

53) **An Old Iranian loanword for a subdivision of the shekel from Late Achaemenid Uruk\*** — It is now well established that the Hellenistic period witnessed the introduction of a new system of subdividing the shekel in Babylonia, which used from one to five *mā'at* (1/12 of a shekel) in combination with *zūzu* (6/12 = 1/2 of a shekel), as well as fractions of the *mā'at* (OPPENHEIM 1973, MAYER 1985 and 1988; see below). By contrast, in the preceding Achaemenid period, the Babylonian norms had remained the sole basis of the weight system (including the shekel subdivisions), despite the fact that the Achaemenid and Babylonian systems were linked in the reign of Darius I (POWELL 1987–1990, 511a). However, the prolonged contact between the two systems made at least a faint impression on nomenclature, as is illustrated by a newly attested term for a subdivision of the shekel in Babylonian. The word under discussion (set in bold below) occurs in BM 109972 (1914-4-4, 38), a prebend sale contract from Uruk. The date is lost, but the text can be assigned to the Late Achaemenid period (possibly the fourth century BCE) on the basis of circumstantial evidence. A full edition of the text and a discussion of its ‘museum-archeological’ context will be presented elsewhere. The passage in question reads (lines 9–23):

*ki-i 1/3 4 gín kù.babbar qa-lu-ú PN, (...) it-ti PN<sub>2</sub>, (...) PN<sub>3</sub> (...), PN<sub>4</sub> (...) u PN<sub>5</sub>, (...) ki.lam, im-bé-e-ma i-šam šám<sup>gīs</sup> šub.ba-šú-nu, mu<sup>meš</sup> til<sup>meš</sup> ú 3 da-nak-ku kù.babbar a-tar sum-su, šu.nigin 1/3 4 gín 3 da-nak-ku kù.babbar a-di 3 da-nak-ku, kù<sup>o</sup>.babbar<sup>o</sup> šá ki-i ka 'a-tar' sum.na kù.babbar a<sub>4</sub> 1/3 4 gín 3 da-nak-ku, qa-lu-ú šám ud.1[7.ka]m<sup>gīs</sup> šub.ba-šú-nu mu<sup>meš</sup>, til<sup>meš</sup> ka-sap til-ti PN<sub>2</sub> (...), PN<sub>3</sub> (...) PN<sub>4</sub>, (...), PN<sub>5</sub> (...), ina šu<sup>II</sup> PN (...), maḥ-ru-u<sup>o</sup> a-pil-<sup>r</sup>u<sup>o</sup>?*

PN (...) agreed with PN<sub>2</sub> (...), PN<sub>3</sub> (...), PN<sub>4</sub> (...) and PN<sub>5</sub> a price of 1/3 (mina) 4 shekels of refined silver; he purchased that prebend of theirs for the full price and gave them (lit. him) 3 *da-nak-ku* of silver as the supplementary payment. Altogether 1/3 (mina) 4 shekels 3 *da-nak-ku* of silver, including 3 *da-nak-ku* of silver which were given as the supplementary payment: PN<sub>2</sub>, PN<sub>3</sub>, PN<sub>4</sub> and PN<sub>5</sub> have received the said 1/3 (mina) 4 shekels 3 *da-nak-ku* of refined silver, the full price of day 17 (of each month) of that prebend of theirs, the entire silver payment, from PN; they are paid.'

The term used to state the amount of the supplementary payment is, to the best of my knowledge, not attested elsewhere in the Neo-Babylonian textual record. In the absence of a convincing Akkadian etymology, the most likely candidate seems to be the Old Iranian word \**dānakā*- (derived from \**dānā*- ‘grain’, on the etymology see TAVERNIER 2007, 450 § 4.4.15.2). This word is well-known from classical sources (δανάκη, referring to a Persian silver coin roughly equivalent to the Attic obol, not infrequently mentioned within the context of funerary practices; see *Der Neue Pauly* s.v. “Danake” [A. Mlasowsky]) and also occurs in the Elamite Persepolis tablets (PT 1963-4: x+8. x+10 *da-na-ka<sub>4</sub>(-um)* and PT 28: 22 *da-na-kaš*). Since even coined silver continued to be weighed, rather than counted, in Late Period Babylonia,<sup>1</sup> we cannot ascertain whether the term refers to the Achaemenid coin (unless the shift in terminology is to be considered an attempt to denote the quality of the silver). Whatever the case, judging from the price quotations in lines 15–16 and the mixture of units, it is clear that

the word can be used as a weight specific term in Babylonian. According to the reference in Xen. *Anab.* 1.5.6 (one Persian shekel = 7 1/2 Attic obols, see CAMERON 1948, 132), it equals one eighth of a shekel and thus corresponds to the ‘older’ Babylonian *bitqu* (see below).

For convenience, the various subdivisions of the shekel known from the Neo-Babylonian textual record are summarized in the following table. Note that the fractions above 1/2 are not included (i.e., *šitta qātātu* [written 2-ta šu<sup>II.meš</sup>] ‘two hands’ = ‘two thirds’, and *šalāš rebātu* ‘three fourths’), as they are probably only accounting terms (Powell 1987–1990, 511b).

Subdivisions	Long 6 <sup>th</sup> c. BCE	Late Achaemenid	Hellenistic
1/2	<i>zūzu</i> <sup>a</sup>		<i>zūzu</i>
1/3	<i>šalšu/šalultu</i> <sup>b</sup> <i>šullušu/šullultu/šullul</i> <sup>c</sup>		
1/4	<i>rebūtu</i>	<i>rebūtu</i>	<i>rebūtu</i>
1/5	<i>ḥummušu</i> <sup>c</sup>		
1/6	<i>suddū</i> <sup>c</sup>		
1/8	<i>bitqu</i>	<i>bitqu</i> <sup>d</sup> <i>dānak</i> (iran.)	
1/12			<i>mā'at</i> <sup>e</sup> (aram.)
1/24	<i>girū</i>	<i>girū</i> <sup>t</sup>	<i>ḥešī</i> <sup>g</sup> (wsem.)
1/40	<i>ḥallūru</i> <sup>h</sup>		
1/48			<i>rab</i> <sup>a,i</sup> (wsem.)
1/180	<i>uṭṭatu</i> <sup>j</sup>		

a) The *zūzu* continues in use into the Late Period (see BM 34029, edited in MAYER 1988, 71–73, probably from the Parthian period) and is borrowed into Aramaic, but so far as can be judged, there are as yet no Late Achaemenid occurrences in the cuneiform record.

b) The non-weight specific term *šalšu/šalultu* ‘one third’ is still attested in Late Achaemenid-Seleucid period texts but, unlike *rebūtu*, is no longer used with measures. Both *šalšu/šalultu* and *šullušu/šullultu* (see below) are always followed by the sign *gín* (LORENZ 2005/06, 249).

c) It seems plausible that the weight specific terms *šullušu* ‘one third of a shekel’ (and its variants), *ḥummušu* ‘one fifth of a shekel’ and *suddū* ‘one sixth of a shekel’ were still in use in the Late Period, but are masked by the writing system.

d) The few Late Achaemenid occurrences of *bitqu* are mostly from the reign of Xerxes (but see JURSA 2010, 477<sup>2598</sup>) and always refer to silver with one-eighth alloy.

e) The word is generally assumed to be borrowed from Aramaic (MAYER 1985 with previous literature). The Akkadian feminine infix shows that it was already morphologically (but not phonologically; the regular spellings with <ḥ> represent Aramaic /ʕ/) integrated into Babylonian (aram. *mā'ā* > akk. *mā'at*) by the beginning of the 3<sup>rd</sup> century BCE (CT 49 101: 1. 2 [Esangila archive, SE 15], edited in HACKL 2013 as no. 90).

f) In the Late Achaemenid period, the term is (largely?) restricted to formulae referring to the fineness of a silver alloy (e.g., STOLPER 1990, no. 17 [Larsa, Art 8?] and OECT 10 205 [Ḥursagkalamma, Art I 30?]; see note d).

g) The word-final long vowel (\**ḥiṣy* > *ḥešī*) is not marked in cuneiform (always written *ḥi-iṣ* [unless graphically shortened to *ḥi*] as opposed to expected \**ḥi-ṣi* or \**ḥi-ṣi-i*, e.g., BM 41161: 1 [presumably Babylon, SE 92; HACKL 2013a] and CT 49 156: 13 [Raḥimesu archive, SE 218]).

h) The value ‘one tenth of a shekel’ entered in the dictionaries (CAD Ḥ *ḥallūru* 47f. and AHw. *ḥallūru(m)* 313) and repeated throughout the literature is to be corrected to a 40 : 1 ratio on the basis of Aramaic evidence from Egypt (POWELL 1987–1990, 511b).

i) The syllabic spellings *ra-ba-ḥa* in YOS 20 35: 16. 18 (Uruk, SE 71; BEAULIEU 1989, 62) and *ra-bu-ḥu* in BM 41582: 8 (Babylon, SE 116; HACKL 2013a) seem to indicate that the original word-final consonant cluster is broken up by indistinct anaptyctic vowels which had not yet turned into a

full vowel at the time these two records were drafted (late 3<sup>rd</sup> and early 2<sup>nd</sup> centuries BCE). Based on this observation, the word can be reconstructed as *rab<sup>o</sup>* < \**rab<sup>o</sup>* (pace HACKL 2013a and CAD R 7 *rabaha* [following BEAULIEU 1989, 66] which simply reproduces the writing in YOS 20 35: 16. 18, including the purely orthographic short final vowel). This incidentally accords well with Mayer's suggestion of a Canaanite or even Phoenician origin (MAYER 1988, 70<sup>1</sup>; note Phoenician \**rab<sup>o</sup>* 'one fourth' [FRIEDRICH/RÖLLIG <sup>3</sup>1999, 176 § 246]). An Aramaic origin, on the other hand, can be ruled out on account of the *qutl* and *qatil* nominal patterns of fractions in Aramaic (Beyer 1984, 460f.; note Aramaic \**rub<sup>o</sup>* > *rob<sup>o</sup>* > *roba<sup>o</sup>* 'one fourth'), unless, of course, we are dealing here with an otherwise unattested by-form (MAYER 1988, 70<sup>1</sup>).

j) Attested definitely as a weight only in VS 5 103 (Sippar, Dar I 28).

\*) My work on this topic has been supported by a Fellowship for Postdoctoral Researchers from the Alexander von Humboldt Foundation in Bonn, Germany. Unpublished texts from the British Museum are cited with the kind permission of the Trustees of the British Museum. I am indebted to C. B. F. Walker for bringing BM 109972 to my attention. Abbreviations are those of the *Archiv für Orientforschung* 48/49 (2001/2002), 311–505. Note furthermore: Art = Artaxerxes; Dar = Darius; Phi = Philipp (III Arrhidaios); SE = Seleucid Era; Xer = Xerxes.

<sup>1</sup> It is therefore not surprising that there is just a single record – Jursa 2002, no. 8 (Esangila archive, Phi 2) – giving both the weight and number of the silver coins paid out. Its first line reads: *1/3 ma.na kù.babbar ki.lá io 'is-ta-ter'-ra<sup>mes</sup>* '1/3 mina of silver, the weight of ten staters (i.e., tetradrachms)'.

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