

ANATOLIAN GLOSSES IN THE AKKADIAN MEDICAL OMINA

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### 1. Medical texts from Ḫattuša

The medical and pharmaceutical texts from the Hittite archives of Ḫattuša have been ordered according to Laroche's *Catalogue des textes hittites* in 1971 (henceforth abbreviated as CTH). The categorisation is not unproblematic, as texts with similar contents sometimes belong to different CTH numbers, while other groups appear to be less than homogenous.<sup>1</sup> In general, however, a first distinction can be made between medical texts written in Hittite and medical texts written in Akkadian.

The former group includes the tablets catalogued under CTH 461, mostly published and discussed by Burde (1974). These texts, which often feature paragraphs beginning with *mān antuḫša-*, a Hittite version of the Mesopotamian *DIŠ NA*, have been characterised by Burde as vague descriptions of medical and magical procedures, which were per se “wenig geeignet” for “den einfachen ‘Heilpraktiker’”,<sup>2</sup> and probably represented only a small portion of a wider corpus of medical and magical knowledge that was perhaps transmitted orally. Zubieta Lupo (2019, 613-615),

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1. A similar view, especially for the CTH 461, is expressed by Zubieta Lupo (2019, 613).  
2. Burde 1974, 53.

considers them to be Hittite adaptations from the Mesopotamian medical knowledge. This characterisation appears convincing, although the exact relationship between these “Hittite” medical texts and the Mesopotamian traditions, which were certainly known to the Hittites, still remains partly obscure. Typically, no clear indication of reworking emerges after the texts of CTH 461 were written down, nor do they contain any glosses or commentaries. Indeed, these documents may have belonged in an archive of ritual prescriptions rather than in a medical practice.

As for the documents in Akkadian, some of them are catalogued in the CTH 800s, which are reserved for Sumerian and Akkadian “magic”. These includes prescriptions against impotence, witchcraft, eye diseases, pregnancy-related and birth-related conditions, toothache, fever, love spells, the unclear multilingually glossed recipes in KUB 37.1 (CTH 808, perhaps against skin infections). Furthermore, a number of documents pertain to problems caused by demons and ghosts.<sup>3</sup> Based on paleography and on the presence of glosses and comments, it is possible to establish that at least a significant part of these documents were composed in Ḫattuša, also by scribes who were not Akkadian native speakers and did not, therefore, come from Mesopotamia. All in all, after Giusfredi’s 2012 edition of KUB 37.1 and Zubieta Lupo’s 2019 critical discussion of the corpora, it is safe to imagine that the medical practitioner in Ḫattuša was a local individual trained in the Mesopotamian scholarship, and very possibly by Mesopotamian teachers, who was capable of working and reworking documents that ultimately came from the Babylonian tradition.

The documents that feature a local, Hittite paleographic ductus all date to the Imperial Age, so one may very well wonder what the linguistic profile of the medical practitioners in Ḫattuša may have been in such a late phase of the history of Ḫatti. Since the XIII century BCE documents, especially from the age of Ḫattušili III onwards, contain increasing traces of Luwian-Hittite interference, it is no surprise that the glosses added to the medical text KUB 37.1 were both in Luwian and in Hittite, or, more probably, in a sort of mixed code that certainly was not a technical or a “learned” medical jargon, but could have reflected, to some extent, the spoken language of Ḫattuša and the one the healer used when physically purchasing ingredients, cooking drugs, or treating a patient.

The foreign texts listed among the Sumerian and Akkadian compositions (under CTH 800 and following) are, however, not the only Akkadian medical texts present in the Hittite archives. A different set of texts were catalogued under the omina, as CTH 537(.I). These were published and discussed by Wilhelm (1994).<sup>4</sup> In his highly interesting and insightful introduction, Wilhelm (1994, 1) identifies, in the catalogue of tablets KUB 8.36 (that does not belong to CTH 537, but mentions a text that, if ever found, probably would), a line that appears to be a literal translation into Hittite of an Akkadian known incipit formula: *m]ān antuḫšan SU’ALU e[paḫzi* (KUB 8.36 ii 15) = *DIŠ NA su’alu DAB-su* (BAM VI 548 I 17).

In general, the Akkadian medical omina from Ḫattuša have been compared by Wilhelm to the similar medical omina of the Late Bronze Age that come from Syrian and Mesopotamian centres

3. Cf. Zubieta Lupo 2019, 607-608.

4. A couple of documents were added after Wilhelm’s publication. One is KBo 35.15 (DBH 19 no. 15), which is a third testimony of Wilhelm’s text A // E (see edition below). Another one is the very short KBo 7.13 (Fincke 2011), which contains no Anatolian glosses.

such as Emar, Nippur and possibly Assur (the date of the texts from Assur being, according to Heeßel 2010, 170, Middle Assyrian). As is often the case for these collections, the texts from Ḫattuša contain passages that are similar, in a more or less close fashion, to passages that will be found in the so-called SA.GIG canonical series, and therefore qualify as potential precursors of its redaction. Indeed, while none of the texts entirely corresponds to a tablet from the canonical series, palaeographically the Akkadian documents listed under CTH 537 that contain diagnostic signs generally appear to be imperial or late imperial, thus collocating them in a period that roughly coincides with the late XIV and XIII centuries BCE, a couple of centuries before the late Kassite redaction was written down.

An important feature of the Akkadian medical omina is the presence of “glosses” in Anatolian languages (a rather unusual feature they share with the recipes in KUB 37.1). These glosses are concentrated only in some passages of a few of the available manuscripts, and they were not discussed in detail after they were first presented by Wilhelm (1994). We shall now provide an overview, before proceeding with the discussion of the material.

A number of the Anatolian glosses occur in Wilhelm 1994 text A // E // DBH 19 no. 15 (A obv. 2, A obv. 5, A rev. 5' // E 8', A rev. 13'). Wilhelm 1994 text C also contains a few (obv. 4', obv. 6', obv. 7' [x2], rev. 9'), while text D, in its two versions, only contains two (D1 8' // D2 obv. 5' and D2 obv. 14'). The presence of different versions of the same texts (text A // E // DBH 19 no. 15 and texts D1 // D2), which in a few cases shows that the glosses were also copied, demonstrates that a complex manuscript tradition existed. The fact that, as will be argued, a number of glosses were additions and commentaries rather than mere translations of the Akkadian original, furthermore, testifies to a local work of re-elaboration of the medical knowledge, as was already suggested by Giusfredi (2012, supported by van den Hout 2020, 162-163) for the glossed recipes in KUB 37.1.<sup>5</sup> Finally, that the glosses were in a local vernacular (Hittite, Luwian) and were maintained in the later copies of the texts is indicative that these glosses were the results of the work of local healers, who were *not* Mesopotamians themselves, and were trained in Akkadian but were Anatolian native speakers.

In the following sections, we will first of all offer an updated edition of the only document for which new parallels emerged after Wilhelm's edition, limiting ourselves to the sections that are relevant for the present study. Then, we will proceed discussing all the passages from the Ḫattuša medical omina that contain glosses, and propose an improved interpretation of each of them. We will then proceed to discuss the position and the function of the glosses. Finally, as the function of the glosses was strongly connected to the way the documents were used, copied and re-elaborated, in the appendix we will also propose that at least one of the texts discussed was eventually translated into Hittite.

5. It should be added that, while translation-glosses are excluded for most of the cases we will discuss, another important function of gloss wedges in the Mesopotamian tradition was that of marking a variant with respect to the main text that was being copied (Krecher 1966, 435-436). Still, as will be evident, the glosses contained in the Akkadian medical omina from Ḫattuša do not belong to this category either.

## 2. An edition of the parallel sections of Wilhelm 1994 Text A

As no new material emerged for most of the texts we will discuss (texts C and D1-2 of Wilhelm's edition), we will not include a full transliteration for all of them. Before starting to examine the Anatolian glosses in the corpus, we do, however, need provide a new joint transcription and translation of the duplicate sections of Wilhelm 1994 Text A // E and DBH 19 no. 15.

Obv.

StBoT36 A	14	[ <i>p̄a-nu-ū-š̄</i> ] <sup>6</sup> <i>ma-aq-tù-ma i-ta-na-aš-ša-a-aš mu-ur-šú i-ri-ik̄-š̄u-ma p̄a-<sup>r</sup>nu<sup>7</sup>-š̄u x[</i>
DBH19 15	x+1	<i>š̄e-r[<sup>6</sup>š̄u</i>
		hi[s face <sup>2</sup> ] is depressed and he is constantly depressed, his condition will be prolonged and his face [...]
StBoT36 A	15	[ <i>š̄a-a-ar a</i> ] <i>p̄-p̄i-š̄ú š̄a e-mì-it-ti kaš-š̄i<sup>r</sup> š̄a<sup>r</sup> *eras. * GÜB e-mì-im na-kaḫ-ta-&lt;š̄u&gt; x x x [</i>
DBH19 15	2'	<i>š̄a-a-a[r</i>
		the breath of his nose is cold on the right and warm on the left; his temples [...]
StBoT36 A	16	[ <i>š̄a-a-ar a</i> ] <i>p̄-p̄i-š̄ú š̄a š̄u-me-li<sup>r</sup> kaš<sup>r</sup>-[š̄i] š̄a e-mì-it-ti e-em<sup>r</sup> na<sup>r</sup>-ka[<i>p̄-ta</i></i>
DBH19 15	3'	<i>š̄a-a-a[r</i>
		the breath of his nose is cold on the left and warm on the right, [his] temp[les ...]
StBoT36 A	17	[ ] *eras. * x[ ] <i>ma-ḫi-iš</i>
DBH19 15	4'	<i>ar-ka-à-t[<sup>7</sup>u</i>
		on the back <sup>2</sup> he is afflicted.
StBoT36 A	18	[ <i>š̄a</i> ]- <sup>r</sup> <i>a-ar<sup>r</sup> ap-p̄i-š̄ú ki-la-al-lu-u [</i>
DBH19 15	5'	<i>š̄a-a-a[r</i>
		the breath of his nose on both sides [
StBoT36 A	19	[ <i>š̄a</i> ]- <i>a-ar ap-p̄i-š̄ú ki-la-al-ku x[</i>
DBH19 15	6'	<i>š̄a-a-ar [</i>
		the breath of his nose on both sides [

- Thus Wilhelm (1994, 22), but the dupl. KBo 35.15 would point to a different restoration, perhaps *š̄erü-š̄u* “his flesh”, which occurs with *maqātu* in the canonical SA.GIG series (cf. e.g. TDP 86:52 = SA.GIG X obv. 52: UZU.ME-š̄ú ŠUB-tu, “his flesh is collapsed”; see CAD M, 245 for other occurrences).
- If this is related to *ma-ḫi-iš* that occurs in Text A 17, *ar-ka-à-t[<sup>7</sup>u* may perhaps be read here; cf. e.g. TDP 86:3 (= SA.GIG X rev. 3): EGIR-tú ŠIG-iš, “he is afflicted (lit. hit) on the back”.

Rev.

StBot36 E	x+1	[	]x x š[ú <sup>r</sup> ]- <sup>r</sup> bu <sup>r</sup> -ri-šu <sup>r</sup> š [-
		[...] his rectum [...]	
StBot36 E	2'	[	<i>i-na q]áb-li-ti la-pí-it</i> [
		[... during t]he middle watch he is infected [...]	
StBot36 E	3'	[	<i>m]u-ur-šú i-[š]a-rik-ma i-[bal-lu-ú]</i>
		[...] the condition be prolonged but he [will survive]	
StBoT36 E	4'	[	]x-bi- <sup>r</sup> šú-ma <sup>r</sup> [B]A.ÚŠ
StBoT36 A	x+1	[	]x x[
		[...] ... and will die [...]	
StBoT36 E	5'	[	]ZU-UḪ-ḪU- <sup>r</sup> šú <sup>r</sup> <sup>r</sup> Ú <sup>r</sup> .IN.NU.U[Š
StBoT36 A	2'	[ <i>en-šú š]a e-m[i-it-ti</i>	]x x[
		[his] right [eye] ... <i>maštakal</i> -plan[t	
StBoT36 E	6'	[	<i>ú-u]k-kà-am ù a-<sup>r</sup>šá<sup>r</sup>-am-šu-[ta/ tu<sup>r</sup>š</i>
StBoT36 A	3'	[ <i>e-na]- <sup>r</sup>a<sup>r</sup>-šu gal-ta[(-a) o o a-kaš]š a-kà-li-šú ú-uk-kà-am ù a-<sup>r</sup>šá<sup>r</sup>-ab-šu [šá</i>	
		his [eyes] are shocke[d ...] takes away his food (< ‘his eating food?’) and its settling down [...].	
StBoT36 E	7'	[	]x x x x [
StBoT36 A	4'	[ <i>en-šú<sup>r</sup> š]a *eras. e-mi-it*-ti [</i>	] *eras.* <i>pí-šu šú-un-dur</i> BA.ÚŠ
		his right [eye ...] his mouth is crooked. He will die.	
StBoT36 E	8'	[	<i>qá-du-š]i :mi-R[II]-<sup>r</sup>ha-aš<sup>r</sup> š[à-a-mi</i>
		<i>:mi-RI-ḫa-aš</i>	
StBoT36 A	5'	[ <i>e-n]a-<sup>r</sup>a<sup>r</sup>-šu da-mi ma-la-<sup>r</sup>a<sup>r</sup> [BA.Ú]Š : <sup>r</sup>e<sup>r</sup>-na-a-šu qá-du-ti sà-a-mi ma-a-li [BA.Ú]Š?</i>	
		his eyes are filled with blood. He will die. : his [ey]es are filled with red mud (:miRIḫaš). He will die.	
StBoT36 E	9'	[	<i>bur-kà-a-š]u <sup>r</sup>ke<sup>r</sup>-e[r-ra-a-šu</i>
StBoT36 A	6'	[ <i>e-na-a]-*šú* it-ta-na-pal-ka<sub>4</sub>-a</i> BA.ÚŠ : <i>e-na-a-šu bur-kà-a-šu ke-er-ra-a-šu ke[i-</i>	
DBH19 15	3'	<i><sup>r</sup>e<sup>r</sup>-na-<sup>r</sup>a<sup>r</sup>-[šú</i>	
		his eyes keep widening, he will die : his eyes, his knees, his throat [...]	

8. Given *a-<sup>r</sup>šá<sup>r</sup>-am-šu* [...], a form of *ašamšūtu* “dust storm” would be the only possible restoration, but it can be a mistake, because the dupl. KUB 37.193+ (Text A) has *a-<sup>r</sup>šá<sup>r</sup>-ab-šu* “its settling down”, probably the original lectio, referring to the retention of the food in the stomach of the sick person. Cf. TDP 156:10 (= SA.GIG XVII 10): DIŠ *ina taš-rit* GIG-šú KÚM ÚḪ NINDA KAŠ GURUN *ma-da* GU<sub>7</sub> *ina ŠÀ-šú* NU TUŠ DUB-ka, “If at the beginning of his illness he burns with fever, he eats a lot of bread, beer, and fruit (but) it does not settle down in his stomach, he throws it up”.

StBoT36 A	7'	[ <i>mi-i</i> ]t- <i>ḫa-ri-iš</i> * <i>eras</i> .* <i>ik-ka-la-a-šū ul-tu mu-ra-sú it-ta-<sup>r</sup>ab<sup>n</sup>-šū a-na</i> [
DBH19 15	4'	<i>mì-it</i> [ <i>ḫa-ri-iš</i>
		are [eq]ually painful. Since his condition began [...]
StBoT36 A	8'	[ <i>ḫ-n</i> ]a <sup>2</sup> <i>ti-ik ša-me-e</i> BA.ÚŠ' [
DBH19 15	5'	<i>i-n</i> [a
		he will die on a rainy day.

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### 3. Analysis of the Anatolian glosses

Besides some remarks in Wilhelm's (1994) edition, a comprehensive study of the Anatolian glosses in the medical omnia from Boğazköy is currently lacking, and they are also mostly ignored by lexicographers. In this section, we provide a tentative analysis of all these glosses, trying to assess the language to which they belong, whether Hittite or Luwian, their meaning, their role in the text, and their relationship with the Akkadian text.

#### 3.1. *taršiyai*

KUB 37.193+ obv. (Wilhelm 1994 Text A)

2 *i-te-eb*<*-bi*>? \*:\* **tar-šī-ya-i** x<sup>9</sup> [... *pa-tá-a-ar m*]u-ur-šī

“He gets up, (Luw.) **he vomits**? [... slackening] of the disease”.

The gloss *tar-šī-ya-i* is best-explained as a verbal form. Laroche (1959, 94) regarded it as the 2sg. imperative of the verb *tarš(a)i-*, matching Akkadian *i-te-eb*, but he did not provide any meaning.<sup>10</sup> Melchert (1993, 217) accepted the interpretation of the form as a 2sg. imperative, but explained *taršiyai* as a possible Hittitised form (vs. Luwian 2sg.imp. <sup>o</sup>-*iyai*) of the Luwian verb (:)*taršī(ya)-* ‘vomit, belch’, to be distinguished from *tarsi-/taršai-* (meaning unknown). Based on some parallels, Wilhelm (1994, 26-27) emended Akkadian *i-te-eb* to *i-te-eb*<*-bi*>, a 3sg. G present, which makes the explanation of *taršiyai* as a Hittite 2sg. imperative unlikely, while an interpretation as a 3sg. present seems to be more fitting. Sporadic Hittite 3sg. presents ending in <sup>o</sup>-*iyai* do exist (e.g. *ḫuittiyai* and *peššiyai*), but are secondary forms of verbs originally belonging to the *mi*-conjugation,<sup>11</sup> so that *taršiyai* is probably a genuine Luwian verbal form.

9. After *tar-šī-ya-i*, traces before the break are compatible with a *Winkelbaken* or an oblique wedge: it can perhaps be suggested that it was a *Glossenkeil* separating the Anatolian gloss from the following Akkadian text (as in KBo 36.53 rev. 9'; see §3.8), but the inclination of the wedge is slightly different from that of the *Glossenkeile* in the text.

10. Güterbock's (1956, 124) tentative translation “to drive (on a chariot)” is mentioned.

11. See the discussion in Melchert 2005, 454-455.

Three different Luwian verbal stems are currently distinguished: *tarš(a)i(-<sup>ch</sup>)* “cause to dry (?)” (cf. Hitt. *tarš-*),<sup>12</sup> *tarš(-<sup>ch</sup>)* “trample” (vel sim.),<sup>13</sup> and *taršiya(-<sup>ch</sup>)* “vomit, belch”. Formally, the 3sg. present *taršiyai* cannot belong to Luw. *tarš(a)i(-<sup>ch</sup>)* nor to *tarš(-<sup>ch</sup>)*, but should be assigned to *taršiya(-<sup>ch</sup>)*, independently attested by the broken 3pl. preterite *tar-šī-ya[-an-tā]* “they vomited” occurring in KUB 35.107+ iii 7’ (CTH 764.I.A, MS) and to be compared with Hitt. *tarašganīyawant-*.<sup>14</sup>

If this analysis is correct, *taršiyai* does not translate the preceding Akkadian verb (*tebū* “get up, arise”): it may be explained as the description of a further symptom (vomiting) added by the Anatolian scribe, which was not present in the Akkadian text.<sup>15</sup>

### 3.2. *tarpalliš*

KUB 37.193+ obv. (Wilhelm 1994 Text A)

5 *pa-nu-šu iṣ-ša-nu-un-du<sub>4</sub> : tar-pal-līš<sup>6</sup> (x) i-na re-e]š mu-ši la-pí-ī[t ...]-r<sup>7</sup> e<sup>8</sup>-pa ù iṣ-[tu]*

6 U<sub>4</sub>.5<sup>KAM</sup> U<sub>4</sub>.10<sup>KAM</sup> *i-na zu-u[m-ri-šu x x -n]a ma-bi-iṣ zu-ú-ta ī[r-ta-na-aš-ši DINGIR-šū] r<sup>7</sup> e<sup>8</sup>-[i]r<sup>7</sup> šū*  
[*zēni/sabus*]

7 [i-n]a U<sub>4</sub>.3<sup>KAM</sup> [BA.ÚŠ]

“His face keeps spinning; (Luw.-Hitt.) **the substitut[e]**; at the begin[ni]ng of the night he is affected [...] ... and for/in five to ten days on his body he is/will be stricken by [...], he k[ceps getting] sweaty, [his god is angry] with him. By three days [he will die]”.

As noted by Wilhelm (1994, 27), *pānūšu iṣṣanundu ina rēš mūši lapit* has a perfect parallel in TDP 76:53 (= SA.GIG IX 53): DIŠ IGI.MEŠ-šu NIGIN.ME ina SAG GE<sub>6</sub> TAG-it.

Luw. *tarpalla/i-* also occurs as a loanword in Hittite. It means “ritual substitute” and matches Akk. *dinānu* “id.” in the lexical list KBo 1.42 iv 28’ (CTH 303.1, NS),<sup>17</sup> but its role in the entry in KUB 37.193+ obv. 5-7 is not clear. Apparently, *tarpalliš* (or, less likely, *tarpalli*, if LIŠ should be read as *li<sub>12</sub>* here) can hardly be a translation or explanation of something occurring in the Akkadian text, so that it should be probably regarded as an addition to the text by the Anatolian scribe, although its meaning remains quite obscure.<sup>18</sup>

12. See Sasseville 2020, 227-228 for this verb.

13. See Sasseville 2020, 136-137, with references. Forms belonging to this stem are listed by Melchert (1993, 217) under (:)*tarš(ya)-* “vomit, belch”.

14. On this adjective, see HEG T/D, 152; Rieken 1999, 342; Hoffner 2004, 342-344.

15. J.A. Scurlock (pers. comm.) suggests that *taršiyai* could actually match *i-te-eb<-bi>*, because *taršienti* and *taršitta* in KUB 31.71+ ii 2’, 9’ (CTH 584, NS), having horses as the subject, could mean “rear up”. However, as just discussed, the morphology of the form *taršiyai* does not seem compatible with such an analysis, which would more easily work if the verb were *tarš(-<sup>ch</sup>)*.

16. Or *:tar-pal-lī<sub>12</sub>*.

17. See Kümmel 1967, 19-22; Tischler 1981, 21-24; Starke 1990, 233-234; Melchert 1993, 214. On its ultimate base, Luw. *tarp-* “tread, trample”, see Yakubovich 2002, 202-208.

18. One might note that there is limited evidence that the sign BAL had a rare value *ku<sub>1</sub>*, (see Steinkeller 1991, 4 with fn. 4), which would provide a reading *tarkulli[š]*, possibly somehow related to the preceding Akk. *šādu* “whirl, spin” (see the discussion in § 6 below, where Hitt. *tarku[ī-...]* is tentatively equated to Akk. *šudduru* “twitch”). However, such a value is never attested at Boğazköy, where these glosses were

3.3. *miriḫaš* / *mitalḫaš*

KUB 37.193+ rev. (Wilhelm 1994 Text A) // KUB 37.120 (Wilhelm 1994 Text E)

:*mi-RI-ḫa-aš*

A 5' [e-n]a-<sup>r</sup>a'-šū da-mi ma-la-<sup>r</sup>a' [BA.Ú]Š : <sup>r</sup>e'-na-a-šū qá-du-ti sà-a-mi ma-a-li [BA.ÚŠ']

E 8' [... qá-du-ḫi :*mi-R[II]-ḫa-aš* s[à-a-mi

“His eyes are full of blood. He will die : his eyes are full of red mud (Luw.-Hitt.) *miRIḫaš*. [He will die]”.

In KUB 37.193+ (Wilhelm 1994 Text A), the gloss occurs in superscript in smaller script, seemingly as an extratextual notation, while in the duplicate KUB 37.120 (Wilhelm 1994 Text E) it is inserted in the text. Given its position in Text A, the *Glossenkeil*<sup>19</sup> surely had lexical function, marking the Anatolian word.

The extratextual position might indicate that it translates or explains something in the Akkadian text. In Text A, the gloss is written above sà-a-mi “red” and, as per Wilhelm (1994, 30), may refer either to Akk. *qadūtu* “mud” or *qadūtu sāmu* “red mud”. Its occurrence after qá-du-ḫi in Text E may suggest the former possibility, but the fact that it breaks a noun phrase is perhaps a bit odd, so that one might also suggest that Text E was directly copied from A, and the gloss was inserted by the scribe of Text E in the corresponding place on the line, i.e. between *qadūti* and *sāmi*. Indeed, in Text A the *Glossenkeil* marking *miriḫaš* is just above the final *Winkelbaken* of the sign TI of qá-du-ti, so that the gloss could have been easily understood as referring to qá-du-ti and to be added after it, even if it had been intended to refer to the whole phrase *qadūti sāmi* by the scribe of Text A.

The hapax *miriḫaš* is currently only listed in Ünal’s (2007, 449) dictionary and merely explained as “a kind of disease”. Our current knowledge on this word can be summarised in the words of Wilhelm (1994, 30): “Die sprachliche Herkunft der Glosse ist unbekannt; sie findet weder unter den „Glossenkeilwörtern“ hethitischer Texte noch im hethitischen oder luwischen Sprachgut einen Anschluß”. However, we would like to suggest the possibility that the cuneiform sign RI should be read as *tal* here. Were this the case, *mi-tal-ḫa-aš* may be perhaps tentatively analysed as containing Hitt.-Luw. *mit(t)a-* “red”, thus gaining a partial semantic correspondence with Akk. *qadūtu sāmu* “red mud”. Further analysis is a matter of speculation: if one regards *mitalḫa-* as a derivative from *mit(t)a-*, the only comparable form for the suffix is <sup>(G1S)</sup>*patalḫa-* “fetter”, allegedly Luwian in origin, derived from *pata-* “foot” through a suffix that should reflect \*-o-*lb*<sub>2</sub>-o-, i.e. perhaps the same preform of the

added, so that this solution is highly unlikely, if not even impossible. A verbal form *tarpalli[škež]*, “it continually spins”, was suggested by O. Soysal (whom we thank for allowing us to mention this still unpublished restoration), which, according to R. Beal (pers. comm.), could be related to the noun <sup>(S1G)</sup>*tarpala-/tarpali-* (on which see especially Görke 2010, 225-235). However, according to Wilhelm’s reconstruction of the tablet, the space would be too short to restore a verb, and the writing with // in *tar-pal-li[š]* vs. consistent single / in <sup>(S1G)</sup>*tarpala-/tarpali-* and derivatives also makes this restoration problematic.

19. Based on the photo on the Hethitologie Portal Mainz (hethiter.net/: fotarch B0237a – last accessed: 26/02/2022), this *Glossenkeil* also consists of two oblique wedges, as all the other *Glossenkeile* in the text (pace Wilhelm 1994, 30).



Luwian adjectival suffix *-alla/i-* (thus *patalḫa-* would mean \*‘‘pertaining to the foot’’ > ‘‘fetter’’),<sup>20</sup> but with the unexpected retention of the cluster /lh/.<sup>21</sup> Otherwise, one could think of a compound including a form derived from the PIE root \**leb<sub>2</sub>-* ‘‘pour’’ as its second member (cf. Hitt. *lāḫu-* ‘‘pour’’ and related words),<sup>22</sup> so that *mitalḫa-* could mean something like ‘‘red pouring’’, which may be a good match for Akk. *qadūtu sāmu*.<sup>23</sup>

A tablet possibly preserving the Hittite translation of this text, and specifically of this paragraph, can be perhaps identified among the texts listed under CTH 537 (see §7 below), but, unfortunately, the preserved text is not helpful for the analysis of this gloss.

### 3.4. *paptartanzī dankuwaēš*

KUB 37.193+ rev. (Wilhelm 1994 Text A)

13' [ŠÀ<sup>MEŠ</sup>-šū<sup>2</sup> ]p-ḫ[a-na-ar-ri-ku-ma<sup>2</sup> ṣa-al-mu<sup>2</sup> ŠU<sup>2</sup> GIDI]M<sup>2</sup>.MA BA.ÚŠ : *pa-ḫap<sup>2</sup>-tar<sup>2</sup>-ta-an-zi*  
*da-an-ku-wa-eš* [

‘‘[His entrails<sup>2</sup>] are aw[kward (and) black. The hand of the gh]ost. He will die : (Luw.-Hitt.) **The entrails<sup>2</sup> (are) black** [...].’’

The Hittite nom.pl. *dankuwaēš*, from *dankui-* ‘‘black, dark’’, is not problematic, while the preceding word – a Luwian nom.pl. noun with ending *-nzi* – poses several difficulties. The second sign is tentatively regarded as AT by Wilhelm (1994, 32), although he does not exclude AB. Based on the photo, AB seems to be far more likely, because AT is traced in a different way (Fig. 1:a-c), but note that the scribe of KUB 37.193+ occasionally confuses the two signs (cf. *ḫa<sup>2</sup>-a[b]-ka-at*(AB) in obv. 11).



Fig. 1: (a) *pa-ḫap<sup>2</sup>-tar<sup>2</sup>-ta-an-zi* in KUB 37.193+ rev. 13' (photo: hethiter.net/: fotarch B0237a); (b) the sign AB in KUB 37.193+ obv. 10; (c) the sign AT in KUB 37.193+ obv. 10 (photo: hethiter.net/: fotarch Phb09669)

20. Unless Luw. *-alla/i-* should be traced back to \**-é-lo-* (thus Sasseville 2014/2015, 109-110), but see Melchert 2014, 209-210.

21. For a tentative explanation that posits a preform \**pod-lḫ<sub>2</sub>-o-*, see Melchert 2014, 210.

22. See EDHIL, 511-513.

23. Perhaps also cf. Hitt. *iš-ḫar-w]a-an-te-et* IM-*it* ‘‘with blood-red clay’’ in KUB 31.147 ii 37' (CTH 435.3, NS), if correctly restored (see HW<sup>2</sup> E, 123).

The third sign is tentatively read as TAR by Wilhelm (possibly to be read as *ḫaš*),<sup>24</sup> but HAL is not excluded. Both solutions may be plausible, although TAR is perhaps more likely (cf. TAR in rev. 15', Fig. 2:a-b).

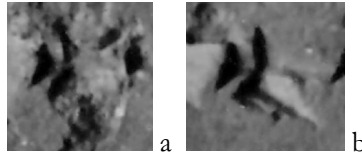


Fig. 2: (a) Alleged TAR in KUB 37.193+ rev. 13'; (b) the sign TAR in KUB 37.193+ rev. 15'

(photo: hethiter.net/: fotarch B0237a)

All in all, *pa-<sup>r</sup>ap-tar<sup>3</sup>-ta-an-zi* seems to be the most likely reading.<sup>25</sup> Luw. *pa-ap-ḫa-* is attested in the small ritual fragment KBo 29.35 iii<sup>2</sup> 10' (CTH 770, NS), but the context is broken and its form and meaning cannot be assessed. Also note the possibly related middle 3sg.pres. *paptittar* (KBo 29.25+ ii 14, 23), whose meaning is however unknown.

As far as the meaning is concerned, Wilhelm (1994, 32) rightly observes that this Luwian word should denote a body part. Given that it is a plural and ŠÀ.MEŠ “entrails, stomach, abdomen” seems to be a good restoration in the Akkadian entry,<sup>26</sup> Luw. *paptarta-* may have the same meaning. Thus, the Anatolian entry would possibly find a parallel in TDP 120:37 (= SA.GIG XIII ii 37): DIŠ ŠÀ.MEŠ-*šu* GE<sub>6</sub>.MEŠ GAM, “if his entrails are black, he will die”.

*Paptarta-* may show the productive Luwian denominative suffix *-ḫ(a)-* (< \*-to-) forming adjectives, often secondarily substantivised.<sup>27</sup> However, several nouns formed with this suffix are neuter (e.g. *ḫappinatta* “wealth”, *šarlatta* “exaltation”, etc.), others are common gender nouns showing *i*-mutation (e.g. *ḫupparta/i-* “pelvis”, *wanatta/i-* “woman”, etc.), while the nom.pl. *paptartanzi* would belong to a common gender non-mutated stem, which possibly makes such derivation quite uncertain.<sup>28</sup> Its immediate base *\*paptar-* may be perhaps explained as a *nomen instrumenti* in *-tar-* (< \*-tro-). As to the ultimate base, note that a verbal stem *pap(a)-* is attested in Hittite, but its meaning is not entirely clear: according to the CHD (P, 96), it would denote “an action performed on fermented dough and resulting in loaves ready for baking; perhaps ‘to subdivide or shape’”. The possible relationship between such a meaning and “entrails” remains a matter of speculation.<sup>29</sup>

24. See Wilhelm 1994, 32-33.

25. While *pa-<sup>r</sup>ap-ḫaš<sup>3</sup>-ta-an-zi* is perhaps less likely both because *ḫaš* is a rare reading of TAR and because the cluster /pḫ/ is not attested in Luwian (see Melchert 1994, 249).

26. However, J.A. Scurlock (pers. comm.) suggests that the entry is rather parallel to TDP 50 iii 5-7 (= SA.GIG V iii 5-7), all starting with DIŠ IGI<sup>II</sup>-*šu* ittene[*prikāma*], “if his eyes are constantly crossed”. This would point to restoring *e-na-a-šu* instead of ŠÀ<sup>MEŠ</sup>-*šu*, but, in our opinion, the two broken signs *ḫp-ḫa* are hardly compatible with the verbal form in the Ntn stem; if the parallel holds, they could perhaps represent a Gtn variant.

27. See Melchert 1999, 368-372; Melchert 2003, 196.

28. One should perhaps mention the possibility that *paptartanzi* is rather a Hittite 3pl. present, possibly matching Akk. *iptanarriku* (if correctly restored), but this seems to be quite unlikely.

29. Semantically, one might perhaps also quote Hitt. *paparriya-* “to suffer from colic”, but the relationship with *paptarta-* is formally difficult, and a connection with *parai-* “blow” seems to be more likely (see CHD P, 97-98).

The relationship between this gloss and the preceding Akkadian entry is difficult to evaluate, because the latter is almost entirely lost. Wilhelm's restoration partly matches the Anatolian gloss, which might thus be regarded as a translation. However, it is also possible that the Akkadian text was different, and the *Glossenkeil* was probably used here, as in other paragraphs, to divide two separate entries, the second one perhaps not present in the model and added by the Anatolian scribe of KUB 37.193+ in his own language.<sup>30</sup>

### 3.5. GIM-an GIG-anza arḫa dalāi

KBo 36.53 obv. (Wilhelm 1994 Text C)

3' [...]x ṽ: *ḫu<sup>1</sup>-ur-ba-a-šu im-ta-na-aq-<sup>r</sup>qu<sup>1</sup>-u[t*

4' [...] -d]ṽ *i-dá-a-am : GIM-an GIG-an-za ar-ḫa da-la-a-ṽ t* [

5' [...]x-at-tar-šu-ma i-ma-a-at

“[...] : shivering will keep striking (him) [...] he will stagger : (Hitt.) **When the disease leaves (him)** [...] he/it/him ... and he will die”.

The gloss is an unproblematic Hittite sentence, *mahyan irmananza arḫa dalāi*, “when the disease leaves (him)”.<sup>31</sup> As far as can be read, it is not a translation of something in the preceding Akkadian text, but probably represents the beginning of a new entry added by the scribe in his own language.

Some Akkadian parallels can be found; see e.g. TDP 22:36 (= SA.GIG III 36): GIG-*su* TAK<sub>4</sub>-*šuma-ma*, “when his disease leaves him”.<sup>32</sup> The existence of Akkadian parallels for this and other Anatolian glosses in the later SA.GIG series does not mean that these Anatolian glosses should be explained as translations made by the scribe of passages mentioned in the original Akkadian version during the copying process. It is perhaps more likely that they represent notations independently added by the scribe, which he regarded as pertinent or even necessary, perhaps based on other entries in the text, although they were not found in the Akkadian passages he was directly copying.

### 3.6. irmananza appatar=šet

KBo 36.53 obv. (Wilhelm 1994 Text C)

6' [...] -s]ṽ *ils-ta-na-an-ni-šu \*eras.\* ŠU ṽ30 : **ir-ma-na-an-za \*ap-pa-tar\* -še-e[t***

“[...] keeps changing (for) him: hand of Šin : (Hitt.) **The disease, its seizing** [...]”.

30. Also note that the only gloss that can be plausibly regarded as a translation in Text A – *miriḫaš* or *mitalḫaš* (see §3.3 above) – is written in superscript.

31. On GIG-an-*za*, see especially Tischler 1981, 36-39. The Hittite reading *irmananza* is suggested by the following gloss (§3.6).

32. Other parallel passages are quoted in Wilhelm 1994, 42-43.

The construction *irmananza appatar=šet* seems to be a partitive apposition, in which *appatar=šet*, being neuter, may be explained either as nominative or as an accusative of respect.<sup>33</sup>

As in the previous gloss (§3.5), *irmanant-* means “disease, illness”, although it is sometimes regarded as referring to the sick person here (see the discussion in Wilhelm 1994, 43-44).<sup>34</sup> The latter interpretation may be justified considering entries like TDP 64:59’ (= SA.GIG VII 59’): DIŠ GIG ṬNIM’-[šú] KÚR.KÚ[R-ir], lit. “If a sick person, [his] words are unintelligible”. However, it would be bizarre if the same word, *irmananza*, occurred with two different meanings in two consecutive paragraphs of the same tablet, and, in general, there is no independent evidence for the meaning “sick person”. In Akkadian, *marṣu* “sick (person)” and *marṣu* “illness” are also distinguished, but the Sumerogram GIG may be ambiguous, so that one might suggest that, if the Anatolian gloss is actually based on an Akkadian entry, *irmananza* may reflect a faulty interpretation of Sum. GIG by the Anatolian scribe, who referred it to the illness rather than the patient.

As suggested by Kümmel (1967, 14), Hitt. *appatar* may correspond to Akk. *šibtu(m)* “seizure” (Sum. DAB), which occurs both alone and combined with other terms in various disease names (see CAD Š, 163-164); see e.g. TDP 28:82 (= SA.GIG III 82): GIN<sub>7</sub> DAB-*su* ŠUB-šú, “when his seizure falls upon him”.<sup>35</sup> Given the fragmentary status of the text, possible parallels are difficult to identify. Wilhelm (1994, 43) suggests TDP 168:106 (= SA.GIG XVII 106): DIŠ GIG SU-šú KÚM-*im* ŠED<sub>7</sub> u DAB-*su* KÚR.KÚR-*ir* ŠU d30, “If a sick person, his body becomes hot (and then) cold, and his seizure keeps changing (for the worse): the hand of Šin”.<sup>36</sup> Thus, this can also provide a possible parallel for the Hittite gloss, because GIG ... DAB-*su* may well match *irmananza appatar=šet*, if we assume, as mentioned, a misunderstanding of Sum. GIG by the Anatolian scribe. Also note that the verb referring to DAB-*su* is Akk. *nakāru* “change” (KÚR.KÚR-*ir* = *ittakir*), while in the Akkadian entry of StBoT36 C obv. 6’ we find *il<sub>5</sub>-ta-na-an-ni-šu*, from *šanú* “id.” (Sum. MAN), which is frequently referred to the illness in the SA.GIG series;<sup>37</sup> e.g. TDP 100:10 (= SA.GIG XII i 10): GIG-*su* MAN-*ni*, “his illness will change”. Therefore, one might also wonder if the presence of a verb often occurring with the illness may have favoured the alleged mistaken interpretation of GIG.

The role of the Hittite gloss in this entry is also difficult to assess. Besides the possible parallel mentioned above, the unexpected use of a Hittite clitic possessive pronoun, an unproductive category in New Hittite, also makes it likely that it was based on an Akkadian entry, because *appatar=šet* provides a perfect, even slavish match of Akk. *šibissu* (DAB-*su*).<sup>38</sup> However, considering the other Anatolian glosses in these texts, it is far from certain that *irmananza appatar=šet* was the translation of the preceding lost Akkadian entry or the direct translation of something that the Anatolian scribe could read in the original entry in his model.

33. For the partitive apposition in the nominative, see GrHL, 243-244; for the accusative of respect, see GrHL, 248.

34. Cf. Carruba 1966, 19 fn. 29 (“der Kranke (macht) sein Aufstehen”) and HW<sup>2</sup> E, 88 (“Der Kranke sei[n] ‚Ergreifen‘ [X]”).

35. This entry is also found in the Middle Assyrian tablet KAR 211 i 8’ (Heeßel 2010, 171).

36. On the meaning of the symptoms described by the phrase “hand of a god”, see Heeßel 2000, 2-3.

37. In TDP 72:23 (= SA.GIG IX 23) it is also referred to the face (IGI.MEŠ-šú *iš-ta-na-an-nu-ú*).

38. On the use of the clitic possessive pronoun in this passage, see also §4 below.

## 3.7. ...-nuškezzi / kanta... lāi

KBo 36.53 obv. (Wilhelm 1994 Text C)

7' [...-n]u-uš-ke-ez-zi ŠU<sup>MEŠ-šú</sup> GÌR<sup>MEŠ-šú</sup> ú-na-a-aš : kán-ta-x[-(o)] la-a-i ŠU 430 [

“(Hitt.) ...] **he keeps [...]-ing**. He moves restlessly his hands (and) his feet : (Hitt.) ... **releases**. The hand of Sin [...]”.

The broken verb at the beginning of line 7' is clearly a Hittite 3sg.pres. of the imperfective stem in *-ške/a-* of a causative verb in *-nu-*, but the lexical base cannot be retrieved. Wilhelm (1994, 44) rightly pointed out TDP 60:43' (= SA.GIG VI rev. 43') as a parallel: DIŠ ZÚ.MEŠ-šú ZÚ.GUZ ŠU<sup>II-šú</sup> u GÌR<sup>II-šú</sup> ú-n[a-aš ŠU] 430 GAM, “If he gnashes his teeth (and) moves restlessly his hands and his feet, [the hand] of Sin. He will die”. If such a parallel holds, the Hittite verbal form [...-n]u-uš-ke-ez-zi may have the teeth as object, but no appropriate parallel can be found in Hittite texts.<sup>39</sup> Possibly, it may be the Hittite translation of Akk. *igaššas* (= ZÚ.GUZ) or *igtanaššas*, “he (continually) gnashes” (< *gašāšu*),<sup>40</sup> but, taking into account the other Anatolian glosses, it is perhaps more likely that it represented a further note added by the Anatolian scribe rather than a translation.

As to the second gloss, although it is partly broken, it cannot be the translation of the preceding Akkadian text, and considering the parallel in TDP 60:43' (= SA.GIG VI rev. 43') quoted above, it can be easily regarded as an addition by the Anatolian scribe, and the *Glossenkeil* as a dividing mark. Wilhelm (1994, 40) reads *kán-ta-x*[(x) *dá-]*la-a-i, where the broken sign following *kán-ta-* could be I, LA, or, maybe less likely, AL (Fig. 3), but neither *kán-ta-ʿr*[-...], nor *kán-ta-ʿa*[-...], nor *kán-ta-a*[-...] matches a known Hittite or Luwian word. The only compatible base is Hitt. *kant-* “(einkorn) wheat”, but further analysis remains entirely speculative. Perhaps, one might suppose a mistaken *kán-gá-*, thus restoring a derivative of the Hittite verb *kank-* “hang” (e.g. *gangala-* “hanger, curtain”),<sup>41</sup> but this does not improve the analysis (see however below for a very tentative explanation).

Wilhelm's restoration of the Hittite verb *dala-* “leave” is perhaps based on the gloss in §3.5 above, but, based on the photo, there seems to be a blank space before *la-a-i*, which must be the verbal form as it is. The Hittite verb *lā-* “unbind, untie, release” belongs to the *mi*-conjugation, but a 3sg.pres *la-a-i* is attested since MS texts (a 2sg. imperative – regularly *la-a-i* besides *la-a-a* – is less likely in this context).<sup>42</sup>



Fig. 3: The gloss *kán-ta-x*[-o] *la-a-i* in KBo 36.53 obv. 7' (photo: hethiter.net/: fotarch N12827)

39. Cf. HW<sup>2</sup> K, 8-12. R. Beal (pers. comm.) suggests that the gnashing of the teeth may correspond to Hitt. *ḫarranuškezzi* “he continually crushes”.

40. For the latter, see TDP 60:47' (= SA.GIG VI rev. 47'): DIŠ 'ZÚ'. [MEŠ-šú] *ig-ta-na*[-aš]-ša-aš.

41. See EDHIL, 437-438.

42. See the occurrences in CHD L-N, 1.

Hitt. *lā-* matches Akk. *paṭāru* “untie, split, loosen, cut open” (Sum. DU<sub>8</sub>),<sup>43</sup> which occurs in several entries in the canonical SA.GIG series referring to body parts<sup>44</sup> or physical conditions.<sup>45</sup> Therefore, the Hittite gloss may represent a further symptom added by the Anatolian scribe, which was not found in the Akkadian entry that served as a direct model, but possibly occurred elsewhere in the text and was also regarded as pertinent here.

If one wanted to speculate, one might point out the entry in TDP 60:41’ (= SA.GIG VI rev. 41’): DIŠ ZÚ.MEŠ-šú ZÚ.GUZ *šú-ú-ra-šú* DU<sub>8</sub>.MEŠ IGI.MEŠ-šú *šú-[ú-r]a-šú tar-ra* GAM, “If he gnashes his teeth, his eyelids are open, his face (and) his eyelids tremble, he will die”.<sup>46</sup> In the SA.GIG series, this entry occurs two lines before the parallel to our passage quoted above, and also starts with DIŠ ZÚ.MEŠ-šú ZÚ.GUZ. If we tentatively assume that Hitt. *kán-ta-x[-(o)]* should be read as *kán-gá-ḷa*, we might suppose that *kangala lāi*, “he detaches the curtains” could represent a quite imperfect translation of Akk. *šūrašu paṭrā*, “his eyelids are open”, of course assuming that Hitt. *kangala-* “curtain” may also metaphorically mean “eyelid”. Thus, by this addition in his own language, the Anatolian scribe would have combined two different entries starting with the same symptom (gnashing of the teeth). However, several problems may prevent such a solution:

- 1) The reading *kán-gá-ḷa* is based on the *ad hoc* assumption that the scribe mistakenly wrote TA instead of GA.
- 2) The meaning “curtain” for the Hittite word is plausible, but not entirely assured,<sup>47</sup> while the alleged metaphorical meaning “eyelid” is mere guesswork.
- 3) The active form and the transitive meaning of *lāi* require the preceding Hittite word, if correctly identified as a body part, to be in accusative case. While an alleged *kán-gá-ḷa* may be a neuter plural, per HW<sup>2</sup> (K, 74-75), the actually attested noun is a common gender *i*-stem, *kangali-*. Admittedly, the verb *la-a-i* is written at the very end of the line, partly overflowing into the right edge, so a sign might have been lost after *kán-gá-ḷa*. However, if the broken sign is actually LA, none of the hypothetical forms *kán-gá-ḷa-an*, *kán-gá-ḷa-as*, or *kán-gá-ḷa-us* would be expected for an *i*-stem.
- 4) The use of the Hittite verb *lā-* “untie, release” to mean “open (the eyelids)” would require to be explained as a calque on Akk. *paṭāru*.

All in all, such a solution seems to present more problems than it solves and should be regarded as mere speculation.

43. Cf. (Akk.) KBo 10.1 rev. 12 ... *qáb-li-šū-nu* (13) *ip-tur-ma*, “he unbelted their waists” = (Hitt.) KBo 10.2 iii 19 ... *na-aš QĀB-LI-ŠU-NU ar-ḫa la-a-nu-un*, “I unbelted their waists” (CTH 4.I / 4.II.A).

44. Eyelids (TDP 60:41’ = SA.GIG VI rev. 41’); ears (TDP 68:6-7 = SA.GIG VIII 6-7); vertebrae of the neck (TDP 82:22-25 = SA.GIG X 22-25, KUB 37.31:7); hands (TDP 96:31 = SA.GIG XI rev. 31, TDP 162:56 = SA.GIG XVII 56); “breasts” of the fingers (TDP 98:49 = SA.GIG XI rev. 49); chest (TDP 100:2 = SA.GIG XII i 2); loins (TDP 108:15 = SA.GIG XII iv 15); epigastrium (TDP 112:27’-28’ = SA.GIG XIII i 27’-28’); buttocks (TDP 132:56-57 = SA.GIG XIV i 56-57).

45. Illness (TDP 8:24 = SA.GIG II 24, TDP 150:40’, 45’ = SA.GIG XV 40’, 45’); fever (TDP 156:6 = SA.GIG XVII 6); fever and sweat (TDP 156:5 = SA.GIG XVII 5).

46. Translation (and meaning of Akk. *šūru*) according to Scurlock 2014, 55.

47. See HW<sup>2</sup> K, 74-75.

### 3.8. *ŪL šuppāri*

KBo 36.53 rev. (Wilhelm 1994 Text C)

8' [...]x *re-eš ŠÀ-šú it-ta-na-an-pa-ab*

9' [...] *Ū-UL šu-up-pa-ri* :<sup>1</sup> *ši-bi-it d<sup>1</sup>F<sup>1</sup>[-fen<sup>2</sup>-me<sup>2</sup>*

“[...] his epigastrium constantly swells [...] (Hitt.) **he does not sleep** : seizure of a ghost”.

From a linguistic point of view, the gloss is not problematic: *šu-up-pa-ri* is the regular Hittite middle 3sg.pres. of the verb *šupp-* “sleep, fall asleep”, coexisting with *šuptari* and *šuppatta*.<sup>48</sup> The Akkadian negation *Ū-UL* clearly belongs to the Anatolian gloss and should thus be regarded as a heterogram standing for Hitt. *natta*.

According to Neu (1968, 157), the Hittite gloss probably matched Akk. *ittananpab* and should be explained as “kommt nicht zur Ruhe”. As noted by Wilhelm (1994, 46), such a “translation” would not be particularly fitting,<sup>49</sup> and he suggests that the appropriate Akkadian equivalent of Hitt. *ŪL šuppāri*, i.e. *ú-ša-an-ša* “he cannot sleep”, was possibly found in the broken part at the beginning of rev. 9” However, taking into account the other Anatolian glosses, which mostly appear to be additions rather than translations, this is perhaps unlikely. Indeed, in the parallel occurring in TDP 112:18’ (= SA.GIG XIII i 18’) – DIŠ SAG ŠÀ-šú MÚ.MEŠ DAB GIDIM<sub>7</sub>, “if his epigastrium is continually swollen: seizure of a ghost” – the detail that the patient cannot sleep is not found. In all likelihood, it should be regarded as a further symptom added by the Anatolian scribe, possibly based on what he could read in different entries of the Akkadian text.<sup>50</sup>

Finally, note that, although the tablet is damaged, a *Glossenkeil* seems to separate *ŪL šuppāri* from the following Akkadian text, which seems to be a unique example (cf. obv. 7’ in the same tablet, where no *Glossenkeil* is found after [...-n] *uškezzzi*, nor between *kanta-x*[...] *lāi* and ŠU <sup>d30</sup>).<sup>51</sup>

### 3.9. *mahḥuršaninzi*

KUB 37.195 (Wilhelm 1994 Text D1) // KBo 9.49 obv.<sup>2</sup> (Wilhelm 1994 Text D2)

D1 8' [... B]A.ÚŠ : *ma-aḥ-hur-ša-ni-in-[zi*

D2 5' [... *ma-a*] *ḥ-hur-ša-ni-in-z[ī]* \*eras.\*

“[...] He will die : (Luw.) *mahḥuršaninzi*”.

Although Wilhelm (1994, 47) transliterates *mahḥur* and *šaninzi* as two separate words,<sup>52</sup> neither manuscript has a blank space between them, so that it seems perhaps more likely that we are dealing with a single word, *mahḥuršaninzi* or *mahḥaršaninzi*, given the polyphony of the sign ḪAR.<sup>53</sup>

48. Cf. EDHIL, 787-788.

49. Note that Akk. *nap-pa-ab-ḫu* matches Hitt. *pa-ri-pa-ri-ya-u-wa-ar* “blow” in the lexical list KBo 26.34 iv 8’ (CTH 299.2, LNS).

50. Cf. e.g. *ú-ša-an-ša* in KUB 37.193+ obv. 9.

51. As mentioned, it is perhaps unlikely that the broken sign occurring after the Luwian verb *taršiyai* in KUB 37.193+ obv. 2 was a *Glossenkeil* (see §3.1).

52. Followed by HEG Š, 831, where Luw. *šaninzi* is tentatively compared to Hitt. *šani-* “one and the same”.

This word is only found here, and the rest of the entry, presumably providing an Akkadian context, is entirely lost, which makes it impossible to identify parallels in the canonical SA.GIG series.

Only two remarks can be made with some confidence: (1) the ending *-nzi* points to a Luwian common gender nominative plural, belonging to a stem *mabburšani-* (or *mabbaršani-*) or *mabburšana/i-* (or *mabbaršana/i-*), with *i*-mutation; (2) it is plausible – although by no means assured – that the noun denoted a body part.

Further analysis can only be speculative: Luw. *mabburšani-* or *mabburšana/i-* may perhaps be compared to Hitt. <sup>(UZU)</sup>*mub(ha)ra(i)-*, <sup>(UZU)</sup>*mab(u)rai-*, a body part of animals, tentatively connected to Gr. μηρός “thigh(bone)”, although its etymology and exact meaning remain unclear.<sup>54</sup> Thus, alleged *mabburšana/i-* may perhaps be related to <sup>(UZU)</sup>*mub(ha)ra(i)-*, <sup>(UZU)</sup>*mab(u)rai-* just like Hitt. <sup>(GIŠ)</sup>*kalmiš(a/e)na/i-* “firelog” is related to <sup>(GIŠ)</sup>*kalmi-* “id.”, although the origin of the suffix *-š(a/e)na/i-* is not entirely clear.<sup>55</sup>

Given the preceding BJA.ÚŠ in KUB 37.195: 8’ (= Wilhelm 1994 Text D1), Luw. *mabburšaninzi* seems to open a new entry added by the Anatolian scribe, separated from the preceding one by the *Glossenkeil*. However, in KBo 9.49 obv.<sup>2</sup> 5’ (= Wilhelm 1994 Text D2) it is only followed by an erasure, and a paragraph line runs below the line, so that *mabburšaninzi* remains isolated, and its role in the text is a matter of speculation (in KUB 37.195: 8’ it also seems to occur at the end of the line, but the right side of the tablet is broken and we cannot say if something else was written after it, perhaps on the right edge).

### 3.10. *auliš šarra tarru artari*

KBo 9.49 obv.<sup>2</sup> (Wilhelm 1994 Text D2)

14’ [...]’*a’-ú-liš šar-ra tar-ru ar-ta-ri*

[...] (Hitt.-Luw.) **the *auli-* stands up firmly**”.

Only the Anatolian gloss can be read in this fragmentary paragraph, which is mostly unproblematic: *artari* is the 3sg.pres. of the middle verb *ar-* “stand”, *šarra* is a Luwian local adverb meaning “up, on”, while *tarru* is an adverb meaning “firmly”, formally the neuter nom.-acc. of the Hittite ablauting adjective *tarru-/tarran-* “firm, secure” (on which see Melchert 2020).<sup>56</sup>

The only problem is the noun occurring after the initial break, which is probably the subject of the verb *artari*. Wilhelm (1994, 48) reads Jx ú? LIŠ, and the reading of the last two signs can be confirmed based on the photo. As to the first broken sign, traces are fully compatible with A, so that we can read *’a’-ú-liš*, with the CHD Š, 238 and Melchert 2020, 546, i.e. – provided that the

53. Laroche (1965, 46) and Melchert (1993, 60) read *ḫar-ša-ni-en-zi* and *ḫar-ša-ni-in-[zi]*, but preceding *ma-ab-* should belong to the same word.

54. Cf. CHD L-N, 317-319; HEG M, 225-226; HED M, 174-176; EDHIL, 540, with references.

55. See EDHIL, 431. Melchert (2002) explains this and other Hittite words in *-š/zina-* as original compounds with Hitt. *šima-* “image”.

56. The phrase *tarrū artari* is also attested in KUB 31.105:8 (CTH 138.2, MH/MS).



word is complete – the nom.sg. of the Hittite noun *auli-*, which denoted an internal organ, perhaps the spleen, the stomach, or the throat.<sup>57</sup>

In Mesopotamian medical texts, Akk. *uṣuṣṣu* “stand” (Sum. GUB) is used to refer to different body parts (see CAD U-W, 375-376). For a possible parallel outside the SA.GIG series, see perhaps BAM 77:33’: DIŠ NA BI.RI-šú GUB.GUB-az, “If a person’s spleen continually stands up” (see also *ibid.* 28’, 30’, 39’).<sup>58</sup>

#### 4. (Socio-)linguistic remarks on the Anatolian glosses

Most of the words occurring in the Anatolian glosses found in the medical omina from Boğazköy unequivocally belong to the Hittite language. Unambiguous Luwian words are the two nom.sg. *mabḫuršaninzi* and *paptartanzi*, the adverb *šarra*, and the 3sg.pres. *taršiyai*, while *tarḫalliš*, although originally Luwian, is a fully integrated loanword in Hittite, and might thus perhaps count as a Hittite word as well.

Only two words cannot be assigned to either language in a clear-cut way, the broken *kanta-...* in KBo 36.53 obv. 7’ (Wilhelm 1994 Text C), which cannot be fully evaluated, and *miriḫaš / mitalḫaš* in KUB 37.193+ rev. 5’ // KUB 37.120: 8’ (Wilhelm 1994 Text A // E), whose reading is unclear. Assuming *mitalḫaš* as the correct reading, if the comparison with *patalḫa-* holds and it is actually Luwian, as is often assumed, we may also tentatively assign *mitalḫaš* to the Luwian language.

The situation is summarised in the following table.

Hittite	Luwian	Undetermined
<i>appatar=šet</i>	<i>mabḫuršaninzi</i>	<i>kanta-...</i>
<i>arḫa</i>	<i>paptartanzi</i>	<i>miriḫaš / mitalḫaš</i>
<i>artari</i>	<i>šarra</i>	
<i>auliš</i>	<i>tarḫalliš</i>	
<i>irmananza (GIG-anza)</i>	<i>taršiyai</i>	
<i>lāi</i>		
<i>mabḫan (GIM-an)</i>		
<i>šuppari</i>		
<i>dalāi</i>		
<i>dankumaeš</i>		
<i>tarru</i>		
<i>...-nuškezzzi</i>		

Tab. 1: The linguistic distribution of the Anatolian glosses in the medical omina from Boğazköy

57. See HW<sup>2</sup> A, 627-631, HED A, 231, and Kühne 1986.

58. See Scurlock 2014, 532.

Such a distribution is not surprising, and perfectly mirrors the situation of the Hittite language in the Empire period, after centuries of language contact with Luwian. The only real peculiar and perhaps quite unexpected element is, if correctly interpreted, the unique occurrence of the Luwian adverb *šarra* instead of Hitt. *šarā*, which, together with the consistent use of Luwian non-adapted words (i.e. always showing Luwian endings) – to be plausibly explained as code-switching phenomena – may suggest that the scribe (or the scribes) of these texts was a Luwian native speaker in the first place.

A further hint in this direction may perhaps be the use of the clitic possessive pronoun in *appatar=šet* (KBo 36.53 obv. 6' = Wilhelm 1994 Text C). As is well-known, the use of clitic possessive pronouns progressively decreases after the Old Hittite stage, and they are almost completely replaced by the genitive of the independent pronoun in New Hittite, being mostly found only in late copies of OH and MH originals and in texts written in an archaising style. The Akkadian clitic possessive pronouns, frequently occurring in NH texts, are also believed to represent the genitive of the Hittite independent pronouns rather than the clitic possessives.<sup>59</sup> Therefore, the use of the clitic possessive pronoun *-šet*, a relic of an almost entirely lost category, may perhaps point to a scribe with a learned rather than a native knowledge of Hittite, unless it should be regarded as a mere translation strategy.

As an alternative solution, maybe we do not need to assume a Luwian native speaker in order to explain the unexpected presence of Luw. *šarra*, because such glosses probably do not reflect the “standard” level of language one can observe in official texts, and colloquial Hittite may have been much more Luwianised than the one we see in administrative and literary documents.

## 5. Remarks on the use of the *Glossenkeil* in the medical omina from Boğazköy

The so-called *Glossenkeil*, generally consisting of one or two oblique wedges, was a multipurpose sign, which was used in Hittite texts both with “lexical” function – i.e. to mark unusual forms (e.g. archaisms, mistakes, uncommon variants, and especially foreign, mostly Luwian, words) – and with paragraphemic function, to mark the beginning of a new paragraph, separate a line from a preceding textual material overflowing from the left column, mark an indented line (or, better, the beginning of the line far from the left edge), divide words in Hurrian texts, etc. A comprehensive discussion on the functions of the *Glossenkeil* in Hittite is beyond the scope of this paper;<sup>60</sup> we will only make a few remarks on its use in the Akkadian medical omina from Boğazköy.

The *Glossenkeil* occurring in these texts always consists of two oblique wedges (also in KUB 37.193+ rev. 5', before *mi-RI-ḫa-aš* in superscript), except for the one found in KBo 36.53 obv. 9', which consists of three oblique wedges. The dimension varies, but the wedges are generally quite long, except for some cases (e.g. the *Glossenkeil* before *tar-ši-ya-i* in KUB 37.193+ obv. 2).

59. See GrHL, 137 with references.

60. For an overview on this topic, see Pisaniello 2020, with references.

As far as can be judged, Anatolian glosses are always separated by a *Glossenkeil* from the preceding Akkadian text, but the *Glossenkeil* sometimes also divides different Akkadian entries inside the same paragraph. All the occurrences are summarised in the following table.

Wilhelm 1994	Passage	Languages involved
Text A	KUB 37.193+ obv. 2	Akkadian : Anatolian
	KUB 37.193+ obv. 5	Akkadian : Anatolian
	KUB 37.193+ obv. 10	Akkadian : Akkadian
	KUB 37.193+ rev. 5'	Akkadian : Akkadian
	KUB 37.193+ rev. 5'	: Anatolian gloss in superscript
	KUB 37.193+ rev. 6'	Akkadian : Akkadian
	KUB 37.193+ rev. 13'	Akkadian : Anatolian
Text B	KUB 37.211+ obv. 17'	Akkadian : *eras.*
Text C	KBo 36.53 obv. 3'	[...] : Akkadian
	KBo 36.53 obv. 4'	Akkadian : Anatolian
	KBo 36.53 obv. 6'	Akkadian : Anatolian
	KBo 36.53 obv. 7'	Akkadian : Anatolian
	KBo 36.53 obv. 9'	Akkadian : Akkadian
	KBo 36.53 rev. 9'	Anatolian : Akkadian
Text D1	KUB 37.195: 5'	Akkadian(?) : Akkadian
	KUB 37.195: 8'	Akkadian(?) : Anatolian
Text E	KUB 37.120: 8'	Akkadian : Anatolian gloss

Tab. 2: Occurrences of the *Glossenkeil* in the medical omina from Boğazköy

As for the function of the *Glossenkeil*, while between two different Akkadian entries it is merely a dividing mark, when Anatolian glosses are involved, its function appears to be twofold. On one hand, there is the paragraphemic use; on the other hand, a linguistic function also exists, which, however, does not generally resemble that of the typical gloss wedge one finds in Hittite texts, and should not be described as “lexical”. When a wedge introduces a gloss in Hittite or Luwian within the omina, it does not mark a single word that intrudes the text as a foreignism, nor does it mark the translation in a local vernacular of an Akkadian word or sentence (as is the case for instance, in the collection of recipes KUB 37.1, e.g. at obv. 6, where the gloss *ḫu-wa-ar-ti-in* GIM-*an za-an-nu-uṣ-zi* translates the Akkadian *a-na ra-bi-ki ta-rab-ba-ak*, “you turn into a soup”, which immediately precedes it).<sup>61</sup> Indeed, there is only one case in which the gloss seems to translate a part of the Akkadian context, i.e. the extratextual *mi-RI-ḫa-aš* added in superscript in KUB 37.193+ rev. 5' (§3.3);<sup>62</sup> in the other cases, excluding the ones that are too fragmentary, the glosses seem to contain additions to the texts that were made by an Anatolian speaker who was working with the text (see

61. See Giusfredi 2012, 50-52.

62. A second example may be *paptartanzṣ' dankumaeš* in KUB 37.193+ rev. 13' (§3.4), if Wilhelm's restoration of the preceding Akkadian text is correct.

§§3.1, 3.2, 3.5, 3.6, possibly also 3.8). Thus, the *Glossenkeil* serves both to single out such additions within individual Akkadian entries (§§3.1, 3.2, 3.5, 3.7, 3.8) and to separate whole new entries in Anatolian from the preceding ones in Akkadian (§§3.4, 3.6, 3.9).

While the multiple functions of the wedges are no surprise at all, if compared, e.g., with our quotation marks, which can have several pragmatic or lexical values as well as paragraphematically mark quoted texts, we may legitimately wonder who was the scribe who made these additions, and what work the said scribe was performing (of course, we refer to the moment the additions were made, not to the scribes who successively copied in other duplicates).

We can envisage two possible answers to this question. The first hypothesis, in line with the interpretation of KUB 37.1 that was given in Giusfredi (2012) is that the author of the glosses was not merely a scribe or a scribal student, but rather a medical practitioner or some kind of specialist involved in the fields of medicine and healing rituals (or perhaps a student who was preparing for a career in those fields). This would very well explain those passages that contain additional, extra annotations that are not translations of the Akkadian base text.

The second hypothesis, which is not mutually exclusive with respect to the first one, is that these annotations also played a role in a process of (enriched) translation of the Akkadian material into the local languages of Ḫattuša. While this second hypothesis is certainly conceivable, a possible counterargument is the lack of evidence for the completion of such a translating process. In order to maintain the idea that specialised translations existed, we will, before moving to the conclusions, make a further proposal to interpret a medical text in Hittite as a proper translation of one of the omnia discussed in this paper.

## 6. KBo 13.33: a Hittite translation of Wilhelm 1994 Text A?

The Hittite small NS fragment KBo 13.33 (Burde 1974 Text P)<sup>63</sup> is listed under CTH 537.II and regarded as a Hittite version of the Mesopotamian medical omnia. Here follows the text, based on the photo available on the Hethitologie Portal Mainz,<sup>64</sup> with minor changes compared to previous editions.

KBo 13.33

x+1	]x x[
2'	]x :tar-ku-ſi-
3'	] [
4'	IGI <sup>H</sup> ]L.A-wa iſ-har-w[a-
5'	-ſ]ſ̄ IGI <sup>H</sup> .L.A-wa x[

63. See also Torri – Barsacchi 2018, 38-39.

64. See [hethiter.net/](http://hethiter.net/): fotarch B0424c.

6' ]x x[  
(rest broken)

Although the tablet is extremely fragmentary, what can be read may find an almost perfect match in the Akkadian tablet KUB 37.193+ rev. 4'-5' (Wilhelm 1994 Text A):

KUB 37.193+ rev.

4' [en-šur š]a \*eras. e-mi-it\*-ti [ ] \*eras.\* pi-šu šu-un-dur BA.ÚŠ

:mi-RI-ḫa-aš

5' [e-n]a-a'-a'-šu da-mi ma-la-a' [BA.Ú]Š : 'e'-na-a-šu qá-du-ti sà-a-mi ma-a-li [BA.ÚŠ?]

“His right [eye ...] his mouth is crooked. He will die. § His eyes are filled with blood. He will die : His [ey]es are filled with red mud (:miRIḫaš). He will die”.

Indeed, IGI<sup>H</sup>l.A.-wa iš-ḫar-w[a- in KBo 13.33: 4'<sup>65</sup> may be plausibly restored as IGI<sup>H</sup>l.A.-wa iš-ḫar-w[a-an-ta “the eyes are bloodied” (or perhaps iš-ḫar-w[a-an-za, if referred to the patient, with IGI<sup>H</sup>l.A.-wa as an accusative of respect), possibly preceded by nu=šš to be restored in the break (note that the traces before IGI<sup>H</sup>l.A.-wa in line 5' are compatible with ŠI). Such an entry would match the one in KUB 37.193+ rev. 5', [e-n]a-a'-a'-šu da-mi ma-la-a' [BA.Ú]Š, “His eyes are filled with blood. He will die”.

The Hittite entry in KBo 13.33: 5', -š]š IGI<sup>H</sup>l.A.-wa x[, may correspond to the second Akkadian entry in KUB 37.193+ rev. 5', 'e'-na-a-šu qá-du-ti sà-a-mi ma-a-li [BA.ÚŠ?], “His [ey]es are filled with red mud (:miRIḫaš). He will die”. If this is correct, the two Akkadian entries separated by the *Glossenkeil* in KUB 37.193+ rev. 5' were probably divided in two different paragraphs in the Hittite translation.<sup>66</sup>

As an alternative, the Hittite entry in KBo 13.33: 5' may also match the Akkadian one in KUB 37.193+ rev. 6', [e-na-a]-\*šur\* it-ta-na-pal-ka-a BA.ÚŠ, “His eyes keep widening. He will die”.

More problematic is the Hittite entry in KBo 13.33: 2', ]x :tar-ku-ḫi-, which, if our hypothesis is correct, should correspond to KUB 37.193+ rev. 4', [en-šur š]a \*eras. e-mi-it\*-ti [...] \*eras.\* pi-šu šu-un-dur BA.ÚŠ, “His right [eye ...] his mouth is crooked. He will die?”. The broken sign at the beginning of KBo 13.33: 2' cannot be easily identified, but, if the very small horizontal wedge that is visible after the break should be considered, we would not exclude WA (see fig. 4), while the two oblique wedges before tar-ku-ḫi- may simply be a *Glossenkeil*.

65. Line 3' in the handcopy and previous editions, which do not take into account the blank space under line 2', which is larger than the ones in the other paragraphs.

66. This is exactly the same phenomenon that can be seen comparing the draft (KUB 6.46) and the edited version (KUB 6.45+) of Muwattalli's prayer to the assembly of gods (CTH 381): in KUB 6.46 iii 30, 33, 36, 38, iv 14, 48, a long oblique wedge divides sections that in KUB 6.45+ ii 64, 68, 72, iii 1, 45, iv 49 are placed in different paragraphs.



Fig. 4: KBo 13.33: 2' (photo: hethiter.net/: fotarch B0424c)

Broken *tar-ku-ſi* is difficult: it may be related to the verb *tarkumalliye* “look angrily” (cf. the action noun *tarkulliyauwar*, matching Sum. *igi-ḫuš* ‘angry eye’ and Akk. *nekelmû* “look angrily” in the lexical list KBo 1.44+ i 48), thus possibly referring to the eyes (i.e. IGI<sup>Hl.A-w</sup>)]a to be restored before it?), although this would perhaps be semantically unattractive in a medical omen, and the alleged parallel entry at the beginning of KUB 37.193+ rev. 4’ seems only to concern the right eye.

Therefore, we might wonder if *tar-ku-ſi* may correspond to something in the second part (or perhaps second entry) of KUB 37.193+ rev. 4’, *pí-šu šú-un-dur* BA.ÚŠ, “his mouth is crooked. He will die”. If we do not take into account the small horizontal wedge found in KBo 13.33: 2’ after the break, KA<sub>x</sub>U or KA<sub>x</sub>U-ſU “(his) mouth” may all be possible restorations, matching Akk. *pí-šu*. Therefore, Akk. *šudduru*, meaning “twitch”, should match the obscure *tar-ku-ſi*, which may thus be etymologically related to Hitt. *tarku-* “dance” (< PIE *\*terk<sup>w</sup>-*), but semantically closer to its Latin cognate *torquēo* “twist, turn”.<sup>67</sup> Unfortunately, the fragmentary status of the Hittite tablet does not allow for further analysis, and the hypothesis that it was a translation of the Akkadian text cannot be confirmed.

## 7. Conclusion

The so-called “medical omnia” from Ḫattuša appear to stem from a tradition of Mesopotamian diagnostic texts that probably represented a previous phase of the materials that will later converge in the canonical SA.GIG series. However, they were copied locally, and the copying process involved the addition of commentaries that in some cases had a linguistic function (lexical glosses that translate an Akkadian portion), but more commonly consisted in additions of symptoms, new observations, or, in any case, new content with regard to the diagnosis (see above §5). For some of these Anatolian additions, parallels seem to be found in other entries of the canonical SA.GIG series, which may possibly show that, during the copying process, Anatolian scribes interpolated passages from other sections that they believed to be relevant. Whether such interpolations were eventually aimed at the compilation of a final, edited version in Hittite language – a sort of improved translation – remains an open question. Evidence for Hittite translations of these materials actually exists, both direct, in two Hittite fragments (KBo 13.32 and KBo 13.33, see §6),

67. For a very unlikely reading *tarkullī[š]* in KUB 37.193+ obv. 5 (Wilhelm 1994 Text A), see §3.2 above with fn. 18.

and indirect, in tablet catalogues (KUB 8.36 ii 15), but the actual extent of this editing process cannot be determined.

The glosses appear to be in Hittite, with a minority being in Luwian, and may also be linguistically interpreted as an example of a mix of the two languages that may have coincided with the vernacular spoken in Ḫattuša by the late XIV and XIII century BCE.

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