

33) On the etymology of shekel fractions in the Hellenistic period* – In 1973 A.L. Oppenheim¹ called attention to a hitherto unknown subdivision of the shekel (aram. *mā'āh*, written <ma(-ḥat)> on which see below) in a group of administrative texts from Late Hellenistic Babylon (notes of income and expenditure). This text group is now commonly referred to as the Rahimesu archive.² He concluded that at the time these texts were drafted two systems of subdividing the shekel seem to have been operating: “an older one, and a new one, using from one to five m. [= *mā'āh*] in combination with [the fraction] ½.”³ A few years later W. R. Mayer⁴ identified two additional subdivisions of the shekel (*hi* “one half of a *mā'āh*”

* This note was written under the auspices of the NFN Project on ‘*The Language of Power I: Official Epistolography in Babylonia in the First Millennium BC*’ funded by the Fonds zur Förderung der Wissenschaftlichen Forschung (Austria) and directed by M. Jursa at the University of Vienna. Unpublished texts from the British Museum are cited with the kind permission of the Trustees of the British Museum. I am indebted to M. Jursa for commenting on this note and providing me with photographs of BM 33009 (= CT 49, 156) and 41780 (= K. Kessler, “Hellenistische Tempelverwaltungstexte. Eine Nachlese zu CT 49,” in: J. Marzahn and H. Neumann (eds.), *Assyriologica et Semitica. Festschrift für Joachim Oelsner* (...). AOAT 252 (Münster 2000), 213-241, no. 10, henceforth Kessler 2000, no. 10); to H.D. Baker for improving my English. She should, however, not be held accountable for the remaining stylistic shortcomings. Additional abbreviations are: McEwan, *Iraq 43* = G.J.P. McEwan, “Arsacid Temple Records,” *Iraq 43* (1981), 131-143; SE = Seleucid Era.

1 A.L. Oppenheim, “A New Subdivision of the Shekel in the Arsacid Period,” *Or.* 42 (1973), 324-327 (henceforth Oppenheim, *Or.* 42).

2 See R.J. van der Spek, “Cuneiform Documents on Parthian History: the Rahimesu Archive. Materials for the Study of the Standard of Living,” in: J. Wiesehöfer (ed.), *Das Partherreich und seine Zeugnisse* (Stuttgart 1998), 205-258 (henceforth van der Spek, *Rahimesu*) and in general M. Jursa, *Neo-Babylonian Legal and Administrative Documents. Typology, Contents and Archives*. GMTR 1 (Münster 2005), 75-76.

3 See the discussion in Oppenheim, *Or.* 42, 325 and 327. Also note that for example in CT 49, 156 the scribe employs <4-tú> (in line 11) alongside <3 ma> (in line 13) to designate one fourth of a shekel.

4 W.R. Mayer, “Zur Unterteilung des Sekels im spätzeitlichen Babylonien,” *Or.* 54 (1985), 203-215 (henceforth Mayer, *Or.* 54). Also see W.R. Mayer, “Ergänzendes zur Unterteilung des Sekels im spätzeitlichen Babylonien,” *Or.* 57. (1988), 70-75 (henceforth Mayer, *Or.* 57).

and *ra* “one fourth of a *mā'āh*”) which occur in the very same text group but had previously been overlooked by Oppenheim. Based on his findings Mayer was able to account for the arithmetical discrepancies Oppenheim had encountered when calculating the accounts recorded in the Rahimesu notes CT 49, 154, 156 and 158 (see Mayer, *Or.* 54, 207-209).

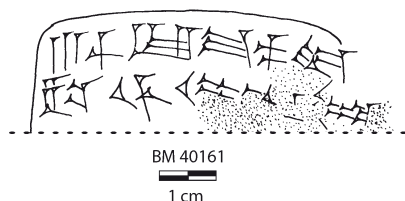
In addition to metrology, both scholars also studied the etymology of the terms denoting the various shekel fractions. On the basis of unpublished epigraphic material⁵ the present note aims to re-evaluate the lexicographical suggestions given by Mayer and to provide new information on the correct rendering of the full forms of *hi* and *ra* (Mayer, *Or.* 54, *passim*). Note that *mā'āh* “one twelfth of a shekel” is excluded from the following discussion, as the Aramaic origin proposed in Oppenheim, *Or.* 42, 327 is generally accepted.

hi Mayer proposed to interpret *hi* as the short form of West Semitic *hi/eṣī* “one half”. In addition to the semantic meaning which corresponds well to the metrological value of the *hi*, Mayer based his suggestion on Nabatean coins which give *hṣ ksp* to designate a half *m'h ksp* “one silver obolus” (Mayer, *Or.* 54, 207). In view of *plene* writings in AB 245 (McEwan, *Iraq* 43, 139, line 4), BM 33009 (CT 49, 156, line 13) and 41780 (Kessler 2000, no. 10, line 5), however, R.J. van der Spek, the editor of the Rahimesu archive, did not endorse Mayer’s interpretation. According to him, the full form of *hi* is to be read <*hi-tú*(UD)> in the instances cited above (van der Spek, *Rahimesu*, 211; on the reading <*hi-tu*₄> see below). Van der Spek, however, did not take into account that the GIŠ sign (two horizontals followed by a single vertical) often resembles the UD sign (two obliques followed by a single vertical), especially when written cursively (a common feature of cuneiform texts from the Hellenistic period). If we thus assume that the sign is rather GIŠ (with the phonological value <*iṣ*>) than UD (<*tú*>), we might argue for the reading <*hi-iṣ*>.⁶ In fact, collation of the BM tablets (CT 49, 156 and Kessler 2000, no. 10; on McEwan, *Iraq* 43, 139 (AB 245) see note 5 shows that in each case the rendering of the sign following the *hi* clearly differs from the numerous attestations of the UD sign throughout the texts. In addition, there is yet another text supporting the reading <*hi-iṣ*>. Unlike CT 49, 156 and Kessler 2000, no. 10, the unpublished receipt BM 40161 (81-3-24, 26; SE 92, no placename) features comparatively large signs and a barely slanting ductus. This is indicative of a non-professional scribe who apparently completed

⁵ Both BM 40161 and 41582 will be edited in full in my forthcoming dissertation on Late Achaemenid and Hellenistic archival texts from northern Babylonia.

⁶ This has already been suggested by Mayer for AB 245 (McEwan, *Iraq* 43, 139). However, the absence of GIŠ signs in this text renders comparison impossible (see Mayer, *Or.* 54, 2056). In CT 49, 156 (line 13) Mayer apparently interpreted the sign following the *hi* as an incomplete erasure (*ibid.* 207); Kessler 2000, no. 10 was not available to him.

his scribal education at a relatively low level (note that the scribe is a party to the contract which is also indicated by the phrase *ina qātišu* “in his own hand” at the reverse). Hence, the ductus allows for a clear differentiation between the GIŠ (two horizontals) and UD (two obliques) signs. The first two lines of the obverse read:



3 ½ gín *ma-ḫat ḫi-iš*(GIŠ)

kù.babbar(UD) *ši-^rmi zú.lum.ma^r*

(...)

Van der Spek not only based his rendering of the half *mā'āh* (viz. <*ḫi-tú*> rather than <*ḫi-iš*>) on paleographic grounds but also on what he interpreted as an alternative spelling of */*hit(u)*/. According to him (van der Spek, *Rahimesu*, 211), the sequence <*ma ḫi tu₄*> attested in two very similar texts from Late Hellenistic Uruk (MLC 2193 (= YOS 20, 100): 4 and TCL 13, 228: 3; both are notations of disbursement of money paid as wages(?) to a group of individuals, see L.T. Doty, *Cuneiform Archives from Hellenistic Uruk* (PhD thesis, Yale University 1977), 116-118) is to be read *<*ma ḫi-tu₄*> (viz. “one and a half *mā'āh*”). However, there is no reason to assume that two different units of weight are employed here (the figures in the following lines are given without units of weight, implying the use of a single unit only; neither text gives a balance). In addition to the evidence presented above, one is thus inclined to interpret the sequence <*ma ḫi tu₄*> as an alternative spelling of <*ma-ḫat*> without a CVC sign indifferent to the vowel.

ra In the absence of a full form of the second subdivision of the shekel Mayer tentatively suggested a derivative of the West Semitic root **rb'* “one fourth” (not only because of the first consonant being *r* (<*ra*>), but also on metrological grounds: the *ra* amounts to a fourth of a *mā'āh*; see Mayer, *Or.* 54, 212).

Mayer’s assumption is now confirmed by an unpublished text in the holdings of the British Museum. In line 8 the promissory note BM 41582 (81-6-25, 196; SE 116, Babylon) reads:

⁸ (...) 1 gín 2-ta *ma-ḫat u ra-bu-^rḫu^r* kù.babbar (...)

The cuneiform text gives the expected orthographic realization of West Semitic /*r*/ in word final position: <*ḫ*> (also <*'*> or Ø; see W. von Soden, “Aramäische Wörter in neuassyrischen und neu- und spätbabylonischen Texten. Ein Vorbericht. III,” *Or.* 46 (1977),

183-197 and R. Zadok, *On West Semites in Babylonia* (Jerusalem 1977), 247). The spelling suggests a form /rabū'/.

Note that the attestations of the shekel fractions presented here are considerably older (SE 92 and 116 respectively) than those collected by Mayer, *Or.* 54, 214 (all of which date to the Arsacid period; TBER 85 (MNB 1891) and Mayer, *Or.* 54, 206 (BM 33900) give no date).

Johannes HACKL <johannes.hackl@univie.ac.at>
Inst. für Orientalistik, Univ. Wien
Spitalg. 2, Hof 4, 1090 WIEN (Autriche)