David I. Owen

A New Silver Balanced Merchant Account from Umma

For Miguel Civil on his entry into his ninth decade, in friendship and with admiration

Silver balanced merchant accounts were the subject of pioneering studies by John B. Curtis and William W. Hallo (1959) and later by Daniel Snell (1982). Subsequent publications by Hans Neuman (1987), D'Agostino and Pomponio (2004), Claus Wilcke (2007), Steven J. Garfinkle (2012), D'Agostino and Pomponio (2014), among others, and the recent comprehensive study on the use of silver at Umma by Xiaoli Ouyang (2013), have each added significant new data to, and interpretations of, the use of silver in the economy of the Third Dynasty of Ur. Furthermore, the role of entrepreneurs and merchants, who utilized silver as a means of exchange during the Third Dynasty of Ur, has been clarified substantially by both Garfinkle and Ouyang. The addition below to the small corpus of silver balanced merchant accounts adds to the data¹ for those merchants and other officials involved with the use of silver in the trade of aromatics, "luxury" goods, metals and stones, agricultural products, etc. and follows the conclusions offered by Snell on the values of specific commodities now brought up-to-date by Ouyang.

Unfortunately, the first (I) and last columns (VI) of the new text are missing and, as a result, both the indication of the type of account, presumably a balanced account ($ni\hat{g}_2$ - kas_7 -aka), and its colophon and date are lost. However, its format and contents indicate clearly that it is a silver balanced merchant account with an Umma provenance. Unfortunately, as with virtually all of the published Umma silver balanced merchant accounts, the tablet lacks an excavated context. Nevertheless, in spite of recent assertions to the contrary, texts without archaeological context continue to contribute much to our understanding of ancient Mesopotamian culture and particularly to our understanding and reconstruction of its economic system(s).

¹ See also BM 110126 recently published in al-Rawi, Gorello and Notizia, Nisaba 26 (2013), no. 2 and the study by D'Agostino and Pomponio 2014.

² Hanson 2008, passim.

³ I have addressed repeatedly (Owen 2013: 335–56 and in my Prefaces to CUSAS volumes) the baseless assertions that texts without excavated context have no value and should not be published. Up until the 1970 declaration by UNESCO, the utilization of unprovenanced texts and artifacts was widely accepted as an integral component of all research and publication and provided much, if not most, of our knowledge of the history, literature, and culture of

Only Lugal-niĝlagare, mentioned in this fragmentary account, is attested as a merchant in the published Umma archival sources and especially in the silver balanced merchant accounts. Given the fact that the aromatics and the other commodities mentioned in this text are usually associated with merchant accounts it is likely that some of the other individuals might be identified with otherwise well-known merchants. In any case, all of the individuals mentioned in the text are known also from silver merchant accounts discussed by Snell (1982), Neumann (1987), and Ouyang (2013).

Merchant's price equivalency, balanced account

125 × 65 mm Umma provenance date lost

Col. I. Lost⁴

II.

- 1. [n ...]
- 2. $[ku_3-bi n] gin_2$
- 3. [5 ^{ĝeš}p]eš₃ še-er-gu⁵
- 4. [ku₃-b]i igi-6-ĝal₂ 6 še
- 5. [kišib₃] lu₂-^dnin-šubur⁶

Mesopotamia. It continues to do so today (note in particular the seminal contributions via the CUSAS series) in spite of the efforts of a vocal and influential minority particularly, but not exclusively, in the United States, to suppress or otherwise ignore or impede such publication and research.

- 4 This tablet, now in a European private collection, was acquired along with notes by the late Wilfred Lambert. It is published with the kind permission of its current owner. According to Lambert's notes the tablet likely contained three columns on each side. The numbering of the columns follows his observations. This publication is based entirely on a series of detailed photos provided by the owner and not on an examination of the original tablet. Its format can be compared with the three-column texts copied in Snell 1982: plates xv-xx, nos. 9–11.
- 5 "A string of figs." Lu-Nin-Šubur, who apparently deals with fruits, dealt with the same item in Grégoire 1996: Ashm. 1924–0667 rev. ii 7–8 (AS 5/xi/-). Restored amount based on value of 4 ^{ĝeš}**pleš**₃ **še-er-gu ku**₃-**bi igi-4-ĝal**₂ 3 **še**, ibid., Ash. 1924–0667 rev. ii 7. See also the following note and Ouyang 2013, pp. 134–135 and 283.
- **6** The name Lu-Nin-Šubur is relatively common at Umma. A single, questionably restored reference suggests that he was a merchant in AS 8/vii/- (AnOr 1: 134:5 [= BDTNS 007702 = CDLI P101125). Another lone reference indicates a man by that name is the son of Lugal-niĝlagare (AnOr 7: 374 ii' 10') who is likely the same person as the merchant by that name (see note 7). See also Snell 1982, p. 249 s.v. But the evidence is hardly conclusive.

- 6. [1.2.5].4 sila₃ ^u₂gamun₂⁷
- 7. $[ku_3-b]i \ 3 \frac{1}{3} gin_2 \ 12 \ / še$
- 8. [kišib₃ lugal-niĝ₂-lagar-e⁸
- 9. $[n^{\hat{g}e\check{s}}]u_3$ -suh₅ $\hat{g}e\check{s}$ mi-ri₂-/za⁹
- 10. $[ku_3-b]i igi-4-\hat{g}al_2$
- 11. $[ki\check{s}ib_3] lu_2 ur_4 \check{s}a_3 ga^{10}$
- 12. $[n g]in_2 šim-gan_2^{11}$
- 13. [ku₃-b]i BLANK
- 14. [kišib₃] ur-^dnun-gal¹²
- 15. [n ma]-na šim(KWU-752)¹³
- 7 "Cumin," for which see Steinkeller and Postgate 1992: 77 and Ouyang 2013: 133 sub 5.3.H. It was understood formerly only as "(a resin)," Snell 1982: 237 s. v., and "(a plant)," Owen 2013: 415 s. v. Lugal-niĝlagare deals with this commodity also in TCL 5 5680 rev. iii 16–17 (ŠS 2/-/-). On the basis of Sigrist and Ozaki 2009, 2664: 1–2 (**0.2.4.** "gamun₂ ku₃-bi 6 ½ gin₂), 1 sila₃ of "gamun₂ = ~2.5 še. The restoration here is thus approximate.
- **8** Lugal-niĝlagare is attested as a merchant from Š 46/i/- (NYPL 335: 4) to ŠS 2/-/- (MVN 16: 685 5). He is the son of Nabasa (Sigrist and Ozaki 2009, 1995: 8, n. d.) and has a son Lu-duga (Ozaki and Sigrist 2006, 710:5, ŠS 2/v/4) who is also a gendarme of the governor according to his seal: $\mathbf{lu_2-du_{10}-ga}$ / $\mathbf{aga_3-us_2-ensi_2}$ / $\mathbf{dumu\ lugal-ni\hat{g}_2-lagar-e}$ (UTI 4: 2823 seal, ŠS 2/vi/-). Note that in BIN 5: 77, 5–6, he dispenses $\mathbf{2/3}\ \mathbf{sila_3}\ \mathbf{u_3gamun_2}$. See also Snell 1982, p. 246 s.v.
- 9 "Fir for (boat punting) poles," for which see Snell 1982, p. 174 s. v. and "pine for (boat punting) poles," Owen 2013: 395 and 416–17 s. v. Heimpel 2011: 103–09, §§ 3.2–3.2.3 translates \$\frac{\text{\text{\$\text{\$e}\$s}}}{\text{\$\text{\$u}_3\$-suh_5}} \frac{\text{\$\text{\$e}\$s}}{\text{\$\text{\$mi}\$-ri_2-za}} as "plank pines." See also Ouyang 2013: 288–290. The values for \$\frac{\text{\$\text{\$\text{\$e}\$s}}}{\text{\$\text{\$u}_3\$-suh_5}} \frac{\text{\$\text{\$e}\$s}}{\text{\$\text{\$mi}\$-ri_2-za}} presumably vary according to their respective lengths; e.g., Ozaki and Sigrist 2006, 1877 obv. ii 8 and 14 and reflect quantities between 30 and 60 poles/planks per shekel.

 10 The name, Lu-uršaga, is attested frequently from AS 2/-/- (Schneider, OrSP 47–49 [1930] 324 ii 4) to IS 3/-/- (MVN 20: 70, 2), the former where he deals in reeds, the latter where he deals in textiles, perhaps different individuals. Lu-uršaga dub-sar dumu Lugal-he2-\$\text{\$\text{\$\text{\$\text{\$a}\$}\$} \text{\$\text{\$a}\$} \text{\$\text{\$\text{\$a}\$} \text{\$\text{\$a}\$} \text{\$\text{\$\text{\$a}\$} \text{\$\text{\$a}\$} \text{\$\text{\$a}\$} \text{\$\text{\$a}\$
- 11 See Brunke and Sallaberger 2010, p. 50 s. v., "a bad smelling aromatic ("schlechter Duft")," contra Snell 1982: 232 s.v., "(a metal)." No value is assigned here so it is not possible to restore a quantity. Ordinarily the value is 1 sila₃ = 5 še according to Snell 1982, plate 17 10 obv. ii 20–21, 0.0.1.2 sila₃ šim-gan₂ ku₃-bi 1 gin₂. In all but one references to šim-gan₂ the quantities are always in sila₃, the only exception being Snell 1982, plate 17 10 obv. ii 32–33, 10 gin₂ šim-gan₂ ku₃-bi 3 še.
- **12** See Snell 1982: 253 s.v. Ur-Nungal was probably the scribe (Ouyang 2013: 69) and son of the archivist, Ur-Šara. (Ouyang 2013: 90 n. 223).
- 13 The price of šim appears to vary perhaps based on its quality. Cf. Snell 1991: 123 obv. iii 13, 2 ma-na šim ku_3 -bi $\frac{2}{3}$ gin₂ and 123 obv. v 5–6, 2 $\frac{2}{3}$ ma-na šim ku_3 -bi $\frac{5}{6}$ gin₂ 10 še.

- 16. $[ku_3-b]i \frac{1}{3} gin_2 12 še$
- 17. [n si]la₃ še-li¹⁴
- 18. [ku₃-b]i igi-6-ĝal₂ 6 še
- 19. [n ma]-na gi¹⁵
- 20. [ku₃-b]i 10-la₂-1 še
- 21. [kišib₃? x]-bi-kam¹⁶
- 22. [1 ½ ma]-na eren¹⁷
- 23. $[ku_3-bi]$ 22 ½ še
- 24. $[kišib_3 m]aš_2-šu-gid_2-gid_2^{18}$
- 25. BLANK SPACE

Lower Edge

26. [n] $gin_2 igi-6-gal_2 22 \frac{1}{2}$ še

¹⁴ "Juniper berry / pine seeds ("aromatic"), Owen, 2013: 410 s. v. and Brunke and Sallaberger 2010: 51 s. v. Classed as a resin in Ouyang 2013: 132 sub 5.3.G. The price of **šim** appears to vary perhaps based on its quality. E.g. Snell 1982: plate 15 09 obv. ii 5–6, **1 sila₃ še-li ku₃-bi ½ gin₂** and 15 09 obv. iii 2–3, **6 ½ sila₃ še-li ku₃-bi 3 gin₂ igi-4-ĝal₂**, Snell and Lager 1991: 123 rev. i 23–24, **3 ½ sila₃ še-li ku₃-bi ½ gín 20 še**.

¹⁵ According to Brunke and Sallaberger 2010: 50 s.v., **gi** appears to be the equivalent of **gi-i**₃ and **gi-du**₁₀-**ga**, "sweet (smelling?) reed." See also Ouyang 2013: 295–97. The value of **gi** appears to fluctuate, perhaps by quality. See, e.g. Snell and Lager 1991: 123 rev. ii 11–12, **7 mana gi ku**₃-bi ¹/₃ **gin**₂ **3 še**, Sigrist 1984: 144 7–8, **5 ma-na gi ku**₃-bi **igi-6-ĝal**₂, Sigrist and Ozaki 2009: 200 7–8, **1 ma-na gi ku**₃-bi **6 še**, etc.

¹⁶ I am unable to restore any personal name associated with the balanced accounts. The only personal name known to me that ends with **-bi-kam** is **šeš-kal-la dumu uru²-ki-bi-kam** in the fragmentary Ĝirsu text, TCTI 2 2816 obv. v 4. But the break in our tablet appears to preclude this restoration.

^{17 &}quot;Cedar." See Brunke and Sallaberger 2010: 49 s. v. for a discussion of the sign form and its meaning. It appears here without a **ĝeš** determinative. The value of **eren** varies perhaps by quality; e.g., **1 ma-na eren ku₃-bi 18 še** is found in Snell and Lager 1991: 123 obv. ii 7–8, obv. iv 8–9, but **18 ma-na eren ku₃-bi 1 ²/3 gin₂ 24 še**, and rev. i 3–4, **15 ma-na eren ku₃-bi 1 ²/3 gin₂**.

¹⁸ The only "diviner" known by name from Umma is La-ma- $\check{s}a$ (MCS 8: p. 96 BM 111750:2, ŠS 3/-/-). It is likely he is the "diviner" involved here. Note that in the BM text, he receives 5 minas of wool and is associated with Lu-kala in a text sealed by A'akala, governor of Umma. See Snell 1982: 260 s.v. and Ouyang 2013: 133 n. 574 where she points out that "some of the resin withdrawals went to the offering for the diviner." This would be only the third such reference.

III.

- 1. ERASED SPACE
- 2. $3 \frac{1}{2} gin_2 16 še ku_3 / ni\hat{g}_2-sa_{10}-ma du_6-ku_3-ga^{19}$
- 3. kišib₃ lugal-niĝ₂-lagar-e
- 4. $3 \frac{1}{3}$ ma-na šu-/ur₂-me²⁰
- 5. ku_3 -bi $\frac{1}{3}$ gin₂
- 6. $3 \frac{1}{3}$ ma-na $ad_2^{?21}$
- 7. ku_3 -bi $\frac{1}{3}$ gin₂
- 8. $3 \frac{1}{3}$ ma-na gi
- 9. ku₃-bi igi-6-ĝal₂
- 10. $3 \frac{1}{3}$ ma-na šim²²
- 11. ku_3 -bi 1 $\frac{1}{3}$ gin₂
- 12. $3 \frac{1}{3} \text{ sila}_3 \text{ še-li}^{23}$
- 13. ku_3 -bi $\frac{2}{3}$ gin₂
- 14. $0.0.1.3 \frac{1}{3} \text{ sila}_3 \frac{u}{2} \text{gamun}_2$
- 15. ku_3 -bi $\frac{1}{2}$ gin₂5 še
- 16. 0.0.2. $esir_2-e_2-a^{24}$
- 17. ku₃-bi 24 še
- 18. DOUBLE LINE
- 19. niĝ₂-dab₅ ĝanun-lugal²⁵
- 19 "Silver for acquired merchandise," ((erworbenes) "Kaufgut," Wilcke 2007: 267) for the "cultic place (of Šara)" (Snell 1982: 89–90). Note that Lugal-niĝlagare certified transactions for various goods belonging to the "cultic place" in the large, Umma account, Grégoire 1996, Ashm. 1924–0667 rev. ii: 6 (AS 5/xi/-): niĝ₂-dab₅ du₆-ku₃-ga kišib₃ lugal-niĝ₂-lagar-e. In the following year, AS 6/-/- (TCS 361: 7), Lugal-niĝlagare was again involved with certifying goods for the "cultic place," and once more two years later in ŠS 1/vii/- (Englund 1992: 99 no. 1 15–16) he again certified goods for the "cultic place." Sallaberger 1993: 253–54, suggests that the du₆-ku₃-ga was a cultic place dedicated to Enlil in Nippur. See also Ouyang 2013: 126 n. 473.
- 20 "Cypress," for which see Brunke and Sallaberger 2010: 49 s. v.
- 21 "Myrtle," for which see Brunke and Sallaberger 2010: 50 s. v.
- 22 "Aromatic substance." The sign is clearly differentiated from KWU-759. See note 35 below.



- 23 "Juniper berry or pine nut." See Brunke and Sallaberger 2010: 51 s. v.
- **24** "Wet bitumen," for which see Stol 2012, *passim* and Ouyang 2013: 130 n. 526–132 referring to Heimpel 2009 as "bitumen of Ea" and not "house bitumen."
- 25 The ĝanun-lugal is otherwise unattested but cf. **ĝa₂-nun e₂-lugal** (BPOA 1: 0652 4, etc.), **ĝa₂-nun gaba e₂-lugal** (BPOA 6: 4 2, etc.), and **ĝa₂-nun kar-lugal** (UTI 6: 3821 5) that are well attested. The sign read **ĝanun** here is not entirely clear but the reading is likely as is its equation with the **ĝa₂-nun e₂-lugal**.



Lower Edge

20. 7 gin₂ 14 še

Rev. IV

- 1. 101 gu₂ esir₂-had₂²⁶
- 2. ku₃-bi 10 gin₂ 18 še
- 3. kišib₃ lugal-e-ba-an-sa₆²⁷
- 4. 17 ma-na 2 ½ gin₂ /uruda
- 5. ku_3 -bi 12 gin_2
- 6. $\frac{5}{6}$ ma-na 5 gin₂ su-/gan²⁸
- 7. ku_3 -bi 1 gin_2 -la₂-15 še
- 8. $ki\check{s}ib_3 lu_2$ -den- lil_2 - la_2^{29}
- 9. 0.0.2. 2 sila₃ *al-la-ha-ru*³⁰
- 10. ku_3 -bi 1 gin_2
- 11. kišib₃ a-kal-la ašgab³¹
- 12. 4 LUM-ba³²
- 13. ku_3 -bi $\frac{1}{3}$ gin₂
- 14. 5 gin₂ ^u₂za-gul³³
- 15. ku_3 -bi 5 gin₂
- 16. kišib₃ dšara₂-kam³⁴
- 18. 1 gu₂ im-babbar₂³⁵

²⁶ "Dry bitumen." See M. Stol 2012, *passim*, and Ouyang 2013: 130–32 sub 5.3.F. Lugal-ebansa (scribe, son of Ur-*Ištaran*) deals with bitumen in BPOA 1: 812 4 (AS 9/-/-), Fish 1939: 38 6 (AS 9/-/-), and YOS 18: 123 rev. iii 24–28 (AS 9/-/-).

²⁷ See Snell 1982: 246 s. v. Lugal-ebansa also delivers barley in Santag 6: 119 15 (AS 3/x/-); discussed in Ouyang 2013: 111–16.

²⁸ For **su-gan**, "(a metal)," see Snell 1982: 232 s.v and "expensive additive in metallurgy," Ouyang 2013: 127–28, 253–55.

²⁹ See Neuman 1987: 115–18. He is possibly "a top administrator in the metal bureau in Umma," Ouyang 2013: 127. Lu-Enlila generally receives metals and metal supplies from the Umma merchants.

³⁰ "Mineral tanning agent," Ouyang 2013: 138, Kleinerman and Owen 2009: 15 s.v. *al-lu-ha-ru-um* and Owen 2013: 361 s.v.

³¹ Akala, the leatherworker, is attested frequently in the Umma archives from Š 46/-/- (AAS: 72:2) to IS 3/xi/- (DoCuEPHE: 24:5). See Snell 1982: 242 s. v. and Ouyang 2013: 89, 114, 134, and 138.

³² Possibly to be read sig₄-ba, "turtle shell?," for which see Snell 1982: 231 s.v.

³³ **za-gul** when preceded by $\mathbf{na_4}$ is "carnelian." But here it is preceded by the $\mathbf{u_2}$ -determinative for plants. I know of no parallels.

³⁴ Šara-kam is known also from merchant accounts. See Snell 1982: 251 s. v.

³⁵ For gypsum, see Owen 2013: 385 n, 675, M. Stol 2012: passim, and Snell 1982: 224 s.v.

- 19. ku₃-bi 9 še
- 20. 0.0.1. naĝa-si- e_3 ³⁶
- 21. ku_3 -bi 1 še
- 22. kišib₃ lu₂-kal-la³⁷
- 23. $6^{2/3}$ ma-na šim(KWU-752)
- 24. ku_3 -bi $\frac{2}{3}$ gin₂ [n[?] še[?]]
- 25. 5 ma-na *za-ba-[lum]*³⁸
- 26. ku_3 -bi $\frac{1}{2}$ [gin₂]
- 27. 5 ma-n[a ...]
- 28. $k[u_3$ -bi n]

(rest of col. IV lost)

Col. V

- 1. $0.1^{?}.0.^{39}$ bulug_x (KWU-759 = ŠIM×UH₃)⁴⁰
- 2. $[ku_3-bi] \frac{1}{3} gin_2$
- 3. [n ma]-na ni- gi_4 - $/tum^{41}$
- 4. [ku₃-b]i igi-6-ĝal₂ še
- 5. [6 ma]-na šim-IM⁴²
- 6. ku₃-bi 18 še

³⁹ The reading and interpretation of the numerical sign, presumably written over an erasure, are reasonably certain. However, **bulug**_x is known from only six texts in which the quantities are all in \mathbf{gu}_2 or \mathbf{ma} - \mathbf{na} (Brunke and Sallaberger 2010: 41, MVN 15: 127, Nisaba 15/1: 538 and 899, Santag 6: 119 and 373). Thus the quantity designation is either unique or erroneous.



40 For the reading of KWU-759, as $bulug_x/mulug_x$ see Brunke and Sallaberger 2010: 50 s. v., and Ouyang 2013: 132 sub 5.3.G. The sign is clearly differentiated from the \S IM sign (note 18 above) and the internal UH_3 (earlier misread as GU) is clear.



- 41 See Brunke and Sallaberger 2010: 50 s. v. NI- $\mathbf{gi_4}$ - $\mathbf{ib_2}$. For a value of 6 $^2/_3$ ma-na = 80 še, see Snell 1982: plate 17 10 obv. ii 16.
- **42** For "(a resin)," see Brunke and Sallaberger 2010: 50 s. v., and Snell 1982: 235 s.v. Restored amount based on value of 5 **ma-na** = 20 **še**, Snell 1982: plate 17 10 obv. ii 6.

^{36 &}quot;Sprouted (alkaline plant)," for which see Snell 1982: 231 s. v.

³⁷ Lu-kala may be the same individual as the $\hat{\mathbf{g}iri}_3$ -official in Snell 1982: plate xxiv, no. 13 21 (ŠS 6/-/-). See also Snell 1982: 248 s. v.

^{38 &}quot;Juniper." See Brunke and Sallaberger 2010: 49 s. v.

- 7. [1] ma-na šim-hi⁴³
- 8. $[ku_3-b]i$ 9 še
- 9. $[1 \frac{1}{2} \text{ m}]$ a-na tam_2 -še- lum^{44}
- 10. [ku₃]-bi 18 še
 - 9. [1/3 si]la₃ še-li⁴⁵
- 10. [ku₃]-bi igi-6-ĝal₂ 10-še
- 11. $[5+^{?}]$ sila₃ šim-gan₂⁴⁶
- 12. $[ku_3]$ -bi $\frac{1}{3}$ gin₂ 7 še
- 13. [3[?] s]ila₃ GAM-GAM-ma⁴⁷
- 14. [ku₃]-bi 12 še
- 15. $[5 \frac{1}{3} \text{ s}] ila_3 gu_4-ku-ru^{48}$
- 16. $[ku_3]$ -bi 8 še
- 17. BLANK SPACE
- 18. $[5 \text{ si}]la_3 \text{ šim-hi-a}^{49}$
- 19. $[ku_3-bi] \frac{1}{2} gin_2$
- 20. [n sila₃] im-babbar₂
- 21. $[ku_3$ -bi n] še /[..]-x

(rest of col. V lost)

(col. VI lost)

⁴³ For "(a resin)," and the reading with **hi** and not du_{10} , see Owen 2013: 412 n. 783 and the remarks of Brunke and Sallaberger 2010: 50 s. v. See also Snell 1982: 234 s.v. Restored amount of **šim-hi** is based on the value indicated in Sigrist and Ozaki 2009: 200 obv. 11, **1 ma-na šim-hi** ku₃-bi 10-la₂-1 še.

⁴⁴ Restored amount based on value of 2 ma-na = 12 še, Snell 1982: plate 17 10 obv. ii 5.

⁴⁵ Restored amount based on value of 1 sila₃ = 20 še, Snell 1982: plate 15 09 obv. ii 5.

⁴⁶ Restored amount based on Snell 1982: plate 17 10 obv. ii 20, $0.0.1.2 \text{ sila}_3 \text{ sim-gan}_2 \text{ ku}_3\text{-bi} 1 \text{ gin}_2$, and plate 19 11 obv. ii 11–12, 6 sila₃ sim-gan₂ ku₃-bi ½ gin₂, i.e. 1 sila₃ = 5 še. At this price the restoration should be 5 ½ sila₂.

⁴⁷ For the aromatic, "(terebinth)," see Brunke and Sallaberger 2010: 51 s. v., Owen 2013: 412 n. 780, and Snell 1982: 233–34 s.v and plate 17 10 ii 22–23, **0.0.1.6 sila₃ šim** GAM.GAM**-ma ku₃-bi** ½ **gin₂ 6 še**, for value and basis of estimated quantity.

⁴⁸ For *gukuru*, "(an aromatic product from a tree)," see Brunke and Sallaberger 2010: 51 s. v., and Owen 2013: 412 n. 782. Restored amount based on value of 1 $sila_3 = 1 \frac{1}{2}$ še, Snell and Lager1991: 123 obv. v 22, rev. i 29.

⁴⁹ Restored amount based on value of $1 \text{ sila}_3 = 6 \text{ še}$, Snell and Lager 1991: 123 obv. ii 13. šim-hi-a may be a general designation for "mixed aromatics" or a specific aromatic to be differentiated from šim-hi.

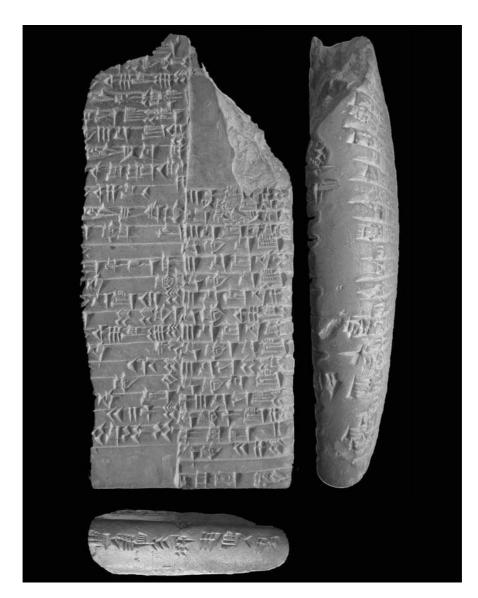


Fig. 1: Obv.



Fig. 2: Rev.

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