Bīsotūn inscription: [*bastā anaya*], “(he) led (them) fettered/in fetters” (cf. I.82, V.26, 28 for the restoration).

As I am convinced that “copper” or (preferably) “bronze” is the first meaning of the loan or Kulturwort *zabar* and its derivative *zappan* (see below), I am inclined to translate the verb *zappa-* as “put s.o. in copper/bronze fetters” (cf. Eng. “to put in irons”), i.e. “to fetter.” From this a derivative meaning “to arrest,” “to capture” or “to take prisoner” (as proposed by Vallat o.c.) is easily conceivable. Along the same lines *zappan* could, apart from its first meaning “bronze/copper,” probably have the derivative meaning “fetter(s),” « (cf. Eng. “irons”). Bronze (and copper) fetters (*maškanum*) are known from Mesopotamia (see Stol in OBO 160.4: 911, also citing the expression “Man hat mir Kupfer, Block und Haartracht angelegt” – see also CAD B 254-5 *birītu* 4, I-J 205-6 *iš qātī a-b*, S 224 *semeru* 3).

Secondly, Giovinazzo contests the validity of the interpretation of *zappan* as “copper” (or “bronze”). *Zappan*, she writes, “ne peut pas signifier le ‘cuivre’ qui, en élamite, est rendu par <sup>GIŠ</sup>za-bar, za-bar<sup>MEŠ</sup>, za-ba-ru<sup>MEŠ</sup>, zu-ba-ar, etc.” This affirmation is, I think, a bit too strong. *Zabar*, conceivably an early loan from Sum. *zabar* (cf. Akk. *siparru*), could well have been elamized by adding an *-n* for the inanimate class (apparently replacing the original *-r*). This is, in fact, the same mechanism as the one Giovinazzo tacitly assumes in her proposal to relate *zappan* in MDP 9, 5: 2 to Akk. *sappu* or *šappu*.

That the two forms, *zabar* and *zappan* co-existed is remarkable, but not inexplicable. Note that *zabar* is often followed by MEŠ from late Middle Elamite onwards (Stolper TTM 10), but that the adapted form *zappan* never is. Normally, MEŠ indicates logograms in Elamite, but can also be used with loanwords (cf. Stolper TTM 20), in which case the term ‘pseudo-logogram’ seems appropriate. One could compare the case of *za-bar*<sup>MEŠ</sup> and *zappan* to <sup>GIŠ</sup>ŠIKAK<sup>MEŠ</sup> (“lance”) which was also spelled *ši-ik-ki* and *ši-ik-ka<sub>4</sub>* and therefore probably pronounced as [šika] in Elamite (Henkelman, ARTA 2002.007). In my view, it cannot be excluded that *za-bar*<sup>MEŠ</sup> was not treated as a full loanword in (later) Elamite, but as a pseudo-logogram pronounced [zapan].

In the Persepolis Fortification texts, the expression *kurtasš appa zappan nutip* (<sup>GIŠ</sup>za-ap-pan nu-ti-ip, <sup>GIŠ</sup>za-pan nu-ti-ip) occurs four times (PF 1815; NN 0948; NN 1280; NN 1368). The documents pertain to the same group of four workers stationed at the – extensive – *partetaš* (παράδεισος; “plantation”) called Parsaraš, at Persepolis. Giovinazzo holds that these are “les ouvriers qui conservent / prennent soin des récipients / de la vaisselle.” Their activity would therefore be completely unrelated to that of Manišdadda, the <sup>GIŠ</sup>za-bar<sup>MEŠ</sup> *tuk-ki-ra*, “copper/bronze-hammerer” or “brazier” who is also stationed at Persepolis. Yet, in NN 1984 five KÛ.GI-kazzip, “goldsmiths,” two <sup>1</sup>zab<sup>?</sup>1-ba-<sup>1</sup>an<sup>?</sup> hu<sup>1</sup>-ut-ti-ip, “*zappan*-makers,” as well as two unqualified female workers and a boy constitute a group of *kurnukašbe*, “artisans” (no location given). To me this is an additional indication that *zappan* means “bronze” and that *zappan-huttip* are “bronze-makers” or “bronze-workers.” It should be admitted, however, that Hallock’s restoration of *zabban huttip* is not completely certain.

Prof. M.W. Stolper kindly informs me that all the signs are clear, except for the first which is almost completely destroyed (but seems to end in a vertical wedge). As far as I can see the only viable alternatives are *appan*, *nappan* and *zippan* (all attested in PF texts), but none of these suits the contexts. Hallock's restoration therefore remains the most likely solution (the spelling *zab-ba-* is attested in forms built on the root *zappa-*).

Incidentally, the occurrence of *zappan-huttip*, made me rethink the interpretation of *zappan nutip*. My previous interpretation of *nutip* as "caretakers/handlers" (as well as Giovinazzo's "[ouvriers qui] conservent...") may be erroneous. The point is that the verb *nuti-* and its derivations, apart from the combination with *zappan*, occur *exclusively* with grain in the Fortification texts. In those contexts the verb must be translated as "to store." With "bronze" (or "vaisselle") the verb seems to fit uneasily. Perhaps one should therefore analyse *za-ap-pan-nu-ti-ip* as *zabban-hutip*, "bronze-makers/workers." It is well known that /h/, especially in initial position had become very weak in Achaemenid-Elamite and *zappan-hutip* would have been heard as [zappanutip] and thus could plausibly be written as *za-ap-pan-nu-ti-ip*. I note in this context that the four texts with *za-ap-pan-nu-ti-ip* are all letters drafted by Hintamukka; the spelling may be particular to this scribe.

Thirdly, Giovinazzo claims that <sup>HAL</sup>(<sup>BE</sup>)*zap-pan* and <sup>GIŠ</sup>*za-ap-pan* are not identical "comme le laisse supposer W. Henkelman." This is my turn to be very surprised, for I never mentioned <sup>HAL</sup>*zap-pan*, nor any of the texts in which it occurs (PF 1497; NN 0550; NN 1856). In fact, I carefully avoided discussing <sup>HAL</sup>*zap-pan*, as the term is problematic in several respects and, moreover, did not have a bearing on the subject of my paper. The word does not have the plural marker *-p*, nor does it belong to 'conjugation II' which is normally used in AE for passive formations (expected: \**zappap*; cf. EW s.v. *zab-ba-be-ip*). Interpretation of <sup>HAL</sup>*zap-pan* as a 'conj. III' passive participle is not excluded (cf. Vallat o.c. 138), but the lack of a gender suffix (expect: \**zappanip*) makes this troublesome. It may be noted that the three texts with <sup>HAL</sup>*zap-pan* are of irregular shapes and concern very similar operations, which strongly suggests a single scribe. <sup>HAL</sup>*zap-pan* may be an idiosyncrasy of his (note that the spelling *zap-pan* does not occur elsewhere). The word may or may not be related to *zappa-* (and *zappan*), but any interpretation would seem hazardous at this point. A geographical designation, "workers (who are) Zappan(-people)" cannot be excluded at this point (cf. the toponym Zappan [in the Diyala region?], well-known from Mesopotamian sources and mentioned in a Middle-Elamite inscription; see Vallat RGTC 11: 305 with references).

Finally, a few words on Giovinazzo's interpretation of <sup>GIŠ</sup>*za-ap-pan šá-ah-ši* in MDP 9, 5: 2, as "vaisselle royale" may be useful. The explanation of *zappan* as a loanword from Akk. *sappu* or *šappu* certainly seems worth considering. I am curious, however, how Giovinazzo explains the rendering of Akkadian /s-/ or /š-/ by Elamite *z(a)-*. As far as I am aware, ascertained loans with *z-* reflect Akk. /z-/ (*zalmu* ~ *šalmu*; *zagrature* ~ *ziqquratu*).

In addition, I do not believe that *šá-ah-ši* is a loan from Old Persian (I assume G. thinks of \**xšaçaiya-*) with the meaning “royal.” The form could perhaps technically be such a loan (though \**ša-ak-ši-ia* would have been more precise), but Yusifov’s reading *ša-ah-ši-ka*> (VDI 85: 202) remains preferable. The form is attested in the same archive (MDP 9, 59: 4; compare also *šahšikra* in 105: r.1, 134: 9) and is obviously related to *šašika* (also *šasika*, *šašaka*, *šaššaka*) which is well-attested in the Fortification texts (Hallock OIP 92: 755, “left over”).

The Elamite lexicon remains a treacherous minefield of uncertainties (cf. Giovinazzo *AION* 49.3: 315); definite conclusions rarely can be drawn. I would therefore not claim that the case of *zappan* may be closed by now. At the same time, it would seem safe to say that my interpretation in AchHist XIII can and should be retained, be it with the stipulation that “copper” is to be corrected to “bronze” and “handlers” to “makers” (or “workers”). The *kurtaš appa zappannutip* are more likely to be “workers who (are) bronze-makers (-workers),” than “ouvriers qui prennent soin de la vaisselle.”

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