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A Newly Discovered Drawing of a Neo-Assyrian Demon in *BAM* 202 Connected to Psychological and Neurological Disorders

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“The oldest and strongest emotion of mankind is fear, and the oldest and strongest kind of fear is fear of the unknown.”

- H. P. Lovecraft, *Supernatural Horror in Literature* (1938)

Losing control of one's faculties and motor functions are among the most frightening symptoms of any medical condition, not only among the patients themselves, but also among family members (Stol 1993: 146). And for healers to diagnose the cause and describe the physiology of these overwhelming symptoms has remained difficult until the rise of modern medicine (Gross 1992: 71ff.). Today we label many such afflictions as psychological and neurological disorders. In ancient Mesopotamia, however, symptoms related to abnormal behaviour and involuntary movements were considered to have been inflicted upon a person by supernatural forces, such as gods or demons. In the massive corpus of magico-medical cuneiform tablets, a fair amount of diagnoses with symptom descriptions, prescriptions, rituals and incantations allows us to examine how healers described and cured such afflictions (e.g., Scurlock 2014: 196ff., 555ff.). Yet, the evidence that indicates how specific demons causing these ailments were visualized is remarkable fragmentary.

Particularly two groups of conditions we today would classify as psychological and neurological conditions have received attention within recent years: the ailments *demmaḫurrû* “derangement” and *ṭēmu šanû* “altering mind” causing insanity, as well as an illness called *bennu*, often translated as “epilepsy” (Chalendar 2013; Stol 2009; Avalos 2007; Kinnier Wilson 2007; Stol 1993; Kinnier Wilson 1965). All these afflictions were described, diagnosed, and treated in an illustrious text published as *BAM* 202, most recently edited and analysed by Vèrène Chalendar (2013). The tablet was originally excavated in the N4 library of the *Haus des Beschwörungspriesters*, originating in 7th century BCE Assur (Maul 2010; see also May 2018; Pedersén 1986: 41ff.; Hunger 1968: 19-20). The manuscript was later published by Franz Köcher (1964: XI and pl. 4-5) in the third volume of *Die babylonisch-assyrische Medizin (BAM)* as no. 202. Besides prescriptions for treating the mental alterations *demmaḫurrû* and *ṭēmu šanû*, as well as *bennu*-epilepsy, the tablet contains a depiction of a demon on the reverse, which has not been noticed in previous publications. Illustrations of such demonic forces on cuneiform tablets with magico-medical treatments are rare, and only a handful is known from the first millennium BCE.¹

This article presents a new line drawing, edition, and commentary of *BAM* 202 in order to publish and discuss the drawing on this manuscript for the first time. In the first section I

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¹ Finkel 2011: 338, 38-42 Figs. 4-6; Zilberg and Horowitz 2016: 175-177, 183; Reiner 1987: 30; Nougayrol 1972: 141.

examine the connection between the illnesses *demmakurrû*, *ṭēmu šanû*, and *bennu*-epilepsy by considering the diagnoses and symptom descriptions in the prescriptions of *BAM* 202. This analysis serves as a backdrop for describing and discussing which demon is depicted on *BAM* 202 in Section 2 and 3, and who copied the tablet in Section 4. As indicated by the title and opening quote, I have chosen to address medical as well as emotional aspects of the symptoms described in *BAM* 202 in order to examine the relationship between the diagnoses and the depicted demon. A conclusion is offered in Section 5. The new line drawing, edition, commentary and pictures of *BAM* 202 are supplied as an appendix in Section 6.

1. The Illnesses Diagnosed in *BAM* 202

Two groups of ailments are diagnosed and treated in *BAM* 202: mental changes (obv. 1-3)² and various symptoms grouped under the heading *bennu*-epilepsy (rev. 5'-7').³ The first diagnosis on *BAM* 202 reads as follows:

“If *dem*[*makurrû*] (derangement) has seized a man and his mind a[lters time and again], his speech is incoherent, he [get]s a dep[ression] time and again (lit.: his [min]d continually fa[lls on him]), and he talks a lot, (in order) to res[tore] his mind to him ...”.

The passage has been treated in depth by Stol (2009), who distinguished two primary psychological changes, namely *demmakurrû* and *ṭēmu šanû* (see also Chalendar 2013: 15-29; Steinert 2012: 385ff.; Geller 2010: 181 n. 40; Scurlock and Andersen 2005: 374ff., 383; Kinnier Wilson 1965: 292). The term *demmakurrû* is a loan word from the scholarly Sumerogram DÍM.MA.KÚR.RA⁴ which is translated into Akkadian as *ṭēmu* “reason, intelligence” and *nakāru* “to alter, led astray, become hostile, become estranged, become deranged” (Stol 2009: 1; see Chalendar 2013: 14; *CAD* N/1: 159ff.; *AHw*: 718ff.). The term *ṭēmu šanû* relates to the illness named “alteration of the mind” (*šinūt ṭēmi*).⁵ The verb *šanû* means “to become different, strange”, and with *ṭēmu* it has the connotations “to change one’s mind, become deranged, become insane” (*CAD* Š/1: 403ff.; *AHw*: 1166f.). Stol (2009: 2, 6, 12) interpreted *demmakurrû* as a mild derangement, whereas he saw *ṭēmu šanû* as insanity, but other researchers translate the terms carrying evenly weight (Scurlock and Andersen

² For mental illness in Mesopotamia, see Buisson 2016; Reynolds and Kinnier Wilson 2014 and 2013; Chalendar 2013; Couto-Ferreira 2010; Stol 2009; Scurlock and Andersen 2005: 367-85; Worthington 2003: 4; Geller 1999; Stol 1999; Ritter and Kinnier Wilson 1980; Kinnier Wilson 1967 and 1965.

³ For epilepsy and neurological conditions in Mesopotamia, see Reynolds and Kinnier Wilson 2014; Fales 2010: 20ff.; Reynolds and Kinnier Wilson 2008; Scurlock 2008; Avalos 2007; Kinnier Wilson 2007; Scurlock and Andersen 2005: 284-344; Kinnier Wilson 1996: 137; Stol 1993; Kinnier Wilson and Reynolds 1990; Labat 1953: 21.

⁴ The writing KA.ĤI.KÚR.RA, found in *BAM* 202, had the phonetic value *dimma* according to various lexical lists (Stol 2009: 1; see Chalendar 2013: 14ff.).

⁵ Stol 2009: 6-8; see also Farber 1977: 74-95; *CAD* T: 95-96. It is important to note that *šinūt ṭēmi* was referred to as a “*šēdu*-demon deputized by Marduk/Gula” in *šammu šikinšu*, see Stadhouders 2011: 10-11, 35 and *ibid.* 2012: 4, 16.

2005: 375-76), or identifies *demmakurrû* as more severe than *tēmu šanû*.⁶ Regardless, both ailments were associated with epilepsy.⁷

To have incoherent speech is described with the words *amātu* “spoken word, utterance” and *nakāru* in the Gtn-stem with the meaning “to talk senselessly” (*CAD* N/1: 163; see Chalendar 2013: 23-24; *AHw*: 719). The loss of meaningful words, possibly involving some aggression, was therefore related to a loss of proper use of one’s faculties.⁸ When a patient’s “mind continually falls on him” (*tēmšu imtanaqqussu*), it may insinuate “depression” (Steinert 2012: 391; Stol 2009: 6, 11 and n. 69), although the interpretation remains open for debate.⁹ The verb *maqātu* “to fall (upon), collapse” could also be used referring to illnesses or demons in the sense “to attack, afflict” (see recently Salin 2015: 330ff.). I use the translation “depression” in lack of a better alternative, but it is questionable if the phrase in *BAM* 202 discussed above describes the modern mental disorder (see n. 9).

Talking a lot appears to be a significant symptom for distinguishing the malady from other mental changes, during which the patient is silent or not able to use his mouth.¹⁰ The Sumerogram *DU₁₁.DU₁₁* is commonly read *dabābu* “to speak (aloud), talk” (Borger 2010: 256),¹¹ but can also be read “complain, protest”.¹² The symptom is mentioned in both

⁶ Chalendar (2013: 21-22) suggests that the verb *nakāru* carries more severe connotations than *šanû*, which indicates that *demmakurrû* may have been worse than *tēmu šanû*. For other cases of illness described from mild to severe forms, see, e.g., Arbøll 2018a; Stol 1993: 56. Furthermore, it is possible that *demmakurrû* was the diagnosis and name of the illness, whereas *tēmu šanû* and the remaining description were symptoms (Chalendar 2013: 22-23). Several lexical lists equate the two types of mental changes discussed here (ibid.: 15-19; Abusch and Schwemer 2011: 255). Some texts list *demmakurrû* as an illness together with, e.g., *bennu*-epilepsy (Chalendar 2013: 48-50; Steinert 2012: 393 n. 38; Farber 1977: 56). For *šabātu* describing causes of illness, see Salin 2015: 325ff.; Heeßel 2000: 55. It is unclear if *tēmu šanû* could be personified as a demon (see Stol 2009: 6). In some texts, it “seizes” the patient (e.g., Geller 2010: 34).

⁷ Chalendar 2013: 15 and n. 36, 16; Stol 2009: 11-12; Stol 1993: 25 and n. 19, 95.

⁸ Stol 2009: 2, 5-6, 11. A similar symptom is observed in a text possibly describing a state of anxiety (Ritter and Kinnier Wilson 1980: 25-26).

⁹ Cf. Chalendar 2013: 25-26 with further references; Scurlock and Andersen 2005: 375 no. 16.43, 383 no. 16.87. The word depression is, due to its modern connotations, difficult to use in the context here. Furthermore, it is troublesome to correlate a symptom connected to depression with the patient talking a lot. Comparably, translations of the related term *miqit tēmi* appear as “dejection, desperation” (*CAD* T: 96), “Depression, Niedergeschlagenheit” (Steinert 2012: 91 n. 29), “loss of reason” (Abusch and Schwemer 2011: 284), “Verzweiflung” (*AHw*: 657), and “affective loss” (Kinnier Wilson 1965: 292). Concerning this term, Chalendar (2013: 26) suggests “démence, plus ou moins synonyme, à l’origine d’aliénation mentale”. Note that a medical commentary equates *muqqut* with *šapil*, “it is collapsed means it is low” (Wee 2012: 635, 640; see also Scurlock 2014: 120, 128 l. 19). Although the text commented on does not concern mental alterations, the equation could tentatively link the expression in *BAM* 202 discussed here with the phrase *libbašu šapil* “his heart is depressed” (Abusch and Schwemer 2011: 64, 144, 329, 343). Antašubba-epilepsy also appears to be connected to sorrow on the basis of the outcry *ai* “woe!” (Stol 1993: 70), although similar outcries are difficult to interpret (cf. Heeßel 2000: 44-45; Kinnier Wilson and Reynolds 1990: 193, 197). Note that depression can be an accompanying disorder for people suffering from epilepsy (Kanner 2006). Medically, depression does not show itself during epileptic seizures. If the diagnoses on *BAM* 202 are connected, they may refer to a long-term affliction instead of two separate episodes of illness. As discussed below, the focus in *BAM* 202 on the patient’s bed could indicate that the healer observed symptoms at the patient’s bedside. However, the clinical pictures painted in the two diagnoses on *BAM* 202 are not easy to correlate, as the symptoms observed by a healer would then have to occur within a relatively short time span, although the first diagnosis possibly includes a statement connected to a long-term observation (recurrent depression). The question is therefore, if it is possible to translate *tēmšu imtanaqqussu* as “repeated moments of desperation/loss of reason” occurring within a limited time span. If the two diagnostic statements in *BAM* 202 are connected to two related medical occurrences within a limited time span, it can cautiously be suggested that the first diagnosis describes a confusional state occurring after an epileptic seizure, which is then described in the following diagnosis.

¹⁰ See *CAD* D: 6; Abusch et al. 2016: 398; Abusch and Schwemer 2011: 3-4, 16; Stol 2009: 10; Kinnier Wilson and Reynolds 2007: 72-76; Scurlock and Andersen 2005: 307, 376, 450; Reynolds and Kinnier Wilson 2004.

¹¹ It is difficult to see if the writing hides a Gtn-stem (see *CAD* D: 4). The D-stem *dubbubu* can be read “to rave (said of a madman)”, and the verb is equated in lexical texts with terms for insanity (Chalendar 2013: 15; *CAD*

diagnoses on *BAM* 202. Other texts indicate that “madness” (*šēhu*, cf. *CAD* Š/2: 266, “possession”; *AHw*: 1209) and the term “ecstatic” (*muhḫû*, *CAD* M/1: 90f.; *AHw*: 582), designating a person overcome by a divine being, imply lunacy.¹³ Madness was also related to *bennu*-epilepsy (Stol 1993: 49-50).

By finally “restoring a patient’s mind”, the cure intends to “return” (D *tāru*) a patient’s mind to him. This may imply that the mind had been taken away (Stol 2009: 11; cf. Herrero 1984: 38, 41). Although it remains uncertain to what extent the two diagnostic statements in *BAM* 202 are related to a single (hypothetical) medical case, it cannot be ignored that the *bennu*-epilepsy in the second diagnosis, acting as a *šēdu*-demon of *Sîn*, could be responsible for removing a patient’s *īēmu*.¹⁴

Turning to the second diagnosis on *BAM* 202, it reads as follows:

“If a man continually j[er]ks in his bed, he cries like a goat, he groans, he shudders (lit.: he is afraid), (and) he talks a lot: ‘Hand of *bennu*-epilepsy’, a [*šē*]du-demon deputized by *Sîn* ...”.

In this entry the patient was confined to his bed, in which he experienced abnormal movements (*galātu*, 𒂍𒌷𒍪) in rev. 5'.¹⁵ The G-stem of *galātu* is translated “to twitch, quiver, be/become restless or nervous, be/become frightened” (*CAD* G: 11ff.; *AHw*: 274) or simply “to jerk” (Scurlock and Andersen 2005: 315), and the Gtn-stem can be translated as “repeated or continuous shivering in bed” (Stol 1993: 38).¹⁶ The word *galātu* is commonly used to describe symptoms of epilepsy (Stol 1993: 95, 97-98).¹⁷ Such shivering was habitually connected to “terrors at night”, such as the evil *alû*-demon and “fit” (*ḥayyatu*),¹⁸ which could occur in bed.¹⁹

D: 13). A translation such as “to complain” in the context of *BAM* 202 may be considered (see also Chalendar 2013: 26-27).

¹² Although the majority of examples listed in *CAD* are Old Babylonian, see *CAD* D: 10-11.

¹³ See Stol 2009: 9; Stol 1993: 49-53. Possibly, an ecstatic state was related to being rabid (see Wu 2001: 38).

¹⁴ Note that an affected *īēmu* can also occur during some cases of severe illness or imbalance, see *SAA* 10 no. 196 rev. 16-18; *CAD* T: 95b.

¹⁵ Descriptions stating that the patient is in bed have been interpreted differently, e.g., indicating that the patient is lying down (Stol 1993: 6, 72) or that the event occurs at night (Schuster-Brandis 2008: 199; see Chalendar 2013: 37-38). Note that the verbs *galātu* (rev. 4') and *parādu* (rev. 6') are generally associated with night time and the bed (e.g., Scurlock 2014: 644, 652, 199; Schuster-Brandis 2008: 75, 202; Stol 1993: 71-72). Shaking with fear in the bedroom was also described in relation to a state of anxiety, which could cause sleepless nights (Ritter and Kinnier Wilson 1980: 25-26). Chalendar (2013: 42) suggests that in some cases, it is possible that the state of horror could be important for diagnosing an illness. Fear seems closely associated with sleep and dreams (see Fales 2010: 17; Butler 1998: 48ff.). The muscles jerks experienced directly before drifting off to sleep (hypnagogic jerks) may be an indicator as to why sleep, dreams, muscle problems, and loss of consciousness were connected. Through the combination of physical symptoms, fear, and a connection to the bedroom, the verb *galātu* can also mean “to have a premature emission” (*CAD* G: 12).

¹⁶ On the semantic difference between *galātu* (*BAM* 202 rev. 4') and *parādu* (*BAM* 202 rev. 6'), see Arbøll 2018a: 266 and n. 20; Chalendar 2013: 38-40; Wee 2012: 349 and n. 26; Abusch and Schwemer 2011: 138 and 144; Böck 2010a: 94; Schuster-Brandis 2008: 75, 199, 202; Scurlock and Andersen 2005: 294ff., 303, 315, 734 n. 30; Fincke 2000: 108-109, 146; Heeßel 2000 tablet 15 (155, 160 l. 82'-83'+85'+90'), tablet 17 (197, 203, 207, 210 l. 23-24+80+84), tablet 22 (256, 261 l. 63), tablet 26 (282, 285, 289, 291, 295 l. 44'+82'+84'-85'), tablet 27 (297, 301 l. 2), tablet 33 (357, 363, 372 l. 96); Volk 1999: 14 n. 88, 20-21 and n. 124, 28, 29 n. 174; Cadelli 1997: 26 n. 110; Stol 1993: 38ff, 65, 71-72, 75, 95, 98; Kinnier Wilson and Reynolds 1990: 192-93; Farber 1989: 62-63, 74-75; Köcher 1978: 35.

¹⁷ It is also used to describe, e.g., abnormal movement of the eyes (Fincke 2000: 108-109; Stol 1993: 93-94) and a symptom of the *šašātu*-illness (Arbøll 2018a: 266).

¹⁸ The term *ḥayyatu* is translated differently as, e.g., “confusional state” (Scurlock 2006: 357), “attack” (Wee 2012: 349 n. 26, 605, 609, 611, 613, 621, 625, 629), “fit” (Stol 1993: 42-44), “terror” (Abusch and Schwemer 2011: 405), “emanation” (Abusch 2002: 129), or “Späher” (Farber 1977: 146-49, 152-55, 190-91; see also Scurlock and Andersen 2005: 315-16, 318; *CAD* H: 1; *AHw*: 309). Medical commentaries also identify the term

The text further specifies in rev. 5' that the patient "cries like a goat" (*kīma enzi išassi*), clearly indicating an abnormal behaviour.²⁰ Goats were connected to epilepsy, and invoking this simile emphasizes the diagnosis (see Stol 1993: 106-7 and n. 67, 149-50).²¹ Considering the incoherent speech mentioned in the first diagnosis, a lack of meaningful utterances must have been an overlapping diagnostic trait (see Scurlock and Andersen 2005: 374-75).

In the beginning of rev. 6', the symptom *ramāmu* can be translated "to rumble, roar, howl, bellow, groan" (*CAD* R: 116-17; *AHW*: 949f.; Stol 2009: 12) or "to drone" (e.g., Scurlock and Andersen 2005: 83 no. 3.268, 375 no. 16.41). The verb is regularly used in connection to animals or similes involving animals (*CAD* R: 116), and this may have been a conscious description due to the animal simile directly before in *BAM* 202 rev. 5'. In relation to patients, the verb seems to indicate abnormal behaviour as well as an agitated emotional state, such as anger (ibid.: 117). The following description of the patient "shuddering" originates in the verb *parādu* meaning: "to be fearful, disturbed, restless, upset" (*CAD* P: 141-44; *AHW*: 827; see n. 16). The verb seems to reflect the physical shaking when being afraid or suffering from conditions similar to Posttraumatic Stress Disorder,²² and it was used to describe epilepsy (e.g., Scurlock and Andersen 2005: 294ff., 315; Stol 1993: 66, 71-72, 75). Similarly to the first diagnosis in *BAM* 202, the second diagnosis also describes the patient talking a lot (*magal idabbub*).

In rev. 7', *BAM* 202 identifies the illness in the second diagnosis as "Hand of *bennu*-epilepsy".²³ The term *bennu* was used as a general word for epilepsy in Mesopotamia, related to most diagnostic statements describing this illness (Köcher 1978: 35; Stol 1993: 7; Avalos 2007: 131-32; cf. Scurlock and Andersen 2005: 83f., 696 n. 261). Yet, *bennu* differed from what we understand as "epilepsy" in modern medicine,²⁴ and the term could be used to describe convulsions, such as (sudden) involuntary muscle movement, twitches, or jerks (Avalos 2007: 133-34; Scurlock and Andersen 2005: 83ff.; Stol 1993: 6; Kinnier Wilson 1967: 202).²⁵ Although the modern neurological condition is not contagious, the *bennu*-illness was considered transmittable (Stol 1993: 119, 146).²⁶ *Bennu* appears to be used both as a term

as "jitters" (*gilittu*) or "fear" (*puluhtu*) (Wee 2012: 604-605, 611). It could act as a demon or a symptom, and it was connected to Antašubba-epilepsy (Stol 1993: 7-8, 42-46 and n. 196-201).

¹⁹ See Stol 1993: 41ff.; in *BAM* 376 col. ii 26-30, prescriptions against *hayyattu* and *alū lemnu* are followed by the diagnosis: "If a man continuously jerks (Gtn *galātu*) in his bed". Both the *alū*-demon and Antašubba-epilepsy were treated together in *SAA* 10 no. 238 (see Stol 1993: 41 n. 173).

²⁰ *CAD* Š/2: 147ff. lists *šasû* as "to shout, make a loud noise, utter a cry", and in the context of animals the translation "to cry (out)" is used (ibid.: 149-50; *AHW*: 1195ff.). It is possible that alterations of the voice could result from frightening dreams or similar (Geller 2010: 148; concerning this commentary, see also Wee 2012: 391, 605). For this passage, see Chalendar 2013: 40.

²¹ Various cries of other animals were also associated with epilepsy (Stol 1993: 150 and n. 13-14 with references).

²² For the symptoms of Posttraumatic Stress Disorder, see Mellman et al. 1995.

²³ Concerning the writing ŠU^{II} *be-en-ni* in *BAM* 202, see the commentary to rev. 7'. For diagnoses formulated as "Hand of a divinity", see Heeßel 2007.

²⁴ For a modern definition of "epilepsy", see Avalos 2007: 132-33; Kwasman 2007: 160. I use "epilepsy" here to refer to symptoms, which in modern medicine may be defined by a broad range of diseases and disorders including non-epileptic convulsions and seizures (Avalos 2007: 134-35). Epilepsy was connected to mental changes in much of the ancient world (Stol 1993: 121ff.), although definitions seem to have differed (Avalos 2007: 133).

²⁵ Such involuntary movements are called myoclonic jerks. This may explain the overlap between *bennu* and the *šaššatu*-illness in lexical lists (Stol 1993: 7; cf. Scurlock and Andersen 2005: 67-68, 693 n. 195 with discussion).

²⁶ Note that some infectious diseases, such as malaria, can produce chills, tremors and occasionally mental confusion, which could mirror the effects of epilepsy (see Warrell 2004: 748; see also Scurlock and Andersen 2005: 36-37, 696). In general, contagion in Mesopotamia was probably rooted in the idea that "some magical power inherent in the body, belongings and abode of a person who was under the wrath of a god could negatively affect anybody entering into this person's intimate personal sphere" (Farber 2004: 124).

referring to convulsive problems, as well as an overarching demonic influence.²⁷ Among other common expressions related to epilepsy are Antašubba²⁸ and *miqtu*²⁹ (see Stol 1993: 7-21; Avalos 2007: 131-32).

Several associated illnesses underline the motoric problems³⁰ and potential for being bedridden.³¹ In the diagnostic-prognostic series Sa-gig, epileptic disorders occupy large parts of the fourth subseries (Heeßel 2000: 19),³² and such diagnoses also appear in the final tablet concerning illnesses of babies (Scurlock 2014: 258ff.; Volk 1999: 16-18; Cadelli 1997: 23-24). Especially infants may have been predisposed for showing muscle contractions, likely because of an immature nervous system (Kinnier Wilson 2007: 64). Commonplace among several of the epileptic disorders is that they displayed symptoms potentially disapproved of socially.³³ These illnesses could be acquired in various places, e.g., in or near a gate, (cattle) pen, river, uncultivated plot, or a corner (Stol: 1993: 68 and n. 38, 97; Scurlock and Andersen 2005: 84 and n. 271).³⁴

The illness is further described in *BAM* 202 rev. 7' as "a *šēdu*-demon deputized (*šanû*) by Sîn".³⁵ The god Sîn was the moon god, and epileptic disorders were connected to the moon (Stol 1993: 6, 130). The fact that the illness acts on behalf of Sîn seems to indicate that the moon may not have been visible on the time of contracting the ailment (*ibid.*).³⁶ It is possible that periodicity was occasionally a characteristic of *bennu*, similarly to the moon's renewal (*ibid.*: 7, 132, 134).

The diagnostic-prognostic series Sa-gig provides a diagnosis explaining a case of *bennu* where the patient appears to observe the evil afflicting him: "[If *miqtu* falls upon him, and at the time it has falle]n upon him he says: 'It is he!' – the roving (*šāidu*) *bennu*-epilepsy has

²⁷ See Scurlock 2014: 145 l. 23'; Heeßel 2000: 287 l. 4', 291 l. 84'; Stol 1993: 5-7; Scurlock and Andersen 2005: 84. The association of *bennu* with (recurrent) fevers (*humtu*) in lexical texts may indicate the shivering, spasm-like, nature of *bennu* (Stol 1993: 6 and n. 13, 7 and n. 22). As noted by Stol, "feverish shivering" can be an early sign of an epileptic seizure (*ibid.*: 38).

²⁸ AN.TA.ŠUB.BA ("what has fallen from heaven") appears to be a learned expression for epilepsy denoting a sudden attack, although it could also be recurrent (Stol 1993: 7-9, 25-26, 77, 132; Avalos 2007: 131, 134; see also Kinnier Wilson and Reynolds 2007: 88 and n. 54).

²⁹ The term *miqtu* seems regularly to designate seizures, and it may indicate an illness overcoming a patient suddenly (Stol 1993: 10-11; Scurlock and Andersen 2005: 216). Possibly, *miqtu* refers to a visible malady (*CAD* M/2: 103ff.; Scurlock and Andersen 2005: 216, 718 n. 33; Stol 1993: 11-12). The word *miqtu* refers to "something that has fallen down" or "falling (spell)" (Stol 1993: 9-11; see Scurlock and Andersen 2005: 316-17, 717 n. 17).

³⁰ Associated illnesses describing motoric disturbances include the *maškadu*-, *sagallu*-, and *šaššaṭu*-illness complex (Arbøll 2018a; Stol 1993: 7, 13 and n. 81, 103 and n. 35-36).

³¹ E.g., *miqtu*, which may in some cases refer to spasms and indicate lameness (Stol 1993: 10-11 and n. 53).

³² In a tablet of Sa-gig (*STT* vol. 1 no. 89), possibly representing the pre-Esagil-kīn-apli recension of the work, entries seem to have been grouped according to various types of witchcraft and epileptic disorders (Stol 1993: 91-98; Heeßel 2000: 105-11; Abusch and Schwemer 2011: 434-43; Wee 2012: 272, 279).

³³ Stol 1993: 146; Volk 1999: 17-18; Scurlock and Andersen 2005: 316-17. Babies could be born with the "spawn of Šulpaea" or Lugal-urra, and women could give birth to the spawn itself, which foreshadowed the scattering or destruction of the household (Kinnier Wilson 2007: 63; Volk 1999: 18 and n. 108; Cadelli 1997: 15; Stol 1993: 14ff., 89; Leichty 1970: 38 l. 68).

³⁴ *Bennu* is even said to "head straight for that man on the high street" in some manuscripts of Udug-ḫul (Geller 2016: 100). Some demons simply occur in the street (*ibid.*: 90, 139, 146, 209, 213; Kinnier Wilson and Reynolds 2007: 93).

³⁵ Note BM 40183+, in which *bennu* is written ^d*be-en-nu*. Stol (1993: 6, 130) interpreted this as Sîn being responsible for the ailment and the demon acting on his behalf. For *bennu* as a "deputized" (*šanē*) affliction, see also Heeßel 2000: 164 with further references.

³⁶ The rays of the moon could cause various skin afflictions, such as *garābu* or *eqbu* ("scales", Stol 1993: 128-130; see also Scurlock and Andersen 2005: 231-32; Stol 1987-88), and it is possible that epilepsy and skin problems were considered internal and external manifestations of afflictions originating from the moon god Sîn (Stol 1993: 147).

seized him; he will be saved”.³⁷ The entry implies that the evil is manifest and observable by the patient (see Section 3). Furthermore, rituals intended to protect the healer when approaching a patient also targeted Antašubba-epilepsy and related demons (e.g., *KAR* 31, see Maul 2018; Geller 2016: 38ff.).³⁸

The two diagnoses in *BAM* 202 diagnose and describe specific symptoms of first insanity and secondly *bennu*-epilepsy. Although the first diagnosis does not elaborate upon time, place, or bodily movements, it is possible to infer from the context of the final treatment (obv. 17-rev. 4') that some of the proposed actions took place while the patient was in his bed. The symptoms pertaining to the second diagnosis also seem to be experienced, at least partly, by the patient in his bed.³⁹ The two diagnostic statements and their treatments therefore overlap in terms of abnormal behaviour, and by focusing on the sickbed.⁴⁰ Furthermore, the *bennu*-epilepsy is the only affliction identified as a demonic entity in *BAM* 202 with certainty.⁴¹

2. Description of the Demon

The drawing on *BAM* 202 is located on the reverse of the tablet underneath the colophon in a fragmentary part of the manuscript. Originally, the colophon was believed to be two lines long (Chalendar 2013: 12), although the second line is written in a smaller script and away from the first line. In general, colophons from the N4 library are not written with individual lines in smaller script. Although greater space between the lines in colophons is common, the blank space in the colophon of *BAM* 202 comprises at least three lines. The unused area combined with the final line in smaller script near the drawing at the end of the tablet, indicates that the copyist intended to separate the final line and image from the remaining colophon. It is therefore likely that the last line relates to this illustration.⁴² Unfortunately, the final line is very broken and difficult to read. The drawing of the demon without breaks is provided below in Fig. 1.

³⁷ Sa-gig tablet 26 line 4' in Heeßel 2000: 278, 287 “Sieh da! Er!”; Stol 1993: 56-57 line 3; see also Scurlock 2014: 196 line 4', cf. 200 “This is it”. Kinnier Wilson and Reynolds (1990: 194) suggests the translation “It is he (again)”, which they interpret as implying an aura. In some cases of the associated condition “Spawn of Sulpaea”, the patient responds to a wailing voice (Stol 1993: 72 and n. 54; see Butler 1998: 53 with further references to similar examples).

³⁸ Antašubba was also blocked out in the apotropaic ritual *šēp lemutti ina bīt amēli parāsu* (Wiggermann 1992: 6-7).

³⁹ Insanity and epilepsy were illnesses bordering on one another (Stol 1993: 121).

⁴⁰ Furthermore, it is plausible that expressing abnormal behaviour must have stigmatized an individual, thereby secluding the patient to his bedroom (see Stol 1999: 67-68).

⁴¹ See n. 5, 6 and 35 above.

⁴² A similar situation was suggested for a tablet published by Zilberg and Horowitz (2016: 176-77), but Jiménez (2018: 45) has recently reinterpreted the relevant line. However, explanatory lines in relation to drawings are attested (e.g., Finkel 2011: 340-341 Figs. 4 and 7).



Fig. 1: Drawing of the demon on *BAM 202* upright

The drawing is incised along the width of the reverse, and the tablet therefore has to be turned 90 degrees to observe the illustration (see also Zilberg and Horowitz 2016: 176-177; Finkel 2011: 339 Figs. 3a-b). The figure is roughly 6,4 centimetres high and 2,6 centimetres wide, and it is clearly anthropomorphic. The head has ears and curvy horns, a serpent's tongue, and possibly a reptile-like eye. The neck is long, and in general the being appears to be covered with badly preserved scales or hair. Unfortunately, the majority of the torso is fragmentary. The left hand appears claw- or paw-like, and the right hand is lumpy with a pointy thumb. The creature has a long tail placed alongside the left leg, and this leg appears to have discernible muscles. The figure is displayed in an upright position standing on two legs (see also Finkel 2011: 339-340 Figs. 3b and 5). The feet are badly damaged, but the right foot may have had claws. Furthermore, there appears to be a curvy line drawn with intent between the right leg and right hand.⁴³

3. Which Demon is Depicted?

The being depicted on *BAM 202* seems to relate to the evil afflicting a patient. None of the two figurines described in the instructions in obv. 9-12 or obv. 17-rev. 4' represents demonic beings.⁴⁴ Additionally, it seems unlikely that the depiction represents any of the initial psychological problems in obv. 1, as these are not described as divine powers in *BAM 202* (see n. 6; cf. n. 5). Consequently, the only evil incarnate mentioned in *BAM 202* is *bennu*-epilepsy, identified in the text as “a *šedu*-demon deputized by *Sîn*”. This seems to resonate with the tentative reconstruction of the final line of *BAM 202*: “The *i[mage]*¹⁷ of divine¹⁷ *Be[n]nu*¹⁷-(epilepsy), de[puty of *Sîn*]”. This line must therefore refer to the depiction, which is drawn along this line and below.

⁴³ This depiction sets itself apart from Reiner's description of such drawings as “schematic” or “clumsy” (Reiner 1987: 30).

⁴⁴ The two prescriptions describe the production of figurines representing the patient's body and a figurine presumed to be married off to the evil afflicting the patient (see Section 6; Chalendar 2013: 10-13).

As discussed in the previous section, *bennu* is the common word for (recurring) epilepsy-like reactions. However, its appearance as a demon remains largely unknown,⁴⁵ and descriptions of *bennu* are poorly attested.⁴⁶ The diagnosis concerning *bennu* also mentions the patient “crying like a goat”, thus underlining the connection between goats and epileptic disorders. However, the drawing does not seem to resemble a goat (see Section 2). Consequently, it is difficult to locate any significant features linking the depiction on *BAM* 202 to concrete descriptions of *bennu*-epilepsy.

Several parallel passages in *BAM* 311, the unpublished BM 40183+, *SpTU* vol. 3 no. 83, and *STT* vol. 2 no. 286 contain diagnoses and treatments for *bennu*, the generic “Any evil” *mimma lemnu*, and the *alû*- and associated demons, as well as instructions for keeping such evils from a man and his bed (Chalendar 2013: 4-8; Finkel 2011: 338, 340 Fig. 4).⁴⁷ Chalendar (2013: 11-13) also reconstructed the ritual in *BAM* 202 obv. 17-rev. 4’ to describe the removal of *mimma lemnu*. These texts therefore display a general overlap in cures against generic epilepsy (especially *bennu*) and the demon *mimma lemnu*, as well as a focus on the patient’s bed. However, descriptions of *mimma lemnu* do not overlap with the depiction on *BAM* 202, and this demon can therefore be ruled out.⁴⁸

Epilepsy was associated with specific involuntary movements, as well as a particular behaviour exhibited by the patient in his bed (Stol 1993: 38; see Section 1). The patient’s sickbed therefore appears to be connected to, e.g., epileptic disorders, and it is mentioned explicitly as an important location twice in *BAM* 202 (obv. 17-23 and rev. 5’).⁴⁹ Focusing on the sickbed may aid in the search for a comparable demon. As shown by Wiggermann (2011: 313-14; Wiggermann 2007: 106-9 and n. 5), a nameless evil with the head of a dragon-snake (*bašmu*?), perhaps representing “Death” (*mūtu*), the messenger of Ereškigal, is depicted on an amulet from the first millennium BCE rearing its head from underneath a man’s bed.⁵⁰ As noted by Wiggermann, the scene seems to mirror the situation described in a Ḫulbazizi incantation found on various amulets, which reads:

“He who transgressed the privacy of my bed, made me shrink for fear, and gave me frightening dreams ...” (Wiggermann 2007: 106-7 and n. 3; see also Wilhelm 1979; Butler 1998: 50-51).⁵¹

⁴⁵ Stol 1993: 5-7, 20-21, 132.

⁴⁶ An account of this demon is found in the Middle Babylonian Armana recension of the myth Nergal and Ereškigal, in which *bennu* is stationed as a demon in the 9th gate of the netherworld, see Ponchia and Luukko 2013: xcv; *CAD* B: 206; Stol 1993: 21.

⁴⁷ An overview of targeted problems: *BAM* 311: obv. 22’ (depression); obv. 30’ (persistent “Hand of Ištar”); obv. 23’, rev. 52’-53’, rev. 59’, rev. 77’ (epileptic disorders); obv. 41’, obv. 46’ (keeping *mimma lemnu* from a man and his bed); obv. 47’ (*alû*-demon); *STT* vol. 2 no. 286 col. ii: 2, 9 (epileptic disorders); *SpTU* vol. 3 no. 83: obv. 16, rev. 15, rev. 22 (keeping *mimma lemnu* from a man); obv. 23 (eradicating evil); obv. 13, rev. 10 (keeping evil from a man and his house); obv. 31 (*alû*-demon? See Chalendar 2013: 7). Chalendar (ibid.: 4-6) states that BM 40183+ contains treatments against mental changes, attacks of the *gallû*- and *alû*-demons, to keep “Any evil” (*mimma lemnu*) from approaching a man, for an evil *šēdu*-demon in a bed, attack of the *bennu*-demon, and instructions to tear out the *lilû*-, *ardat lilû*- and *mimma lemnu*-demons.

⁴⁸ In the so-called “underworld vision of an Assyrian prince”, *mimma lemnu* is stated to have two heads, one of a lion and another unknown one, see *SAA* 3 no. 32 rev. 7. Only a single crude and partly damaged depiction of *mimma lemnu* exists (Finkel 2011: 338, 340 Fig. 6), and this does not resemble the drawing on *BAM* 202. I cannot describe any significant features of this drawing from the picture published by Finkel.

⁴⁹ The patient’s bed and the influence of various demons were also described in numerous rituals connected to, e.g., dreams, see Butler 1998. Possibly, the bedroom offered the most privacy, and it was the place where the healer visited the patient. Van der Toorn (1996: 60-61) argues that in the Old Babylonian period the bedroom also had the family tomb underneath the floor due to the room’s high degree of privacy and silence. The patient’s bed in connection to illness and demons should be examined further elsewhere. See n. 15.

⁵⁰ Wiggermann 2011: 313 Fig. 6, copied after Becker 1993: pl. 2 no. 7 (photo). Wiggermann (2011: 313-14) proposes that this illustration represents a nameless evil sharing iconographic features with *mūtu*.

⁵¹ Wilhelm 1979: 38. The following is a composite transliteration of the relevant lines: ÉN šá mal-di ^{giš}NÁ-iaš DAB ú-pal-lih-an-ni ú-šag-ri-ra-an-ni MÁŠ.GE₆.MEŠ pár-da-a-ti ú-kal-lim-an-ni ...

The bed may generally have been linked to certain evils, such as *mimma lemnu* and *mūtu*.⁵² A physical description of Ereškigal's messenger *mūtu* is known from the "underworld vision of an Assyrian prince". The demon is described as having the head of a *mušhuššu*-dragon, human hands and some unknown description of the feet.⁵³ The *mušhuššu* is a snake-dragon with a long neck and the head of a snake with a forked tongue, two horns occasionally curled up, front paws of a lion, and hind legs with talons of a bird (Wiggermann 1993-97: 456).⁵⁴ Although the *mušhuššu* is commonly depicted without ears and on all fours, for example on the Ištar Gate, it can also be depicted with ears and standing up (e.g., Parpola 1993: 212). This description could reflect parts of the drawing on *BAM* 202, though the demon does not appear to be depicted with paws or human hands exclusively.⁵⁵ Although death could be personified, the Neo-Assyrian recension of the Epic of Gilgamesh informs us that "No one sees Death, no one sees the face [of Death]".⁵⁶ Yet, a related *bennu* diagnosis referenced in Section 1, emphasizes that occasionally the patient did in fact see the evil in question. Possibly, a similar situation is mirrored in Gilgamesh as well: "In my bed-chamber Death abides, and wherever I might turn [*my face*], there too will be Death".⁵⁷

The drawing on *BAM* 202 does not conform completely to any descriptions of demons associated with the content of the text or the larger demonological context. Yet, it is possible that the creature on *BAM* 202 illustrated a specific version of a demon.⁵⁸ Perhaps its particular physique was once described in the statement in rev. 15'. Therefore, it seems plausible that the demon represented a version of *bennu*-epilepsy, possibly representing our first depiction of this demon in the cuneiform record. Still, the drawing may instead have depicted an

⁵² For a recent analysis of *mūtu*, see Sibbing-Plantholt in press. Also note that Kišir-Aššur likely fumigated the bed in relation to treatments of the epilepsy-associated *šaššaṭu*-illness (*BAM* 129 col. iv 10', col. iv 16'; Farber 2004: 127 n. 54), and Kišir-Nabû copied a *namburbi*-ritual to negate evil emanating from a man's bed (VAT 13682 = N4 no. 404; Maul 1994: 379ff., 546-547; see Butler 1998: 46-47).

⁵³ Wiggermann 1997: 34-35; *SAA* 3 no. 32 rev. 3: ... ^dmu-ú-t[u'] SAG.DU MUŠ.ḪUŠ' ša-ki-in ŠU^{II}-šú LÚ.MEŠ GÌR^{II}-šú [x][x x]. Alternatively, *mūtu* could appear Anzû-like (Sibbing-Plantholt in press). For *mūtu* as personified death, see Stol 1993-97; see also George 1992: 108. "Death" is blocked out of a man's house, alongside other evils, in the apotropaic ritual *šēp lemutti ina bīt amēli parāsu* (Wiggermann 1992: 6-7).

⁵⁴ Furthermore, the animal of Marduk was described as a possible sender of *šinūt tēmi* in *šammu šikinšu*, see n. 5.

⁵⁵ As described in Section 2, the demon on *BAM* 202 shows several reptile features. Note that the *mušhuššu*-dragon could be equated with a *ḫulmittu* (*CAD* Ḫ: 230). As argued by Landsberger (1934: 46, 62-63, 116ff.), it is possible that the *ḫulmittu* is to be identified as a chameleon. If so, this could explain why such related demons were difficult to detect, seeing as a chameleon can change its colour. Furthermore, chameleons move their eyes separately in various directions, which could be related to the abnormal eye movements occasionally encountered during various seizures. The *ḫulmittu* could also herald death (Freedman 2006: 73).

⁵⁶ Tablet 10 lines 304-5: [ul ma]-am-ma mu-ú-tu im-mar : ³⁰⁵ ul ma-am-m[a ša mu-ti i]m-[mar] pa-ni-šú (George 2003: 696-97). Note also lines 316-17: "The abducted and the dead, how alike they are! They cannot draw the picture of death", *šal-lu ù mi-tum ki-i KA a-ḫa-meš-ma* ³¹⁷ šá mu-ti ul iṣ-ṣi-ru ša-lam-šú (ibid.; see Wiggermann 2011: 309).

⁵⁷ Tablet 11 lines 245-46: *ina É ma-a-a-li-ia a-šib mu-tum* ²⁴⁶ ù a-šar [pānīya?] lu-uš-kun šu-ú mu-tum-ma (George 2003: 718-19). It is unclear if "Death" here is considered an abstract or a personified figure.

⁵⁸ This was originally suggested to be the case concerning the demon on a ritual tablet published by Zilberg and Horowitz 2016; cf. Jiménez 2018. Furthermore, the appearance of various protective deities and demons is known from Neo-Assyrian reliefs, as well as from figurines buried beneath houses (Rittig 1977). Yet, the latter cannot always be coupled with the associated rituals (Wiggermann 1992: 99-100, cf. 102-3). Wiggermann (2011: 309-10) has stressed that images of the majority of evil demons are not found depicted in the available record. It is possible that a certain amount of danger was associated with displaying such evils. Note that an apotropaic figurine of *mūtu* could be used in some rituals (Sibbing-Plantholt in press; for other demons utilized in rituals to support a patient, see Schwemer 2018).

overarching evil, such as the messenger of Ereškigal, “Death” (*mūtu*), which was found lurking underneath the bed of some patients.⁵⁹

4. Discussion of the Colophon

Due to the damaged colophon, it is uncertain by whom the tablet was copied and what professional title the copyist may have had. The colophon states: “for undertaking a (ritual) procedure (of) Ki[šir- ...].⁶⁰ *BAM* 202 was therefore copied by Kišir-Aššur or his nephew Kišir-Nabû of the Baba-šuma-ibni family of *āšipu-/mašmaššu*-exorcists who inhabited the N4 house (see May 2018; Maul 2010; Pedersén 1986: 41ff.). *BAM* 311, which contains a parallel diagnosis to *BAM* 202 for *bennu*-epilepsy, was also excavated in the N4 house in Assur. And this manuscript was also copied by either Kišir-Aššur or Kišir-Nabû,⁶¹ though it is plausible that the tablet may have been copied by Kišir-Nabû.⁶² Below, I offer an overview of idiosyncrasies in *BAM* 202, which may aid in identifying the copyist.

Although a palaeographic study of particularities in Kišir-Aššur’s and Kišir-Nabû’s way of writing individual signs needs to be conducted before any definitive conclusions can be drawn, some tentative observations can be made concerning individual writing practices. The initial Winkelhaken of the GIM in *BAM* 202 rev. 5’ is not similar to, e.g., the one in the GIM¹ (mistakenly written as BAN) in Kišir-Aššur’s *šamallû šeḫru* manuscript *BAM* 129 col. i 10. Furthermore, the dual writing ŠU^{II} *be-en-ni* in *BAM* 202 rev. 7’, which must be read as a singular, seems to reflect a scribal convention also found in, e.g., Kišir-Aššur’s *BAM* 9.⁶³

BAM 202 also contains a number of odd writings and scribal mistakes (obv. 15, rev. 8’, rev. 11’, see the commentary), as well as scribal variants (rev. 5’-6’, see the commentary). For example, *BAM* 202 rev. 5’ describes the patient talking a lot (*magal idabbub*). Both the parallel passages in *BAM* 311 (rev. 52’) and BM 40183+ (rev. 25’) write “he continually cries out a lot” *magal ištānassi* (GÜ.GÜ-si). It remains uncertain if this change was a scribal

⁵⁹ Perhaps this is the reason why the demon on *BAM* 202 was illustrated horizontally. Bottéro (2001: 63) notices the following concerning generic demons: “It seems that people did not dwell very much on their persons, their nature, or their existence, as they have never been presented very clearly”.

⁶⁰ Chalendar (2013: 12-13, 45-46) offers the reconstruction *ana šabāt epēši Ki[šir-Aššur mašmaš bīt Aššur ...]*, thus providing Kišir-Aššur with the title “exorcist of the Aššur temple” without explicitly stating why. It is clear from the commentary, however, that the reconstruction [*mašmaš bīt Aššur*] is based on the observation by Maul (2010: 2012-13) that the phrase *ana šabāt epēši* is less likely to have been used by young apprentices, as there must have been a responsibility involved in copying knowledge for practical purposes. For the various attested phases of Kišir-Aššur’s and Kišir-Nabû’s careers, see *ibid.*: 208-10.

⁶¹ The colophon reads rev. 94’-96’: [(x) x x x]x¹ SAR È *a-na ša-bat DÙ-ši* ^{95’} *ᵀKi-šir-dingir-[x]* ^{95’} [DUMU ^{p.d}x x (x)] ^{96’} *ᵀMAŠ.MAŠ È Aš-šur ḥa-an-tiš ZI-ḥa* ^{96’} [x x x]x¹ GIM LIBIR.RA [x x (x)]. See Scurlock 2014: 667, 701, 754; Abusch and Schwemer 2011: 49-52; Böck 2010a: 92-93; Schuster-Brandis 2008: 63 and n. 179; Scurlock and Andersen 2005: 83 no. 3.268, 315 no. 13.169, 422 no. 18.25, 789; Heeßel 2000: 86 n. 61, 223, 316 and n. 15; Stol 1993: 6 and n. 10, 16 and n. 110-111, 29 and n. 49, 30 and n. 61, 37 and n. 140, 41 and n. 166-167, 82 and n. 101, 103-104 and n. 31, 33, 40, and 44, 150 and n. 14; Hunger 1968: 75 no. 218 (colophon); Köcher 1964: XXIII-XXIV and pl. 75-77 no. 311 (copy).

⁶² *BAM* 311 contains the previously unnoticed sign KÚR “wrong!” on the left edge of the tablet in obv. 24’, which marks a mistake in the line (obv. 24’: ... *ᵀqitl-<ma>* ²*ina KUŠ*). The use of KÚR to mark mistakes has so far only been observed in three N4 manuscripts: *BAM* 311 (obv. 24’), Kišir-Nabû’s copy of the Exorcist’s Manual *KAR* 44 (rev. 41; Schwemer 2011: 422; Geller 2000: 254 with references), and *BAM* 193 (col. i 7’; Schwemer 2007: 110) with a broken colophon (see also Geller 2000: 254 with further references). As one out of three tablets contain Kišir-Nabû’s name, it is possible to tentatively suggest that tablets with this notation from the N4 library originated from his hand. Frahm (2011: 269 n. 1277) suggested that Kišir-Aššur might have been the instructor of his nephew Kišir-Nabû, possibly copying at least a commentary for Kišir-Nabû’s instruction, although this remains uncertain.

⁶³ *BAM* 9 obv. 14 and 16 list an eye of each side of the head, but in both instances Kišir-Aššur writes IGI^{II}. Note that the manuscript was likely from an early stage of his career, and his use of such a convention does not continue in later texts. Whether or not such a scribal convention is also valid for Kišir-Nabû’s texts requires further study. For Kišir-Aššur’s earlier career phases, see Arbøll 2018b.

mistake. However, it is worth noticing that the ritual instructions in *BAM* 202 also differ from the parallel lines (see commentary to rev. 5'-11'). Furthermore, the copyist added one too many wedges to the sign 𒀠𒀭𒀠𒀭𒀠¹ (rev. 8'), which may be considered a mistake. The sign therefore looks similar to the Neo-Babylonian way of writing 𒀠𒀭𒀠𒀭𒀠 instead of the expected Neo-Assyrian variant (see commentary). Of the two individuals, Kišir-Nabû is the only one explicitly engaged in copying writing-boards in Babylonian writing, and he notices this in several manuscripts.⁶⁴

It is entirely likely that the phrase *ana šabāt epēši*, which I translate: “for undertaking a (ritual) procedure” and refer to as a “purpose statement”, was added to colophons of the Baba-šuma-ibni family members to indicate that the tablet in question was copied for a specific purpose, e.g., in preparation of a specific healing ceremony.⁶⁵ Such statements largely do not seem to have been written in colophons by Kišir-Aššur before he reached the *mašmaššu*-stage of his career. It is furthermore difficult to determine if some of the idiosyncrasies in *BAM* 202 exist due to haste in copying or carelessness. The presence of the drawing indicates that the copy was not rushed more than necessary, although this remains uncertain.

Illustrations of demonic forces are rare on magico-medical cuneiform tablets, and the majority of drawings serve to depict a figurine produced during a ritual described in the text.⁶⁶ However, the drawing at the end of the reverse of *BAM* 202 is not likely to have served as a sketch for the production of figurines in the rituals (see n. 44). It is therefore possible that the drawing served as a unique testimony to how the Baba-šuma-ibni family envisioned a demonic foe.⁶⁷ Until now, few tablets from the N4 tablet collection have been shown to contain drawings linking theory to practice. Of the two likely candidates for writing *BAM* 202, only Kišir-Nabû copied another tablet with drawings, namely an extract of the *mīs pī* ritual.⁶⁸ Unfortunately, the observations above must be considered inadequate for reconstructing the copyist's name with certainty. Therefore, the evidence remains inconclusive at present.

5. Conclusion

This article has presented and discussed the newly discovered demon depicted on the reverse of *BAM* 202, by providing the first revised line drawing of the manuscript since Köcher's copy from 1964. The two groups of associated ailments portrayed in the manuscript, namely labels of insanity and *bennu*-epilepsy, the latter explained as a demon acting on behalf of the moon god Sîn, are described in diagnoses to exhibit various types of abnormal behaviour associated with odd speech and sounds, as well as motoric disturbances in the patient's nervous system. It is plausible that several of these symptoms confined the patient to his bed, which is mentioned twice in the text.

⁶⁴ E.g., *BAM* 52 state to be copied from an “Akkadian” (URI^{ki}) writing-board, which likely refer to Babylonian script. However, this observation is tenuous and it may be insignificant.

⁶⁵ I will review the previous literature on the phrase *ana šabāt epēši* and examine the use of such expressions in Kišir-Aššur and Kišir-Nabû's texts in a future monograph based on my dissertation (Arbøll 2017). For now, see the references in the commentary to *BAM* 202 rev. 14'. Chalendar (2013: 3) also suggests that the prescriptions on *BAM* 202 were collected for a specific purpose.

⁶⁶ Zilberg and Horowitz 2016: 175-177, 183; Finkel 2011: 338, 38-42 Figs. 4-6; see Reiner 1987: 30; Nougayrol 1972: 141. The texts are *STT* vol. 1 no. 73 col. ii (amorphous blob); BM 40183+ (antediluvian sage and assistant); BM 47817 (figurine to dispel a ghost); BM 47701 (the *mimma lemnu*-demon); Zilberg and Horowitz 2016 (the *māmītu*-curse).

⁶⁷ Chalendar (2013: 46-47) proposes that the text could have functioned as a differential diagnosis exercise. Principles of differential diagnosis of (divine causers of) illness can be observed in some sections of Sa-gig, see, e.g., Wee 2012: 167-68, 213; Heeßel 2000: 11 and n. 65, 57. Both Kišir-Aššur and Kišir-Nabû copied various texts, which can be classified as advanced training texts (see, e.g., Arbøll 2018a; Frahm 2011: 122).

⁶⁸ See Walker and Dick 2001: 227-42; Pedersén 1986, N4 no. 80. However, note that Kišir-Aššur's *LKA* 137 contains a crude diagram incised on the reverse (Finkel 1995).

Partly based on the tentative reconstruction of the final line in the colophon, I have suggested that the demonic variant of *bennu*-epilepsy described in the text was the being depicted on the reverse of the manuscript. If so, this would be the first depiction we have of *bennu*-epilepsy from Mesopotamia. However, the illustration does not conform completely to any descriptions of known demons, and it cannot be ruled out that the depiction represented a specific variant of a demon, or that the drawing was related to another overarching evil. Several associated demonic beings are mentioned in similar contexts in texts with parallel passages.

The copyist cannot be identified with certainty, as the evidence remains tenuous. The fact that the drawing is found on a medical tablet, combined with the Baba-šuma-ibni family's occupation as *mašmaššu*-exorcists, ensures us that the demonic being was real to the practitioners and its features must have been evoked when administering the cure. Not only is the drawing on *BAM* 202 one of the most detailed depictions of a demon on any magico-medical tablet from ancient Mesopotamia, it is also a unique testimony to how the copyist envisioned his demonic foe.

6. Appendix: Edition of *BAM* 202

BAM 202 contains eight paragraphs consisting of diagnostic statements and prescriptions. The text ends with a brief colophon and a drawing of a demonic creature. Each paragraph is separated by a single horizontal line, except between rev. 4'-5' and 13'-14', which are separated by two horizontal lines. Double rulings may indicate that the succeeding paragraph originated in a different text, and they also serve to mark off colophons (see Cancik-Kirschbaum and Kahl 2018: 169-170). Parallel passages are found in *BAM* 311 (rev. 51'-55'), the unpublished BM 40183+ (obv. 1'-2', 8'-11', rev. 25'-27'), *SpTU* vol. 3 no. 83 (obv. 5'-6', 9'-11'), and *STT* vol. 2 no. 286 (col. ii 14-29). I collated *BAM* 311 in the summer of 2016, and I read the parallel passages in BM 40183+ from online pictures (British Museum collection online 2018). The remaining passages were read from the hand drawings. The parallel passages are discussed in the commentary.

Museum no.: VAT 13739+14130

Description: Single-column tablet in portrait format; collated during the summer of 2015 at the Vorderasiatisches Museum zu Berlin

Provenience: Assur; the N4 library ("Haus des Beschwörungspriesters"); N4 no. 476

Length - Width - Thickness: 117 mm – 79 mm – 22 mm

CDLI no.: P285293 (photograph)

Bibliography: Chalendar 2013 (edition); Böck 2010a: 94; Stol 2009: 2 n. 10, 6-7, 11-12; Scurlock and Andersen 2005: 83 no. 3.268, 315 no. 13.169, 375 no. 16.43, 383 no. 16.87, 788; Heeßel 2000: 86 n. 61, 223; Stol 1993: 5-7 and n. 10, 20-21 and n. 163, 49-50 and n. 259 and 261, 149-150 and n. 14; Pedersén 1986: 71; Farber 1977: 74-75 n. 4; Hunger 1968: 70 no. 201 ms F (colophon); Köcher 1964: XI and pl. 4-5 no. 202 (old copy).

6.1. Line Drawing:

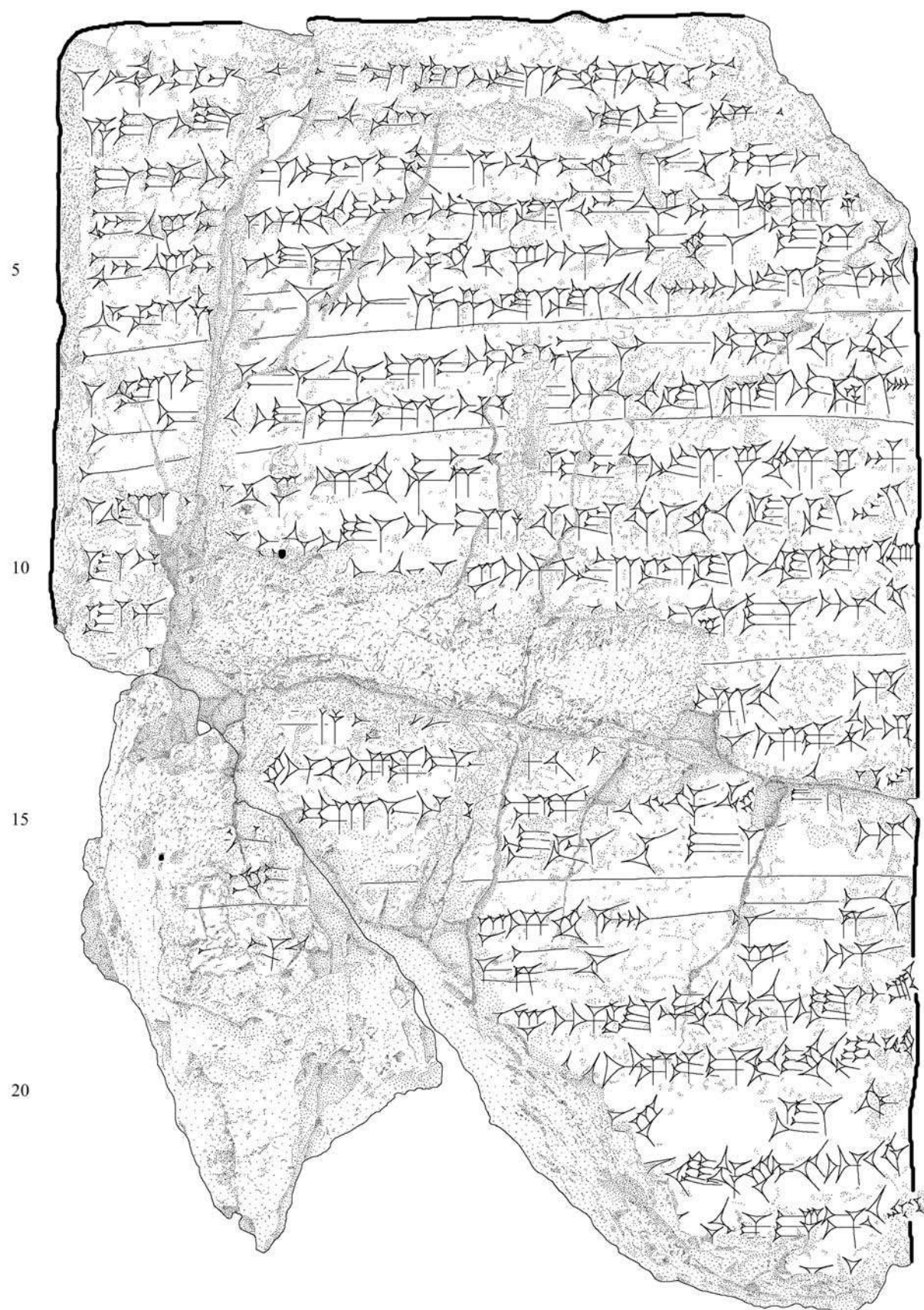


Fig. 2: Drawing of the obverse of *BAM 202*

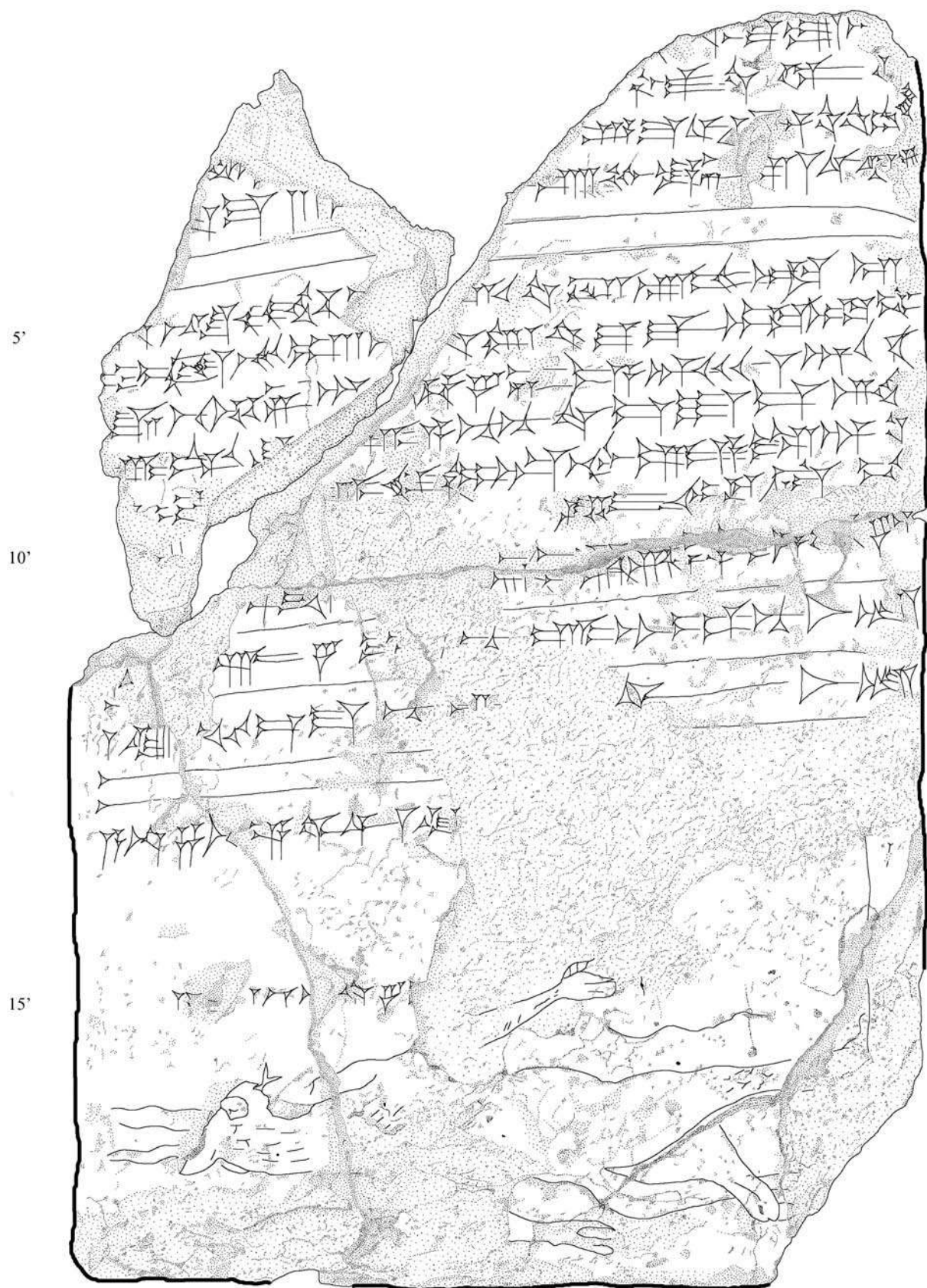


Fig. 3: Drawing of the reverse of *BAM* 202

6.2. Transliteration:

Obverse

- 1 DIŠ NA KA.[HI.KÚR.R]A DAB-su-<ma> tē-en-šú i[š-ta-na-an-ni]
2 a-ma-tu-^lšú^l K[Ú]R.KÚR-ru [(x x)] [U]MUŠ-šu ŠU[B.ŠUB-su u]
3 ma-gal D[U]₁₁.DU₁₁-ub a-na tē-me-šú tur-r[ⁱšú]
4 GÌR.PAD.D[U] NAM.LÚ.U₁₈.LU GÌR.PAD.DU ŠÁḤ NI[TA]
5 GÌR.PAD.D[U] KA₅.A ina GÚ-šú GAR-an ina NE SAR-šú
6 ù ÌÌ.MEŠ A.ZA.LU.LU EŠ.MEŠ-su-ma TI
-
- 7 DIŠ KI.MIN ^ll[ⁱ]GI-lim ^uKA.ZAL.LÁ KA tam-tim
8 ina K[A]Š la pa-tan EN ^lil-bal-lu-ṭu NAG.MEŠ
-
- 9 DIŠ KI.MIN ^lSU^l-šú šá GI DÙ-uš [S]AG.DU-su šá IM GAR-an
10 ^{túg}G[Ú].^lÈ^l tu-ḫal-lap-šú TÚG UD.1.KAM MU₄.MU₄-su
11 ^{túg}BAR[.SIG ina SAG.]D[U]-š[ú] GAR-an KUŠ UR.GI₇ ina KI.TA-šú ŠUB
12 ^lx^l[x x x x x]^lx x x^l [G]U₇-ma TI-uṭ
-
- 13 [DIŠ KI.MIN SA]G² a-^llal-^l[ⁱ?mušen SAG UG]A^{mušen}
14 [SAG KUR.G]I^{mušen} SAG GIŠ.N[U₁₁?]^[mušen] S[AG Í]GIRA^{mušen}
15 [SAG du-r]u-um-me^{mu[š]en} SAG B[U]RU₅.ḤAB[RUD^l?].IDA^{mušen} NÍTA^l
16 [ina] ^lNE^l SAR-šú-ma TI
-
- 17 [DIŠ KI.MIN] ^lx pi² x^l[x x] šá GI.MEŠ DÙ-uš
18 [x x x x x ina p]a-ni-šú GAR-an
19 [(x) x x x x x-š]^u GAR-an ^{túg}GÚ.È tu-ḫal-lap-šú
20 [x x x x x x x]^lx^l ina SAG ^{giš}NÚ GIG GAR
21 [(x) x x x ina² ^{giš}NÚ² GI]G tuš-tál
22 [(x) x x x x x x -m]^a GIG BI TI-uṭ
23 [(x) x x x x x x x]^lx šul-pur GUD BAL-šú
24 [(x) x x x x x x x x]^lx^l[(x)]

Breaks off.

Reverse

- 1' [(x) x x x x x x te²-leq²-q]ⁱ²-^lšil-ma ^ltal-a[^t-ta²-lak²]
2' [(x) x x x x x x x] šu-ud-di-šú
3' [ana² bi²]-^l[i šá² BĀD² tu²-še²]-rib-ma IGI-^lšú ^lUTU.È GAR-ma
4' [ta-bar-ra]^m²-ma ^l3^l Z[^l.DUB.D]UB.BU NAG[A.S]I ana IGI ḤA[BRU]D ^lŠUB^l
-
- 5' ^lDIŠ^l [N]A ina KI.NÁ-šú ḤU[LUḤ.ḤUL]UḤ-ut GIM ÛZ GÚ-si
6' i-ram-mu-um ^lil-[p]ar-ru-ud ma-gal DU₁₁.DU₁₁-ub
7' ŠU^{ll} be-en-ni ^ll[AL]AD šá-né-e ^d30 ana TI-šú
8' ^llGEŠTIN.K[A₅.A] ^ll^la-nu-nu-tú ^{giš}ḤAŠḤUR^l GIŠ.GI
9' [ILL]U² L[ⁱ?TUR²] ^ll^lḤ[A]R.LUM.BA.ŠIR ^ua-ra-an-tú
10' [x]^lx^l[(x x x)] SÍG UGU.^lDUL^l.BI
11' [ina KUŠ ^{munus}]^lÁŠ.GĀR^l ^lx^l[x x ina] ^lSA ÁB.RI.RI.<GA> ^lGAG^l?².GAG-p^ll ina ^lGÚ-šú^l GAR-^llan^l
-
- 12' ^lDIŠ^l K[I.MIN] ^llšá-r[a]-nu ^uḫal-tap-pa-nu ina K[U]Š
13' DIŠ KI.MIN NUMUN ^{giš}MA.NU ^ll[IGI]-lim ina KUŠ
-
- 14' a-na ša-ba[t] e-pe-ši ^pKi-[šir-x-x (x x x x?)]
15' ^lša^ll-[^l]a[m²] ^ld^l?²(diš)l-be²-e[n²]-^lina^l?² šá-n[é-e ^d30]

6.3. Translation:

Obv. 1-3:	If <i>dem</i> [<i>makurr</i>] <i>û</i> (derangement) has seized a man and his mind a[lters time and again], his speech is incoherent, he [get]s a dep[ression] time and again (lit.: his [min]d continually fa[lls on him]), and he talks a lot, (in order) to res[tore] his mind to him:
4-6:	You place “bone of humanity”, the bone of a ma[le] pig, (and) the bone of a fox by his neck. You fumigate him by means of charcoals, and (then) you anoint him continuously with oils of herd animals (<i>nammaššû</i>), and he will recover.
7-8:	If “ditto”, he repeatedly drinks “It cures a thousand”-plant, <i>kazallu</i> -plant, (and) <i>imbu’ tâmti</i> in beer on an empty stomach until he recovers.
9-12:	If “ditto”, you make (a representation of) his body (made out) of reed, you place (a representation of) his head (made out) of clay (on it), you clothe it (in) a <i>naḥlaptu</i> -cloak, you cover it with the garment for one day. You place a <i>par[šigu]</i> -headdress on its [hea]d, you place the skin of a dog underneath it. [He (i.e. the patient) ...], he [e]ats [...], and he will recover.
13-16:	[If “ditto”], you fumigate him (with) the hea[d] ² of an <i>allal</i> [<i>lu</i> -bird the head of an <i>ārib</i>] <i>u</i> -bird, [the head of a goos]e, the head of an <i>anpa</i> [<i>tu</i>] ² -bird, the h[ead of a h]eron, [the head of a <i>dur</i>] <i>ummu</i> -bird, (and) the head of a male <i>iššūr ḥurri</i> -bird [on] charcoals, and he will recover.
17-23:	[If “ditto”] you make a [... (<i>figurine</i>)] of reeds, you place [... <i>in</i> f]ront of it, you place [... <i>by</i> it]s ² [...], you clothe it in a <i>naḥlaptu</i> -cloak. [<i>You</i> ² ...], you place [... (<i>the figurine</i> ?)] at the head of the patient’s bed. You make (it) lie [<i>in the bed of the patie</i>]nt [...]. [<i>You</i> ² ... <i>an</i>] ² that patient will live. [<i>You</i> ² ...], (and) you pour [...] (for) it in an ox hoof, [<i>You</i> ² ... (<i>breaks off</i>)]
Rev. 1’-4’:	“[<i>You will take</i>] her <i>a</i> [<i>way</i>], and you [<i>will depart</i>].” [...] its travel provisions, [you sli]p [(it) into a drain]age ope[ning of the city wall], and you place it facing the sunrise, and then [<i>you sea</i>] <i>l</i> (the opening), and you pour three flour heaps (and) “horned salt-plant” in front of the op[eni]ng.
5’-11’:	If a man continually j[er]ks in his bed, he cries like a goat, he groans, he shudders (lit.: he is afraid), (and) he talks a lot: “Hand of <i>bennu</i> -epilepsy”, a [<i>šē</i>] <i>du</i> -demon deputized by Sîn. To cure him: you wrap up “f[ox] grape”, <i>anunūtu</i> -plant, “marsh-apple”, sap of <i>abukkatu</i> -plant, <i>ḥarmunu</i> -plant, <i>arantu</i> -plant, [...], (and) hair of a monkey [<i>in the skin of a female</i>] kid [... with] the tendon of a dead cow ¹ , (and) you place (it) around his neck.
12’:	If “d[itto]”, (you place) <i>šarānu</i> -plant (and) <i>ḥaltappānu</i> -plant in a leather skin (around his neck).
13’:	If “ditto”, (you place) <i>ēru</i> -tree (and) “[It cures] a thousand”-plant in a leather skin (around his neck).
14’:	For undertaking a (ritual) procedure of Kišir-[Nabū] ² , (<i>broken title?</i>).
15’:	The i[m]a[ge] ² of divine ¹² <i>Be[n]nu</i> ¹² (-epilepsy), de[puty of Sîn].

6.4. Commentary

Obv. 1-6: Parallel passages are found in *STT* vol. 2 no. 286 col. ii 14-18 and *SpTU* vol. 3 no. 83 10'-11':

STT vol. 2 no. 286 col. ii

- 14 [x x K]A.ḪI.KÚR.[RA] DAB-su-[m]a UMUŠ-šú iš-t[a-na-an-ni]
 15 [a-ma-t]u-šú KÚR.K[Ú]R-ra té-em-šú ŠUB.ŠUB-[su] u ma-gal [x x (x)]
 16 [ana té-e]m-šú tur-[ru]-šú ḪÌR.PAD.DU NAM.[LÚ].U₁₈.L[U?]
 17 [x x x] ŠAḪ² ḪÌR.P[AD.D]U KA₅.A ina GÚ-[šú] GAR-[an]
 18 [ina] ḪNE x SAR[?] Ḫ[?].MEŠ^{1?} A.[Z]A.LU.[LU] ŠÉŠ [x x x x]

SpTU vol. 3 no. 83 obv.

- 10' DIŠ ḪI.MIN ḪÌR.PAD.DU NAM.LÚ.U₁₈.LU ḪÌR.PAD.DU ŠAḪ NITÁ
 ḪÌR.PAD.DU KA₅.A ina ḪGÚ-šú GAR-an ḪSAR^{1?}-šú
 11' ina ḪUDU A.ZA.LU.LU ŠÉŠ.ŠÉŠ-[su]

For a discussion of the diagnosis, see Section 1. For previous discussions of this passage, see Chalendar 2013: 10-13, 12-29; Steinert 2012: 391 and n. 29-30; Stol 2009: 1-2 and n. 10, 7, 11-12; Finkel 2008: 337; Scurlock and Andersen 2005: 375-76 no. 16.43, 383 no. 16.87; Köcher 1964: XI; cf. *CAD* Š/3: 46. In addition, the commentary *CT* vol. 41 pl. 43 BM 59596 concerns the same diagnosis, although much of the text is obscure (see Chalendar 2013: 8-9; Frahm et al. 2013; Frahm 2011: 238; Stol 2009: 12; Labat 1933: 114-15).

- 1: For the tentative reconstruction of a Gtn-stem of *šanû*, see *CAD* Š/1: 406; *CAD* Ṭ: 95; Stol 2009: 2 n. 10; Chalendar 2013: 20; see also *AHW*: 1166.

The inserted <ma> is based on the duplicate passage in *STT* vol. 2 no. 286 col. ii 14.

- 2: There is a break in the middle of the line, which may have held two signs. Considering the parallel passage in *STT* vol. 2 no 286, it seems likely this space was originally left blank.

The reconstructed [u] at the end of the line is based on the parallel passage in *STT* vol. 2 no. 286.

- 3: Chalendar (2013: 10) suggests reading the partly broken sign at the end of the line as *tur-r*[²-šú], which the visible wedges support.

- 4: Based on my collation, there appears to be a small wedge impressed above the U₁₈ sign, which cannot be explained. Chalendar (2013: 10) transliterated the end of the line as ŠAḪ NI[TAḪ], which is presumably a typo for the reading ŠAḪ.

- 4-5: Whether or not some of the bones mentioned were *Decknamen* for plants remains uncertain (Rumor 2017: 27; Chalendar 2013: 29-30; Böck 2010b and 2011; Stol 2009: 12).

- 5-6: The phrase *ina pēnti tuqattaršu*, “you fumigate him (with various plants) on charcoal” (e.g., Abusch and Schwemer 2011: 127, 203, 267-68), is followed in *BAM* 202 obv. 16. As no specific fumigants are mentioned in obv. 5, I have translated “by means of” for *ina*. For fumigation in the context of insanity and epilepsy, see Chalendar 2013: 29-30; Böck 2011: 700, 702; Böck 2010a; Stol 2009: 12; Stol 1993: 106-107 and n. 75; Walker 1980. For fumigation in Mesopotamia, see also Reiner 1957-58: 394; Labat 1961; Goltz 1974: 83-86; Herrero 1984: 109f.; Finkel 1991; Stol 1998: 350-351; Geller 2010: 20, 81f., 181 n. 44; Geller 2016: 25-26; Stadhouders 2016.

6: Note that the ending (verbal form)-*ma* TI “he (drinks/eats/etc.) ..., and he will recover” in *BAM* 202 obv. 6, 12, and 16 may designate “a subordinate ‘if’ clause” (Scurlock and Andersen 2005: xvi).

7-8: This prescription runs largely parallel to *STT* vol. 2 no. 286 col. ii 19-20 and *SpTU* vol. 3 no. 83 9’:

STT vol. 2 no. 286 col. ii

19 DIŠ K[¹I].MIN ¹u¹I[GI-*lim* ¹k]a-za[l-la KA ta]m-tim GA[Z x x (x)]

20 [NU] p[a]-tan E[N]¹x x¹[x x] T[IN[?] x x]

SpTU vol. 3 no. 83 obv.

9’ DIŠ KI.MIN ¹IGI-*lim* ¹ka-zal-la KA A.AB.BA ina KAŠ NU pa-tan EN
[ba¹l-tu ¹NAG¹.MEŠ

For a discussion of this passage, see Chalendar 2013: 10, 30-31.

8: Imbibing medication on an empty stomach is well attested (see, e.g., Geller 2005; Scurlock 2014).

9-12: The prescription runs parallel to *STT* vol. 2 no. 286 col. ii 21-24:

STT vol. 2 no. 286 col. ii

21 DIŠ [KI.MIN] NU-šú [š]á [GI]-šú D[¹U-uš[?]] [SAG¹.D[U]-[su] šá I[M GAR-
[an]

22 [x x]¹x¹[x t]u-*hal-lap*-šú T[¹U x x]¹x¹[x x x]

23 [x]¹x¹[x x] [SAG.DU[?]]-šú [GAR[?]]-[an[?] KUŠ[?] UR[?]].[GI[?] x x x x (x)]

24 [x]¹[(ca. six signs missing)]¹x¹[(no more than five signs missing)]

For a discussion of this passage, see Chalendar 2013: 10, 31-32.

9: The sign in the break is difficult to see. Chalendar (2013: 10) suggests the reading [SU]-šú, which is supported by the new line drawing. However, note the reading NU-šú in *STT* vol. 2 no. 286 col. ii 21.

11: The *paršīgu* is a headdress made out of a sash (*CAD* P: 203ff.; see Chalendar 2013: 13).

13-16: The prescription runs parallel to the unpublished BM 40183+ obv. 1’-2’:

BM 40183+ obv.

1’ [x x x x x] [SAG.DU UGA^{mušen} SAG¹.DU KUR.[GI¹m¹u¹šen SAG.DU
GI]Š[?].¹NU¹¹[?]¹mušen SAG.DU [e¹]-*giri*[?]¹mušen] (I can barely see the last sign on
the photograph)

2’ [SAG.DU d]u[?]-ru-um-mi^{mušen} [SAG¹.DU [B]URU⁵.HABRUD^{ru}.DA^{muse}[ⁿ
NÍT]A ina NE SAR-šú-ma TI

Alternatively, the penultimate bird listed in BM 40183+ obv. 1’ could very cautiously be read SAG.D]U [LAGAB[?]¹mušen for a mysterious bird whose Akkadian name is unknown (Veldhuis 2004: 164, 191, 197, 202, 265), or perhaps SAG.D]U [BUL[?]¹mušen/SAG.DU BU]L[?]. [BUL[?]¹mušen indicating the expected *anpatu*-bird (this reading would likely require the long form NIN.BUL.BUL; cf. *CAD* A/2: 143). The tentative reading of the final bird in obv. 1’ as [e¹]-*giri*[?]¹mušen for the *igirû*-heron is not attested elsewhere (cf. *CAD* I-J: 41). For this passage, see Chalendar 2013: 4-5, 10, 32-33. Note that Chalendar has a typo listing BM 40183+ obv. 1’-5’ as parallel to *BAM* 202 (ibid.: 10; cf. ibid.: 4-5).

13: The reconstruction -[i[?]¹mušen SAG UG]A(Ú.NAGA.GA)^{mušen} follows Chalendar (2013: 10 and n. 26, 33). The broken space could ideally have fitted the reconstructed signs.

14: The remains of the sign GI fits with the writing in obv. 17.

The final ingredient is written with the Sumerogram KI.SAG.MUNUS^{mušen} (*igirû*), and the remains of the sign K]I can be spotted on the original.

15: The *durummu*-bird (*CAD* D: 198) is mentioned in the commentary *CT* vol. 41 pl. 43 BM 59596 obv. 4 in an obscure passage (see Chalendar 2013: 8-9, 33).

BAM 202 records BURU₅ as 𒃶.ŠE.ERIM, whereas BM 40183+ has the reading as 𒃶.ERIM.

The sign read 𒃶AB[RUD¹⁷] is different from 𒃶ABRUD in rev. 4', and it does not appear as neither KIXU nor KIXBAD (Borger 2010: 414; Labat 1995: 208f.).

17-rev. 4': *BAM* 202 obv. 17 may have run parallel to the broken entry in *STT* vol. 2 no. 286 col. ii 29. Chalendar (2013: 11, 33ff.) edits the section from *BAM* 202 obv. 23-rev. 4' parallel to BM 40183+ obv. 8'-11', although the passage is almost completely broken in *BAM* 202:

STT vol. 2 no. 286 col. ii

29 [(ca. seven missing signs)] GI DÙ 𒀭¹⁸ al[(breaks off)]

BM 40183+ obv.

8' NINDA.Ì.DÉ.A LÁL Ì.NUN.NA GAR-*an* NÍG.NA šim¹⁹LI GAR-[*an*] KAŠ SAG BAL-*q*[*i*] (ca. eight signs missing)

9' DAM šu-*hu*-za-ta at-[*ta*] DAM-[*sà šī*]-*i* DAM²⁰l-ka ana pu-[*uh*] NENNI A [NENNI] *te-leq-qí-ši-ma ta*²¹-*at*²²-*ta*-[*lak*]

10' [*ta*²³-*qab*²⁴-*bi*]-*ma* NU *a-di šu-de-e-šú* ana *bi*-*i* [*šá BÀD*] *tu-še*-[*rib*] IGI.MEŠ-*šú* ana [²⁵UTU.ŠÚ.A²⁶] GAR-*an*²⁷-*ma* BAD-[*hi*]

11' 3 [ZÌ.DUB].D[U]B.BU NAGA.SI ana IGI 𒃶ABRUD ŠUB.ŠUB-*di* NIM UR.GI²⁸ *ú-paṭ tim-bu-ut* A.ŠÀ²⁹ *ina* KUŠ

The text in *BAM* 202 obv. 17-rev. 4' may have concerned a ritual where the evil afflicting the patient is offered a figurine representing a wife and married off to this figurine, after which the demon is removed (Chalendar 2013: 33-34, 36; see Scurlock 2006: 52-53; Farber 2004: 128-30; Farber 2001: 255; Schwemer 1998: 60-63, 66-67).

17: As noted by Chalendar (2013: 11, 33), the opening of the line must have referred to the figurine (*šalmu*). Perhaps the break once contained additional information concerning what sort of figurine was constructed. One of the uncertain signs before and after 𒀭¹⁸ may have been NU, but this does not account for the remaining traces. No useful reconstruction is suggested.

19: Chalendar (2013: 11, 33-34) reconstructs [¹⁹BAR.SIG *ina* SAG.DU]-[*šú*]. The sign read -*šú* is not clear on the original.

20: The few traces are reminiscent of the sign *kur* or the end of a NÚ, although Chalendar (2013: 11, 33) suggests reading [NÚ²⁰]. The line could be reconstructed as [*ina še-pit* ²⁰NÚ], although something would be missing directly after, and the foot and the head of the bed would be in reverse order (cf. *CAD* Š/2: 293).

21: Chalendar (2013: 11, 33-34) reconstructs [*ina*²¹ ²¹NÚ²²] GI²³ *tuš-tál*, which is reasonable in accordance with the original. For the verb *itūlu*, see *CAD* N/1: 204ff.; *CAD* U-W: 344ff.; Kouwenberg 2010: 365, 480; Huehnergard 2002: 178ff. Similar actions can be found in other rituals (e.g., Scurlock 2006: 515-19; Tsukimoto 1985: 125-27).

22: The ending GIG BI TI-*uṭ* is problematic, as it indicates the cure is over (Chalendar 2013: 34-35). Horizontal lines divide prescriptions in *BAM* 202, and there is no line between obv. 22-23. Thus, it is unclear if the prescription continued.

23: Chalendar (2013: 11 n. 27) suggests that the tablet may hide a -*qí* on the edge, although the original only contains the final signs BAL-*šú*. For the possible reconstruction [*nignak burāši tašakkan šīnāt imēri an*]a [*šul*]-*pur* ..., see Chalendar 2013: 35.

24: Only a few traces remain. This and a hypothetical missing line may have contained instructions for marrying off the demonic being to a substitute figurine, reconstructed as: *maḥar Šamaš kiām taqabbi mimma lemnu aššata šūhuzāta atta mussa šī aššatka*, "You say the following in front of Šamaš: 'Any Evil'-demon, you

are made to take a wife, you are her husband, she is your wife” (Chalendar 2013: 11-13; see references to obv. 17-rev. 4’).

Rev. 1’: The broken end of the line can barely hold the reconstructed signs $^1ta^1-a[{}^1t^1-ta^1-lak^1]$. Perhaps it is possible to read $^1ta^1-t[al^1-lak^1]$, although this spelling of the second person singular verbal form is not attested in the *CAD* (A/1: 322ff.; see also *AHW*: 33). Chalendar (2013: 11 and n. 28) suggests the alternative reading $t[a-at-ta-l][ak]$ on the basis of the CDLI picture of *BAM* 202. This proposal can now be dismissed on the basis of my collation.

The line may have contained the end of a phrase uttered before Šamaš concerning the evil afflicting the patient (*ibid.*: 13, 35).

2’: Chalendar (2013: 11) reconstructs $[annâ taqabbima\ NU\ a-di]$. I have refrained from reconstructing this passage, due to the unclear and few remaining signs.

3’: I have drawn on the parallel passage in *BM* 40183+ to reconstruct the line, and the remains in *BAM* 202 rev. 3’ support the proposed reconstruction. For the use of a “drainage opening” $bî'u$ in connection to figurines in a ritual context, see *CAD* B: 297. Abusch and Schwemer (2011: 156, 285, 345) translate the word as a “sewage opening”.

4’: Chalendar (2013: 35) suggests reconstructing the line as $[bî'a tepehhi\ k]îma$ (see also Abusch and Schwemer 2011: 156 line 32). However, $kîma$ makes little sense in the context here. In light of the duplicate *BM* 40183+ obv. 10’, the line must refer to the closing of the deposit. The reconstruction $[ta-bar-ra]m^?-ma$ reflects this interpretation.

The final sign HABRUD ($hurru$) is translated “hole” (*CAD* H: 252-53), e.g., in relation to a hole made in a wall to hide a figurine in (see Abusch and Schwemer 2011: 144, 186). The word must refer to the previously mentioned drainage opening.

5’-11’: The diagnosis and prescription has parallel lines in *BAM* 311 rev. 51’-55’, *BM* 40183+ rev. 25’-27’, and *SpTU* vol. 3 no. 83 obv. 5’-6’:

BAM 311 rev.

51’ $DI\check{S}\ N[A\ in]a\ KI.N\acute{A}-\acute{s}u\ \text{HULU}\check{H}.\text{HULU}\check{H}-ut\ GIM\ G\ddot{U}\ \ddot{U}Z\ G\ddot{U}-si\ [i]l-$
[ram-mu-um]

52’ $i-par-ru-ud\ ma-g[al]\ G\ddot{U}.\text{G}\ddot{U}-si\ \acute{S}U\ be-en-nu\ ^d[ALAD\ \acute{s}a-n\acute{e}-e\ ^d30]$

53’ $ana\ TI-\acute{s}u\ [{}^u]GE\check{S}TIN.KA_5.A\ ^u a-nu-n[u-t]\acute{u}\ ^{gi\check{s}}[{}^u]HA\check{S}HUR\ ^{gi\check{s}}[{}^u]GI$

54’ ${}^u\text{HAR}.LU[M.BA.\acute{S}I]R\ ^u a-ra-r[i]-a-nu\ ILLU\ LI.TUR$

55’ $SIG\ U[GU.DUL.BI\ ina\ K]U\check{S}\ P\acute{E}\check{S}.\ddot{U}[R.R]A\ GAG.GAG\ ina\ G\acute{U}-\acute{s}u\ GAR$

BM 40183+ rev.

25’ $DI\check{S}\ NA\ ina\ KI.N\acute{A}-\acute{s}u\ \text{HULU}\check{H}.\text{HULU}\check{H}-ut-ma\ GI[M\ x\ x\ x\ x]\ [{}^u]l\ i-ram-mu-$
[mu $i\check{l}-na-ru-ut\ ma-[gal\ G\ddot{U}].\text{G}\ddot{U}-si$

26’ $[{}^u]\acute{S}U\ ^d be-en-nu\ ^d[ALA]D^? [\acute{s}a\check{l}-n\acute{e}-e\ ^d3[0\ ana\ TI-\acute{s}]\acute{u}\ ^{gi\check{s}}GE\check{S}TIN.KA_5.A\ ^u a-$
 $nun-nu-tu_4^?]\ ^{gi\check{s}}[{}^u]HA\check{S}HUR\ ^{gi\check{s}}G]I\ ^u\text{HAR}.LUM.(BA.[{}^u]SIR]$ according to
Chalendar, but I cannot see it)

27’ $[{}^u]a-r[a-ri]-a-nu\ IL[LU\ L]I.DUR\ SIG\ U[GU.D]UL.BI\ ina\ KU\check{S}\ ina\ SA$
 $P\acute{E}\check{S}.\ddot{U}R\ G[AG.GAG\ ina\ G\acute{U}-\acute{s}]\acute{u}\ GAR-an-ma\ [{}^u]TI^?$ (I can barely see the last
sign)

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5’ $[DI\check{S}]\ K[I.MIN]\ [{}^{gi\check{s}}][GE\check{S}T]IN.KA_5.A\ ^u a-nu-nu-tu_4\ ^{gi\check{s}}HA\check{S}HUR\ ^{gi\check{s}}GI$
 ${}^u\text{HAR}.LUM.BA.\acute{S}IR\ ^u a-ra-r[i-a-nu]$

6’ $ILLU\ LI.TAR\ SIG\ UGU.DUL.BI\ ina\ KU\check{S}\ ina\ SA\ P\acute{E}\check{S}.\ddot{U}R$

- For a discussion of this diagnosis, see Section 1. See previous discussions in Chalendar 2013: 10-13, 37ff.; Böck 2010a: 94; Stol 2009: 12; Scurlock and Andersen 2005: 83 no. 3. 268; Heeßel 2000: 86 n. 61, 223; Stol 1993: 6 and n. 10; Köcher 1978: 35.
- 5': The parallel line in *BAM* 311 reads GIM GÜ ÛZ GÜ-*si*, thereby adding GÜ, *rigmu* “voice, sound, noise, wailing” of a goat (*CAD* R: 328ff.).
- 6': Both the parallel lines in *BAM* 311 (rev. 52') and BM 40183+ (rev. 25') write GÜ.GÜ-*si* instead of *BAM* 202's DU₁₁.DU₁₁-*ub*. See Section 4.
- 7': The copyist chose to write the diagnosis “Hand of *bennu*-epilepsy” with the dual of “hand” (ŠU^{II} *be-en-ni*). The writing was likely due to a scribal convention used among certain members of the Baba-šuma-ibni family (see Section 4 and n. 63). Further analysis of this phenomenon is required. Note that BM 40183+ writes ^d*bennu* (see Stol 1993: 21 and n. 162-63).
- 8': The copyist imprinted one horizontal wedge too many in the beginning of the ḪAŠḪUR sign, which makes it similar to the Babylonian writing of the sign, as seen in *SpTU* vol. 3 no. 83 obv. 5'.
- 9': The reconstruction is based on the parallel passages cited above (see Chalendar 2013: 11-12).
- 10': Chalendar (2013: 11 n. 29) suggests that the break may have held the ingredients found in the beginning of rev. 9', although this would require other ingredients in rev. 9'. For the use of “monkey hair”, see Dunham 1985.
- 11': The reconstruction is based on the duplicate passages (see Chalendar 2013: 11-12).
The first sign GAG of the partly preserved [SA ÁB.RI.RI].<GA> [GAG]¹⁷.GAG-*pī* *ina* [GÜ-šū] GAR-[*an*] is problematic, and if properly restored, the copyist must have miscalculated the space available for writing the ingredient GAG.GAG-*pī*, thereby missing the restored <GA>.
None of the other duplicates use the skin of an *unīqu* “female kid”, although such skins were occasionally used in rituals connected to epilepsy (see *CAD* U-W: 160). For the writing “dead cow” (ÁB.RI.RI.GA, *šalquttu*), see *CAD* Š/1: 262; *CAD* L: 217.
- 12'-13': The description “in leather” is an abbreviation for producing a *mēlu* “phylactery, poultice, bandage, (leather) bag” (see Reiner 1959-60: 150; Lambert 1980; Stol 1993: 102-104; *CAD* M/2: 14-15). Such bags were used to ward off an epileptic attack, and to eradicate ailments (Stol 1993: 102-103 and n. 30, 109). For a discussion of the ingredients, see Chalendar 2013: 44-45.
- 12': The *šarānu*-plant is also mentioned in the LB medical commentary BM 54595 (= *CT* 41 pl. 43) obv. 12: *ša-ra-nu: kur-sis'-s[u]*, “*šarānu*-plant (is) *kursissu*-rodent”. This commentary is described as “relating to (the work) ‘in order to tear out and [release] Antašubba-epilepsy” (*ša ana Antašubba nasāhi u [pašāri]*), BM 54595 rev. 3'; see discussion and edition in Frazer 2017; cf. *CAD* Š/2: 50; see also *CAD* K: 567). A similar sentence is also mentioned in the related manuscript *BAM* 311 rev. 59'.
- 14': The meaning and use of the phrase *ana šabāt epēši* is discussed briefly in Section 4; see especially n. 65. See also Couto-Ferreira 2018: 152 n. 10, 157-62; Maul 2010: 212-13, 216; Böck 2008: 296; Maul 2003: 180-81; Maul 1994: 159 n. 16; Bottéro 1983: 159; Hunger 1968: 12; Leichty 1964: 153; Eilers 1933: 325. Chalendar's (2013: 12-13) reconstruction of this line is discussed in Section 4.
- 15': The reading of this line is uncertain. The initial traces could be [ša¹]-[l]a[m²], although this does not explain the writing *benna*. I have cautiously emended the visible vertical wedge after -[l]a[m²] to [d¹?](diš), but the reading remains tentative. The

sign *be*²- is questionable. The following sign could be an *-e[n]*², and I emend the next sign to *-[na]*¹². Compared with the writing of *bennu* in rev. 7', it does not look identical. The writing *be-en-na* is attested, although infrequently (e.g., *CAD* B: 206d; Schwemer 2007: 115; Reiner and Pingree 1981: 46). An alternative reading of the opening as *[ša]*¹-*[l]*^{am}² *[d]*¹*b[e]*-*[na]*¹² makes the problematic vertical wedge part of *-lam*, although this sign would take up more space than other signs in the line. Furthermore, the spelling *be-na* is awkward. The final traces support the reading *ša-n[é-e]*^{d30}, although the reconstructed three signs can barely fit in the broken space before the drawing. None of the traces permit ^dALAD. Alternatively, the final line could refer to the removal of *bennu*, e.g., *[a]*¹-*[n]*^a²/*ana* Š[U^(II)]¹² *[d]*^{benna}¹² *ša-h[a]*¹-*ti* (*CAD* Š/1: 94), but the final traces of the line do not fit this reconstruction well. Although the initial wedge could be a *Personenkeil*, the traces after *ša* do not permit *tir*, and I find it difficult to reconstruct the line as part of the colophon.

6.5. Pictures of *BAM* 202:

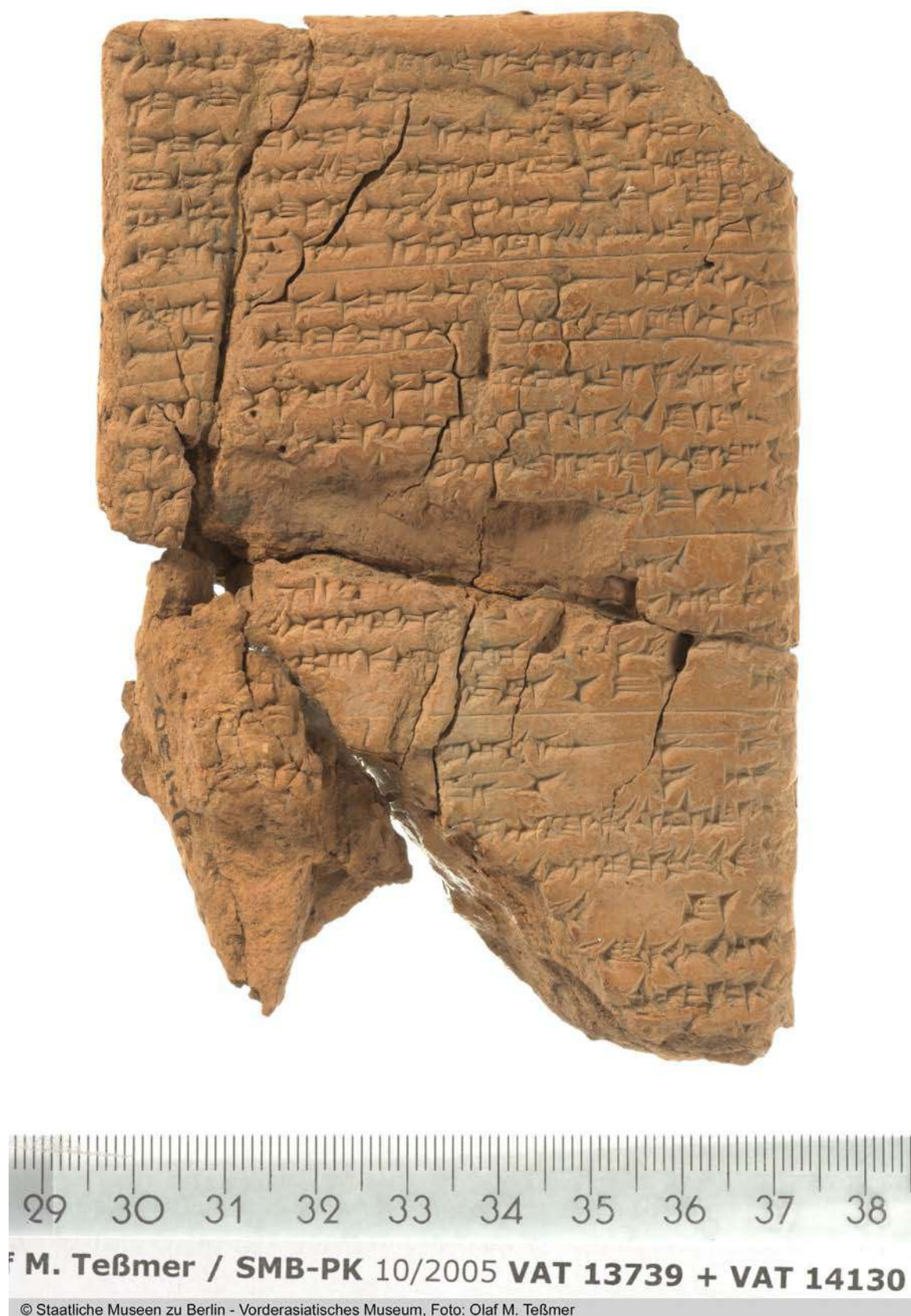


Fig. 4: The obverse of *BAM* 202

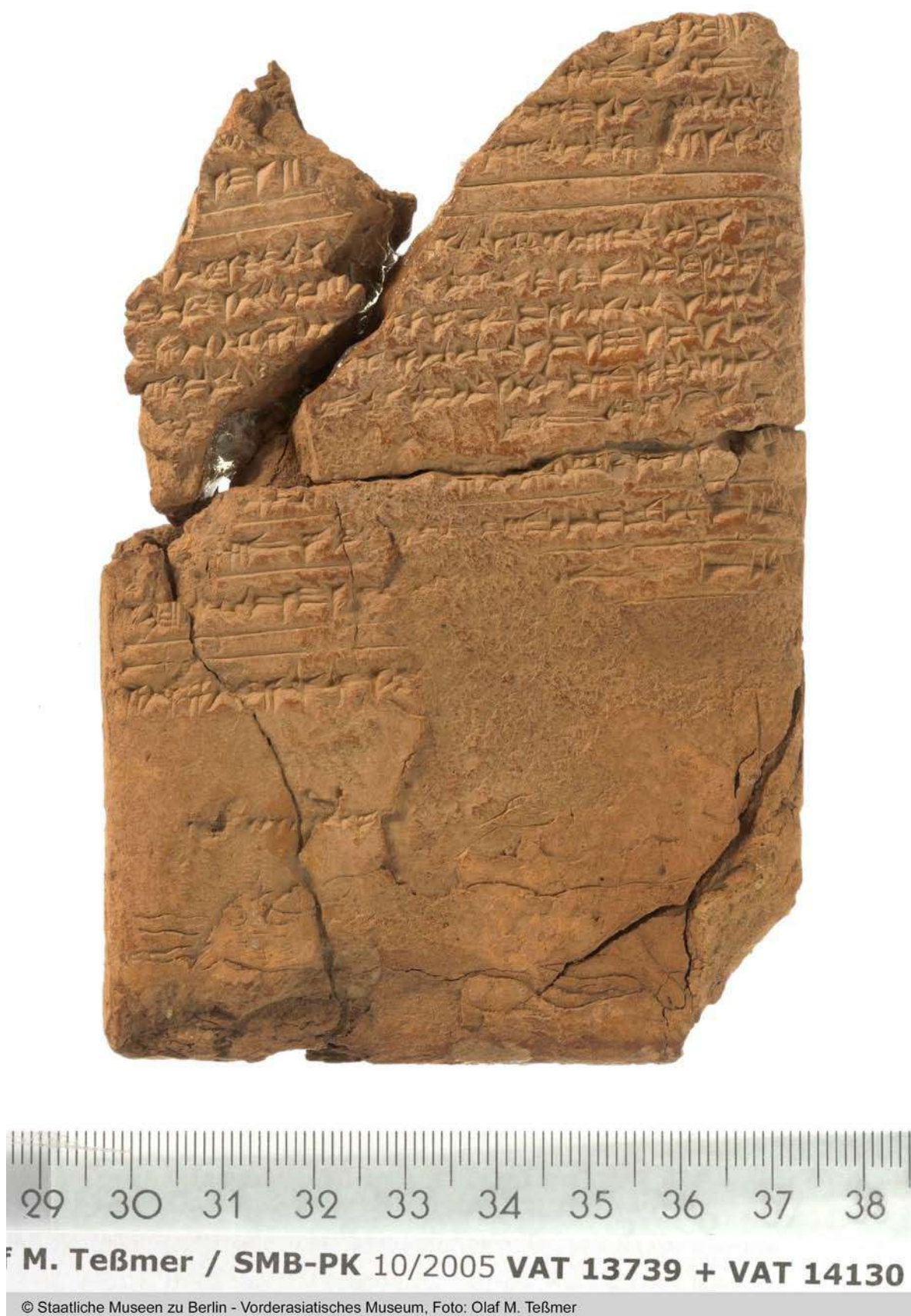


Fig. 5: The reverse of *BAM* 202

7. Bibliography

Abbreviations follow R. Borger 1975: *Handbuch der Keilschriftliteratur. Band II* (Berlin and New York: Walter De Gruyter), pp. XI-XXXII, with the addition of *JMC* for *Le Journal des Médecines Cunéiformes* (Paris) and *NABU* for *Nouvelles Assyriologiques Brèves et Utilitaires* (Paris).

- Abusch T., Schwemer D. 2011.** *Corpus of Mesopotamian Anti-Witchcraft Rituals Volume One*, Ancient Magic and Divination 8/1, Leiden/Boston: Brill.
- Abusch T., Schwemer D., Luukko M., van Buylaere G. 2016.** *Corpus of Mesopotamian Anti-Witchcraft Rituals Volume Two*, Ancient Magic and Divination 8/2, Leiden/Boston: Brill.
- Arbøll T. P. 2017.** *Medicine in Ancient Assur: A Microhistorical Study of the Neo-Assyrian Healer Kišir-Aššur*, Dissertation, Copenhagen: The University of Copenhagen.
- Arbøll T. P. 2018a.** “Tracing Mesopotamian Medical Knowledge: A Study of *maškadu*- and Related Illnesses”, in G. van Buylaere, M. Luukko, D. Schwemer, A. Mertens-Wagschal (eds.), *Sources of Evil. Studies in Mesopotamian Exorcistic Lore* (Ancient Magic and Divination 15; Leiden/Boston: Brill), 261-284.
- Arbøll T. P. 2018b.** “Kišir-Aššur’s Name and Title in Writing”, *NABU* 2018/2, note no. 50, 80-83.
- Avalos H. 2007.** “Epilepsy in Mesopotamia Reconsidered”, in I. L. Finkel, M. J. Geller (eds.), *Disease in Babylonia*, Cuneiform Monographs 36, Leiden/Boston: Brill, 131-136.
- Becker A. 1993.** *Uruk. Kleinfunde I. Stein*, Ausgrabungen in Uruk-Warka Endberichte 6, Mainz: Philipp von Zabern.
- Böck B. 2008.** “Babylonisch-assyrische Medizin in Texten und Untersuchungen: Erkrankungen des uro-genitalen Traktes, des Enddarmes und des Anus”, *WZKM* 98, 295-346.
- Böck B. 2010a.** “Epilepsie, Schlaganfall und Lähmung”, in B. Janowski, D. Schwemer (eds.), *Texte aus der Umwelt des Alten Testaments. Neue Folge. Band 5. Texte zur Heilkunde*, Gütersloh/München: Gütersloher Verlagshaus, 90-98.
- Böck B. 2010b.** “Pharmakologische Texte”, in B. Janowski, D. Schwemer (eds.), *Texte aus der Umwelt des Alten Testaments. Neue Folge. Band 5. Texte zur Heilkunde*, Gütersloh/München: Gütersloher Verlagshaus, 163-168.
- Böck B. 2011.** “Sourcing, Organizing, and Administering Medicinal Ingredients”, in K. Radner, E. Robson (eds.), *The Oxford Handbook of Cuneiform Culture*, Oxford: Oxford University Press, 690-705.
- Borger R. 2010.** *Mesopotamisches Zeichenlexikon*, [Second edition], Alter Orient und Altes Testament 305, Münster: Ugarit-Verlag.
- Bottéro J. 1983.** “Les morts et l’au-delà dans les rituels en accadien contre l’action des ‘revenants’”, *ZA* 73, 153-203.
- Bottéro J. 2001.** *Religion in Ancient Mesopotamia*, [Translated by T. L. Fagan], Chicago/London: The University of Chicago Press.
- British Museum collection online 2018.** “BM 40183”,
https://www.britishmuseum.org/research/collection_online/collection_object_details.aspx?objectId=327276&partId=1&searchText=BM+40183&page=1 [Accessed 03/06/2019]
- Buisson G. 2016.** “À la recherche de la mélancolie en Mésopotamie ancienne”, *JMC* 28, 1-54.
- Butler S. A. L. 1998.** *Mesopotamian Conceptions of Dreams and Dream Rituals*, Alter Orient und Altes Testament 258, Münster: Ugarit-Verlag.
- Cadelli D. S. 1997.** “Lorsque l’enfant paraît ... malade”, *KTEMA* 22, 11-33.
- Cancik-Kirschbaum E., Kahl J. 2018.** *Erste Philologien*, Tübingen: Mohr Siebeck.
- Chalendar V. 2013.** “‘Un aperçu de la neuropsychiatrie assyrienne’: Une édition du texte BAM III-202”, *JMC* 21, 1-60.
- Couto-Ferreira E. 2010.** “It is the same for a man and a woman: melancholy and lovesickness in ancient Mesopotamia”, in A. Grossato (ed.), *Quaderni di Studi Indo-Mediterranei III*, Alessandria: Edizioni dell’Orso, 21-39.
- Couto-Ferreira E. 2018.** “Putting Theory into Practice: Kišir-Aššur’s Expertise between Textual Knowledge and Practical Experimentation”, in S. V. Panayotov, L. Vacin (eds.), *Mesopotamian Medicine and Magic. Studies in Honor of Markham J. Geller*, Ancient Magic and Divination 14; Leiden/Boston: Brill, 149-166.
- Dunham S. 1985.** “The Monkey in the Middle”, *ZA* 75, 234-264.

- Eilers W. 1933.** “Ein verkannter medizinischer Keilschrifttext”, *Sudhoffs Archiv für Geschichte der Medizin* 26/4, 318-328.
- Fales M. 2010.** “Mesopotamia”, in S. Finger, F. Boller, K. L. Tyler (eds.), *Handbook of Clinical Neurology* 95, Amsterdam: Elsevier, 15-27.
- Farber W. 1977.** *Beschwörungsrituale an Ištar und Dumuzi: attī Ištar ša ḫarmaša Dumuzi*, Wiesbaden: Franz Steiner.
- Farber W. 2001.** “Das Püppchen und der Totengeist (KBo 36, 29 II 8-53 u. Dupl.)”, *ZA* 91, 253-263.
- Farber W. 2004.** “How to Marry a Disease: Epidemics, Contagion, and a Magic Ritual Against the ‘Hand of the Ghost’”, in H. F. J. Horstmanshoff, M. Stol (eds.), *Magic and Rationality in Ancient Near Eastern and Graeco-Roman Medicine*, Leiden/Boston: Brill, 117-132.
- Fincke J. C. 2000.** *Augenleiden nach keilschriftlichen Quellen*, Würzburger medizinhistorische Forschungen 70, Würzburg: Königshausen & Neumann.
- Finkel I. L. 1991.** “Muššu’ u, Qutāru, and the Scribe Tanittu-Bēl”, *Aula Orientalis* 9, 91-104.
- Finkel I. L. 1995.** “In Black and White: Remarks on the Assur Psephomancy Ritual”, *ZA* 85, 271-276.
- Finkel I. L. 2008.** “Manuel de guérison illustré néo-babylonien”, in B. André-Salvini (ed.), *Babylone*, Paris: Musée du Louvre Éditions, 337.
- Finkel I. L. 2011.** “Drawings on Tablets”, *Scienze dell’Antichità* 17, 337-344.
- Frahm E. 2011.** *Babylonian and Assyrian Text Commentaries: Origins of Interpretation*, Guides to the Mesopotamian Textual Record 5, Münster: Ugarit-Verlag.
- Frahm E., Frazer M., Jiménez E. 2013.** “Commentary on Therapeutic (šumma amēlu dimmakurrū iṣbassū-ma) (CCP 4.2.S)”, in E. Frahm, E. Jiménez, M. Frazer, K. Wagensonner (eds.), *Cuneiform Commentaries Project*, <<https://ccp.yale.edu/P461269>> [accessed 03/02/2019].
- Frazer M. 2017.** “Commentary on Therapeutic (ana antašubba našāḫi u [pašāri]) (CCP 4.2.R)”, in E. Frahm, E. Jiménez, M. Frazer, K. Wagensonner (eds.), *Cuneiform Commentaries Project*, <<https://ccp.yale.edu/P461257>> [accessed 30/07/2019].
- Freedman S. M. 2006.** *If a City Is Set on a Height. The Akkadian Omen Series Šumma Alu ina Mēlê Šakin. Volume 2: Tablets 22-40*, Occasional Publications of the Samuel Noah Kramer Fund 19, Philadelphia: The University of Pennsylvania Museum.
- Geller M. J. 1999.** “Freud and Mesopotamian Magic”, in T. Abusch, K. van der Toorn (eds.), *Mesopotamian Magic: Textual, Historical, and Interpretative Perspectives*, Ancient Magic and Divination 1, Groningen: STYX Publications, 49-55.
- Geller M. J. 2000.** “Incipits and Rubrics”, in A. R. George, I. L. Finkel (eds.), *Wisdom, Gods and Literature: Studies in Assyriology in Honour of W. G. Lambert*, Winona Lake, Indiana: Eisenbrauns, 225-258.
- Geller M. J. 2005.** *Renal and Rectal Disease Texts*, Die babylonisch-assyrische Medizin in Texten und Untersuchungen 7, Berlin/New York: De Gruyter.
- Geller M. J. 2010.** *Ancient Babylonian Medicine: Theory and Practice* Chichester: Wiley-Blackwell.
- Geller M. J. 2016.** *Healing Magic and Evil Demons: Canonical Udug-hul Incantations*, BAM 8, Boston/Berlin: De Gruyter.
- George A. R. 1992.** *Babylonian Topographical Texts*, Orientalia Lovaniensia Analecta 40, Leuven: Uitgeverij Peeters.
- Geller M. J. 2003.** *The Babylonian Gilgamesh Epic: Introduction, Critical Edition and Cuneiform Texts, Volume I-II*, Oxford: Oxford University Press.
- Goltz D. 1974.** *Studien zur altorientalischen und griechischen Heilkunde. Therapie – Arzneibereitung – Rezeptstruktur*, Sudhoffs Archiv 16, Wiesbaden: Franz Steiner.
- Gross R. A. 1992.** “A brief history of epilepsy and its therapy in the western hemisphere”, *Epilepsy Research* 12, 65-74.
- Heeßel N. P. 2000.** *Babylonisch-assyrische Diagnostik*, Alter Orient und Altes Testament 43, Münster: Ugarit-Verlag.
- Heeßel N. P. 2007.** “The Hands of the Gods: Disease Names, and Divine Anger”, in I. L. Finkel, M. J. Geller (eds.), *Disease in Babylonia*, Cuneiform Monographs 36, Leiden/Boston: Brill, 120-130.
- Herrero P. 1984.** *La Thérapeutique Mésopotamienne*, Paris: Editions Recherche sur les civilisations.
- Huehnergard J. 2002.** “izuzzum and itūlum”, in T. Abusch (ed.), *Riches Hidden in Secret Places*, Winona Lake: Eisenbrauns, 161-185.

- Hunger H. 1968.** *Babylonische und assyrische Kolophone*, Alter Orient und Altes Testament 2, Kevelaer: Butzon & Bercker/Neukirchen-Vluyn: Neukirchener Vlg. des Erziehungsvereins.
- Jiménez E. 2018.** “Exit the ‘Oath with the Feet of a Goat’”, *NABU* 2018/1, note no. 27, 45.
- Kanner A. M. 2006.** “Depression and Epilepsy: A New Perspective on Two Closely Related Disorders”, *Epilepsy Currents* 6/5, 141-146.
- Kinnier Wilson J. V. 1965.** “An Introduction to Babylonian Psychiatry” in H. G. Güterbock, T. Jacobsen (eds.), *Studies in Honor of Benno Landsberger on His Seventy-fifth Birthday April 21, 1965*, Assyriological Studies 16, Chicago: The University of Chicago Press, 289-298.
- Kinnier Wilson J. V. 1967.** “Organic Diseases of Ancient Mesopotamia”, in D. Brothwell, A. T. Sandison (eds.), *Diseases in Antiquity*, Springfield: Charles C Thomas, 191-208.
- Kinnier Wilson J. V. 1996.** “Diseases of Babylon: an examination of selected texts”, *Journal of the Royal Society of Medicine* 89, 135-140.
- Kinnier Wilson J. V. 2007.** “Infantile and Childhood Convulsions and SA.GIG XXIX”, in I. L. Finkel, M. J. Geller (eds.), *Disease in Babylonia*, Cuneiform Monographs 36, Leiden/Boston: Brill, 62-66.
- Kinnier Wilson J. V., Reynolds E. H. 1990.** “Texts and Documents. Translation and Analysis of a Cuneiform Text Forming Part of a Babylonian Treatise on Epilepsy”, *Medical History* 34, 185-198.
- Kinnier Wilson J. V., Reynolds E. H. 2007.** “On Stroke and Facial Palsy in Babylonian Texts”, in I. L. Finkel, M. J. Geller (eds.), *Disease in Babylonia*, Cuneiform Monographs 36, Leiden/Boston: Brill, 67-99.
- Kouwenberg N. J. C. 2010.** *The Akkadian Verb and Its Semitic Background*, Languages of the Ancient Near East 2, Winona Lake: Eisenbrauns.
- Köcher F. 1964.** *Die babylonisch-assyrische Medizin in Texten und Untersuchungen III: Keilschrifttexte aus Assur* 3, Berlin: Walter de Gruyter & Co.
- Köcher F. 1978.** “Spätbabylonische medizinische Texte aus Uruk: Seriengestaltung der medizinisch-therapeutischen Texte. Ein erstes Zeugnis babylonischer Krankheitstheorie. ‘Hand eines Totengeistes’: Symptombeschreibungen und Diagnosen”, in C. Habrich, F. Marguth, J. H. Wolf (eds.), *Medizinische Diagnostik in Geschichte und Gegenwart: Festschrift für Heinz Goerke zum sechzigsten Geburtstag*, München: Werner Fritsch, 17-39.
- Kwasman T. 2007.** “The Demon of the Roof”, in I. L. Finkel, M. J. Geller (eds.), *Disease in Babylonia*, Cuneiform Monographs 36, Leiden/Boston: Brill, 160-186.
- Labat R. 1933.** *Commentaires Assyro-Babyloniens*, Bordeaux: Imprimerie-librairie de l’Université.
- Labat R. 1953.** *La Médecine Babylonienne*, Les Conférences du Palais de la Découverte, Série D. no. 22, Paris: Université de Paris/Palais de la Découverte.
- Labat R. 1961.** “A propos de la fumigation dans la médecine assyrienne”, *RA* 55, 152-153.
- Labat R. 1995.** *Manuel d’Épigraphie Akkadienne*, revu et augmenté par F. Malbran-Labat, 6e éd., nouveau tirage, Paris: Librairie Orientaliste Paul Geuthner.
- Lambert W. G. 1980.** “The Twenty-One ‘Poultices’”, *Anatolian Studies* 30, 77-83.
- Landsberger B. 1934.** *Die Fauna des Alten Mesopotamien nach der 14. Tafel der Serie HAR-RA = Hubullu*, Leipzig: von S. Hirzel.
- Leichty E. 1964.** “The Colophon”, in Anonymous (ed.), *From the Workshop of the Chicago Assyrian Dictionary. Studies Presented to A. Leo Oppenheim June 7, 1964*, Chicago: The Oriental Institute of the University of Chicago, 147-154.
- Leichty E. 1970.** *The Omen Series Šumma Izbu*, Texts from Cuneiform Sources 4, New York: J. J. Augustin Publisher.
- Maul S. M. 1994.** *Zukunftsbewältigung: Eine Untersuchung altorientalischen Denkens anhand der babylonisch-assyrischen Löserituale (Namburbi)*, Baghdader Forschungen 18, Mainz: Philipp von Zabern.
- Maul S. M. 2003.** “Wie die Bibliothek eines assyrischen Gelehrten widersteht” in J. Marzahn, B. Salje (eds.), *Wiedererstehendes Assur: 100 Jahre deutsche Ausgrabungen in Assyrien*, Mainz: Verlag Philipp von Zabern, 175-182.

- Maul S. M. 2010.** “Die Tontafelbibliothek aus dem sogenannten ‘Haus des Beschwörungspriesters’”, in S. M. Maul, N. P. Heeßel (eds.), *Assur-Forschungen: Arbeiten aus der Forschungsstelle “Edition literarischer Keilschrifttexte aus Assur” der Heidelberger Akademie der Wissenschaften*, Wiesbaden: Harrassowitz, 198-228.
- Maul S. M. 2018.** “‘Ninurta-Duft’ oder: Von den Vorsichtsmaßnahmen, die ein mesopotamischer Heiler ergreifen sollte, bevor er einen erkrankten Patienten aufsuchte”, *ZA* 108/2, 175-191.
- May N. N. 2018.** “Exorcists and Physicians at Assur: More on their Education and Interfamily and Court Connections”, *ZA* 108, 63-80.
- Mellman T. A., Kulick-Bel R., Ashlock L. E., Nolan B. 1995.** “Sleep Events Among Veterans with Combat-Related Posttraumatic Stress Disorder”, *American Journal of Psychiatry* 152/1, 110-115.
- Nougayrol J. 1972.** “Textes Religieux (II)”, *RA* 66/2, 141-145.
- Parpola S. 1993.** *Letters from Assyrian and Babylonian Scholars*, State Archives of Assyria 10, Helsinki: Helsinki University Press.
- Pedersén O. 1986.** *Archives and Libraries in the City of Assur: A Survey of the Material from the German Excavations Part II*, Uppsala: Almqvist & Wiksell.
- Ponchia S., Luukko M. 2013.** *The Standard Babylonian Myth of Nergal and Ereškigal*, State Archive of Assyria Cuneiform Texts 8, Helsinki: The Neo-Assyrian Text Corpus Project.
- Reiner E. 1957-58.** “KÜ.GI in medical texts”, *AfO* 18, 394.
- Reiner E. 1959-60.** “ME.UGU = *mēlu*”, *AfO* 19, 150.
- Reiner E. 1987.** “Magic Figurines, Amulets, and Talismans”, in A. E. Farkas, P. O. Harper, E. B. Harrison (eds.), *Monsters and Demons in the Ancient and Medieval Worlds. Papers Presented in Honor of Edith Porada*, Mainz: Philipp von Zabern, 27-36.
- Reiner E. and D. Pingree 1981.** *Babylonian Planetary Omens: Part Two*, Bibliotheca Mesopotamica 2, Malibu: Undena Publications.
- Reynolds E. H., Kinnier Wilson J. V. 2004.** “Stroke in Babylonia”, *History of Neurology* 61, 597-601.
- Reynolds E. H., Kinnier Wilson J. V. 2008.** “Psychoses of epilepsy in Babylon: The oldest account of the disorder”, *Epilepsia* 49/9, 1488-1490.
- Reynolds E. H., Kinnier Wilson J. V. 2013.** “Depression and anxiety in Babylon”, *Journal of the Royal Society of Medicine* 106, 478-481.
- Reynolds E. H., Kinnier Wilson J. V. 2014.** “Neurology and psychiatry in Babylon”, *Brain* 137, 2611-2619.
- Ritter E. K., Kinnier Wilson J. V. 1980.** “Prescription for an Anxiety State: A study of *BAM* 234”, *Anatolian Studies* 30, 23-30.
- Rittig D. 1977.** *Assyrisch-babylonische Kleinplastik magischer Bedeutung vom 13.-6. Jh. v. Chr.*, Münchener Vorderasiatische Studien 1, München: Uni-Druck München.
- Rumor M. 2017.** “The ‘AŠ section’ of Uruanna III in Partitur”, *JMC* 29, 1-34.
- Salin S. 2015.** “When Disease ‘Touches’, ‘Hits’, or ‘Seizes’ in Assyro-Babylonian Medicine”, *KASKAL* 12, 319-336.
- Schuster-Brandis A. 2008.** *Steine als Schutz- und Heilmittel: Untersuchung zu ihrer Verwendung in der Beschwörungskunst Mesopotamiens im 1. Jt. v. Chr.*, Alter Orient und Altes Testament 46, Münster: Ugarit-Verlag.
- Schwemer D. 1998.** *Akkadische Rituale aus Hattuša. Die Sammeltafel KBo XXXVI 29 und verwandte Fragmente*, Texte der Hethiter 23, Heidelberg: Universitätsverlag C. Winter.
- Schwemer D. 2007.** *Rituale und Beschwörungen gegen Schadenzauber*, Keilschrifttexte aus Assur literarischen Inhalts 2, Wiesbaden: Harrassowitz.
- Schwemer D. 2018.** “Evil Helpers: Instrumentalizing Agents of Evil in Anti-witchcraft Rituals”, in G. van Buylaere, M. Luukko, D. Schwemer, A. Mertens-Wagschal (eds.), *Sources of Evil. Studies in Mesopotamian Exorcistic Lore, Ancient Magic and Divination* 15, Leiden/Boston: Brill, 173-191.
- Scurlock JA. 2006.** *Magico-Medical Means of Treating Ghost-Induced Illnesses in Ancient Mesopotamia*, Ancient Magic and Divination 3, Leiden/Boston: Brill and Styx.

- Scurlock JA. 2008.** “Some Mesopotamian Medicine for a Greek Headache”, in R. J. van der Spek (ed.), *Studies in Ancient Near Eastern World View and Society*, Bethesda: CDL Press, 195-202.
- Scurlock JA. 2014.** *Sourcebook for Ancient Mesopotamian Medicine*, Writings from the Ancient World 36, Atlanta, Georgia: SBL Press.
- Scurlock JA. and B. R. Andersen 2005.** *Diagnoses in Assyrian and Babylonian Medicine: Ancient Sources, Translations, and Modern Medical Analyses*, Urbana/Chicago: University of Illinois Press.
- Sibbing-Plantholt I. in press.** “Visible Death and Audible Distress: The Personification of Death (*Mūtu*) and Associated Emotions as Inherent Conditions of Life in Akkadian Sources”, in J. Llop, S.-W. Hsu (eds.), *The Expression of Emotions in Ancient Egypt and Mesopotamia*, (will appear in Brill’s Culture and History of the Ancient Near East series).
- Stadhouders H. 2011.** “The Pharmacopoeial Handbook *Šammu šikinšu* – An Edition”, *JMC* 18, 3-51.
- Stadhouders H. 2012.** “The Pharmacopoeial Handbook *Šammu šikinšu* – A Translation”, *JMC* 19, 1-21.
- Stadhouders H. 2016.** “Sm. 460 – Remnants of a ritual to cure the malady *hīp-libbī*”, *JMC* 28, pp. 60-65.
- Steinert U. 2012** *Aspekte des Menschseins im Alten Mesopotamien: Eine Studie zu Person und Identität im 2. und 1. Jt. v. Chr.*, Cuneiform Monographs 44, Leiden/Boston: Brill.
- Stol M. 1987-88.** “Leprosy. New Light from Greek and Babylonian Sources”, *JEOL* 30, 22-31.
- Stol M. 1993.** *Epilepsy in Babylonia*, Cuneiform Monographs 2, Groningen: STYX Publications.
- Stol M. 1997.** “*Mūtu*”, in D. O. Edzard (ed.), *Reallexikon der Assyriologie und Vorderasiatischen Archäologie. Achter Band, 5/6 Lieferung*, Berlin/New York: Walter de Gruyter, 523.
- Stol M. 1998.** “Einige kurze Wortstudien”, in S. M. Maul (ed.), *Festschrift für Rykle Borger zu seinem 65. Geburtstag am 24. Mai 1994, tikip santakki mala bašmu ...*, Cuneiform Monographs 10, Groningen: STYX Publications, 343-352.
- Stol M. 1999.** “Psychosomatic Suffering in Ancient Mesopotamia”, in T. Abusch, K. van der Toorn (eds.), *Mesopotamian Magic. Textual, Historical, and Interpretative Perspectives*, Ancient Magic and Divination 1, Groningen: STYX Publications, 57-68.
- Stol M. 2009.** “Insanity in Babylonian Sources”, *JMC* 13, 1-12.
- van der Toorn K. 1996.** *Family Religion in Babylonia, Syria and Israel: Continuity and Change in the Forms of Religious Life*, Studies in the History and Culture of the Ancient Near East 7, Leiden/New York/Köln: E. J. Brill.
- Tsukimoto A. 1985.** *Untersuchungen zur Totenpflege (kispum) im alten Mesopotamien*, Alter Orient und Altes Testament 216, Kevelaer: Butzon & Bercker / Neukirchen-Vluyn: Neukirchener Verlag.
- Veldhuis N. 2004.** *Religion, Literature, and Scholarship: The Sumerian Composition Nanše and the Birds*, Cuneiform Monographs 22, Leiden/Boston: Brill and Styx.
- Volk K. 1999.** “Kinderkrankheiten nach der Darstellung babylonisch-assyrischer Keilschrifttexte”, *OrNS* 68/1, 1-30.
- Walker C., Dick M. 2001.** *The Induction of the Cult Image in Ancient Mesopotamia. The Mesopotamian Mīs Pī Ritual*, State Archives of Assyria Literary Texts 1, Helsinki: The Neo-Assyrian Text Corpus Project.
- Warrell D. A. 2004.** “Cerebral Malaria”, in W. M. Scheld, R. J. Whitley, C. M. Marra (eds.), *Infections of the Central Nervous System*, [Third edition], Philadelphia: Lippincott Williams and Wilkins, 735-754.
- Wee J. Z. 2012.** *The Practice of Diagnosis in Mesopotamian Medicine: With Editions of Commentaries on the Diagnostic Series Sa-gig*, Dissertation, Yale: Yale University.
- Wiggermann F. A. M. 1992.** *Mesopotamian Protective Spirits: The Ritual Texts* (Cuneiform Monographs 1; Groningen: STYX & PP Publications)
- Wiggermann F. A. M. 1995.** “*Mušhuššu*”, in D. O. Edzard (ed.), *Reallexikon der Assyriologie und Vorderasiatischen Archäologie. Achter Band, 5/6 Lieferung*, Berlin/New York: Walter de Gruyter, 455-462.

- Wiggermann F. A. M. 1997.** “Transtigridian Snake Gods”, in I. L. Finkel, M. J. Geller (eds.), *Sumerian Gods and Their Representations*, Cuneiform Monographs 7, Groningen: STYX Publications, 33- 55.
- Wiggermann F. A. M. 2007.** “Some Demons of Time and their Functions in Mesopotamian Iconography”, in B. Groneberg, H. Spieckermann (eds.), *Die Welt der Götterbilder*, Beihefte zur Zeitschrift für die alttestamentliche Wissenschaft 376, Berlin, New York: Walter de Gruyter, 102- 116.
- Wiggermann F. A. M. 2011.** “The Mesopotamian Pandemonium. A Provisional Census”, *Studi e Materiali di Storia delle Religioni* 77/2, 298-322.
- Wilhelm G. 1979.** “Ein neues Lamaštu-Amulett”, *ZA* 69, 34-40.
- Worthington M. 2003.** “A Discussion of Aspects of the UGU Series”, *JMC* 2, 2-13.
- Wu Y. 2001.** “Rabies and Rabid Dogs in Sumerian and Akkadian Literature”, *Journal of the American Oriental Society* 121, 32-43.
- Zilberg P., Horowitz W. 2016.** “A Medico-Magical Text from the Otago Tablets, Dunedin New Zealand”, *ZA* 106/2, 175-184.

A Short Note on a New Join to K. 3628+ (Epileptic and Demonic Afflictions of Infants)*

Eric Schmidtchen

The new join, K. 3628 + K. 19939, was identified by the present author in April 2016 and thus did not find its way into J. Scurlock's *Sourcebook* from 2014.¹ Since it has been mentioned only briefly by U. Steinert in BAM 9,² it is worth presenting the lines in question in transliteration, translation and with some additional notes. Since K. 3628+ has been translated and commented upon several times, it will not be the subject of lengthy discussion.³

The join with K. 19939 adds some new information to the fragmentary rubric and colophon. It is now clear that the tablet under discussion is the second tablet of an excerpt series (*nishu*, l. 20) concerning remedies against several epileptic or epilepsy-like afflictions⁴ and associated divine as well as demonic agents, with a special focus on their occurrence in children. Line 21 states that the two-tablet excerpt is “finished” or “completed” (AL.TIL), suggesting that the following tablet (mentioned via the catchline in l. 18f.) belonged to another excerpt or series, whose content continued the topic of epilepsy-like diseases (here *bennu*), in children of increasing age. Furthermore, the join confirms the suggested restoration of ŠU.DINGIR.RA in line 21.⁵

The enumeration of different sources (l. 23f., namely the diagnostic standard-series *Sakikkû*, works on epilepsy or epileptic fits, and some writing boards of unknown provenience/content) hint at another interesting aspect of this short excerpt-series, viz. that it might have formed a separate compilation in Nineveh conforming to the Assur Medical Catalogue (AMC).⁶ Thus, there is no separate section on children's diseases or similar conditions within the preserved material of the AMC. In contrast, some additional sections (introduced by *adī*) suggest the implementation of such material concerned with children as supplementary material, at the end of the respective sub-series.⁷ Due to the fragmentary state of the AMC, it is possible to posit similar additional sections engaged with medical and/or ritualistic treatments of epileptic fits and demonic attacks in the second part of the AMC (viz. HAZARDS and EVIL POWERS).⁸

A second possible context of such material is suggested by texts such as BAM 248 from Assur, mainly concerned with difficult childbirth,⁹ but which continues in col. iv 39-43 with a prescription for the prophylactic protection of children (i.e. an amulet) against the

* I would like to thank Markham J. Geller as well as Ulrike Steinert for their helpful corrections and suggestions.

¹ Scurlock (2014), 621ff. text 2.13.1.

² Steinert (2018), 228.

³ See Farber (1989), 28, 67 §15a, 126-129 §§45-46 as well as Stol (1993), 89 and Scurlock/Andersen (2005), 84 §3.272, 321 §13.200, 416 §17.165-166, 433 §19.10. For the incorporated HUL.BA.ZI.ZI-incantations cf. further Finkel (1976), 92-95 and pl. 25-26.

⁴ It can be assumed that the treatments of Antašubba and Bēl-ūri-epilepsy have been listed within the excerpt's first tablet.

⁵ Scurlock (2014), 624 l. 21.

⁶ For the similarities and differences of the AMC with the Nineveh medical corpus, see Panayotov (2018). For another more famous *nishu*-recension from Nineveh cf. the Uruanna *nishu*-series (see Hunger (1968), BAK 321) in whose colophons Assurbanipal himself claims to have been responsible in venturing the new structure from different sources.

⁷ Cf. Steinert (2018), 211 AMC l. 23 (TEETH, *adī*-section, *bu šānu*); l. 28 (BRONCHIA, *adī*-section, *suālu*).

⁸ Cf. Steinert (2018), 215 AMC l. 74 (HAZARDS, *adī*-section between hazardous incidents and the bites of different animals) and especially l. 83 (EVIL POWERS, *adī*-section including HUL.BA.ZI.ZI-incantations) as well as prescriptions against evil disease agents in l. 96 (evil *Alū*), 97(?), and 98 (Lamaštu) (MENTAL ILLNESSES, *adī*-section).

⁹ The respective sub-series or section on this topic within the AMC, and possibly the Niniveh medical corpus as well, would be PREGNANCY/OFFSPRING (AMC ll. 109-114), although none of its *adī*-sections shows any particular connection to epilepsy or demonic afflictions.

“Hand-of-a-God”¹⁰ – a topic that, although fragmentary, most certainly precedes the preserved text-portions on the obverse of K. 3628+. This accompanies prescriptions for fumigation and an ointment against the *Lilû*-demon.¹¹ However, since the medical material from Assur often differs in terms of structure as well as in terms of the positioning of certain topics, the possible placing of such treatments for difficult childbirth within the Nineveh medical corpus remains rather uncertain.

Transliteration

- 18 [DIŠ šī]-bit be-en-ni₇ šá ina MU.7.KÁM Û.TU IGI ia-az-za
 19 [(x)] i-ta-na-šá-áš ina ŠUB-šú ŠU^{II}-šú ana EGIR-šú NIGIN-mi
 20 2-ú ni-^ris¹-^hu bul-ti ša ^{lu}TUR AN.TA.ŠUB.BA ^dLUGAL.ÛR.RA
 21 ŠU DINGIR.RA ŠU ^{d+}INNIN LÍL.LÁ.EN.NA ù A.LÁ.ĤUL DAB-su AL.TIL
 22 ul-tu ŠÀ DIŠ ^rSA¹.GIG-ki ù šī-pir AN.^rTA.ŠUB¹.BA
 23 ^rú² ul-tu ŠÀ ^rgiš¹ZU.^rMEŠ¹ ^rú² [...] ^rú² [...] ^rú² [...]
 24 ^rGABA¹.RI x [...]

Translation

- 18f. (Catchline:) [If] the grasp of *bennu*-epilepsy can be observed in a seven-year (old child) (lit. someone who was born seven years ago), (such that) he makes unnatural noises, he is constantly upset, (and) while he is falling his hands are bend backwards.
 20f. (Rubric:) Second excerpt of treatments for a child (in the case) *Antašubbû*-epilepsy, *Bēl-ūri*-epilepsy, “Hand of a God”-disease, “Hand of a Goddess”-disease, the “Hand” of a *Lilû*-demon or an evil *Alû*-demon has seized him. Finished.
 22f. (Colophon: Excerpted) from (the series) *Sakikkû* and (from) the “work” of/on *Antašubbû*-epilepsy, as well as from writing boards a[nd? ...].
 24 Copy (of an original) from [...].

Commentary

- 18f. So far, the symptom entry of this catchline is not attested in any other source.
 20f. For the recurring grouping of these disease agents and topically similar texts concerning children, see the short overview in Steinert (2018), 259ff (note to l. 92).
 22f. *Contra* Scurlock (2014), 624 one should certainly read ù šī-pir instead of šī-lu-šī-tú as proposed by J. Scurlock without further elucidation of this uncommon word. The term *šipru* is more often attested with *mišittu* “stroke”, referring to the effects of the respective seizure or the fit itself.¹²
 The restoration ^rIGI-ru¹ in l. 23 following ^rgiš¹ZU. ^rMEŠ¹, as suggested by Scurlock (2014), 624, is far from certain, since the traces after the presumed IGI do not look like RU but rather like KU or LU (thus the reading ù suggested here). This would provide a hint that another source followed the enumeration. Unfortunately, the provenience of the original tablet(s) referred to in l. 24, from which K. 3628+ was copied, remains unknown, since the text breaks off at this point.

¹⁰ See Scurlock (2014), 626f.

¹¹ Strikingly, the last two prescriptions (BAM 248 iv 42-43) against the approaching *Lilû*-demon are paralleled in K. 3628+. There, however, the first of the remedies is prescribed against the “Hand-of-a-Goddess” (K. 3628+ obv. 10'-11'), and only the second against the approaching *Lilû*-demon (K. 3628+ obv. 17'-18'). Note that K. 3628+ obv. 16' also parallels BAM 248 iv 41'.

¹² Cf. for instance Kinnier Wilson/Reynolds (2007), 69f. Another possible interpretation is to see *šipir Antašubbû* as a reference to a body of works concerning remedies against epilepsy. See for this meaning of *šipru* CAD Š/3, 81f. sub 4c as well as the transferred meaning “treatment” ibid. 83f. sub 7.

Bibliography

- Farber W. 1989.** *Schlaf, Kindchen, Schlaf! Mesopotamische Baby-Beschwörungen und -Rituale*, Mesopotamian Civilizations 2, Winona Lake.
- Finkel I. L. 1976.** *ḪUL.BA.ZI.ZI. Ancient Mesopotamian Exorcistic Incantations*, Unpublished Dissertation, University of Birmingham.
- Hunger H. 1968.** *Babylonische und assyrische Kolophone*, Alter Orient und Altes Testament 2, Kevelaer/Neukirchen-Vluyn.
- Kinnier Wilson J. V., Reynolds E. H. 2007.** “On Stroke and Facial Palsy in Babylonian Texts”, in I. L. Finkel, M. J. Geller (eds.), *Disease in Babylonia*, Cuneiform Monographs 36, Groningen/Leiden, 67-99.
- Panayotov S. V. 2018.** “Notes on the Assur Medical Catalogue with Comparison to the Nineveh Medical Encyclopaedia”, in U. Steinert (ed.), *Assyrian and Babylonian Scholarly Text Catalogues. Medicine, Magic and Divination*, Die babylonisch-assyrische Medizin in Texten und Untersuchungen 9, Berlin, 89-120.
- Scurlock JA. 2014.** *Sourcebook for Ancient Mesopotamian Medicine*, Society of Biblical Literature, Writings from the Ancient World Series 36, Atlanta.
- Scurlock JA., Andersen B. R. 2005.** *Diagnosis in Assyrian and Babylonian Medicine. Ancient Sources, Translations, and Modern Medical Analyses*, Urbana/Chicago.
- Steinert U. 2018.** “The Assur Medical Catalogue”, in U. Steinert (ed.), *Assyrian and Babylonian Scholarly Text Catalogues. Medicine, Magic and Divination*, Die babylonisch-assyrische Medizin in Texten und Untersuchungen 9, Berlin, 203-291.
- Stol M. 1993.** *Epilepsy in Babylonia*, Cuneiform Monographs 2, Groningen/Leiden.

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Introductory Remarks

The botanical identification of the plant substances used in Babylonian-Assyrian medicine is one of the major challenges in understanding the prescriptions in medical texts. In Babylonian-Assyrian medical texts in general and texts dealing with conditions of the feet in particular, one plant stands out which is mentioned in many prescriptions for a number of diseases. This plant is *kasû*. In spite of its wide range of usage, the botanical identity of *kasû* is still debated by Assyriologists. It is, therefore, fitting to take another look at the various attempts at identifying this plant, as the arguments so far presented for any given identification often consider only selected aspects of the textual evidence.

In Babylonian-Assyrian medical texts practically all the parts of the *kasû* were used as medication, its leaves, seeds, sprouts, the fruity pulp (presumably in those instances where a particular part is not specified), and most importantly the *mê kasî* “*kasû*-juice” which is used to wash parts of the body or as the liquid base in which other *materia medica* were boiled or soaked and the resulting decoctions applied to the body on bandages. In treating the conditions of the feet, *kasû* juice was used to wash the feet prior to the application of other *materia medica*. The *kasû* could be crushed, boiled, roasted and/or finely ground into powder (*kasû* flour) that was used as a dry medication sprinkled on boils or wet lesions. This flour made from roasted *kasû*, *qēm*(ZĪ) *kasî*(GAZI^{SAR}) *qalûti*(BĪL.MEŠ), is mentioned in a list of various kinds of flour and other powdered substances (BAM 124 iii 44-54; BM 30918, 18-29). Interestingly, there are no references mentioning the root of the *kasû* as having been used as medication or otherwise.

Let us briefly list the references that offer an identification:

a) The first botanical identification of *kasû* with *cuscuta* “dodder” was suggested in 1917. See j) below, the reference to M. Stol.

b) A. Ungnad supported this opinion and identified *kasû* as “Flachsseide” (*cuscuta monogyna*).²

c) According to A. Leo Oppenheim (1948) *kasû* was “cassia”.³ See n. 34 below concerning this problematic identification.

d) In 1949 an analysis was presented by R. Campbell Thompson, *A Dictionary of Assyrian Botany* in which he identified *kasû* variously, as “cassia”, “carob” or “rose”.⁴ In suggesting the identification “rose”, he cited the reference in *Maqlû* for “*kasî* ŠAR” and carob (*Ceratonia siliqua*) for “*kasia*”.⁵

e) In his article in *AfO* 18 Landsberger proposed the identification of *kasû* as “mustard”.⁶ His identification was partly prompted by the lexical references in 𒄩𒄩 XXIV

¹ Special thanks are owed to Prof. Markham Geller for reading the manuscript and for his constructive comments, suggestions and pointers. I thank Dr. Annie Attia for drawing my attention to ARCHIBAB the Babylonian Archive of texts from the 20th to the 17th centuries B.C. A number of references to *kasû* can be accessed s.v. “*kasûm* moutarde”. The photographs in the article courtesy of Charles H. Eypper.

Note des éditeurs : cet article devait initialement être présenté lors de l’atelier Médecine Mésopotamienne (RAI de Paris, juillet 2019). Une chute malencontreuse avec fracture, alors que l’auteure se rendait en bibliothèque pour d’ultimes vérifications bibliographiques, ne lui a pas permis d’assurer cette présentation. Cet article important est donc proposé ici en avant-première. Les articles ayant fait l’objet d’une communication effective lors de cet atelier seront publiés dans le JMC courant 2020.

² Ungnad 1937: 76 s.v. *kasûa*.

³ Oppenheim 1948: 7.

⁴ Campbell Thompson 1949: 192-194.

⁵ Campbell Thompson 1949: 194 and 192.

⁶ Landsberger 1957-1958: 337 notes for line 83.

which point to the fact that *kasû* was a condiment with which foods were spiced,⁷ such as fish⁸, cheese and beer.⁹ M. Geller points out that the basis for Landsberger's identification was irrelevant for *kasû*.¹⁰ The identification with "mustard" is followed by many despite being challenged early on by M. Civil, see g) below.

f) AHW 455a "Senf(-Kohl) *Sinapis nigra*" follows this identification. CAD K s.v. "*kasû*" 248a-250b after presenting the textual evidence concludes, "*kasû* might actually denote the mustard (seed)."

g) "Serious doubts" concerning the use of *kasû* as a flavoring agent in beer were expressed by M. Civil in his article "A Hymn to the Beer Goddess and a Drinking Song".¹¹

h) The identification "common beet, *Beta vulgaris*" was proposed by M. Geller in his article "A Recipe against ŠU.GIDIM". His suggestion is based on the prescriptions for the treatment of convulsions resulting from the ŠU.GIDIM using malonic acid (found in beetroot) and urea (in urine). As more chemical tests are needed to prove this theory, the question is left open.¹²

i) P. Steinkeller identifies *kasû* as "wild licorice" (*Glycyrrhiza glabra*) stating that both cassia and mustard do not form part of the flora of southern Iraq.¹³ Regarding the botanical definition of "cassia", see n. 32 below.

j) M. Stol, returns to the old identification of *kasû* with *cuscuta* and cites the various species of this dodder that are found in southern Iraq and affirmatively states: "Our conclusion is clear: *kasû* is *cuscuta*, not mustard or common beet".¹⁴ In an earlier article, he translated the "flavored" cheese GA.ÀR GAZI as "Dodder cheese".¹⁵ In his article in the *RIA* concerning dairy products in Mesopotamia, Stol identifies GAZI with "(a dodder, *cuscuta*?)"¹⁶

k) A.L. Slotsky after presenting some of the evidence concludes: "In view of this, *kasû* will be called "mustard /*cuscuta*" in this study in order to achieve a balance between tradition and accuracy." She misses, as pointed out by M. Geller, textual evidence that gives us possible clues about the identification of *kasû*.¹⁷

l) H. Stadhouders in his edition of *šammu šikinšu* "The plant (and) its appearance" identifies *kasû* as "a kind of mustard and/or dodder," thus following Landsberger and Stol.¹⁸

m) In a recent note M. Stol confirms his identification of *kasû šitê* with "dodder" citing his earlier 1994 article.¹⁹

Examining the textual evidence describing *kasû* and its use, our initial question was: what plant or its fruit would combine all the criteria that our Mesopotamian sources offer? It would appear that there is only one plant that fulfills all the criteria, the tamarind or rather the tamarind pod.²⁰ The present contribution intends to prove this botanical identification by comparing the textual evidence with the actual plant.

⁷ Reiner and Civil, *MSL* XI 87 and 161 (Old Babylonian Forerunner 17) with salts and alkali.

⁸ Landsberger, *MSL* XVIII/2, 120 (line 127).

⁹ Civil 1964: 77 n. 14. Also Röllig 1970: 80 n. 33, 34 and Oppenheim 1950: 9.

¹⁰ Geller 1982: 193 n.19.

¹¹ Civil 1964: 77 n. 14.

¹² Geller 1982: 194-195.

¹³ Steinkeller 1987: 92.

¹⁴ Stol 1994: 179.

¹⁵ Stol 1993: 108.

¹⁶ Stol 1997 *RIA* VIII s.v. Milch(produkte) A. In Mesopotamian. 200a.

¹⁷ Slotsky 1997: 32. Review of this book by Geller 2000: 410-411.

¹⁸ Stadhouders 2011 nr. 18, 12 §32' and translation in 2012 nr. 19, 5 n. 35.

¹⁹ Stol 2018: 350.

²⁰ Krishnamurthy 2008. This reference provides us with a full analysis of all the compounds and chemical composition of the parts of the tamarind.

It should be mentioned that the tamarind tree does not exist in Iraq today, but the tamarind pod is available in abundance, as it is an imported commodity from countries such as Oman, Saudi Arabia and India, to name only three. However, there is evidence that *kasû*(GAZI) was harvested in the forests of the province of Umma during the Ur III period. Here forest (TIN) is defined as the areas of “riverain thickets, trees, bushes, and grasses”.²¹ The *kasû* was collected, stored and later sold for silver to private traders.²² As mentioned above, Steinkeller has identified *kasû* with “wild licorice” (*Glycirrhiza glabra*).²³ This identification is problematic, as it is the *root* of the *Glycirrhiza glabra* that is used, and as mentioned above the root of the *kasû* was not used. Hence, for the same reason the identification “beetroot” for *kasû* would not be a possibility.²⁴ It is possible that the tamarind tree once grew in Mesopotamia, but at some period in its history ceased to exist for reasons unknown. Evidence from a Neo-Babylonian letter mentions a boat of *kasû* for which silver was paid.²⁵ As this is a late text, the possibility of the tamarind pods being imported could be raised. We know that many commodities were traded between Dilmun (today Oman), which acted as an entrepôt, and southern Mesopotamia. Thus, it is likely that *kasû* ultimately became an import. The tamarind pods are easily transportable and travel well. Within this context, a particular reference comes to mind. In Hh III, in the section in which the various kinds of date palms are listed we read in line 285 GIŠ.GIŠIMMAR NU.TUK.KI with the reading *asnû* ²⁶. This entry is followed by 286 GIŠ.GIŠIMMAR MÁ.GAN.NA=*makkannu* (which Landsberger thinks it to be a mistake because the other parallels do not mention this), and 287 GIŠ.GIŠIMMAR ME.LUH.ĦA= *meluhhu*. As *kasû* “tamarind” may well have been an import, could any one of these “palm trees” of obvious foreign origin refer to the tamarind? As references describing these particular kinds of dates are not available, this is highly unlikely and is open to wide speculation. In comparison to *kasû*, their usage in medical texts is relatively rare. In texts dealing with conditions of the feet, the “date of Dilmun” is prescribed only in prescriptions dealing with the *sikkatu*-condition.²⁷

What is the tamarind?

The tamarind derives its name from the Arabic *Tamar Hindi* “Indian date”.²⁸ Its scientific name is *Tamarindus indica* which is the sole species of the genus *Tamarindus*. The Arabic name *Tamar Hindi* is used throughout the Middle East. But in every other country in Asia where the tamarind is grown it is referred to by different names, as e.g. (in India itself) “*imli*” from the Sanskrit *amlika*; (in Thailand) *makhm*; and (in Indonesia) *asam jawa*. The Tamarind belongs to the Fabaceae family and is a very leafy, evergreen, medium-growth tree originally indigenous to tropical Africa and India, but now growing throughout Asia. It grows wild in Africa and southern Arabia especially in Oman on the mountain slopes facing the sea. In this region the tamarind grows to about 6 meters in height. In fact, nowadays it is found around the world (including China and the U.S.A.) wherever a sunny tropical climate

²¹ Steinkeller 1987: 91.

²² Steinkeller 1987: 96.

²³ Steinkeller 1987: 92.

²⁴ Geller 1982: 194-195.

²⁵ CT 22, 123, lines 6-7 (Plate 24).

²⁶ Landsberger, *MSL* V 117: Hh III 285 (Date palm of Dilmun).

²⁷ Four prescriptions in a single Kuyunjik text, AMT 32,5 + AMT 51,4 + AMT 43,3: iv 8', 9', 13', 16'. AMT 93,2: rev 1 (for *sikkatu*, in broken context). In an Aššur text BAM 124 iii 41-43 one prescription for *sikkatu*, which has a parallel in AMT 32,5+ iv 14-16, lists *isqūqu* flour which has been replaced by the “date from Dilmun” in the AMT 32,5+ reference.

²⁸ Clearly the Arabic influence is discernable by the nomenclature in the West. In Middle Ages it was called *tamarindus* and Marco Polo (14th cen.) wrote *tamarandi* (The Compact Oxford English Dictionary, Second Edition, 1994: 2006).

dominates. In optimum climatic conditions the tamarind can grow to a height of about 24 meters. Its numerous bright green leaves fold at sunset and open again at sunrise. Its small yellow flowers are five petalled with orange or red streaks.²⁹ The *kasû* is described as GAZI SIG₇.SIG₇ which may refer to the dense foliage of this plant.³⁰ Also in the pharmaceutical series *Uruanna* II 39 it is described as ÚGAZI^{SAR} SIG₇.³¹ It should be noted that *kasû* and *amḥara* are described as being *atartu*,³² which may denote a wild growing plant.³³ The determinative SAR., the designation SIG₇.SIG₇, and *atāru* appropriately describe the particularly dense foliage of the tamarind, a leguminous plant which could grow wild or also be cultivated (*erīšti erēši*).³⁴ Therefore, *kasû* cannot be identified with the parasitic *cuscuta* “dodder” because the most prominent feature of this parasite is the absence of leaves (in some species its so-called “leaves” are actually minute scales). The dodder depends on the host plant for its nutrition. The *kasû* has abundant leaves.

But it is the fruit of the tamarind tree that is of special interest to us, as its use particularly as a condiment is widespread in Asia and the Middle East. A tamarind tree, whose fruit matures between April and July, can produce about 170 kg of tamarind yearly. It should be noted that the Mesopotamian references refer to the fruity pulp designated *kasû* and its use, which to some extent, is very similar to that of dates (*suluppû*). Dates were used, for example, as *mê suluppî* a “date maceration”, or *aban suluppî* the “date stone”, or *qēm suluppî* “date flour”, or *šikar suluppî* “date beer”. Interestingly, the wood of the *kasû* does not seem to have been used, as it appears either without any determinative or frequently with the determinative Ú not GIŠ and (most decisively) SAR.

The tamarind has hard-shelled, light brown, segmented pods (see Ills. 1 and 2, A) which can be anywhere between 4 and about 12 cm. long. The shell can be easily cracked open by hand revealing the elongated, sharply segmented, brownish-red pulp (the fruit) (see Ills. 2, B and D). Although in connected segments, this fruity pulp looks as if it was all held together by or contained in a “net” (see Ill. 2, C) consisting of three or four large veins that run from the stem longitudinally along the sides of the fruity pulp and smaller tiny filament-like veins that extend in pairs from the longitudinal veins and burrow into the sides of the pulp itself (see Ill. 2, B). It is, in fact, this net structure that makes the tamarind unique in comparison to either the species *cassia fistula* or the carob (*Ceratonia siliqua*).³⁵ Both the *cassia fistula* and the carob belong to the family *Fabaceae* (as also the tamarind) and although they too produce pods, the arrangement of the fruity pulp and the seeds is markedly different from that of the tamarind and lacks such a vein structure. Thus, there is no real point of comparison.

The taste of the ripe tamarind is sweet-sour to sweet. The unripe tamarind is very sour. Each fruit segment contains one seed which is encased in a thin husk (Ill. 2, E). The seed is very dark brownish-red, somewhat flat, irregularly rectangular in shape (not round), glossy smooth, and roughly 1cm in size (Ill. 2, F).

²⁹ Krishnamurthy 2008: 363.

³⁰ Reiner, *MSL* XI: 𐎶𐎵 XXIII, Old Babylonian Forerunner 15, 158, line 489.

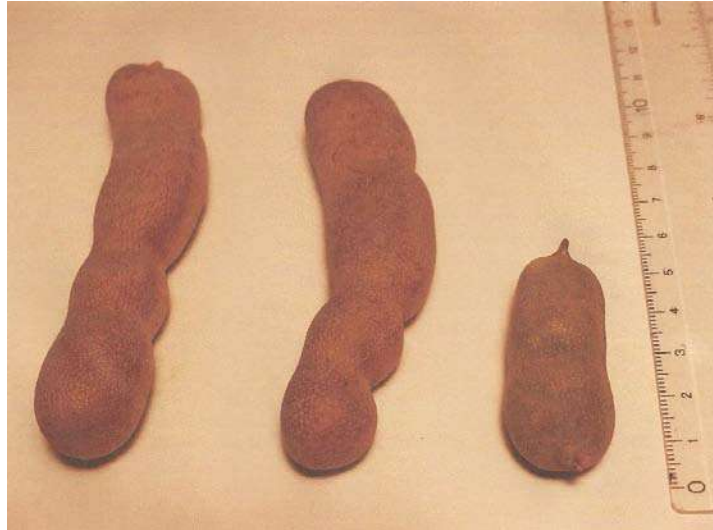
³¹ Geller 1982: 196 n.25.

³² Landsberger and Reiner, *MSL* X Commentary 𐎶AR-gud to 𐎶AR-ra XVII, Recension B 103, line 178b. Ú.GAZI.SAR - *amḥara* - *ḥasarrat* (according to CAD this latter is “a kind of grass”).

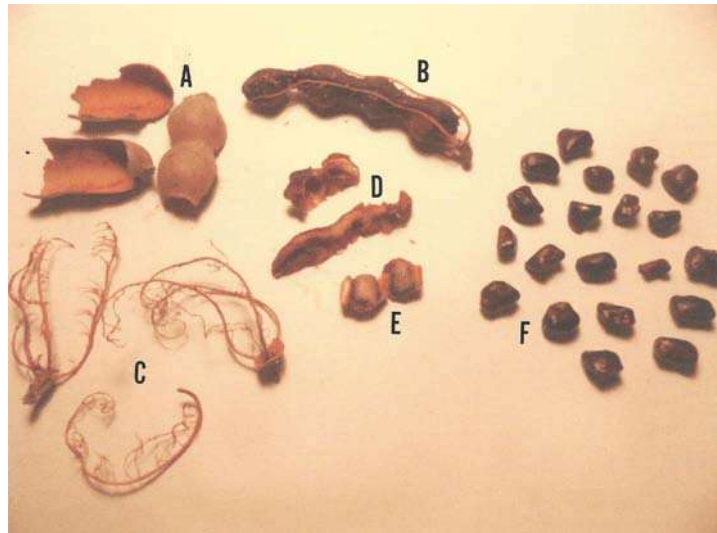
³³ CAD A/II s.v. *atartu* B 486b. M.J. Geller 1982: 194a.

³⁴ Geller 1982: 194a.

³⁵ It should be noted that the genus *cassia* includes numerous species, and it has become an imprecise collective known as the “cassias”. It is therefore not accurate to botanically identify a particular Akkadian plant with only the name of a genus, as e.g. Oppenheim 1948: 7. Thompson refers to both *cassia* and *cassia fistula* and also “carob”, and “rose” (see above, n. 3 and 4).



Ill. 1 Tamarind pods



Ill. 2. Parts of the tamarind pod

A. Shell; B. Fruity pulp and veins; C. Examples of veins and fine filaments; D. The fruity pulp; E. Husk containing the seed; F. Tamarind seeds

The *kasû* seems to have been a staple condiment in Mesopotamia. Evidence of its use is attested from almost all periods of Mesopotamian history. Large amounts, for example, 15 GUR 3 PI of *kasû*,³⁶ appear in economic texts. A group of tablets from Ur belonging to the archives of the Ganunmah (gá.nun.mah), the store-house of the ^dNingal temple, lists foodstuffs such as butter, cheese, oil, dates, delivered for offerings for various deities. These offerings fall into three basic categories: *sattukku*(SÁ.DUG₄) regular daily offerings, monthly special offerings, and offerings for particular festivals. In the listings for regular daily offerings *kasû* and coriander (*kisibirru*) in equal amounts appear. The required amounts were

³⁶ As this is an Old Akkadian text, (the value of one *kurru*(GUR) at that time was equal to 300 *qû*(SÌLA) “liter”. This amount would, accordingly, be 15x300=4500 liters. In addition to this there are 3 PI, a unit which is a little less than a GUR as 1 GUR is equal to 5 PI. Thus, we have an actual overall total of over 4500 liters of *kasû*. For other examples see CAD K s.v. *kasû* 248b. Measurements are approximations and vary in time and location. See *RLA* VII 500-504.

not inconsiderable and they vary between 13 and 15 liters.³⁷ A text dated to the reign of Rim-Sîn of Larsa, confirms the receipt of 20 liters of *kasû* for princess Šamuḫatum.³⁸ Also 20 liters were delivered to a “fuller (^{LÚ}ÁZLAG) who had been bitten by a dog, and a brewer (^{LÚ}KAŠ.ÍL) whose foot is sick”.³⁹ A smaller amount of 10 liters were delivered to a certain Šamaš-magir, “when his foot had been sick”.⁴⁰ An interesting Old Babylonian reference for the purchase of an unknown amount of *kasû* against a payment of three shekels of silver gives us some insight as to the value of this commodity.⁴¹ The product seems thus to have been in the middle price range, but not cheap. In an inheritance list from the Old Babylonian period, 5 BÁN of *kasû* is listed.⁴² A relatively large amount of *kasû* appears in a list as *riqqû ša asî* “aromatic plants of the physician” in a text from Nuzi.⁴³ An example from the Neo-Assyrian period gives us yet another dimension as to the “popularity” of *kasû*. On a stela of Aššurnāširpal II, the king describes the elaborate celebration at the opening of his royal palace in 879 B.C. at Kalḫu (Nimrud) which hosted thousands of people over ten days of festivities. A detailed list of the foods and drinks, including spices, and the quantities of each are arranged in descending order, the smallest being ten homers (ANŠE). Among the series with quantities of a hundred or more, *kasû* is listed, 100 *kasû*(GAZI.SAR) followed by 100 *šizbu*(GA) “milk”.⁴⁴ Unfortunately, the unit of measurement is not mentioned with any of the quantities of 100 and above. Considering the large quantities of other items, e.g. 1000 sheep, 1000 lambs, 500 deer, 10000 doves, 10000 fishes, to name only a few, the 100 *kasû* must have also represented a reasonably large amount of some unit of measurement. As a condiment it was more than likely tamarind paste that was offered with the food at the elaborate celebrations hosted by Aššurnāširpal II.

The *kasû* “Tamarind” in *Maqlû*

One particular reference, which is often quoted, should be considered. In Tablet V of the Witchcraft Series *Maqlû*, the victim presents his case before the gods Nusku and Girra, saying in line 31 *kîma kasî liksûši kišpûša* “Like *kasû* may her spells bind her”.⁴⁵ Beyond the pun of the plant name *kasû* and the verb *kasû* “to bind” (also magically), the question should be asked whether this wordplay might describe something about the *kasû* that “binds”. Also related to this is the prescription in BAM 158 i 22 and ii 11-12 of the *šitê kasî* “the *šitû* of the *kasû*” mentioned after *kasû* among other *materia medica*.⁴⁶ Also in BAM 228 obv 13 and its parallel BAM 229 obv 7 (broken context) we read *kasû* followed by *šitê kasî*.⁴⁷ The *šitû* seems to have been in fact some part of the *kasû* that was specifically used as *materia medica*.

³⁷ See references in ARCHIBAB s.v. “kasûm moutarde” from UET 5, with ARCHIBAB numbers 16-22. These texts were studied by H.H. Figulla 1953: 101 e.g. UET 5 742 calls for 1 *sûtu*(BÁN) 4.5 *qû*(SÎLA)=14.5 liters, or 97-98 UET 5 777 1 *sûtu*(BÁN) 5 *qû*(SÎLA)=15 liters. One *sûtu*(BÁN)=10 liters at this early period.

³⁸ CUSAS 15 87. The measurement BANMIN (2 BÁN).

³⁹ CUSAS 15: 158. A fuller is a wool clothmaker who used the process of fulling for thickening and shrinking wool cloth by moistening it and trampling it with his feet.

⁴⁰ CUSAS 15: 192.

⁴¹ Poebel 1909. BE VI/2 44-45, tablet 65, plate 39. A document dated to the First Dynasty of Babylon is a receipt for 3 shekels of silver for the purchase of *kasû* from Balilum and Sîn-Malik.

⁴² One *sûtu*(BÁN)=10 liters at this early period. Hence, 50 liters of *kasû* was the amount called for in this list. Frank 1928: 33 and Plate XV Text 38, 7.

⁴³ Lacheman 1950: 11, transliterated text 539 (Plate 89 213. Written on the lower edge. In line 6 the amount required was 1 *emāru*(ANŠE) “homer”=about 100 liters and 10 <SÎLA> “liters” of *qa-zu-e*.

⁴⁴ Wiseman 1952: 24, 28, 35 and 43 line 130. He erroneously follows Thompson’s identification “rose” for *kasû*.

⁴⁵ Abusch 2015: 102.

⁴⁶ BAM 158 i 22 *kasû*(GAZI.SAR) *ši-te-e kasî*(GAZI.SAR) and ii 11-12 *kasû*(GAZI.SAR) *ši-te-[e] kasî*(GAZI.SAR). CAD Š/III s.v. *šitû* B 143a defines it as (a plant, a variety of *kasû*). The cited reference *šitû* SAR in a list of plants in Merodachbaladan’s (Marduk-apla-iddina II) garden (CT 14: 50 20) may have been a plant unrelated to the *šitê kasî*, however this is only a possible suggestion.

⁴⁷ Prescribed in a prescription against fever. Bácskay 2018: 205.

CAD suggests a possible connection with *šedû* “offshoot”.⁴⁸ This is unlikely, as the word generally used for “offshoot” is written in medical texts with the logogram ŠE.KAK with the possible readings *habburu*, *nīplu*, *ziqpu*, or *šitlu*⁴⁹, or described as in AMT 51,5 rev 4’ *šitil* or *ziqip*(ŠE.KAK) *kasī*(GAZI^{SAR}) “offshoot of *kasû*” in broken context. With this in mind, *šitû* cannot be “offshoot”.

It is this particular vein structure of the tamarind that vividly reminds us of the passage from tablet V of the Witchcraft Series *Maqlû* mentioned above. The author of *Maqlû* has indeed achieved a literary feat by so ingeniously using the pun on the verb *kasû* “to bind” and the name of the plant. This plant can be none other than the tamarind. We now have an understanding of this analogy. Additionally, the *šitê kasī* “the *šitû* of the *kasû*” can be identified as the designation of the vein-like structure that encloses the fruit as in a net (see Ill. 2, B and C, after the fruit has been removed). It is a part of the *kasû* and not a kind of *kasû*.⁵⁰ Therefore, the *materia medica* in the prescriptions in BAM 158 i 22 and ii 11-12 and BAM 228 obv 13 mentioned above can be identified as the tamarind and “tamarind veins”, two separate entities. In light of the identification of the *šitû* of the tamarind, the identity of the *šitû* in the eye disease becomes clear and the connection suggested in CAD with the *šatû* B “to weave, to spin, entwine, interlace” is indeed viable. However, the analogy with the eye disease is more than likely not a reference to a “spider’s web”⁵¹ but rather it is an analogy to the reddish-brown “tamarind veins” that come out of the stem, thus referring to an eye disease that involved a pronounced reddening of the thin capillaries of the eye around the iris, easily identifiable by the *āšīpu*.⁵² An identification of this disease is beyond the scope of this article. The conglomerate of tamarind veins was used as a known *materium medicum*.

The *kasû* “Tamarind” and carnelian

The reddish-brown color of *kasû* is established by its association with the stone *sāmtu*(GUG) “carnelian”. Carnelian is a semi-translucent to translucent brownish-red mineral. It is often confused with sard which, however, is a much darker shade of brownish-red and is duller.⁵³ A variety of carnelian is ^{NA4}GUG GAZI SAR which is best translated as “*kasû* carnelian”. The reading *kasânītu* for this stone is a “free restoration” and not attested.⁵⁴ This variety of carnelian is described in *abnu šikinšu* as “spotted with *kasû*”⁵⁵. Clearly reference is being made to the tiny brownish-red inclusions (spots) that can best be seen in the lighter pale variety of carnelian. Such inclusions are iron oxide impurities, which here are being compared with *kasû* seed, which are reddish-brown. ^{NA4}GAZI SAR read *aban kasī* refers to the stone or seed of the *kasû*, as e.g. *aban suluppi* “date stone” which is also attested in medical prescriptions.

The *kasû* “Tamarind” likened to diseased gallbladder

In an Old Babylonian extispicy text, the gallbladder is described as covered with *kasû*: *šumma*(DIŠ) *martu*(EŠ) *kasī samūti udduḫat šamûm izannun* “If the gall bladder is spotted with red *kasû*-s, it will rain”.⁵⁶ The gallbladder in animals and humans alike is a shade of

⁴⁸ CAD Š/III s.v. *šitû* B 143a.

⁴⁹ CAD Z s.v. *ziqpu* A 127 a and b.

⁵⁰ Contra CAD Š/III s.v. *šitû* B 143a.

⁵¹ Scurlock and Andersen 2005: 199.

⁵² Labat 1950: 52 G 11 *šumma*(DIŠ) *šer’ān*(SA) *īnē*(IGI.MIN)-*šu kīma*(GIM) *ši-te-e* [*kasī*(GAZI^{SAR}). . .] which is a very likely emendation CAD Š/III s.v. *šitû* B 143a. See also Attia 2000: 49-50 and Fincke 2000: 138.

⁵³ Both carnelian and sard belong to the family of Chalcedony and are silicates.

⁵⁴ Landsberger and Reiner, *MSL* X 8 Hh XVI line 137 and commentary for this line, 19.

⁵⁵ A. Schuster-Brandis 2008: 24.

⁵⁶ Scheil 1930: Tablette B 150:3. The logogram EŠ in the reading BÀ is read *amūtu* “liver” and the logogram ZÉ is *martu* “gallbladder”. In his study of gallbladder omens, K. Riemschneider 1965 established that EŠ is to be

green due to the presence of bile. As the organ is somewhat semi-transparent, the color of the bile “shimmers” through. The gallbladder stores the bile produced by the liver. Emptied of bile, as for example after the consumption of food, the organ is light pinkish-red covered with thin capillaries.⁵⁷ As the gallbladder in this extispicy text is completely spotted (*udduhu*) with *kasû*, it is clearly not a “healthy” gallbladder, and it is likened to the reddish-brown *kasû*. Mammals, such as horses, sheep, goats, like humans, have gallbladders and about 10% may suffer from gall stones. It is likely that the gallbladder in the text above is not smooth but covered by lumps which are likened to segmented *kasû* fruit or seeds. The analogy of the unhealthy gallbladder as being covered with “lumpy” brownish-red tamarind or its seeds can now be understood. Unlike the smooth texture of the healthy dark reddish-brown liver, the cirrhotic liver in both humans and animals is considerably lighter colored and “lumpy” as if covered with tamarind segments or seeds. Whether we consider the textual reference as referring to the gallbladder or the liver, the analogy to the tamarind is applicable.

The *kasû* “Tamarind” and *uḫūlu*(NAGA) and the “horned” or “sprouting” *uḫūlu*(NAGA.SI)

It should be mentioned, however, that in the stone list in Hh XVI *kasû* is listed with salt and alkali. We read: line 236 ^{NA4}MUN= *aban ṭābtī*, line 237 ^{NA4}GAZI.SAR= *aban kasī*, line 238 ^{NA4}NĀG= *aban uḫūli*. Here *kasû* is listed between “rock salt” and “*uḫūlu* alkali stone”. The identical order appears also in the Ras Shamra Recension.⁵⁸ These same three items appear in a different order in a Sumerian text giving a series of medical prescriptions identified by Civil, with *uḫūlu qarnānu*(NAGA.SI^{SAR}), *ṭābtu*(MUN), and *kasû*(GAZI).⁵⁹ The determinative SAR after NAGA.SI is unusual, but it probably was intended to designate the “sprouting” plant. Furthermore, in Hh XI in a listing of ten *tukannu* leather bags for specific items, such as silver and gold the salt, *kasû*, and *uḫūlu* are listed in the identical order as mentioned above, *tukkan ṭābtī*, *tukkan kasī*, and *tukkan uḫūli*.⁶⁰ It is interesting to note that other references to leather bags are for twin bags *tū'amātu* (probably to be put on a beast of burden) and for a bag for the stylus, *tukkan qan ṭuppi*. These entries could point to the importance and the practical daily use of the items they were to carry. One of which was *kasû*.

As defined in CAD, *uḫūlu* is “a plant and its product (soda ash) used as a source of alkali”.⁶¹ Oppenheim suggests that NAGA is “used in a double way”: as spice and as a source of potash after burning the plant.⁶² It was used as a cleansing agent for washing the body and fabrics.⁶³ Although the texts do not inform us about the Mesopotamian process of fulling, we know that the fullers received a certain amount of both *uḫūlu*(NAGA) and “horned” or “sprouting” *uḫūlu*(NAGA.SI) which were used in clothmaking. Fulling is particularly used in wool clothmaking.⁶⁴ The *uḫūlu* also plays an important role in the manufacture of glass.⁶⁵ In medical texts it is used diluted in water to bathe diseased parts of the body. Although its use in medical texts is similar to that of *kasû*, this use is not as varied. There are, for example, no

read *martu* in some instances and presents a new edition of the texts published by Scheil in 1930. Riemschneider 1965: 128 and n.15. CAD A/II s.v. *amūtu* A 96b. In the Zeichenliste (2nd ed. 2010) sub EŠ, Borger expresses doubt concerning the reading with a question mark. CAD E s.v. *edēhu* “to cover” 24b. In this context “spotted” would be more suitable.

⁵⁷ Gray's Anatomy for Students, 332 (Drake et al. 2015).

⁵⁸ Landsberger and Reiner, *MSL* X 11 Hh XVI line 237, and the Ras Shamra Recension 44, line 185-187.

⁵⁹ Civil 1960: 62, lines 103-105 and p.70 comments for lines 103 and 105. *kasû* is translated “mustard”.

⁶⁰ Landsberger, *MSL* VII 132 Hh XI, lines 189-191. In the Commentary HhAR-gud to HhAR-ra=*hubullu* XI, 149, *tukkan kasī* is omitted.

⁶¹ CAD U and W, 48b, s.v. *uḫūlu*.

⁶² Oppenheim 1948: 6.

⁶³ Oppenheim 1988 74b.

⁶⁴ Waetzoldt 1972: 172.

⁶⁵ Oppenheim 1988: 43.

references of dried and ground *uḫūlu* sprinkled on a sore, while there are several references of *kasû* used in this manner.

It is very difficult to botanically identify the kind of alkali-plant from which the ashes were won, as there are a number of possibilities. They all belong to the *Amaranthaceae* family, under which many genera are classified. The effort to narrow down the possibilities by identifying these plants through their Arabic names has proven to be of little help. Some common Arabic names for these shrubs are *ushnān*, *ishnān*, *khureizeh*, *huradh*, *ghasūl*. The difficulty lies in the fact that our botanical differentiation is not always applied. Some names refer to alkali shrubs that scientifically do not belong to the *Amaranthaceae* family or the same name is given to more than one genus of the *Amaranthaceae* family.⁶⁶ The search could be limited to those alkali-plants found in the steppes and the Iraqi/Syrian desert, as these plants were readily available as sources of lye and soda. Interestingly, the source of pure *uḫūlu qarnānu* “horned/sprouted alkali” is said to come from the steppes.⁶⁷ The species of alkali plants found in the Iraqi/Syrian desert generally belong to three genera.⁶⁸ Although we can only narrow down the botanical identification of *uḫūlu*, we can conclude that it was, together with *ṭābtu* “salt” and *kasû* “tamarind”, one of the three important staples found in a Mesopotamian household, which would help to explain their mention together as a group.

The *kasû* “Tamarind” in dyeing textiles

Although little is known about the nature of the dyes used or the process of dyeing textiles in Mesopotamia in general, the British Museum tablet WA 62788, first published by E. Leichty⁶⁹ with transliteration and translation, offered an initial insight into the process of dyeing wool. After adding a join, WA 62788+82978, I. Finkel published this Neo-Babylonian tablet dating from the 7th century B.C.⁷⁰ offering a transcription and a translation. The instructions in one section on the reverse, section vi provide us with evidence for the use of *kasû* in dyeing wool.

- 10 *kasû*(GAZI.SAR) *ana mē*(A) *tanaddi*(ŠUB) *ina išāti*(IZI) *tušabšal*(ŠEG₆-šal) *ta-šá-ḫal*
šipātu(SÍG) *u₄-ri-qu*
- 11 *a-na libbi*(ŠÀ) *tanaddi*(ŠUB) *ina išāti*(IZI) *tušabšal*(ŠEG₆-šal) *tušellā*(E₁₁)-*ma*
šipātu(SÍG) *ar-ga-man-nu*
- 10 You put tamarind in water (and) boil it on fire. You strain it (and) put the *urrīqu* wool in it. You boil it on fire. You take it out and (you will have) *argamannu* wool.

This section deals with dyeing *urrīqu* wool to produce *argamannu* wool, “pale blue wool to red-purple wool”.⁷¹ Although the text does not tell us what part of the *kasû* “tamarind” was boiled and for how long, we know that the leaves and flowers of the tamarind are used today

⁶⁶ Librairie Du Liban Publishers-Electronic Dictionary, Nahal’s Dictionary of Scientific plant names (En/Ar) s.v. “Salicornia” which is one of the genera of the *Amaranthaceae* family. Post 1896: 686, offers a somewhat different classification.

⁶⁷ It is referred to as *ša ištu šadī* which is rendered “from the mountains”. As we know the general identity of this plant, the rendering “from the steppeland” would be more appropriate. See CAD Š/I s.v. *šadû* A2 58b.

⁶⁸ Family: *Amaranthaceae*. Genera: *Arthrocnemum*, *Anabasis* and *Salicornia*. The species from the latter two being more common.

⁶⁹ Leichty 1979.

⁷⁰ Reference to this tablet is made in Cardon (ed.) 1999-200: 64-65. In the bibliographical note, reference is made to I. Finkel and H. Granger-Taylor, “Neo-Babylonian Recipes for Dyeing Wool”, *Dyes in history and Archaeology* 16-17, 1999 in print. This publication for the years 1999-2001 was located at the Rathgen-Forschungslabor in Berlin, but it did not contain the article. The article was only found online under: www.tekhelet.com/pdf/AssyrianTablet-Finkel.pdf [accessed 3 May 2019]: 1-4.

⁷¹ www.tekhelet.com/pdf/AssyrianTablet-Finkel.pdf [accessed 3 May 2019]: 3. A discussion of the Mesopotamian color scheme falls beyond the scope of this paper.

as mordants in dyeing, and the ground seeds are used for sizing cotton.⁷² But boiling the tamarind pod in water creates a dye of different shades of brown and reddish-brown, even grey depending on the mordant added.⁷³ The husk of the tamarind seed is rich in tannin which acts as a mordant. Possibly in the dyeing process cited above, the whole pod was boiled. In fact, the tamarind could be used as a dye and as well as a mordant. It is interesting to note that in most instructions that are found on this fragment (sections iv, v, vii, viii) alum (potassium aluminum sulfate) is boiled on fire with the wool that was to be dyed. Alum is a known mordant. In section vi the tamarind assumes this role and, hence, alum is not needed.

The *kasû* “Tamarind” in the making of beer

In the Neo-Babylonian period larger amounts of *kasû* seem to have been required. This is specially the case in the making of beer. Although Mesopotamia had a long tradition of beer brewing going back into the third millennium B.C., the process of brewing was not uniform and different kinds of beer were available. In order to better understand the role of *kasû* in this process, let us briefly look at what the Mesopotamian brewing process entailed. Generally, beer was made of barley (rarely emmer-wheat). First the barley was allowed to germinate by keeping it damp in large containers. The process of malting was then stopped either by spreading the malt on the ground under the sun, or by roasting it in an oven until dry. This green malt was, therefore, the initial product. Before it was ground, the remaining hulls still found in the green malt were broken up by pounding (*ḥašālu*). The coarsely or finely ground malt was sifted, and used in various ways, but especially in the making of beer. It was also a trading commodity.⁷⁴

Before a brew was made by adding water to the ground malt, a second product that was prepared separately was added to the malt. This product was designated as *bappiru*(BĀPPIR) “beer bread” written with the combination of two signs ŠIM “aromatic plants” and NINDA “bread” which in fact informs us to some extent about the identity of this “beer bread”. It was evidently an important ingredient in making beer. Although it is not clear whether barley or wheat was used, the bread dough was probably made of unmalted grain to which aromatic ingredients were added, the identity of which remains unknown.⁷⁵ The dough was then shaped into cakes. But, as W. Röllig mentions, the use of such aromatic ingredients need not have been identical throughout the ages.⁷⁶ Varieties of “beer bread” were also trading commodities.⁷⁷

The next step in preparation process was the production of the beer-mash which was made by combining the *bappiru* “beer bread” and the malt and adding some water. The mash was then heated in an oven and allowed to cool by spreading it on reed mats made specifically for this purpose.⁷⁸ After cooling the beer-mash, an additional sweet substance called *billatu*(DIDA) was added. Like the *bappiru* “beer-bread”, the *billatu* served the purpose of spicing the beer and could have been added in liquid or dry form. It is not certain whether it was added generally to all beer or possibly replaced the *bappiru* entirely as a spicing agent. As the *billatu* was especially sweet, it would have enhanced the fermentation process about which little is known.⁷⁹ Finally after adding more water, the resulting beer-mash was poured into fermentation vats.

⁷² Krishnamurthy 2008: 363. Note: A mordant is a substance that fixes the dye to the cloth and makes it color fast. Sizing is the process of adding a substance to strengthen the yarn thus reducing breakage.

⁷³ www.asiantextilestudies.com/brown.html#g [accessed 8 May 2019]: Tamarind or Asam Jawa.

⁷⁴ Röllig 1970: 19-21. For earlier discussions see, Oppenheim 1950: 6-16.

⁷⁵ Röllig 1970: 21-22. Also, Civil 1964.

⁷⁶ Röllig 1970: 22.

⁷⁷ Röllig 1970: 23.

⁷⁸ Röllig 1970: 23-24.

⁷⁹ Röllig 1970: 24-25.

After this brief summary of the brewing process, what then was the role of *kasû*? Although textual evidence of its use comes only from a few references from the Neo-Babylonian period, it is likely that it either formed one of the ingredients in the *bappiru* “beer-bread” or was part of the *billatu* mixture. One particular reference that should especially be considered in attempting to identify *kasû* in this process refers to the preparation of 40 empty vats for *billatu*-beer, for which 34 *kurru*(GUR) of barley and 10 *kurru*(GUR) of *kasû* were needed.⁸⁰ Therefore, *kasû* formed about one-third of this mixture. This is not to be confused with the sweet *billatu*-mixture mentioned above. In the late Neo-Babylonian period *billatu* referred to generic beer and the traditional word for beer *šikaru*(KAŠ) now referred to the beer made specifically from dates.⁸¹ Many kinds of beer were brewed in Mesopotamia, each presumably with its own particular taste. Two kinds of beer, however, that are designated by their color are the “dark beer” (KAŠ.GE₆) and the “red-brown beer” (KAŠ.SI₄ or KAŠ.SA₅). These beers are attested as early as the Presargonic period in Mesopotamia.⁸²

The process of beer manufacturing was presented above in some detail in order to establish at what stage a flavoring agent would be added. Although the identity of all of the spices is not known, we are told of one flavoring agent (*kasû*) the tamarind. Tamarind was, therefore, added to either the *bappiru* “beer bread” or the *billatu* in liquid or paste form. In this capacity the sweet tamarind was probably used not only to enhance the sweetness of the beer, but also to enhance the fermentation process. This would explain the surprisingly large amount of tamarind (one-third of the total amount of barley) needed to prepare the *billatu* beer. Of the various types of beer available in ancient Mesopotamia it is likely that the “red-brown beer” (KAŠ.SI₄ or KAŠ.SA₅) owed its name to the tamarind additive.

The *kasû* “Tamarind” in the preparation of fish

Mesopotamian texts inform us that *kasû* was used not only to flavor beer, but also to flavor fish. Together with salt it played an important role in the preparation of fish.

The lexical text Hh XVIII begins with a long list of fishes, “Fish Catalogue”, lines 1-137, the final ten lines of which deal with their preparation. There are two references of particular interest to us, line 126 *nūn tābtī*(MUN KU₆) “salt fish” and line 127 *nūn kasê*(GAZI.SAR KU₆) “*kasû* fish”⁸³ Evidently, the first instance refers to fish that have been preserved in salt. The *nūn kasê* “*kasû* fish”, on the other hand, probably referred to fish spiced with *kasû*. This is followed in line 128 by *nūn šilli* lit. “shade fish”, probably to be understood as “fish slowly dried in shade”.⁸⁴ Finally it lists the cooking procedures, as for example, “in hot ashes” and various forms of grilling. A closer look at these final lines informs us that these procedures were not exceptional, but rather regular and well-known ways of handling fish. Both salt-water and fresh-water fish from the rivers and canals formed part of the Mesopotamian diet. The two most popular kinds of river fish cherished even today in Iraq are the *purādu*(SUĤUR), Arabic *šabbūt* and the *arsuppu*(EŠTUB), Arabic *bunni*. The *bitrū*(SUĤUR.MÁŠ), Arabic *bizz* is also popular.⁸⁵ These are species of the carp family *cyprinidae*.

The use of tamarind in a particular preparation of carp that traditionally is said to go back to ancient times is, in fact, a national dish in Iraq. This preparation is called in Arabic *maskoof*, pronounced in Iraq *masgoof*. Along the banks of the Tigris one sees small flickering

⁸⁰ VAS 3 1907: 14 Text 47 lines 1-3. 1) 40 DUG *dan-nu-tú ri-qu-ti*; 2) 34 GUR *uṭṭatu*(ŠE.MÁŠ); 3) 10 GUR *ka-si-ia šá bi-li-ti* Also quoted in Ungnad 1937: 76 s.v. *kasiia*.

⁸¹ Röllig 1970: 41.

⁸² Bauer 1972: 215 nr. 60 I 1,6.

⁸³ Landsberger, *MSL* VIII/2. The Series H_{AR}-ra=*hubullu* tablets XIV and XVIII, 120.

⁸⁴ Salonen 1970: 187.

⁸⁵ Salonen 1970: 241-242.

fires around which the freshly caught fish impaled on short sticks are arranged, either whole or cut open lengthwise “butterflied”.⁸⁶ In other words, it is not grilled over a direct fire. The fish is spiced with tamarind and basted with a marinade of tamarind, olive oil, and salt. The two kinds of carp that are suitable for this dish are the *purādu*(SUḪUR), Arabic *šabbūt* and the *arsuppu*(EŠTUB), Arabic *bunni*. Depending on the size of the fish, this indirect grilling could take well over an hour. There are a number of Akkadian verbs that are rendered in English by “grilling” or “roasting”, without necessarily considering the manner in which the grilling was to be performed. In an attempt to find a comparable designation for indirect grilling, the reference in 𒄩 XVIII 129 (restored from the Ras Shamra late Forerunner 72c) IZI.TAG.GA KU₆ = *nūnu ša išāta laptu*⁸⁷ might express that particular manner of grilling. Salonen translates this line “grilled fish”, but adds “TAG = *lapātu* ‘anrühren’, vom Feuer gesagt, d.h. ‘to grill’”.⁸⁸ In fact *lapātu* is the key to understanding this expression. Literally it must be rendered “fish that is lightly touched, or has been touched by fire” which clearly expresses the fact that it is not grilled over direct heat. It should be noted that 𒄩 XVIII offers other modes of preparing fish: Line 17 IZI.KU₆ = *nūnu išāti* “fire fish” i.e. fish grilled over an open fire; and line 18 IZI.TÁ.NA.A = *nūnu timri* “ash fish” i.e. fish cooked in hot ashes.⁸⁹ All these are known modes of cooking fish. One is entitled to ask whether the Mesopotamian enjoyed “*masgoof*” by the name *nūn kasē*(GAZI.SAR KU₆) “tamarind fish”?

The *kasû* “Tamarind” in the making of cheese

Evidently *kasû* was used in some capacity in the making of Mesopotamian cheese *eqīdu*(GA.ÀR). In the lists of various kinds of cheeses GA.ÀR.GAZI “*kasû* cheese” appears in the Old Babylonian Forerunner 15 to 𒄩AR-ra XX-XXIV line 350 and GA.ÀR.A.GAZI appears in the Old Babylonian Forerunner 17, col vi 18.⁹⁰ Cheese was made from curdled milk, i.e. milk to which a curdling agent had been added. In Arabic sources rennet was added. But an Akkadian equivalent term for such a curdling agent is not known. In later Greek and Roman times plants or fig juice served as the curdling agent.⁹¹ Although we do not know the manner in which *kasû* was used in the process of Mesopotamian cheese making, it is not unlikely that it was used as the curdling agent. It is precisely the presence of tartaric acid in tamarind that would make a suitable curdling agent in the milk.

Conclusion

This paper has provided an answer to the perplexing question of the nature of the *kasû* found in Babylonian-Assyrian medical texts. Scholars have attempted identifications, but have hitherto not considered the full extent of the textual evidence available. There is only one plant that fulfills all the evidence, and that is the tamarind (*Tamarindus indica*), specifically the segmented pod of the tamarind tree. The hard-shelled pod contains a fruity pulp enclosed by large veins and smaller filament-like veins that burrow into the fruit enclosing it as in a net. This explains the statement in Maqlû that the witch’s spells bind her like *kasû*. A major contribution of this study is the identification of the *šitû* of the *kasû* in BAM 158 and 228 as these veins and their use as a separate *materium medicum*. This identification also explains the visible symptom of an eye condition that involves the pronounced reddening of the capillaries.

⁸⁶ Salonen 1970: 192 Akkadian *letû*(𒄩A.AL.DAR.(R)A) in the “Fischkatalog” “aufgespaltener Fisch”.

⁸⁷ Landsberger, *MSL* VIII/2, 120.

⁸⁸ Salonen 1970: 204.

⁸⁹ Landsberger, *MSL* VIII/2, 101.

⁹⁰ Reiner and Civil, *MSL* XI 157 and 161.

⁹¹ Stol 1997 *RIA* VIII s.v. Milch(produkte) A. In Mesopotamien. 198a.

Through the botanical identification of *kasû* with “tamarind pod” we have been able to explain a number of questions as to the use and effect of this plant. The *kasû* “tamarind” is found in numerous contexts, from its association with the inclusions in carnelian and the spots on a diseased gall bladder, through the process of dyeing wool and to its use in the preparation of fish by cooking it by indirect heat and the production of beer. The identification of *kasû* “tamarind” as the curdling agent in cheese making is another contribution of this study.

The *kasû* “tamarind” seems to have been a staple condiment evidently for all social classes throughout Mesopotamian history, even being mentioned on a stela of Aššurnasirpal II that describes the celebration, including the food, drink, and spices used at the opening of his royal palace at Kalḫu (Nimrud). The fact that salt, *kasû* “tamarind”, and *uḫūlu* alkali are listed in the same order when they appear could point not only to the importance of these three items in general but also to their practical daily use.

The tamarind was, therefore, one of the staples in the Mesopotamian diet, and together with salt and lye formed a “trio” that is listed together in lexical texts, as they were a necessity in every household. The well-known Sumerian proverb can now find its *Sitz im Leben*

Let the poor man die, let him not live.
When he finds bread, he finds no salt.
When he finds salt, he finds no bread.
When he finds tamarind, he finds no meat.
When he finds meat, he finds no tamarind.
When he finds oil, he finds no jar.
When he finds a jar, he finds no oil.⁹²

It was better to die than live without the essentials that keep man alive: bread, salt, tamarind, meat, and oil.

List of Abbreviations

AHw	W. von Soden, Akkadisches Handwörterbuch
AMT	Thompson, R. Campbell. Assyrian Medical Texts
BAM	Köcher, F. Babylonisch-Assyrische Medizin in Texten und Untersuchungen
BE	Babylonian Expedition of the University of Pennsylvania, Series A: Cuneiform Texts. H.V. Hilprecht (ed.)
CAD	The Assyrian Dictionary of the University of Chicago
CUSAS	Cornell University Studies in Assyriology and Sumerology
CT	Cuneiform Texts in the British Museum
MSL	Materialien zum sumerischen Lexikon
RIA	Reallexikon für Assyriologie
UET	Ur Excavation Texts
VAS	Vorderasiatische Schriftdenkmäler der königlichen Museen zu Berlin

Bibliography

- AbuschTzvi 2015.** *The Witchcraft Series Maqlû*. Society of Biblical Literature: Writings from the Ancient World, Atlanta, Georgia: SBL Press.
- Alster Bendt 1997.** *Proverbs of Ancient Sumer: The World's Earliest Proverb Collection I*, Bethesda, Maryland: CDL Press.
- Asiantextilestudies.** Tamarind or Asam Jawa. www.asiantextilestudies.com/brown.html#g [accessed 8 May 2019]: Tamarind or Asam Jawa.
- Attia Annie 2000.** “A propos de la signification de šer’ānu dans les textes médicaux mésopotamiens: une question d’anatomie”, *Histoire des Sciences Médicales* 34, 47-56.
- Bácskay András 2018.** *Therapeutic Prescriptions against Fever in Ancient Mesopotamia*, Alter Orient und Altes Testament 447, Münster: Ugarit-Verlag.
- Bauer Joseph 1972.** *Altsumerische Wirtschaftstexte aus Lagasch*, Rome: Biblical Institute Press.

⁹² Alster 1997: 16, Collection 1.55.

- Campbell Thompson Reginald. 1949.** *A Dictionary of Assyrian Botany*, London: The British Academy.
- Civil Miguel 1960.** “Prescriptions médicales sumériennes”, *Revue d’Assyriologie et d’Archéologie Orientale* 54, 59-72.
- Civil Miguel 1964.** “A Hymn to the Beer Goddess and a Drinking Song”, in Robert D. Biggs, John A. Brinkman (eds.), *Studies Presented to A. Leo Oppenheim June 7 1964*, Chicago: The Oriental Institute of the University of Chicago, 67-89.
- Drake Richard L., Vogl A. Wayne, Mitchell Adam W. M. 2015.** *Gray’s Anatomy for Students*, Third Edition, Philadelphia, Pennsylvania: Churchill Livingstone/Elsevier.
- Figulla Hugo H. 1953.** “Accounts Concerning Allocation of provisions for Offerings in the Ningal-Temple at Ur”, *Iraq* 15, No.1 (Spring), 88-122.
- Figulla Hugo H., Martin William J. 1953.** *Letters and Documents of the Old-Babylonian Period. Ur Excavation Texts* 5, London: British Museum/University Museum of Pennsylvania.
- Fincke Jeanette C. 2000.** *Augenleiden nach keilschriftlichen Quellen*, Würzburger medizinhistorische Forschungen 70, Würzburg: Königshausen & Neumann.
- Finkel Irving L., Granger-Taylor Hero, Cardon Dominique 1999-2000.** “Un fragment de tablette inscrite en cunéiforme”, in Dominique Cardon (ed.) *Teintures précieuses de la Méditerranée: pourpre, kermès, pastel*, Carcassonne: Musée des Beaux-Arts / Terrassa: Centre de Documentació i Museu Tèxtil, 64-65.
- . “Neo-Babylonian Recipes for Dyeing Wool”. www.tekhelet.com/pdf/AssyrianTablet-Finkel.pdf [accessed 3 May 2019].
- Frank Carl 1928.** *Straßburger Keilschrifttexte in sumerischer und babylonischer Sprache*, Berlin/Leipzig: Walter de Gruyter & Co.
- Gadotti Alhena, Sigrist Marcel 2011.** *Cuneiform Texts in the Carl A. Kroch Library*, Cornell University, CUSAS 15, Bethesda, Maryland: CDL Press.
- Geller Markham J. 1982.** “A Recipe against ŠU.GIDIM”, in Hans Hirsch, Hermann Hunger (eds.), *Vorträge gehalten auf der 28. Rencontre Assyriologique Internationale in Wien 6.-10. Juli 1981*, Archiv für Orientforschung, Beiheft 19, 192-197.
- Geller Markham J. 2000.** Review of A.L. Slotsky, *The Bourse of Babylon*. Market Quotations in the Astronomical Diaries of Babylonia, *Orientalische Literaturzeitung* 95, 410-411.
- Köcher Franz 1963.** *Babylonisch-Assyrische Medizin in Texten und Untersuchungen* II, Berlin: Walter de Gruyter & Co.
- Köcher Franz 1964.** *Babylonisch-Assyrische Medizin in Texten und Untersuchungen* III, Berlin: Walter de Gruyter & Co.
- Krishnamurthy K.S., Sapna V.P., Parthasarathy Villupanoor A. 2008.** “Tamarind”, in Villupanoor A. Parthasarathy, Bhageerathy Chempakam, T. John Zachariah (eds.), *Chemistry of Spices*, Wallingford Oxfordshire / Cambridge Massachusetts: CAB International: 362-375.
- Labat René 1951.** *Traité akkadien de diagnostics et pronostics médicaux* I, Paris: Académie Internationale d’Histoire des Sciences.
- Lacheman Ernest R. 1950.** *Excavations at Nuzi V: Miscellaneous Texts from Nuzi Part II: The Palace and Temple Archives*, Harvard Semitic Studies XIV, Cambridge, Massachusetts: Harvard University Press.
- Landsberger Benno 1957-1958.** “Selected Philological Remarks”, *Archiv für Orientforschung* 18: 336-340.
- Landsberger Benno 1957.** *The Series HAR-ra=hubullu, Tablets I-IV*, Materialien zum sumerischen Lexikon V, Roma: Pontificium Institutum Biblicum.
- Landsberger Benno 1959.** *The Series HAR-ra=hubullu, Tablets VIII-XII*, Materialien zum sumerischen Lexikon VII, Roma: Pontificium Institutum Biblicum.
- Landsberger Benno 1962.** *The Fauna of Ancient Mesopotamia, Second Part, HAR-ra=hubullu Tablets XIV and XVIII*, Materialien zum sumerischen Lexikon VIII/2, Roma: Pontificium Institutum Biblicum.
- Landsberger Benno, Reiner Erica 1970.** *The Series HAR-ra=hubullu, Tablets XVI, XVII, XIX and related texts*, Materials for the Sumerian Lexicon X, Roma: Pontificium Institutum Biblicum.

- Leichty Erle 1979.** "A Collection of Recipes for Dyeing", in Marvin A. Powell Jr., Ronald H. Sack (eds.), *Studies in Honor of Tom B. Jones*, *Alter Orient und Altes Testament* 203, Kevelaer: Verlag Butzon & Bercker / Neukirchen-Vluyn: Neukirchener Verlag des Erziehungsvereins, 15-20.
- Nahal's Dictionary of Scientific Plant Names** (En/Ar). Librairie du Liban Publishers. Electronic Dictionary www.LDLP-dictionary.com.
- Oppenheim A. Leo 1948.** *Catalogue of the Cuneiform Tablets of the Wilberforce Eames Babylonian Collection in the New York Public Library. Tablets of the Time of the Third Dynasty of Ur*, American Oriental Series 32, New Haven: American Oriental Society.
- Oppenheim A. Leo 1950.** "The XXIIIrd Tablet of the Series *ḪAR.ra=ḫubullu*" in Louis F. Hartman, A. Leo Oppenheim, "On Beer and Brewing Techniques in Ancient Mesopotamia, According to the XXIIIrd Tablet of the Series *ḪAR.ra=ḫubullu*", *Journal of the American Oriental Society*, Suppl. 10, December.
- Oppenheim A. Leo 1970.** *Glass and Glassmaking in Ancient Mesopotamia*, New York: The Corning Museum of Glass.
- Poebel Arno 1909.** *The Babylonian Expedition of the University of Pennsylvania. Series A: Cuneiform Texts*, Philadelphia.
- Post George E. 1896.** *Flora of Syria, Palestine, and Sinai, from the Taurus to Ras Muhammad, and from the Mediterranean Sea to the Syrian Desert*, Beirut: The Syrian Protestant College.
- Reiner Erica, Civil Miguel 1974.** *The Series ḪAR-ra=ḫubullu tablets XX-XXIV*. Materials for the Sumerian Lexicon XI, Rome: Pontificum Institutum Biblicum.
- Riemschneider Kaspar K. 1965.** "Ein altbabylonischer Gallenomentext", *Zeitschrift für Assyriologie und Vorderasiatische Archäologie* 23, 125-145.
- Röllig Wolfgang 1970.** *Das Bier im Alten Mesopotamien*, Berlin: Gesellschaft für die Geschichte und Bibliographie des Brauwesens E.V., Institut für Gärungsgewerbe und Biotechnologie.
- Salonen Armas 1970.** *Die Fischerei im Alten Mesopotamien*, *Annales Academiae Scientiarum Fennicae*, Ser. B, Tom. 166, Helsinki: Suomalainen Tiedekatemia.
- Scheil Vincent 1930.** "Nouveaux présages tirés du foie", *Revue d'Assyriologie et d'Archéologie Orientale* XXVII, no. 3, 141-154.
- Schuster-Brandis Anais 2008.** *Steine als Schutz- und Heilmittel*, *Alter Orient und Altes Testament* 46, Münster: Ugarit-Verlag.
- Scurlock JoAnn, Andersen Burton R. 2005.** *Diagnosis in Assyrian and Babylonian Medicine*, Urbana: University of Illinois Press.
- Slotsky Alice Louise 1997.** *The Bourse of Babylon. Market Quotations in the Astronomical Diaries of Babylonia*, Bethesda, Maryland: CDL Press.
- Stadhouders Henry 2011.** "The Pharmacopoeial Handbook *Šammu šikinšu* - An Edition". *Le Journal des Médecines Cunéiformes*, no.18, 3-51.
- Stadhouders Henry 2012.** "The Pharmacopoeial Handbook *Šammu šikinšu* - A Translation". *Le Journal des Médecines Cunéiformes*, no. 19, 1-21.
- Steinkeller Piotr 1987.** "The Foresters of Umma: Towards a Definition of Ur III Labor", in Marvin A. Powell (ed.), *Labor in the Ancient Near East*, New Haven, Connecticut: American Oriental Society, 73-115.
- Stol Marten 1993.** "Milk, Butter, and Cheese", *Bulletin on Sumerian Agriculture* VII, 99-113.
- Stol Marten 1994.** "Beer in Neo-Babylonian Times", in Lucio Milano (ed.), *Drinking in Ancient Societies*, *History of the Ancient Near East/Studies* VI, Padova: Sargon srl, 155-183.
- Stol Marten 1997.** *Reallexikon der Assyriologie* VIII, s.v. Milch(produkte) A. In *Mesopotamien*, 189-201.
- Stol Marten 2018.** Review of A. Bácskay, *Therapeutic Prescriptions against Fever in Ancient Mesopotamia*. *Bibliotheca Orientalis* LXXV: 344-351.
- Ungnad Arthur 1937.** *Glossar*, in Mariano San Nicolò, Arthur Ungnad, *Neubabylonische Rechts- und Verwaltungsurkunden*, Beiheft zu Band I, Leipzig: J.C. Hinrichs Verlag.
- Waetzoldt Hartmut 1972.** *Untersuchungen zur Neusumerischen Textilindustrie*, *Studi Economici e Tecnologici* 1, Roma: Centro per le Antichità e la Storia dell'arte del Vicini Oriente.
- Wiseman Donald J. 1952.** "A New Stela of Aššur-našir-pal II", *Iraq* XIV, 24-44.

The *libbu* our second brain? *

Appendix part 2

Annie Attia

5 – “Mal de vivre”, desperation, hopelessness, sickness-of-living *nissatu(m)*.

This section will study the Akkadian term *nissatu*, in Sumerian *zarah* (sag.pa.lagab).

Dominique Charpin introduced us to the hopeless bilingual scribe (1992). This scribe lost the royal favour and became desperate, expressed in Akkadian with the term *nissatum* (in the text in Sumerian: pa.sag.lagab). This man could have a medical background, as some scribes probably had, but it is not obvious when reading his letter. The term *nissatum* is associated with mourning as it is derived from the verb *nasâsu* “to lament, wail, and moan”. Interestingly in the Mari corpus (see ARCHIBAB) in a letter¹ this term is employed to describe an old lion, and is translated by “maladie” linked to the weakness of old age. Another letter² associates *nissatum* with *pirištum*, in this context it means “hard feelings, grievance”.

In the letters found in the Royal Library of Neo-Assyrian Nineveh *nissatu* is used in scholarly contexts. The authors quote predictive omens. E.g. there is a mention of this desperation in the letter SAA 10 42 (Parpola, 1993) written by Balasî, an astrologer, to Esarhaddon. He explains how a ritual should be performed in case of a storm. He quotes from a tablet the following prediction: “the said man ⁸will be (lit. will walk continuously) ⁷restless and hopeless (⁷*ina ku-û-ri u ni-is-sa-te*³) for three years”.⁴ How much older this omen is than the letter is uncertain. Another example comes from the letter SAA 18 24 (Reynolds 2003). The author complains and denounces some fellow, cursing him thus: “may ... bestow upon him ⁹grief (*ni-is-sat*) and ¹⁰wailing ([*q*]*u¹-be-e*)”. In other terms, the man will lament out loud from sheer hopelessness. In Esarhaddon’s succession treaty (Parpola/Watanabe 1988, SAA 2 §38A), *nissatu* is one of the numerous curses against the violation of the oath threatening that the god Anu will rain down illnesses on transgressors.

The use of *nissatu* in a literary text, *Gilgamesh*, is interesting: it is significant to have several occurrences of this word in a text where the problem of death and mourning is predominant (see George 2003: 678 l. 8, 680 l. 42, 684: 114 –in the *karšu*, stomach, belly, body, mind, and heart, 692 l. 256 –in the *šer’ânu* sinews and cord-like body parts).

Nissatu is found frequently in incantations enumerating different diseases (it is no coincidence that in several Sargonid documents this ailment occurs in curses, in the same way it could be a bad omen, see for instance Böck 2000: 44b, 164: 199-200, 170: 264). Even if these texts were learned and known by different types of physicians, they are just lists and do not help to understand the nature of *nissatu*. Thus, I shall concentrate on technical texts.

* **Reminder:** in JMC 31, in a paper entitled “Mieux vaut être riche et bien portant que pauvre et malade” I try to find in the texts of practice, especially in the letters, “case histories” related to melancholy, a severe form of depression. In an appendix to this paper, entitled “the *libbu* our second brain”, I confront the words and expressions used in these letters to their attestations in the medical texts. This way I try to check if a “specific” language is found in the medical texts, accounting for a “specific” medical reasoning. My working hypothesis is that physicians used technical words or expressions that are not found in everyday language, this type of behaviour is proper to the medical practice (and, probably, among scholars). Along the way, this study comes across several developments or digressions which I try to clarify. I do not pretend to solve all the questions or to clarify all the obscurities. I am not like the man running around shouting “I have an answer, who has a question?” I am afraid to admit that I have more questions than answers!

¹ ARM (Archives Royales de Mari) 14 1 [A.263]: 26, Durand 1997: 349 note f) and Streck 1997: 109.

² ARM 28 25 [A.328].

³ For the same formulation see the incantation CMAwR vol. 2, text 10.7: 71.

⁴ See further on.

5.1 Plants against “mal de vivre” / desperation, misery, sorrow.

Several plants were known to be good for this mood disturbance, and several medical prescriptions (*bulṭu*) list plants with the following indications:

BAM 1 i 59 ú *azallû*: *šammu nissati*(zarah): *lâ patân akâlu u šatû* “The plant *azallû* is the plant (for) ‘mal de vivre’: to eat or drink on an empty stomach.”⁵

BAM 209 r 8’-9’⁶ // **BAM 318 i 40-42**:⁷ *ana amêli nissatu*(zarah) *ul iṭehhe: kamkadu* [...] *ana amêli nissatu ul iṭehhešu / ilu ina dannata <iṭ>’¹⁷tirš[u]’* “so that ‘mal de vivre’ will not approach the patient, *kamkadu*=meadow saffron ... (then) ‘mal de vivre’ will not approach the patient (and) the (personal) god will save him’ from distress.”

BAM 209 r 10’-11’// **BAM 318 i 43-45** (with the complete formula: *ana amêli nissatu*(zarah) *ul iṭehhešu dannatu*(munus.kala.ga) *paṭrassu* “so that ‘mal de vivre’ will not approach the patient, distress will be undone for him.”) *ana min urqîta*(ú.šim) *adârâna teleqqe tub[bal ištêniš tasâk i’-n]a’* *šik[ari’ rešti’ išat]ti*, “for ditto: you take green leaves (and) *adârânu*-plant, you [dry (them), (and) pound them together; he drin]ks (*it*) [i]n be[er].”

BAM 318 iii 29, 39: *šumma azallâ ikkalma nissata*(ni-is-sa-ta₅) *im[ašši]* “If he eats the plant *azallû*, he will forget ‘mal de vivre’”.

This plant of oblivion against “mal de vivre” is also quoted in the series devoted to plants. *Uruanna* I v 64’ the plant is broken in the indication: ú zarah *ma-[-še-(e) ...]*, *Uruanna* II 2, as ú *ni-is-sa-ti* (var. sag.pa.lagab/zarah): “(*azallû* is) the plant for ‘mal de vivre’”. Cf. also BRM 4 32:19 and CT 14 32 ú.a.zal.lâ // ú *ni-is-sa-at ma-še-e* “*azallû* = plant to forget ‘mal de vivre’”⁸.

It is noteworthy that *azallû* was supposed to help to forget the strains and to have a tranquillizing effect (see above –this plant was prescribed in BAM 316): it could be called *amnesia*-plant. This is one of the reasons why it is sometimes assimilated with cannabis or poppy (since according to *šammu šikinšu* its flower is red⁹). However, this identification may be questionable (see the comments on *azallû* in Abusch/Schwemer 2011: 468-469). Anyway, it is possible that *azallû* was efficacious and the result was that the desperate patient calmed down, or even became euphoric and could live with his mental disturbance.

5.2 A clinical observation?

In the Mari petition mentioned above, the poor scribe laments that “mal de vivre made him bow down (*ni-sà-tum u[q-da]-di-da-a[n-ni]*)”. Does this phrase indicate humiliation?¹⁰ Is he bowing down because he feels ashamed? Or is he afraid of blows? Ursulla Garrigue comments on the traditional iconography representing the melancholic patient: “la tête appuyée sur une main (voire les deux) pour contrebalancer sa propre lourdeur”.¹¹ Ulrike Steinert states that the head stands for the person and thus, to “bow the head” in Akkadian conveys notions of humiliation, especially if one is disdained by others (2012, 198-200). In the catalogue of the exhibition dedicated to “Mélancolie, génie et folie en Occident” it is obvious through numerous works that the attitude of our Mari scribe is the traditional way to represent a melancholic person, be it a character trait or be it a diseased person.

⁵ For BAM 1 See Attia / Buisson (2012) for transcription and comments.

⁶ BAM 209 r 8’ *ana na zarah nu te ^ukam-ka-d[u ... ana na]’* zarah nu te-šú dingir *ina munus.[kalag].[ga (iṭṭir(šu))]* BAM 209 r 10’ *diš min ú.šim ^{lú}la-da-ra-na ti-qé x[...]*¹¹ *ana na zarah nu te-šú munus.kalag.ga duh [...]*.

⁷ For BAM 318 see Schwemer, 2013.

⁸ Geller (2010a: 168-173) edition of BRM 4 32.

⁹ See §6.2.5, Stadholders (2011: 17, §8) and Stadholders (2012: 8).

¹⁰ As in Dietrich 2003: SAA 17 n°53 r 10’-12’ (and 54 r 16), the viceroy of Babylon, Bêl-ibni begs for rehabilitation: “may I not be slighted and humiliated (¹¹*re-si-ia* ¹²*la i-šap-pi-la*) in the eyes of my fellow Babylonians”.

¹¹ Guarrigue 2004.

5.3 “Mal de vivre” in BAM 316

In BAM 316 iii 23-24 “mal de vivre” shares the salient initial position with “(crushing, oppressive) vice-like heartbreak”, where both are linked by *u* “and”: *šumma amêlu hušša hîp libbi u nissata(zarah) irtanašši nullâti libbušu îtammu* “If, without letting up, a man has vice-like heartbreak and ‘mal de vivre’ (and/so that) his heart makes him ponder (literally: his heart ponders) nonsense/foolishness”¹²

Both feelings are on the same level, as two aspects of feeling miserable. Nonsense or foolish talk can be a facet of this mental despair, or it can aggravate it. It may correspond to a special clinical feature. The physician could choose between three treatments (or try all of them). They could be administrated as a potion, an ointment or amulet-bag, the preparation was based twice on the plant *azallû* already encountered above, with more common medicinal plants. It is difficult to know if *nissatu* was considered as an internal illness needing a potion or an external sickness needing an external treatment (oily ointment): two different problems are associated in this case. The leather-bag containing *materia medica* is usually considered as a magical treatment, but we do not know how it was supposed to treat or to prevent ailments.

iii 25 *azallû*-plant, *imhur-lîm ina šikari ina šamni ina maški*, “amnesia-plant, it-confronted-1000 in beer, in oil, in leather.”

iv 1 *imhur-lîm zêr bîni ina ma[ški...]*, “it-confronted-1000, seeds of tamarisk in leat[her ...]”

iv 2 *arariânu zêr bîni zêr azallî ina šikari rešti išatti* “arariânu-plant, seeds of tamarisk, seeds of amnesia-plant, to drink in first quality beer.”

5.4 Could *nissatu* earn its stripes as a disease?

In a prayer addressed to Marduk (Abusch/Schwemer 2016: 235, text 8.28: 59a), the patient begs the god to clear him from his diseases. He is ill in his “soul” and in his body and requests: B₁¹³ obv. 29’ *muṣṣu nissati(gig zarah) lâ tûb šîri(nu dūg.ga uzu) ina [zum]riya nussi* “Remove the ‘mal de vivre’-*nissatu* (and) the ill-being of my body!”

It is interesting to find here the mental ailment *muṣṣu nissati* and on the other hand *lâ tûb šîri* “the sickness-of-the-body”, an organic sickness. The phrase could match *lâ tûb libbi lâ tûb šîri iškuna* “he inflicted mental (and) physical ill-health” found in one prayer to Marduk.¹⁴ Tzvi Abusch and Daniel Schwemer understood the sequence of *gig* and *zarah* as two different entities, translating “remove the illness (*muṣṣu*), wailing (*nissata*), (and) physical ill-health (*lâ tûb šîri*) from my [bo]dy” (p. 242). If my interpretation is correct, and taking into account that it is not a technical text but a poetic incantation, mental illness is represented here by a feeling of grief or agony and is distinct from physical illness.¹⁵ I believe that, in this incantation, *zarah/nissatu* is a generalization for mental disease.

But what about a prescription of seventeen plants against *ka.dib.bi.da*, often translated by “aphasia”, one of which effects is to suppress the pain-of-living? It seems that *nissatu* was a manifestation of aphasia-illness; this is not found in the usual descriptions of this illness, it could mean that it was a cause of sorrow to suffer from such an illness and that the patient will be happy once healed (Leichty 1988: 262, CBS 14161:10 “*zarah ina su-šû duh-at*, pain-of-living will be relieved from his body”). I owe this interesting and puzzling attestation to Marten Stol).

¹² See also KAR 92: 1 *diš na hu-uš gaz lib-bi tuk.tuk-ši [nu]-ul-la-[tim]*² *ša-šû i-ta-mu* (§6.1.4).

¹³ K 3151B + 3346 + 8188 + 10055 + 10063 + 13271 (+).

¹⁴ See Abusch/Schwemer 2011: 383: 28 for this long incantation.

¹⁵ As in another prayer to Marduk (Abusch/Schwemer 2011: 218, text 8.27: 39), where *zarah nu dūg.ga uzu*^{mes} are found at the end of a list of disorders linked by *u* “and”. Noteworthy *ša.dūg.ga* is a positive feeling with attestations in the medical corpus, see references for “herbs for a Good Heart” in Stol 1993: 35 note 83. See another reference in Finkel (2000: 142) and Bácskay (2015: 5, BM 422772: 8).

5.5 External treatments:

There is a treatment in which *nissatu* is supposed to leave the patient's body with the water with which he washes his hands and which is poured on him (in this case *nissatu* is provoked by witchcraft, Abusch/Schwemer 2016, text 8.4: 45'); in a Bît Rimki ritual (CMAwR 9.1.1:33-34) bathing can remove several diseases, including *nissatu*, and transfer them to a statue representing the witch. In a *Maqlû* incantation (Maqlû VII: 38) dedicated to "Pure Oil", this "oil of healing" can remove illnesses including *nissatu*. Even if these treatments are found in so-called magical texts, they reveal that several illnesses were considered as external, like some kind of dirt or some kind of unpleasant cover. The rain bringing misery on the houses of traitors in the Esarhaddon succession treaty (mentioned above) conveys a similar idea of external attack producing disease and expelled with an external manipulation.

5.6 Conclusion?

Nissatu is a feeling of grief and unhappiness, a special sort of pain-of-living –in French, *mal de vivre*. This translation was inspired by the title of a song of Barbara, a French singer.¹⁶ She describes admirably this terrible feeling creeping into the soul. In a similar type of poetic composition, the Mesopotamian scribes imagined it as rain falling on a patient and his household, soaking him and flooding him with sorrow¹⁷ or like dust covering him with filth (see references in §5.5). This dirt is reminiscent of the mourning rituals of grieving people.¹⁸ It reminds also of Job's disgusting skin disease. This profound unhappiness is a form of depression linked to mourning feelings without ruin-delusional ideas which are (as we will see in the next section) characteristic of heartbreak. The fact that prejudice is external is an element to differentiate it from heartbreak (*hûš*) *hîp libbi*. In the medical texts, however, mundane treatments (potions, etc.) are also proposed. It seems that a plant (*azallû*) with a euphoric or calming effect, for which I proposed the name *amnesia*-plant, was recommended in this medical indication.

6 – Heartbreak (*hûp libbâti*, *hîp libbi*, *kusup libbi*) and crushed, oppressive broken heart: vice-like heartbreak (*hûš hîpi libbi*).

• Reminder: texts of practice

– **Old-Babylonian period.** This expression was already used in the Mari correspondence.¹⁹ It is found in a lady's letter: Gabêtum, to Yahdun-Lîm. She hopes that he will be relieved by the god Dagan of "tes soucis actuels, *hi-ip šà-ka*" and be able to travel safely and be in good health. In another letter, not yet published but highlighted by Jean-Marie Durand (in the note a), the author complains that his correspondent writes only sad news (*hi-pí li-ib-bi-i[m]*). It was a mild expression denoting a sad or unpleasant mood.

Another Old-Babylonian attestation is interesting: a man has received worrying news about his employer's health and writes to him: *šu-ú ru-qú-uq li-ib-bi ma-di-iš i-te-eh-[pí] te4-em si-li-ih-ti [š]u-up-ra-am*, "he, he is very thin, my heart is so much broken, send me (good) news about your illness." (Kraus 1985: AbB 10 28: 8-11). The employee is alarmed by the health of his boss (*awîlum*), he expresses this feeling by *libbî mâdiš ittehpi*, it is not, as will be proposed later on, the heart which or "who" breaks him but it is the heart which is broken.

¹⁶ Barbara 1964, her song can be found on <https://fr.wikipedia.org/wiki/Barbara>.

¹⁷ See in Esarhaddon's succession treaty cited above, among other calamities *nissatu* is said to "rain upon all your houses" (Parpola/Watanabe 1997: 45 §38 and §3.5).

¹⁸ See Charpin 2006: 101-103.

¹⁹ I thank Dominique Charpin who gave me these references. I was complaining that I didn't find *hîp libbi* in the Mari archives and he could immediately point this letter (1216) to me: Durand 2000: 421-2 (with further references).

Kouwenberg (2010: 428) quotes several attestations of this expression in Old-Babylonian texts. He points out (note 236) that, in this context, it was “an idiomatic expression”:

AbB 3, 80:11' The writer of the letter asks his correspondent to give him some good news about his journey so that his heart will not be “continuously broken”, *[l]-ib-bi la it-te-ne-eh-p[i]*.

AbB 1, 124:19 In a letter concerning commercial matters the author sends something to his correspondent and adds: *li-ib-bi la it-te-né-eh-<pi>*, “let my heart not be broken continuously”,

IM 30976 In a letter concerning complicated commercial problems Šilli-Šamaš writes: *aš-šum ⁹te-em ^{m.d}enzu-ú-sé-li ša ta-aš-pa-ra-am ¹⁰li-ib-bi it-te-eh-pi* “concerning the case of Sîn-uselli, about which you wrote to me, my heart is broken.”

AbB 11, 168: 17 the writer instructs his correspondent for protecting the harvest. He finishes on a polite letter ending: “write to me about your well-being” *li-ib-bi la it-te-né-eh-[p]i*, “so that my heart will not be broken”.²⁰

In these letters this idiomatic expression could be translated “I am very annoyed and upset”, it corresponds to a disturbed state of mind, it is not obvious that the person who uses this expression has a painful crushing sensation in his chest or has a depressive illness.

In these examples *hepû* is in the passive system (IV/1 or IV/3): “the heart is broken”. There is no medical text of this period, describing heartbreak, allowing making a comparison. But another pain symptom is described in an Old-Babylonian version of SA.GIG (see Heeßel 2000: 97-98, text LB 2126: 18' *šum-ma mar-šu qá-ta-a-šu ù še₂₀-pa-a-su ^{18'} i-ik-ka-la-a-šu*, “if a sick person (complains that): his hands and his feet devour him (hurt him in a devouring way)”, the verb is in the active I/1 stem. In later medical texts, the verbs for pain are mostly written with a logogram and the grammatical form is often unknown. It is, as will be observed later, a difficult problem especially for the expression *ša-šú gaz^{meš}-šú* but this OB attestation provides a clue that the verb is in the active form.

And last (and not least?) a similar expression is found in a literary text, Atrahasis, in the Old-Babylonian version: Atrahasis' family enters the boat and sits down at the table for eating and drinking (with relief and pleasure) but Atrahasis does not feel well, “(he could not sit still, he was restless ⁴⁷*he-pí-i-ma li-ib-ba-šu i-ma-a' ma-ar-ta-am* for his heart was broken (and) he was vomiting gall (Lambert/Millard 1969: 92 ii 42-47). This attestation is significant: the hero is in a restless state of mind, he cannot participate in the meal with his family, and it leads to a broken heart feeling with a somatic symptom: “vomiting gall”. This somatic symptom could be a metaphor for Atrahasis' bitterness before the arrival of the Flood.

– **Neo-Assyrian period.** This feeling is expressed in several letters in the Sargonids' archives in different ways. The expressions *hûp* or *hîp libbi* derived from *hêpu* “to smash, destroy an object, to break, to crush” (CAD H: 170-171, AHw: 340-341), and *kusup libbi* derived from *kasâpu* “to chip, to break into pieces” (*kasâpu* A, CAD K: 241, *kasâpu* I, AHw: 45) convey similar feelings and sensations. As both expressions are found in the same letter (Parpola 1993, SAA 10 334) they are supposed to be differentiated, and in consequence, Simo Parpola choose to translate *hûp libbâte* and *hîp libbi* as “crushing of heart” vs. *kusup libbi* as “broken-heart”, both being depressive feelings with a tightening sensation in the chest. It is difficult to appreciate whether this distinction was just hollow rhetoric or meaningful. Parpola's analysis evolved from what he proposed in 1983: 51 concerning the letter LAS 41 = SAA 10 45: *hi-ip lib-bi* corresponded to “fear of the heart” comparable to the Arab *hāfa*, and *ku-su-up lib-bi* was the “broken heart”, (attestation courtesy Marten Stol).

The translation suggests that a person suffering from these feelings is at the same time unhappy and worried and that he (or she) experiences a thoracic pain characteristic of anxious fits. This sensation was sufficiently unpleasant and scary to make one fear death or to wish to

²⁰ These references would not have been found without the help of Ilya Arkhipov whom I warmly thank.

die in order not to suffer anymore (behind a possible rhetorical expression, an exaggeration, authentic situations give to this expression an element of realism). The relation between death and bereavement suffering is found in a scholar's letters to the king: SAA 10 224 *ina hûp libbâte imûat* "he is dying of crushed-heart", SAA 10 334 *ina kusup libbâte amûat* "I am dying of broken-heart". Significantly, that it is coupled with being terror-stricken (*hûp libbi iššabtani aptalah*) which is a salient mental symptom.²¹

This "idiomatic" expression seems to have gained a more severe meaning in the Neo-Assyrian period than in the Old-Babylonian examples (apart from the Atrahasis attestation). Is it because the authors of the letters were close to the medical sphere?

• **The different translations of (*hûš*) *hûp libbi* in the medical texts: there is no consensus!**

The medical texts often use the same expression as in BAM 234: *gaz lib-bi*, *hûp libbi* referring to a mental disorder associated with a broken, crushed or tense sensation in the chest, but they employ also a ready-made expression *hûš hîpi libbi* (see CAD H 260b and AHw 361a) which Tzvi Abusch and Daniel Schwemer (2011: 150) tie to depression. Marten Stol (1993: 27-31) analyses these expressions and considers that they are equivalent: "Adding this word *hûšu* was obviously a matter of style and we gather from a late Babylonian commentary that later they no longer understood this word. We conclude that this variant of heart-break makes no difference for us." (p. 30).

– **What can be said about *huššu*?**

The problem lies in the fact that the verbal root of *huššu/hûšu* is not known, and consequently, not given in the dictionaries. Ulrike Steinert (2018: 259) recalls that there is a verb in Mandaic (an Aramean language), *hûš*, that could be linked to this root with a meaning of compression, tenseness or oppression.

An attestation of a verb *huššu* (II/1 stem of *hiâsum*) in an Old Babylonian letter (AbB 4, 58) and its translation proposed by Jesse L. Boyd in 1983 (see most recently ARCHIBAB with references) is enlightening: a man named Lu-Ninurta seeks satisfaction for a person who has been prejudiced by a lady. After reparation the man who suffered harm will "*la uh-ta-na-as-[si]*, no more harass/be a burden for" this lady. The verb includes a notion of intimidation and anger. Of course, there is a big gap between this OB letter and the attestations of the *huššu*-oppression in the medical texts, but it helps to better define this feeling.

Another rare attestation of *huššu* alone (which I owe to Marten Stol whom I thank a lot) is found in a medical text edited by Mark Geller (2010c: 49 iv 15') "[if ditto (unfortunately the case line iv 13' is broken: skin disease or fever or both?)] and 'stomach pains' have overwhelmed him" [*diš ki.m*]in *hu-uš-šû ik-šu-su-ma*. the context is without doubt somatic: skin disease or/and fever. To treat this "oppression" (or, if we follow Mark Geller, this somatic pain), hot bandages are prescribed.

Moudhy Al-Rashid's recent approach is interesting in the sense that she tries to understand the significance of *huššu* with the help of the medical commentary explaining *hušša* in TDP 126: 7²² quoted by Stol²³, GCCI II 406: "¹⁰ *hu-uš-ša // še-mu-û šá ka-ba-bu* "*hušša*

²¹ For this important mental disorder, see Stol's analysis of fright during epileptic fits (1993: 38-46) and in "psychosomatic suffering" (1999: 61-67) and Buisson (2016a) for his analysis of fears during mental diseases. These fears were an important feeling in the Mesopotamian civilisation and the richness of the vocabulary for fear is relevant. See the importance of fear provoked by *zikurrudâ* witchcraft and leading to death in Abusch 2008: 63-66.

²² Al-Rashid 2014.

²³ Stol (1993: 30 n. 63) considers this commentary as a hint that this word was not understood. See Geller 2010a: 151-152 who points out the interesting analogy with the Greek "physiopathology" of cooking and digestion, see also Genty 2010: 18, 24; Wee, 2012: 488: "Thus, *še-mu-û šá ka-ba-bu* ('to roast') in the case of burning" in Comm. Sagig 13 & 12/14 = GCCI II, 406: 10. 'Burning' clarifies that the form *se-mu-û* refers to the verb *šemû* ('to roast') instead of its more common homonym *šemû* 'to hear'".

corresponds to *šemû* (to roast), with the meaning ‘to burn’.” Interestingly Cadelli (2000: 362) points out that a belly illness *kîs libbi* conveys also a burning concept. Al-Rashid suggests that line 11 of the commentary gives another aspect of this pain: *ša-a-lim ša INIM ana GIG-um*, “quarrelling (with regard) to speaking (stands) for an illness”. If her interpretation is correct, this comment adds the semantic aspect of “delusional ideas of ruin” to the sensation of burning conveyed by *huššu*. It is attractive, but it remains hypothetical.

It is noteworthy that a particular formulation is found in an incantation in which the patient curses the witch responsible for his adversity: text 10.7: 72 (Abusch/Schwemer 2015: 373): “may she end her years in oppression and heartbreak! *ina hušši(hu-uš-ši) u hîp libbi* (gaz šà) *liqattâ šanâtîša*”, the ready-made expression has found here a poetic formulation slightly different from the conventional one but parallel to the preceding “numbness and ‘mal de vivre’, *ina kûru(ku-û-ru) u nissati(ni-is-sa-ti)*” (see Stol’s comment 1993: 30). This formulation has been chosen by Ulrike Steinert (2018: 258-259), she considers that there are “two independent nominal entities” and the translation is: “*tenseness* (and/of) ‘heartbreak’” (p. 259).

– So, what can be said of *hûš hîpi libbi*?

As seen previously (see §4.5), the common language evolved when it was used in medical texts. The physicians used this standardized formula as a technical expression; it became a medical term even if it was very close to everyday language. Stol’s statement is for me more convincing than Steinert’s. I believe that *hîp libbi* and *hûš/huššu hîpi libbi* describe the same ailment but the second one belongs to the medical world. As will be seen in the following study these denominations were sometimes employed interchangeably: in BAM 316 iii 17-24 (§6.1.2) or BAM 317 r 10-r 27 (§6.1.2) different ways of naming this ailment follow each other without allowing understanding what distinguishes one from the other. More interesting is the fact that the same treatment (see §6.2.3) can be prescribed for *hîp libbi* (BM 78963: 82-83 in a potion) and for *hûš hîpi libbi* (BAM 311: 8’-9’ and 22’ in an amulet-bag, *mêlu*), or for *ša-šû gaz^{mes}-šû* (STT 95+295: 7-12 in an amulet-bag, as an ointment or a potion. Surprisingly, all of these methods of administration being qualified by *mêlu* –an amulet-bag in BAM 317 r 29-30 –see further notes 68 and 69 and Stol 1993: 30 note 61 for a list of attestations of the same type). These observations point to the fact that all the denominations were more or less equivalent.

– Different translations convey different approaches for this ailment: is it heartbreak or heart/belly pain?

René Labat’s translation (1951: 126-7: 43) is: “colique déchirante”. He was followed by Adamson (“severe abdominal colic”, 1993: 154). Scurlock/Andersen (2005: 71, note 14) discuss the different opinions concerning this painful sensation (to summarise they contest the preceding translations and consider that it is only a physical “crushing pain”, linked to cardiac involvement or abdominal harm). Scurlock modified her translation to “a crushing sensation in the chest”, which is closer to anxious pain, but she sticks to a somatic pain of cardiac origin (Scurlock 2014: 537). Geller (2010a: 151) considers that *hûš* designates a “stomach cramp” (p. 151) but translates also *gaz libbi* by “heartache” (p. 176). It seems that this expression was difficult to understand for the Mesopotamian scholars themselves and that they needed commentary to explain it (see Stol 1993: 30, Geller 2010a: 151 and Al-Rashid 2014, quoted above). Gilles Buisson (2016) considers that it is a precursor of the Hippocratic Melancholia. See the note (235) dedicated to this ailment by Danielle Cadelli (2000: 341): she comments on Adamson’s (1993: 154) interpretation negatively.

As I will emphasize several times, it is until now difficult to differentiate acute coronary syndrome from anxious or depressive chest pain (and numerous other diagnoses), the differential diagnosis needs modern explorations. And just a comment: how would react a patient with depression when he reads that he does not suffer from a “real” pain? Painful

symptoms (including “non-cardiac chest pain”) are common in depressive illnesses. Different localisations are possible and sometimes pain and somatic complaints dominate the clinical picture, formerly, this type of depression was called “masked depression”. There are numerous medical articles on the subject, one is particularly significant: Stephen Stahl and Mike Briley (2004: S9-S13) in the article “Understanding pain in depression” explore the neurophysiology of pain and depression in order to understand why they are associated and intricate. I quote a passage from the conclusion (S12): “With the realization that pain is an integral part of depressive symptomatology and an improved understanding of the psychopharmacology of pain in depression, it is now possible to coherently aim for the goal of full remission with the elimination of all depressive symptoms, including painful ones.”

To come back to the letters written to Esarhaddon, Simo Parpola (1933: 51) pointed out in a very astute observation that *hîp libbi* could be the counterpart of *tirik libbi*. This bad feeling is found in a letter of Urad-Nanaya, a physician (LAS 264 = SAA 10 316) “*ina ti-ri-ik lib-bi mé-e-tu*, they died of a throbbing heart” or as proposed by Parpola (1993: 242) “they were frightened to death”. This rapid heart rate is the somatic consequence of fear and could be at the origin of metaphors used for fear, anxiousness, panic attack, etc. It is meaningful that a physician used this expression which, for us, describes several somatic disorders of the heart rhythm (e.g. tachycardia or other heart rhythm disorders) to evoke terrible or irrational fear. Again, we are confronted with an example where mental and somatic spheres are entangled. And, what’s more, the metaphor using heartbeat proves that *libbu* corresponds to the heart! I thank Marten Stol for drawing my attention to this helpful reference.

Therefore, I will try to determine if (*hûš*) *hîpi libbi* belongs to the (neuro)-psychiatric or the somatic field –to the melancholic area or cardiovascular (or another organ) failure. My suggestion is to translate *hûš hîpi libbi* with “vice-like heartbreak” thus maintaining this ambiguity: vice-like recalling coronary pathology and heartbreak depressive sorrow.²⁴

6.1 Heartbreak (*hîp libbi*) or vice-like heartbreak (*hûš hîpi libbi*) as the main symptom/medical sign introducing or concluding the description of a clinical case.

Several cases of this type of painful heartbreak are described in tablets focussing on illnesses caused by divine wrath, but the expression can also appear in other contexts. I shall go through several tablets where (*hûš*) *hîpi libbi* is the “flagship” sign or a malady name either beginning or concluding the clinical description. John Wee’s arguments (2012, 99) about a malady name appearing at the beginning of a clinical description in the Diagnosis-Prognostic Handbook, SA.GIG, seem for me applicable to therapeutic texts:

“Once a doctor had determined the nature of the patient’s malady, that knowledge would remain the most noteworthy information he had concerning the patient, and the malady name (*S_M*) accordingly would receive the first mention before any other medical signs (*S_p*) in *Semiosis*.” It would be useful because “Such an arrangement provides a convenient cue for the doctor on where to begin his search, should he desire to browse through the numerous medical entries in the Diagnostic Series”.

²⁴ During my medical training a certain type of pain was called “avoir le cœur serré en étau”. This pain is found in the McGill pain list (<https://eprovide.mapi-trust.org/instruments/mcgill-pain-questionnaire>). This well-known questionnaire lists in English several types of constrictive sensations “pinching, pressing, gnawing, cramping, or crushing”. The translation in French (<http://www.antalvite.fr/pdf/QDSA.pdf>) is slightly different: “pincement, serrement, compression, écrasement, en étau, broiement”. This is close to the *hušsu* oppression of the Aramaic verbal root.

For descriptions of thoracic pains once attributed to cardiac failure and now considered from psychiatric origin see e.g. Da Costa’s syndrome (Wikipedia with references).

A heading malady name is a convenient starting point for searching significant medical signs comforting the diagnosis or allowing to determine the different clinical forms or to seek a differential diagnosis. A malady name that concludes a series of clinical signs represents the clinical diagnosis, the preceding signs being its “typical” description.

This review is meant to determine if (*hûṣ*) *hîpi libbi* is a clinical diagnosis, a mental disease with defined and established signs, or just a painful-anxious symptom with a localization in the chest.

I will also try to point out if the use of this expression in the medical corpus is different from its everyday utilisation. In fact, without wishing to reveal right away my conclusions, I can say that most of the cases belong to the field of psychological disorders like in everyday language.

6.1.1 BAM 234 has been the subject of Gilles Buisson’s interrogations. I will not repeat his transcription, translation, and commentaries (see Buisson 2016).²⁵

6.1.2 BAM 316 is a late Middle-Assyrian tablet found in Aššur in the library of an exorcist, Kišir-Aššur. This tablet is revolving around the topic of divine wrath of the personal deities, and contains several cases describing different aspects of the pathological condition “vice-like heartbreak”. In this tablet, several clinical cases and their treatments are grouped and separated from other cases by double rulings. Therefore two types of occurrences of heartbreak must be interpreted separately. The first one is found in the second column in a clinical case where heartbreak concludes the description and is treated by a ritual manipulation and an incantation. The others are grouped in the third column, and are, as will be seen, closely linked with “*nullātu*”, foolish talk.

BAM 316 ii 5’-9’ (// BAM 315 iii 1-6 // STT 95+295 iv 130-134 // SpTU II-22 + III 85 i 21-30 // Bu 91-5-9, 214 ii 3’-7’ // *AfO* 35, 21: 1-4.²⁶) If a man is constantly frightened by *dark premonitions/by dark thoughts* (*ginâ šûdur*),²⁷ he worries day and night (*inazziq*), he is repeatedly suffering losses, his profit is cut off, (people) slander him, who(ever) speaks to him lies to him (or speak in a deceptive way, *dâbib ittišu kîtte lâ idabbub*), (people) point with an ‘accusing’ (lit. evil) finger at him (*ubân lemutti arkîšu tarṣat*), being present in the palace is no longer welcome (*ina êkalli izzazzu lâ mahrâšu*),²⁸ his dreams are dreadfully frightening (*šunâtušu pardâ*), he keeps seeing dead people in his dream: he suffers from heartbreak (lit. heartbreak is placed on him, *gaz ša gar-šû, hîpi libbi šakinšu*).

The case opens with the main symptom: fright. Afterwards, the following description develops the reasons why the patient is fearful.²⁹ Marten Stol (1999: 57-68) focuses on the notion of fear in this type of text linked to witchcraft and/or divine wrath, and explains how a

²⁵ See also the translation of this text in Ritter & Kinnier Wilson’s (1980) and in Geller (2007b: 37)

²⁶ See Abusch 2002: 31-32, Abusch/Schwemer 2015: 31-34, text 3.5 (BAM 315 and Bu 91-5-9: 17-32), text 3.6 p. 35-38 (BAM 316: 1-12) and text 3.7 p. 39-44 (*AfO* 35, 21 and STT 95+295: 1-7). See Gilles Buisson’s transcription of these texts under the rubric “le club des 5” (Buisson, 2016a: 47-49 and his comments on pages 27-32). For SpTU see von Weiher 1983: 109, 114 text 22: 16-25, Abusch 1999: 114-117, Schuster-Brandis 2008: 247-264, text 6. For *AfO* 35, 21 see Geller 1988, 21: 1-4); cf. also Scurlock, 2005 §16.95, §19.110. See how Abusch (1999) analyses these texts in relation to the part played by the witch in the drama between the patient and the personal god.

²⁷ This refers to the fact that there are two verbs *adâru*; one conveys the sense of fear and the other one of being dark, gloomy.

²⁸ SpTU II 22: 18 and STT 95: 132-133 are different: *ina é.gal-šû* “in ‘his’ palace or in his (lord’s) palace”. *gub-zu izzazzu* “being present” is found only in BAM 316: ii 7’ and 315 iii 4.

²⁹ In the parallel SpTU II 22+ line 44 a second treatment is proposed, only the main problem, i.e. fear, is quoted, the other symptoms, explaining this fear, are summarized by “*šu.bi.aš.àm*, idem i.e. see above”. See how Tzvi Abusch (1999: 114-117) analyses this tablet and the differences with the other parallels.

person suffering from a disease could feel: “In subjective terms: his experience of physical deterioration takes away his strength, his awareness of divine wrath makes him desperate, the attitude of people drives him into a corner.”(p. 68).

The different problems encountered by the patient are of the same type as the “ruin-delusional ideas” described in BAM 234. Either they correspond to real misfortunes, in which case the patient should be called “mister bad-luck”, or this extravagant abundance of adversities is a bit “too much” and may correspond to a melancholic delirium. The conclusion is that all these misfortunes belong under the realm of heartbreak, which is “placed” or “imposed” on the patient. Therefore, it is tempting to interpret *hîp libbi* as the clinical diagnosis of a mental disease dominated by fear and ruin delusional ideas. This is coherent with Parpola’s interpretation (1983: 51, *hîp libbi*, fear of the heart).

The divine wrath, to which the patient’s problems are attributed, is believed to be caused by black magic, indicated in the text through the statement that the experts in divination cannot clarify the bad omens encountered by the patient.

Worth mentioning SpTU II 22+ III 85 i 21-30, a late Babylonian tablet, from the library of Iqîšâ, written by his son Ištar-šumu-êreš (Schuster-Brandis 2008: 247 with references), contains, among other problems, this clinical description with adequate treatment. It follows cases of phosphenes (visual illusion of lightning) and precedes descriptions of stone necklaces and amulet-bags against enemies or to soften the god’s wrath. Meaningful is the fact that this clinical catalogue follows a case of visual illusion: the ruin complaints fall probably also within the realm of delusion.

It is noteworthy that, in SpTU II 22 i 20-21, another problem is added after “*gaz lib-bi tuk-šî*”: “He does not hold back/remember the dreams he sees” (or the dreams he sees do not contain meaning?), *šunât immaru lâ ukâl*” and “in his dream it is as if he was having (illicit?) sex with a woman and he ejaculates sperm, *ina šuttîšu kîma ša itti sinništi uštahhu*” (*uš-ta-hu*’(ri)-<u>) u a.ri.a-šû³⁰ *išarrurû*”. Lots of questions are raised by this peculiar dream, and there is no obvious answer. Is the ejaculation real so that the man wakes up with traces of sperm, or is he just dreaming that he has a sperm emission? Is it a nightmare or an erotic dream? How to correlate this with the previous night terrors full of ghosts?³¹ Maybe the fact that this problematic erotic dream was so different from the usual expected bad dreams was considered significant? Anyway, this second type of dream supplements, or contradicts, the “classic living-dead” nightmares. Another problem is that in SpTU II 22 *hîp libbi* is no more the conclusion of the description; it is mentioned as a simple clinical sign hidden in the middle of the description. It is difficult to explain this anomaly: the clinical diagnosis was not more recognized in this late tablet? A “case history” obliged to change the “classical” case description?

The treatment for this case consists in an amulet-bag filled with plants and stones and comes with an incantation. Signally the goal of this treatment does not mention heartbreak, which could be the “clinical diagnosis”. So, what is its purpose? Is it to make the illness disappear (without mentioning heartbreak or the main symptom –fear)? Is it to get rid of the cause of the misfortune (god’s wrath and witchcraft will leave the patient so that the different pathological manifestations will disappear)?³² This type of treatment is difficult to categorize:

³⁰ See comment Abusch/Schwemer 2016: 28-29 note 6.

³¹ Abusch/Schwemer (2011: 101) comment on this “sexual impurity” in connection with divine wrath and witchcraft diagnoses (like in BAM 205). I thank Ulrike Steinert for drawing my attention to this reference. See also Abusch (1989: 45-48) who explains the association of witchcraft and dreams.

³² For these amulet-bags see Reiner (1959-60: 150), Geller (2007: 15) draws attention to the difficulty of attributing the action of phylacteries to magic or traditional medicine. See JoAnn Scurlock’s (2006: 66-67) for a discussion about how these amulet-bags could have functioned. It is interesting to read in Jouanna (2011) how Galen tried to explain why amulets were efficacious. It is a good lesson to see this esteemed physician checking

is it an “ordinary” or a “magical” treatment against a supernatural etiology with the aim to drive out the evil or is it supposed to alleviate the symptoms?³³ In a recent article Panayotov (2018: 192-222) highlights the preventive action of plants inserted in amulets against bad luck and evil. The amulet-bags could be a prophylactic magical procedure against evil, maybe by way of purification.

In col. iii-iv of BAM 316 a series of clinical cases are framed by double rulings (iii 8'-iv 10)

BAM 316 iii 8' (// BAM 317 r 9): *šumma amêlu libbušu ihteneppesu pîqam la pîqam iparrud amêlu šû kimilti ili u ilti elišu irašši ilušu ittišu zenî* “If a man, without letting up, his heart oppresses him (and) he is periodically dreadfully frightened: the anger of god and goddess is upon him.” (Scurlock/Andersen, 2005 §8.8 and §19.109, Buisson 2016: 36).³⁴

BAM 316 iii 16' (// BAM 317: 16 // STT 95+295: 145) *šumma amêlu hîpi libbi irtanašši³⁵ urra u mûša puluhtu irašši ilušu ittišu zenî* “If, without letting up, a man has heartbreak (and) day and night he is terror-stricken: his god is angry against him.” (Scurlock/Andersen, 2005 §8.17 and §16.18, Buisson 2016: 36).³⁶

Heartbreak or heart oppression is again coupled with fright. Fear, panic attacks are, as mentioned, salient symptoms of mental disorders (see note 21), these symptoms comfort the diagnosis of “mental” heartbreak.

The same type of treatment is recommended in these two cases: an amulet-bag containing different stones and plants is placed around the patient’s neck in order to restore divine favour, as an etiological treatment (it is worth noting that the same type of treatment is indicated in other cases of divine wrath in this tablet).

In **BAM 316 iii 17, 20, 23-24** heartbreak is associated with *nullâtu* foolish, outrageous or shameful talk close to delirium. This clinical sign has been quoted already in a catalogue of manifestations (e.g. §2.3, text 7.6.7 in Abusch/Schwemer 2011) bound to insanity (*šaniš tēmšu ušta[nnā]*) and to “low spirit” (*libbušu šapil*). Here each clinical sign is first treated separately, then associated, treatment is recommended for their separate and combined occurrences:

šumma amêlu libbušu ihteneppesu “If a man, without letting up, his heart oppresses him.”

šumma amêlu libbušu nullâti itammu “If a man his heart (makes him) ponder nonsense/foolishness.”

šumma amêlu hušša hîp libbi u nissata irtanašši nullâti libbišu itâmu “If without letting up, a man has vice-like heartbreak and ‘mal de vivre’, his heart (makes him) ponder nonsense/foolishness.”³⁷

the efficacy of phylacteries in a “scientific” way, ending up with a wrong conclusion. It shows, if there was any doubt on the subject, the limits of empirical medicine.

³³ For an analysis of magical treatments *versus* “pharmacological” treatments see Worthington (2003: 4-7), for the differences between treatments for somatic diseases and mental distress see Geller (2010a: 27-39). For a different tune see Zucconi (2007: 27, 31): The *asû*’s treatments were “charged substances (i.e. medications)” used for their property to communicate with the supernatural forces more than with their medical properties.

³⁴ BAM 316 iii 8' diš na šà-šû gaz^{meš}-šû pi-qam nu pi-qam i-pâr-ru-ud ^{iii9'} na bi dab-ti dingir u ^diš₈-târ ugu-šû gâl-ši dingir-šû ki-šû ze-ni

BAM 317 r 13 diš na šà-šû gaz^{meš}-šû pi-qam nu pi-qam i-pâr-ra-[ad na bi dab-ti ^diš₈-t]âr² [ugu-šû gâl-ši dingir-šû ki-šû ze-ni]

³⁵ In the different tablets *rašû* is written: tuk^{meš}-ši, tuk.tuk-ši and tuk, it shows the limits of the passage from transliteration to bound transcription and the problems linked to the *tan* sub-system in medical texts.

³⁶ BAM 316 iii 13' diš na gaz lib-bi tuk^{meš}-ši u₄ u ge₆ pu-luh-tû tuk-ši ^{iii14'} dingir-šû ki-šû ze-ni

BAM 317: 16 diš na gaz lib-bi tuk.tuk-ši ur-ra u g[e₆ pu-l]uh-tû tuk-ši ¹⁶ dingir-šû [...]

STT 95 iv 145 diš na¹(an) gaz ša tuk u₄ u ge₆ pu-luh-tû tuk dingir-šû ki-šû ze-ni

³⁷ BAM 316 iii 17 diš na šà-šû gaz^{meš}-šû

BAM 316 iii 20 diš na šà-šû nu-ul-la-ti i-ta-mu

BAM 317 r 31 [diš na šà-šû nu-u]l-la-a-ti i-ta-mu-u

BAM 316 iii 23 diš na hu-uš-ša gaz lib-bi u zarah tuku^{meš}-ši

The clinical cases in column iii are short and quote only a few mental problems: fear, foolish talk (delirium, insults, or unintelligible speech?), and “mal de vivre”. Again the clinical diagnosis of mental distress, namely heartbreak is confirmed.

It is noteworthy that in the fourth column of the reverse, inside the frame of the double ruling, after two alternative treatments,³⁸ a clinical case gives an example, and maybe an explanation, of what is hiding behind “*nullâti*”:³⁹

šumma amêlu ‘libbî libbî’ iqabbi libbušu lâ ikkalšu akala lâ ikkal mê lâ išatti idammum amêlu šû kimilti ilišu u iltišu elišu ibašši “if a man (whines) saying ‘my belly, my belly’, (but) his belly is painless, he does not eat (and) does not drink, he moans, this man the anger of his god and of his goddess is on him.”⁴⁰

This small text shows that the sick person’s complaints are groundless, it could be an example of what is meant by *nullâti*, and it confirms the delusiveness of the “ruin complaints” like what is described in the next case:

ana ṭapulti amêli lâ qabî ubân lemutti arkišu lâ tarâši “so that there will be no disrespectful talk against (this) man, and that no spreading of malicious rumour (evil finger pointed behind him) spreading behind his back.”⁴¹

This is an example of the sick person’s fears and delusions, born in his disturbed mind, and expressed in his “foolish talks”.

The treatments are composed of amulet-bags filled with plants, stones, of potions or preparations to be eaten on an empty stomach, and of ointments.⁴² The choice of plants is sometimes based on mental symptoms. It could be the case with *azallû*-(*amnesia*-plant)⁴³ which is prescribed for *libbušu ihteneppešu*, the heart of the patient oppressing him and for

BAM 316 iii 24 *nu-ul-la-ti šà-šû i-ta-mu*

³⁸ See §5.3 and further on.

³⁹ For this type of foolish talk see Buisson 2016a: 34 and Chalendar 2013: 17.

⁴⁰ BAM 316 iv 3 *diš na lib-bi lib-bi i-qab-bi šà-šû nu gu₇-šû ninda nu gu₇ a nu nag*
STT 95 ii 70 *diš na lib-bi lib-bi dug₄.ga š[à-šû nu] gu₇-šû [ninda] nu [gu₇]¹ [a nu nag]*
KAR 92 r 4’ *diš na lib-bi [lib-bi] dug₄.dug₄-si šà-[šû nu gu₇-šû]⁵ ninda nu gu₇ kaš nu nag*
BAM 316 iv 4 *i-dam-lmu-um* na bi dab-ti dingir-šû u ⁴*iš₈-tár ugu-šû gál-ši*
STT 95 ii 71 *i-da-mu-um* na bi dab-[ti dingir-šû (u)] ^d15-(šû) ⁷²*ugu-šû gál-ši*
KAR 92 r 5’ *i-da-mu-um* ⁶*dab-ti dingir u 15 ugu-šû gál-ši*

⁴¹ BAM 316 iv 7 *ana ṭa-pul-ti lú la qá-bi-i šu.si hul-ti egir-šû nu lal-še*

STT 95 iii 126 *ana [ṭa-pul-ti lú la qá-bi-i šu.si hul-ti¹ egir-šû [ba⁷].ra ta-ra-ši*

⁴² BAM 316 iii 10’ *ana búr ka a.ab.ba ṽnu-ša-bu ^{giš}šur.mìn ṽnigin^{sar} ⁱⁱⁱ¹¹na⁴zálag ṽaš ina ^{sigàka}nigin-mi ina kuš gag.gag ⁱⁱⁱ¹²ina gú-šû gar-an-ma dingir.šà.dab.ba silim-im*, “to release (from deities’ wrath) you spin it in raw wool coral, cypress, plant nigin-sar (or nigin-vegetable or *supâlu*), shiny stone, (and) single plant, you wrap (it) in a leather (amulet-bag and) place it around his neck and the god’s angry heart will become peaceful.”

BAM 316 iii 14 *ṽši-qit-tú ⁱⁱⁱ¹⁵ka a.ab.ba ^{na4}babbar.dili ^{na4}èš-me-kám ⁱⁱⁱ¹⁶[hal-he-e šá udun zì.mad.gá igi ^dnuška*

ina kuš, “*šiqittu* plant, coral, agate, malachite, furnace slag (and) flour: offering to Nuska in a leather-bag.”

BAM 316 iii 17 *ṽigi-lim nu pa¹-tan gu₇-meš ⁱⁱⁱ¹⁸ina kaš [nag] i.giš eš^{meš} ina ^{sigàka}nigin-mi ina kuš*, “it-confronted-1000 to eat on an empty stomach, to drink in beer, to anoint (in) oil, to envelop in carded wool for a leather-bag.”

BAM 316 iii 19 *ana ki.min ṽa.zal.lá súd ina kaš nag-šû*, “for the same (purpose/case), you pound *azallû*-*amnesia*-plant, (and) make him drink in beer.”

BAM 316 iii 21 *ṽer-kul-la ṽtar-muš₈ ṽhar.lum.ba.šir ⁱⁱⁱ²²ṽlú-a-nu úh.^did ka a.ab.ba ina kuš*, “*erkulla* plant, lupin, *harmunu* plant, man-like-plant, river-spittle, (and) coral in a leather-bag.”

BAM 316 iii 25 *ṽa.zal.lá ṽigi-lim ina kaš ina i.giš ina kuš* “*azallû*-*amnesia*-plant, it-confronted-1000: in beer, in oil, (and/or) in a leather-bag.”

BAM 316 iv 1-2 *ana ki.min ṽigi-lim numun ^{giš}bi-ni ina k[uš²] ^{iv2}diš ki.min ṽa-ra-ri-a-nu numun ^{giš}bi-ni numun ṽa.zal.lá ina kaš nag* “for the same (purpose/case): it-confronted-1000, seeds of tamarisk in lea[ther ...]; for the same: *arariânu*-plant, seeds of tamarisk, seeds of *amnesia*-plant, to drink in first quality beer.”

⁴³ See §5.1.

the association of *hušša hîpi libbi*, *nissatu* and *nullātu*. The other plants and minerals are found in various indications and it is difficult to understand the reasons of their selection. There is also a wide-range of methods of administration. The target of these “all-out” methods of administration of treatment is difficult to appreciate. One hypothesis is that it counters all the effects of bewitched food or oil (to eat and to drink against magical potions or aliments, anointment against evil oil). Alternatively, the fact that certain plants counteract specifically certain clinical signs or illnesses must also intervene (*azallu* to cure or to accept frustrating feelings or depression). Whatever the purpose of the treatment, questionable is how to make sense about the way treatments are administrated (iii 24 *ina* kaš *ina* i.giš *ina* kuš) when the same preparation (depending on the mood of the moment?) can be drunk, rubbed or hanged on the neck as an amulet-bag?

• **So, just to summarise:** In BAM 316, *hîp libbi*, *hûš hîpi libbi* and *libbušu ihteneppešu* are different formulations for the same disease. It is the leading manifestation initiating or concluding the case descriptions; two types of clinical pictures are related to this mental disorder, the “delusions of ruin” and particular psychological disturbances (fear, foolish talk, “mal de vivre”). It is closely linked to the divine anger by the ancient physicians. Already it can be stressed that the heart is somehow responsible for the disease since it is his heart which –or, if we personalize it, “who”– breaks or oppresses the patient (see *side comment* sub §6.3.1.1). Similarly it is the *libbu* “who” utters delusional discourse.

If we compare with the *hîp libbi* complaints in the letters, especially with the letters of the Ninevite scholars, the overall meaning is similar: dreadful feelings associated with fear and ruin complaints.

6.1.3 BAM 317

This seventh-century tablet, found in Aššur, concerns mainly *libbu* problems, especially *hîp libbi*. The beginning and the end of this tablet containing several cases of heartbreak are missing. A summary of the contents of BAM 317 is found in Abusch/Schwemer (2011: 49-50).

The obverse is difficult to analyse, but two lines parallel it to a complete case in BAM 438 and BAM 445 which allows restoring it: it concerns *hûš hîpi libbi*.⁴⁴ The context is globally somatic without the “psychiatric” manifestations of melancholia.

The beginning of the reverse of the tablet is damaged but the remaining lines include an incantation. These lines⁴⁵ parallel an incantation of BAM 316 vi 4’-13’ and STT 95+295: 84-97: so, thanks to these lines, we know which pathology is described in the missing part of the tablet: insane talk in a confused mind provoked by the anger of the personal god: *šumma awîlu itti libbišu nullâti îtammu atmûšu išannû zamar šalil zamar êr u tēmšu lâ ukâl*, “if a man speaks out loud to himself, (uttering) foolish things, his utterings change, sometimes he sleeps (and) sometimes he is awake and his mind wanders (he cannot control it).”⁴⁶ The

⁴⁴ BAM 317: 7’ diš na *hu-uš* gaz *lib-bi* tuk-ši *mi-na-t[u-šu* dub.dub]^{8’}[eme]-šú *it-te-nen-bi* x x [. . .]

BAM 438: 6 [*hu*]-uš gaz šâ tuk^{meš}-ši (in Abusch/Schwemer 2011, text 7.2: p. 118-119 where vice-like heartbreak is only a secondary symptom in a long list of ailments see §6.3.3.1.3)

BAM 445: 10 diš na *hu-uš-ša* gaz *lib-bi* tuk-ši (in Abusch/Schwemer 2011, text 7.7: 47-53 p. 154, 157, where vice-like heartbreak appears as the first manifestation of a disease associating somatic pathological manifestations, see §6.1.4).

⁴⁵ BAM 317 r 1’ *ag-gu* [lib-ba-ka] li-nu-ha-[ka (...)] a^{meš} [x] [x]^{12’} a^{meš} ta-ni-ih-ti lim-hu-[ru-ka 3]-šú dug₄.ga^{13’} nu tuš-ken ma-la lib-bi-šú dab ka [x (x)] // BAM 316 vi 11’ *ag-gu* šâ-ka li-nu-ha a^{meš} ta-ni-ih-ti^{12’} lim-hu-ru-ka 3-šú dug₄.ga-ma ki.za.za-[x]^{13’} [...]gur.gur-ma dab-ti dingir-šú duh-su, “May your angry heart calm down, may the ‘waters-of-appeasement’ receive you!” He repeats (this) three times and he (does not?) prostrate himself, and the wrath of his god will be released for him.”

⁴⁶ With the help of Scurlock’s translation (2014: 661).

pathology and the origin of this case should be very close to the (*hûš*) *hîpi libbi*'s pathology. It could be a clinical form of this illness or a special development of it.

Then follow cases dedicated to vice-like heartbreak which are separated by horizontal rulings (rev. 10'-30') as if the redactor wanted to dedicate a sort of chapter to this ailment and delimited a small tablet.

BAM 317 r 10 diš na *hu-uš-ša* gaz *lib-bi* tuk.tuk-ši

BAM 317 r 13 diš na šà-šú gaz^{meš}-šú *pi-qam* nu *pi-qam i-pár-ra*-[ad na bi dab-ti ^diš₈-t]ár² [ugu-šú gál-ši dingir-šú ki-šú ze-ni] ^{r14} ana búr

BAM 317 r 16 diš na gaz *lib-bi* tuk-tuk-ši *ur-ra* u g[e₆ *pu-l*]uh-tú tuk-ši dingir-šú [ze-ni] ^{r17}dingir-šú ki-šú ana silim-me

BAM 317 r 19 diš ki.min

BAM 317 r 20 diš na šà-šú gaz^{meš}-šú

BAM 317 r 23 diš na gaz *lib-bi* tuk-tuk-ši

BAM 317 r 24 diš na igi^{meš}-šú nigin-du me.[dím]^{meš}-šú dub.dub-ka *hu-uš-ša* gaz [*lib-bi*] ^{r25}*pi-rit-tu*₄ tuk.tuk-ši šu nam.lú.u₁₈.lu ugu-šú gál-[ši]

BAM 317 r 26 [diš ki.m]in²

BAM 317 r 27 [diš na *ina ma-k*]a-li šà-šú gaz^{meš}-šú *ina* é lú.ne [*ina*] sila *pu-ú*[*h-pu-hu-u* gar-šú] ^{r28}[šá na b]i *ki-mil-ti* ^damar.utu ugu-šú gál-ši [dab²]-ti [^damar.utu ana búr-ri]

Several cases already translated (with parallel treatments) under §6.1.2 (BAM 316) are inscribed at the beginning of this section. The link between the different cases seems to be that the treatments are based on amulet-bags. It is noteworthy that the mental ailment “vice-like heartbreak” is written in several ways and represents the same pathological entity, with or without *huššu*: *hušša hîpi libbi irtanašši* (*hu-uš-ša* gaz *lib-bi* tuk.tuk-ši), *hîp libbi irtanašši* (gaz *lib-bi* tuk.tuk-ši), *libbušu ihteneppešu* (šà-šú gaz^{meš}-šú). The first six clinical cases of the reverse are related to the anger of one's personal god. They are associated with fear symptoms. The hand of mankind and Marduk's wrath are held responsible for the last cases:

šumma amêlu pânûšu iššanundû minâtûšu ittanašpakâ hušša hîpi libbi pirittu irtanašši qât amêluti elišu ibašši “If a man's face seems continually to be spinning, his limbs are flaccid, without letting up, he has vice-like heartbreak (and) dreadful fright: the hand of mankind is upon him”.⁴⁷

The description begins with abnormal somatic clinical signs. The physician seeks signs allowing him to adjust his diagnosis; here the vice-like heartbreak and the frightful mental distress allow him to tie them to the hand of mankind. It is the typical medical procedure – in view of such a problem we seek the presence or absence of such and such signs and it orients the clinical/etiological diagnosis. The first signs are similar to what is described in the first “somatic heartbreak” case of the obverse of the tablet. Significantly this case is different from the “typical” ruin delusional ideas encountered in heartbreak and looks more like a somatic disorder with mental instability. It seems that the physician wanted to know if he had to tie these somatic pathological signs to one diagnosis or another. The fact that he could relate the case to the typical diagnosis of melancholia (melancholic distress with fear) allowed him to guide the etiological diagnosis. This being stated, each ailment is not specific enough and not sufficiently understandable to know what the patient was suffering from.

šumma amêlu ina mākâli libbušu ihteneppešu ina bîti šâltu ina sūqi puhpuhu šaknûšu amêlu šuātu kimilti Marduk elišu irašši “If during the meals, without letting up, his heart oppresses him, he experiences quarrel at home (and) squabble in the street: this man, Marduk's wrath is upon him...”⁴⁸

⁴⁷ Abusch/Schwemer 2011, text 1.5 p. 49, 50, Scurlock/Andersen 2005 §8.11, 19.121.

⁴⁸ //STT 95 i 7-8, AMT 40/2: 4'-6'; Scurlock/Andersen 2005 §8.15, §16.17, §19.111.

Painful oppression can be caused by food digestion (e.g. in stomach ulcers or gastro-esophageal reflux), it can also be one of the ailments composing a panic disorder,⁴⁹ as such it can introduce the classical description of misfortunes which follows and completes it.⁵⁰ It is not possible to settle the somatic or mental origin of this oppressive feeling just with this description. Mental and somatic pains have the same origin in the brain and people can suffer in the same way regardless of the origin of the pain.⁵¹ As will be seen later on (§6.2.3) the same treatment is found in a tablet (BM 78963: 82-84) dealing with somatic ailments. The indication is then *hîp libbi*, and the context directs towards a somatic pain. In BAM 317 Marduk's divine wrath was chosen instead of the personal god's anger, this type of choice emphasises the difficulties for us to understand the logic of ancient etiological diagnosis.

• *In fine*, this tablet describes two different clinical pictures of “heartbreak” pathology: one with psychological distress and one with “tangible” somatic disorders. What must be stressed is that the same clinical diagnosis is ascribed to these different clinical cases. The question is: are they “various clinical forms” of a given illness or different illnesses bearing the same name? The same type of ambivalence will be found in the next paragraph with the occurrence of two distinct types of pathology related to “*huššu hîpi libbî*”. Noteworthy, these somatic clinical descriptions are not found in the letters where heartbreak is a mental disturbance more of less profound.

The treatments, as far as the breaks in the tablet allow their reading, consist in leather-bags that probably protect and oppose the effects of witchcraft and divine wrath. Eventually, another method of administration is implied (rev. 23: *diš na gaz lib-bi tuk-tuk-ši numun^{giš} bi-ni^u sumun.dar súd*): the plants are ground: usually ground plants are given to drink but it is not mentioned in the end of the line.

6.1.4 Text 7.7 “Ušburruda against depression”: dedicated to heartbreak.

Text 7.7 in Abusch/Schwemer 2011: 150-158 is dedicated to heartbreak. The authors compiled several incomplete and broken tablets,⁵² elements of which combined together form

⁴⁹ See DSM 5 <https://www.verywellmind.com/diagnosing-panic-disorder-2583930> (05/06/2019).

⁵⁰ Gilles Buisson suggests an alternative solution: meals were a pleasure of life, not being able to enjoy eating was significant (see how Atrahasis was unable to seat down peacefully and appreciate his meal with his family).

⁵¹ Medical studies on the physiological and anatomical basis of physical and psychological pains, using imaging techniques, show that both types of pain have the same cerebral representations. Thus, it is not surprising that the Mesopotamian physicians used the same words to designate morale and somatic pains (occurring in thoracic or abdominal ailments). The “modern” approach considering that psychological pains are imaginary is far from the neurosensory truth, and, as Gilles Buisson states, will belong probably to history. Macdonald and Leary (2005: 212) comment on the issue: “Overall, strong evidence for a physiological connection between responses to physical pain and social exclusion has been found across a variety of physiological markers.” and (p. 218): “Evidence from a wide range of psychological disciplines converges to suggest that physical and social pain operate via common mechanisms”. Gaillard *et al.* (2010) come to a similar conclusion: “Le psychiatre est confronté à toutes sortes d’états émotionnels, de la tristesse à l’exaltation de l’humeur, et le terme de douleur morale est couramment utilisé dans la description d’un épisode dépressif à caractéristiques mélancoliques. Mais est-il possible de caractériser cette douleur sans lésion visible ni délimitation corporelle ? Nous montrons qu’il est légitime de parler de douleur psychique, à la fois d’un point de vue physiopathologique, d’un point de vue pronostique et d’un point de vue thérapeutique. Les neurosciences cognitives permettent en effet de montrer que les structures cérébrales impliquées dans la représentation de la douleur physique sont également activées par la douleur psychique.”

⁵² BAM 443 + 444 + K 16808 + 81-2-4, 393 (plates 28-30) // KAR 92 // BAM 445. From Nineveh (Ashurbanipal's Library): BAM 443 and 444 are fragments of single column tablets of 13 lines, completed by the fragments K 16808 + 81-2-4, 393; BAM 445 is a fragment of a single-col. tablet face and reverse inscribed and decipherable. From Aššur (library N 4) KAR 92 is a broken tablet face and revers being decipherable.

a coherent picture. The last line of text A (planches 28-30) before the colophon introduces text E (BAM 445).

The clinical descriptions are followed by suitable medicinal treatments and rituals including incantations and prayers.

Text 7.7 (KAR 92: 1-2): ¹ “If, without letting up, a man has vice-like heartbreak (*hušša hîpi libbi irtanašši*),² if a man, his heart (makes him) ponder foolishness (*nullât[i] libbušu îtammu*)”.⁵³

Two transfer rituals and a prayer-incantation to Šamaš follow the description. The patient requests the transfer of all his ailments to a figurine. It is worth noting that this request concerns the mental distress:

Text 7.7 (pl. 28 obv. 14'-rev. 1 and parallels): 21-23 “delirium (foolish talk, *nullātu*), vice-like heartbreak (*hûš hîpi libbi*), panic (*hattu*), dreadful fright (*pirittu*) which I continually experience in my body, my flesh (and) my ‘sinews’ (*ša ina zumrîya šîrîya šer'ânî[ya] âtanamdaru aptanallahu*), (and which make me) continually terrorised.”

This passage is extracted from a prayer, and it is risky to make physiological statements on this basis. Nevertheless, it is intriguing that the mental suffering is experienced in the body made of “flesh and sinews” (or “cords” if we consider that craftsmen used sinews as ropes, see Attia 2000: 47-56 and Barbara Böck’s recent update 2014: 26-30), i.e. in the entire body and not exclusively in the organs of sentiments. It seems that the ancients, even in poetic language, had a prosaic conception of mental suffering. This observation shows also how mental and somatic spheres were entangled.

Then follows a treatment for *huššu hîpi libbi irtanašši*: “for a patient who, without letting up, has vice-like heartbreak”.⁵⁴ This statement introduces medicinal treatments composed of plants, which had to be eaten and/or drunk on an empty stomach; other methods of administration are lost in tablet breaks. These types of administration are consistent with inside/abdominal indications and are also efficacious against bewitched food or drinks. The implied question is: is this treatment intended to soothe the vice-like heartbreak, considered to be an inside sickness, or to fight the cause of it, namely the witchcraft?

The third clinical description is similar to the description of text 7.2: 4-13 (BAM 438: 118-119 see §6.3.4.1⁵⁵) succinctly presented above (§6.1.3) and differs notably from the first ones:

Text 7.7: 47-53 (pl. 28 r. 16 rest broken // BAM 445: 10-16) “If, without letting up, a man has vice-like heartbreak (*hušša hîpi libbi irtanašši*), his limbs are flaccid (*m[inâtûšu ittanašpakâ]*), his tongue is swollen (*lišânšu ittenenbiṭ*), he bites his lips *lišânšu una[ššak]*), his ears are buzzing (*uznâšu išaggumâ*), his hands are numb (*qâtâšu išammamâšu*), his knees (and) legs gnaw at him (*b[irkâšu kimšâšu] ikassasâšu*), his epigastrium continually pro[trudes] (*rêš libbîšu ittan[azqar]*), his sexual capacity towards women is diminished (*ana sinniṣti alâki muṭtu*), cold tremors afflict him repeatedly (*hurbâšu imtanaqqussu*), he gets fat (and) then skinny (*i[kabbir ibahhu]*), he drools (*ru'ta ina pîšu ittanadd[i]*): that man has been given (bewitched) bread to eat and (bewitched) beer to drink, he has been anoi[nted] with (bewitched) oil.”⁵⁶

⁵³ This clinical description is only found in ms. B KAR 92 from Aššur but the treatment is identical to ms. A, pl. 28, from Nineveh.

⁵⁴ BAM 445: 1 [diš n]a *hu-uš-šû* gaz š[à tuk].¹tuk-ši numun ²ninniṣ³l(?)

Pl. 27 r 16 (= BAM 444 r 18) [diš na *h*]u-uš-šû gaz šà tuk.tuk-ši numun ⁴ninniṣ

⁵⁵ The clinical case 7.2: 4-13 allows restoring damaged passages, but several important details are different.

⁵⁶ See 2014 Scurlock’s translation of BAM 445 10-25 p. 463. She signals that in BAM 388 “The last treatment of potions and a bath (i 12-18) is parallel to BAM 445:10-25.”

This case is disturbing. The clinical description goes through different perturbations of different parts of the body, from head to legs, including disabling behaviour (weight, impotence). Some of them, for the modern doctor, point towards neurological disturbances (flaccidity, numbness, drooling and eventually buzzing ears). The context is thoroughly somatic. This clinical case is different from the “psychiatric” cases encountered before: here we do not find any “ruin delusional ideas”, any mental disability, no fear, and no speech alteration. The treatment does not help to characterize this clinical case: medicinal preparations are drunk or ingested on an empty stomach, induced vomiting follows, and then a new potion and a bath (l. 17-25). The purpose was to get rid of the bewitched food and the evil oil. As already quoted, this type of treatment was also often prescribed for internal diseases.⁵⁷ Afterwards a series of fumigations are also indicated in this case (l. 26-31). And, most interestingly, the final conclusion (text 7.7: 69 = BAM 445: 32) is: *[mur]ussu ul itârma ul isanniqšu šahluqtu ul iṭehhe[šu]*, “his [illn]ess will not return and will not come near him; ruin will not approach [him].” This indicates, even if the “typical” heartbreak symptoms are missing, that these different types of clinical descriptions, for the therapist, were closely entangled. In the end, a release-ritual (*ušburruda*) is performed. Again the goal of the treatment is interesting: (text 7.7: 75=BAM 434 iii 9): *ša itanamdaru lâ ikaššassu*, “(the black premonitions) which he fears will not reach him”: here too we find a hint that the symptoms are what the patient fears that could happen and not the reality.

How can we explain so different descriptions for heartbreak?

The physical signs developed in 7.7: 47-53 were just added to the typical description found on the obverse of the tablet. This description is a possible complement to the typical case. This hypothesis is supported by the fact that, as seen above, the purpose of the treatment of the “somatic” case is to eliminate ruin-symptoms, even if no description of any bad-luck event is found in the scenario of this description.

Alternatively, it is possible that this last description of vice-like heartbreak corresponds to a “real” somatic illness and that two different diseases with the same name coexisted. The painful aspect could prevail and be part of different clinical forms of heartbreak. Moreover, for the “somatic disease”, there is no prayer and no transfer ritual as for the former one, therefore it may not belong to the same kind of pathology. All these ambiguities are puzzling and could underline the impression that the malady names and even the clinical signs are not immutable, and that a name could correspond to different ailments.⁵⁸

It is worth noting again that the somatic pathology is missing in the letters and does not belong to the heartbreak of the everyday language.

6.1.5 STT 95+295 a seventh-century tablet from Sultantepe concerns methods to regain divine favour (Scurlock 2014: 650-663). In some cases, heartbreak initiates or concludes the clinical case. These cases are duplicates to cases already mentioned before, and will not be analysed any further.⁵⁹ JoAnn Scurlock comments (p. 650): “In addition to the medical

⁵⁷ This similarity could explain the purpose of internal diseases’ treatments: not only to soothe the symptoms but get rid of a malicious intruder or *vice versa*! See for the relation of internal diseases and witchcraft Abusch 2002: 79-87.

⁵⁸ Historians of medicine and of ideas are confronted with this type of problem. In a recent article about melancholia in the Middle-Ages, Sebastià Giral (2017) reports that melancholia could have several forms, the main one with classic manifestations of “unmotivated fears or speech disorders” and a special one: the “hidden melancholy” (p. 276)!

⁵⁹ STT 95+295: 7-8 // BAM 317 r 27-28 // AMT 40/2: 4’-6’ (initiates)

STT 95+295: 130-144 // BAM 316 ii 5’-25’ // BAM 315 iii 1-16 (final position)

STT 95+295: 145-148 // BAM 316 iii 13’-16’ // BAM 317: 16-18 (initiates)

A treatment established for STT 95+295: 145-148 (and parallels) is also found in BAM 311: 6’.

treatments for various conditions caused by divinities of the pantheon, there were things for the patient to do to regain divine favour, a particular problem where the patient was depressed, anxious, or stressed with or without any other symptoms.”.

6.1.6 BAM 315 is a tablet from the seventh-century library of Kišir-Aššur in Aššur.⁶⁰ This tablet contains mainly *mêlu*, amulet-bags, intended to cure or to protect against illnesses (as fever-kúm) or to release from the anger of a deity.⁶¹ In the third column iii 1-16 there is a description parallel to BAM 316 ii 5'-9'⁶² where heartbreak (*gaz lib-bi gar-šú*) concludes a long list of mental troubles and introduces the etiological diagnosis. This clinical case is more detailed than the other indications of *mêlu* in this tablet. The amulet-bags, in this case, are intended to counteract the deity to blame for the personal damage; they are not directed against any clinical diagnosis. This statement is supported by the fact that the treatment is not intended to cure *hîp libbi*: the symptoms and the evil methods employed against the patient are repeated, as goals of the amulet-bag, but heartbreak is not mentioned.

6.1.7 One attestation in a broken context in SA.GIG.

TDP 126 iii 43 [... *h*]uṣṣa *hîpi libbi irtanašši qât Ištar – qât* [...] “[...]without letting up he has [v]ice-like heartbreak: hand of Ištar – hand of [...]

This case is mentioned in a list of *libbu* ailments following two cases of *nîš libbi* impotence. The link between the different cases is the *libbu* localization, either with the anatomic or with the functional meaning (like impotence). The main lesson is provided by the commentary (GCC I II 406: 10-11) explaining that *huṣṣu* was a type of burning pain (see above in the introduction). The heartbreak can be connected with the heart or the inside organs of the belly or with a function of these locations, i.e. mental sufferance.

6.1.8 To sum up: (*huṣṣu*) *hîp libbi* is a clinical diagnosis with two different clinical presentations: one could be the typical form, comparable to the heartbreak of the letters with fear, delusion, abnormal behaviour, and a different form, in which the pain prevails with movement and behavioural disorders. Other signs can be associated with this atypical clinical presentation pointing, more or less, towards a neurological problem. This diagnosis can be the main topic of tablets or appear as a clinical diagnosis in tablets addressing deities' wrath and/or witchcraft. In these tablets, the different ways of naming the disease (*huṣṣu hîp libbi - hîp libbi irtanašši - šakinšu, libbušu ihteneppešu*) follow each other and seem to be interchangeable.

6.2 Texts in which the **therapy is indicated for (*hûš*) *hîpi libbi*** without clinical description: **the ailment is considered as a complete entity, perhaps a disease necessitating a specific treatment.**

Without clinical description, it is difficult to determine if we are confronted with a mental or a somatic disorder. Eventually, the context or the method of administration helps more or less to orientate towards a mental or a somatic field.

Amulet-bags for *hûš hîpi libbi* in STT 95+ i 8-21 are also found in BAM 311: 8'-13'.

⁶⁰ See Abusch/Schwemer 2015, text 3.5 p. 31-34 (BAM 315 and Bu 91-5-9: 17-32)

⁶¹ E.g. BAM 315 i 42 [pap 8 *me*]-*eli ana k[úm ša lú dab-su zi-hi]*, “total: 8 bags to root out a fever gripping a patient”, i 27 pap 18 *me-eli šu nam.[érin]*, “total: 18 bags for the hand of Curse.”, ii 30 *ana dab-ti dingir uru-šú búr*, “to release from the anger of the god of his town.”

⁶² See §6.1.2.

6.2.1 BAM 388⁶³

This Neo-Babylonian tablet lists treatments for a series of ailments. Two fumigations and an ointment are indicated for heartbreak. These prescriptions follow a fumigation for a stroke: BAM 388 i' 2 [...*qutâ*]ru ša *mišittu*). Then we find three fumigations for heartbreak (*qutâru ša hîp libbi*) in BAM 388 i' 3-7 // TCL 6.34 iii 3'-6', and an ointment for heartbreak (*napšaltu ša hîp libbi*) in i' 8-11 // TCL 6.34 iii 7'-11'.⁶⁴ It seems that treatments were directed against maladies i.e. clinical diagnosis and not against symptoms or etiological diagnosis.

A third prescription (BAM 388 i 12-18 and TCL 6.34 iii 12'-16') does not mention the indication, but the prescription is parallel to BAM 445: 17-25 so we know that it is for heartbreak (see §6.1.4 text 7.7). The administration of the treatment is broken, but the parallel allows restoring: potions, ingestion, vomiting and bath.

6.2.2 BAM 159 iii 29 This Neo-Assyrian tablet from Assur features “three ingredients for permanent/recurrent vice-like heartbreak, to drink in beer” (3 ú *hu-ša gaz lib-bi* *tuku*^{meš}-*ši ina kaš n[ag]*).⁶⁵

6.2.3 BM 78963⁶⁶ is dedicated to inside illnesses, mainly to digestive and chest ailments, and to lung pathology. Other somatic ailments are also listed with their treatments. Two potions (l. 82-84) composed of different plants are intended to treat heartbreak: “⁸³*mašqût ša hîp libbi(gaz šà)*”, and vice-like heartbreak “⁸⁴*šalâšat šammê hûš hîpi libbi(hu-uš gaz šà) na[sâh]i*.”⁶⁷ Just afterwards the tablet ends on a catchline with a treatment for *li'bu*-fever (separated from the previous line by a double ruling and followed by the colophon). The context is “somatic”, (*hûš*) *hîpi libbi* is associated with a pain considered as coming from the heart or from an internal organ, without obvious connection with mental affliction. However, a pain in the chest (*gaba-su, irassu*) is found at the beginning of the tablet (l. 22) with the verb *akâlu*, frequently employed for painful feelings. It suggests that, even if heartbreak-pain is found in this tablet, the quality of the pain is not mundane.

The first treatment is for *hîp libbi*. The plants employed in this treatment are more or less identical to those found in BAM 311: 8'-9' // STT 95+295: 9-10 // BAM 317 r 29-30 // AMT 40/2: 6'-8'.⁶⁸ The second, against *hûš hîpi libbi* (with *azallû*, *amnesia*-plant) is parallel to a recipe of BAM 316 iv 2 (§6.1.2).⁶⁹

⁶³ For BAM 388 a tablet of unknown provenance I follow Strahil Panayotov's transcription established for the workshop “Healing through Fumigation in Mesopotamia and the Ancient World” organized during July 2015 in Berlin by the BabMed project headed by Mark Geller. For TCL 6-34 see §6.2.6.

⁶⁴ Geller 2010a: 173-176; Scurlock 2014: 463-464.

⁶⁵ See Parys 2014: 32 “*Arariānu*, graines de tamaris, graines d'*azallû* : 3 simples contre les *accès* 'd'oppression intérieure' répétées, il b[oir]a dans de la bière”.

⁶⁶ BM = Museum siglum of the British Museum, London. This tablet has been the subject of a detailed study and analyses (with pictures and references) by Henry Stadhouders and Cale Johnson (2018: 556-622). They propose that this tablet of unknown provenience could be a copy of a Neo (or Late) Babylonian tablet from Borsippa. See also Scurlock (2014: 469-479).

⁶⁷ See Stadhouders/Johnson 2018: 584 l. 82-84 and Scurlock 2014: 475, 479.

⁶⁸ BM 78963:82 [gi]šsur.mìn [šim]š[še.l]i na⁴kur-nu dab ú⁵-ra-nu úⁱⁿ6.úš ki-šir giš[ma].nu ⁸³[num]un giššin[i]g 7 ú^{hi.a} šes^{meš} maš-qut ša gaz šà-b[i ina ka]š nag

BAM 311:8' [diš k]i.min gišsur.mìn šimš[še.l]i na⁴kur-nu dab ú⁵-ra-n[u]^{9'}[(x)] lú¹in.nu.úš ki-šir giš[ma].nu numun gišbi-ni ina k[uš]

STT 95+ i 8 [(gišsur.mìn) šimš[še.l]i.babbar⁹ na⁴kur-nu l¹⁰dab.ba] ú⁵-l¹⁰ra-l-nu úⁱⁿ6.úš u[š k]i-šir giš[ma].nu numun gišsinig ¹¹7 ú^{[hi].a} an-nu-te

BAM 317 r 29 [gišsur.mìn šim]š[še.l]i babbar na⁴kur-nu dab ú⁵-ra-nu úⁱⁿ6.úš²⁰[ki-šir] giš[ma].nu numun gišbi-ni 7 ú^{hi.a} an-nu-l¹ti l¹ina kuš

AMT 40/2:6' gišsur.mìn šimš[še.l]i b[abbar ...] ⁷ú⁵-ra-an-nu úⁱⁿ6.úš ki-šir giš[ma].nu^{8'}7 ú^{hi.a} an-nu-ti ina kuš [...]

⁶⁹ BM 78963:84 [ú]a-ra-ri-ia-a-nu numun gišsinig ú.a.zal.lá 3 ú^{me} hu-uš gaz šà z[i²-h]i² ina kaš nag

BAM 316 iv 2 diš ki.min úa-ra-ri-a-nu numun gišbi-ni numun ú.a.zal.lá ina kaš sag nag.

The difference of denomination (with or without *hûš*) is not to be taken too seriously: in the first case (*mašqûṭ ša hîp libbi*), it corresponds in BAM 311, to a recipe which is one of the *mêlus* for *hûš hîp libbi* (²² 15 *me-eli* diš na *hu-uš* gaz šà-*bi* tuk^{meš}-šî) and in BAM 317 (and duplicates see §6.1.3 §6.1.5) it is for heart oppression occurring during meals (šà-šû gaz^{meš}-šû) with victimization feelings. The formulations vary but the meaning is identical.

It is also interesting to compare and see the similarities of the recipe of the second case: *hûš hîp libbi* in BM 78963: 84 with the association of *hušša hîp libbi+nissatu* with *nullatû* in BAM 316 (iv 2). It illustrates that the choice of the different ingredients used in the composition of a medicinal recipe is not only based on the disease but on the various ailments implied and hidden in the malady name.

6.2.4 BAM 311

This Neo-Assyrian tablet from Assur lists treatments for a series of ailments (see the organization of the tablet in Chalendar 2003: 7-8). The beginning of the tablet is broken and we do not know if it included a clinical description or just the mention of the disease or of the symptom to treat (as it is the case later on). The therapies are indicated for supernatural diseases such as in l. 23': diš na ^dlugal.úr.ra dab-su “If the Lord of the Roof has seized him”.⁷⁰ Another entry concerns the vicious grip of the goddess: BAM 311: 30' *ana* šu ^dinnana *la-zi* zi-*hi* “to root out the tenacious ‘stranglehold’ of the goddess”. There is also treatment for “common” disease like “falling sickness”: BAM 311: 59' “*ana* a[n].ta.šub.ba zi “to root out an.ta.šub.ba (*miqtu*)”. Interestingly these ailments correspond to “neurological/seizure” disorders to which heartbreak is also linked. But treatments are also recommended for simple symptoms such as BAM 311: 87' diš [n]a [*ina*] k[i.ná]-šû zú^{meš}-šû gùruš-aš “If a man in his bed gnashes his teeth”. The absence of consistency does not allow maintaining that only diseases –clinical diagnosis– are mentioned with their indications in this tablet.

The reference to vice-like heartbreak concludes a particularly long list of amulet-bags: BAM 311: 22' 15 *me-eli* diš na *hu-uš* gaz *lib-bi* tuku^{meš}-šî “15 amulet-bags for a patient, presenting, without letting up, vice-like heartbreak”. There are parallels to most of the treatments of this list in BAM 316, BAM 317 and STT 95+295 or as seen above in BM 78963. The formulation indicates that these bags were supposed to cure or to protect against heartbreak. They are not only directed against the supernatural cause of the disease.

6.2.5 In the series *šammu šikinšu* describing plants, *azallû* is prescribed for gaz šà, *hîp libbi*: *šammu šikinšu kîma kanašî u sām azallû šumšu ana hîp-libbi damiq tasâk ina šamni tapa[ššaš]* “The plant whose appearance is like (that of) the *kanašû*-vegetable and which is also red – it is called *azallû*-poppy; it is good against melancholia. You pound it and ru[b it on] in oil’.”(Following Henry Stadhouders’ transcription and translation: 2011: 17, §8 and 2012: 8)

6.2.6 In the series *Qutâru*, fumigations are prescribed for *hîp libbi* in TCL 6 34 r col iii 5⁷¹: 10 ú^{hi.a} *qus-taru ša* gaz *lib-bi* “10 plants for a fumigation against heartbreak” and iii 6 “ú^{hi.a} *kur-ka-nam* ú^{hi.a} kur.kur naga.si ina dè sar-šû *qus-taru ša* gaz *lib-bi* “*kurkânu*, *atâ'îšu*-hellebore, *uhûlu qarnânu*-salicornia, for fumigation against heartbreak”. This treatment is parallel to BAM 388 i' 7 as seen in §6.2.1.

⁷⁰ This type of epilepsy or convulsive illness is described by Stol (1993: 16-19).

⁷¹ For TCL 6 34, a Seleucid tablet from Uruk, see the edition in Geller 2010a: 173-6. I follow also Strahil Panayotov’s transcription established for the workshop “Healing through Fumigation in Mesopotamia and the Ancient World” (see footnote 63). The tablet was copied by Thureau Dangin (1922).

6.2.7 Amulet stones are also efficient for heartbreak:

Amulet stones were intended to relieve the anger of Marduk (BAM 370: 1'-4') or of Nuska (BAM 372: 1-2) when these deities were associated with heartbreak (*ù/u hîpi libbi irašši* “and (if) he gets heartbreak”).⁷² In BAM 375 i 8-11 stones are intended for *hîpi libbi(gaz lib-bi)*.⁷³ In a catalogue of stones the indication *gaz šà* is quoted (Shuster-Brandis 2008: 136, 209).

6.2.8 So?

This ailment was quite well-known: treatments could be delivered on its name, without a clinical description. The target of the treatment was often inside the body (potion, ingestion, and smoke) but it was also useful to intervene from outside with a bath or by soothing the skin with ointment. It is difficult to understand if the amulet-bags or amulet-stones had any outside effect (on the illness or its sender) or inside effect (the drugs getting inside the body through the skin). A bath is found only once in BAM 445: 17-25 // BAM 388: 6-19 (see §6.1.4 and §6.2.1) it is indicated for a clinical case of the “organic” type (initiated by *diš na hu-uš-ša gaz šà tuk.tuk-ši* BAM 445: 10). It is possible that the bath was prescribed in order to soothe the divine wrath (like in BAM 322: 30-32 or r. 71-73), but the indications for bathing are manifold and no conclusion can be given. Intuitively no plant or association of drugs asserts itself as “unusual or original” but this “impression” needs to be comforted by other comparative researches.⁷⁴ This illness, deserving so many different types of treatments and administrations, was probably frequent and considered difficult to cure. If I may venture a conclusion, the fact that the drugs and their delivery systems were varied, means that their targets were the different symptoms of the disease “(vice-like) heartbreak” even if they are labelled “treatment for (vice-like) heartbreak”.

To my knowledge there is no presentation of incantations, prayers or rituals on the model: “this incantation wording is for (vice-like) heartbreak”, *ka.inim.ma (hušša) hîp libbi*. The incantations are mainly directed against witchcraft or other supernatural forces, the origin of mental distress.

6.3 “Heartbreak” distress: a simple clinical sign inside clinical cases? On the mental or the somatic side?

When heartbreak appears at the beginning or at the end of a clinical case it is, as seen previously, a malady name. The problem is more complicated when this ailment is found in a list of symptoms or clinical signs: is it a malady name implying typical symptoms and signs or is it a symptom, a type of pain or of mental distress? It can already be noted that most of the clinical cases quoted in this part do not start with disease names but with pathological signs.

6.3.1 “Heartbreak” in tablets dedicated to pain syndromes.

In these tablets, the main symptom is pain with different localisations.

6.3.1.1 Heartbreak as part of a description of an extensive multifocal pain syndrome

TDP 20-23: 32-33 Labat (1951) considers it as being abdominal pain, colic. For Scurlock (2014: 14, 20:41-42) a crushing sensation in the chest: *šumma qaqqassu iššanabbassu(dab.dab-su), kišâssu iltanapassu(tag.tag-su) irassu îtanakkalšu(gu^{meš}-šû) libbušu ihteneppešu(šà-šû gaz^{meš}-šû) pîqam la pîqam i[ttanadla]h ikkal u išatti lâ itârma (gu⁷ u nag nu gur-ma) ikkal u išatti*, “If his head seizes him all the time, his neck gives him a stabbing pain, (and) his breast a nagging pain, without

⁷² See on BabMed and in Schuster-Brandis (2008: 79-80) the transcription and other parallels listing these stones.

⁷³ Schuster-Brandis (2008: 136).

⁷⁴ Sometimes certain plants or methods of administration allow eliminating a diagnosis of mental disease such as melancholy: see Giusfredi (2012, 40-63).

letting up, his heart oppresses him, from time to time he is [pert]urbed, he does not regurgitate what he eats and drinks, and therefore, he eats and drinks.”⁷⁵

The clinical description follows the classical progression “from head to toe”. The heartbreak enters this enumeration because of the presence of “his heart šà-šú/libbušu” after “his chest gaba-su/irassu”. Noteworthy the succession of chest and “heart/inside/belly” implies different interpretations: the enumeration of the body parts is from top to bottom so *libbušu ihteneppešu* can be an organic pain in the heart or in the belly. Conversely, as heartbreak is linked to sorrow and to depressive feelings, and as pain in the chest is expressed by “his chest gives him a nagging pain, *irassu itanakkalšu*”, *libbušu ihteneppešu* has a different connotation: it is the link between somatic pains and psychological perturbations. Meaningful is the presence of an eating disorder, which can be secondary to the digestive tract or to mental disturbances. This case is close to the case described in BAM 317 r 27-28, §6.1.3 where oppressive heartbreak appears during meals (and is expressed identically: šà-šú gaz^{meš}-šú⁷⁶). It could be a clue that the physician interpreted this pain as an intermediate pain, a sort of mixture between somatic and psychogenic pain. Noteworthy, different body parts, head, neck, chest, and heart are responsible for pains. It explains why the verbs for pain are different for each organ, each of them inducing a different type of pain. This is based on observation of the reality of illnesses but may have evolved in a theory of the origin of sickness, regardless of who or what is responsible for the disease, the organs create the ailment.

• **Side comment:** This physio-pathological theory largely hinges on the assumption that gaz^{meš}-šú (or other verbs conveying pain feelings) corresponds to I/3 stem with active meaning. The subject is the organ with a possessive suffix -šu, the verb being suffixed with an accusative suffix -šu which refers to the patient. This could be in contradiction with the way pain feelings were expressed in Old-Babylonian letters, as seen before, (with the verb in the passive IV system, without pronominal suffix). Or this could witness the fact that the expression of pain differs in the medical texts:

– see above the SA.GIG Old-Babylonian example with the verb in the I/1 stem with an accusative suffix -šu (*šumma maršu qatāšu u šépāsu ikkalāšu*). It is notable that the pronominal suffix is an accusative suffix. Later the dative and accusative suffixes are no more distinguishable, this attestation is a hint or a proof that later -šú are accusative suffixes.

– in the medical texts from the Neo-Assyrian period verbs can be in the I/1 system e.g. BAM 168: 16 [*bur-ka*]-a-šú i-za-qata-šú úr^{meš}-šú¹⁷ [*i-ta-na*]-ah *bur-ka-šú i-kaš-ša-ša-šu*, “his shins pierce him (with pain), his thighs are always weak, his knees gnaw at him” (see Geller 2007: 130 with duplicates)

⁷⁵ This last part is difficult, I followed more or less CAD Š II 213b (‘and therefore’ instead of ‘but’ for the -ma in *itarma*) instead of Labat (s’il mange et boit sans pouvoir recommencer à manger ni boire). Scurlock offers a similar translation (2014: 20) “he eats and drinks (but/‘and therefore’) does not eat and drink again”.

⁷⁶ It is a challenge to give the Akkadian transliteration of šà-šú. There are attestations of *libbašu* in the nominative form: in Atra-hasis (see the introduction to §6) we have *he-pi-i-ma li-ib-ba-šu* where the *libbu* is the subject of the verb. In the Mari archive (see ARCHIBAB website) the same transliteration is found in several examples (e.g. with *marāšu*: A.2548 [see bibliography in ARCHIBAB] r. 21 *li-ib-ba-šu i-ma-ra-aš*). The phonetic attestations of the singular nominative form *libbušu* are rare in CAD L 170-171 sub *libbu*. But in Assyrian the vowel assimilation matches the ending vowel (von Soden GAG §10 5/e, but this assimilation is not made on the pronominal suffix). This is corroborated by the search in the glossary of the SAA texts: *libbušu* is attested in several letters (for instance in SAA 19 152: 17 *lib-bu-šu is-lsi-ni ip-lpa-l-šar* ‘his heart will be favourably disposed towards us’) Interestingly in this corpus in Neo-Babylonian *libbušu* is also attested (SAA 4 177: 2’ and r 6). But there are also attestations with *libbašu* in the nominative form e.g. SAA 10 294 r. 9 *šà-ba-šū lu-u dūg.ga-šū* “let his heart please him”. I thank Martin Worthington for his help in this thorny grammatical problem.

– or in the II/1 system e.g. BAM 434 i 13 sag šà-šú ú-šar-[rap]-[šú] (*rēš libbišu ušarrapšu*)¹⁴ gaba-[su] gu₇-šú (*irassu ikkalšu*), “his epigastrium burns him (with pain), his breast devours him,”

– or I/3 system e.g. BAM 574 ii 15 diš na šà-šú ik-ta-na-su-šú (*libbušu iktanassušu*), “his belly ‘binds’ him constantly (whatever pain or problem being described by ‘bind’).”

These differences between everyday language and technical language could be due to a divergence (or to scholarly theory) in the understanding of the responsibility of organs in the occurrence of pain. This responsibility can also be guessed or inferred from this case: BM 78963: 25. diš na lu mur^{meš} lu ki-šir-ti mur^{meš} lu su-alu gig ana din-šú (Scurlock 2014: 472) in which diseases and body parts are on the same level.

6.3.1.2 Heartbreak is also part of a description in which **cephalalgia localized in the middle of the head** is the “flagship” ailment:

– In UGU 1

UGU 1: 239’-241’ (BAM 480 iv 38-40 // Jastrow: obv. 43-r 1) *šumma amêlu qabal qaqqassu uzaqqassu birkâšu kabtâ utabbaka[?](ú-ta-b[a-ka]) êtannah hîpi libbi irtanašši kalissu êtanabbal [...]* *iššanammu ikkašu iktenerru ana murša nasâhi* “If the middle of a man’s head causes him a stinging pain, his knees are heavy, he excretes a lot[?] (and) is constantly tired, without letting up he has heartbreak (pain) (gaz šà tuku^{meš}), and his kidneys dry up⁷⁷ constantly [...], he is constantly thirsty, he is short of breath – in order to [remove] the illness” (Worthington 2005: 14, 22).⁷⁸

The symptomatology is mainly somatic. A local dressing is prescribed, the exact localisation of the bandage is not specified but the middle of the head is likely. The classical progression “head to toe” is not found here, the scribe begins with the head, and then moves directly to the knees and the other signs are enumerated messily. It seems to me that the patient suffers from a special pain in the chest called “painful heartbreak, *hîp libbi*”. But it may be a depressive mental disturbance connected with the (nervous?) exhaustion.

– In LKA a “magical text” with a clinical case beginning with a headache.

LKA 88: 1-8 // LKA 87: 1’-9’ (Scurlock 2006: 339 text 115). The text begins with symptoms of the top of the head with pain in the middle of the skull and in the two temples, buzzing ears, dry mouth (palate), neurological ailments follow: numbness and paralysis. Then another set of symptoms with pain in the chest ‘gaba^{meš}-šú gu₇^{meš}-šú, *irâtišu îtanakalûšu*’ and gasping for breath ‘*zi-šú ik-ta-nâr-rù, napištašu iktanarru*’, hair standing on the head (fright? awkward feeling?), cold chills and body numbness complete the physical disorders before arriving to the mental ailments: vice-like heartbreak ‘*hûš hîpi libbi irtanašši, hu-uš gaz lib-bi tuk.tuk-ši*’, torment constantly overwhelming him ‘*a-šu-uš-tum šub.šub-su, ašuštu imtanaqqassu*’. The last problems concern appetite (abnormal behaviour): hunger but the impossibility to eat and in an exhausting way the patient vomits. Several etiological diagnoses are possible: hand of a ghost, *lubâtu*-disease, and hand of Marduk. The treatments consist in rituals and prayers.

⁷⁷ It is difficult to translate é[ll]ag-šu *e-ta-na-bal*! with *abâlu* A (but does not begin with e CAD A/1 10-29) to bring, to carry and *abâlu* B (beginning by ‘e’ is possible CAD A/1 30b 1-2’-d for body parts) to dry. Worthington, 2006: 22 chose to interpret *abâlu* A as “to affect”. I suppose that Scurlock 2014: 328 chose the same verb, with a re-interpretation of the meaning: the patient changing his position in bed. *Abâlu* B does not seem to be in favor, the meaning “to dry” is difficult to use for the kidneys. But this verb is used for several parts of the body (CAD A I 30b) so I select it: the skin in the region of the kidneys could be dry or the patient experiences a dry sensation in this area, and thanks to the grammatical precisions, courtesy of Marten Stol, it fits the grammar.

⁷⁸ See also Scurlock 2014: 318, 328 and for Jastrow’s duplicate see Scurlock proof-reading 2003: 16-17. For a discussion on breathing difficulty see Attia (2018: 87-88) §4.4.2 and note 71.

This clinical picture associates a large range of varied clinical signs, pains, neurological ailments, mental sufferance, digestive problems, etc. It is difficult to differentiate it from the rag-bag catalogues. The association of *hûš hîpi libbi* and *ašuštu* points toward mental sufferance more than towards somatic clinical signs. It is important to notice that in the same clinical case we find a pain in the chest described in two ways: first it is the chest, as a whole, which devours the patient, and afterwards, he has the vice-like heartbreak. This can be considered to prove that (*hûš*) *hîpi libbi* is not a “simple” intrathoracic pain.⁷⁹ Interestingly all these ailments are found in various associations in other clinical pictures comprising heartbreak. As often there is a family resemblance in these descriptions but no obvious reproducible description. The reason why this type of clinical description was attributed to one etiology remains mysterious (at least for me!).

6.3.2 Heartbreak is one of the ailments in clinical cases where the main problem is “neurological”.⁸⁰

6.3.2.1 – In SA.GIG:

SA.GIG Tablet 26: 28’-29’, Stol 1993: 62, Heeßel 2000: 288, Scurlock 2014: 197, 201 *enûma ihitaššu nakkapātušu itanakkalâšu(gu^{meš}-šû) libbušu ihteneppešu(gaz^{meš}-šû) arkânu qâtâtêšu u šêpêšu ukappar nabalkut ru’tašu la išû u* (variant: //) *ittanagarar* ... “If, at the time it (a fit) overwhelms him, his temples keep causing him a nagging pain, without letting up his heart oppresses him (*šà-šû gaz^{meš}-šû*, lit. ‘his ‘heart’ constantly breaks him’, for Nils Heeßel ‘sein Herz ihm andauernd gebrochen ist’); later on he rubs his hands and feet, he is upside down(?), he does not have saliva(no drooling) and/but (variant //) he is rolling over”.

This description shows how the physician searched for clinical signs characteristic of epilepsy (drooling, turning, having uncontrollable movements) in an atypical case (“fit” with headache and heartbreak but without drooling). The translation of *ittanagarar* is crucial, because, if it denotes rolling over, it points in the direction of epilepsy. Marten Stol suggests: “Instead of the translation ‘he is rolling over’ for *ittanagarar*, ‘he is made frightened’ could be possible, deriving the form from the verb *garâru* with this meaning”,⁸¹ so it may point in the direction of a nervous fit with “hysterical” behaviour. Two clinical diagnoses are given by the physician: *miqtu*(šub-tu), a type of falling-epilepsy or *hamîtu*-disease.⁸² Thus, the physician still hesitated between two different diagnoses. It is difficult to appreciate if this description was good enough to enable him to choose or not. Interestingly, the etiological diagnosis is the same for the two diseases: grip of Ištar.

Here the context is clearly neurological, the strong headache being utterly suggestive of such pathology. Vêrène Chalendar (2013), in her study of BAM 202, highlights the link between mental and neurological disorders. We will see later other links between these types of pathology.

6.3.2.2 – In a late commentary text BRM 4 32:

A commentary explaining the names of diseases due to supernatural agents (TCL 6 34, see also §6.2.6) describes different “neurological” conditions is also interesting. The first malady

⁷⁹ See §6.2.3 (in the tablet BM 78963) for a similar constatation.

⁸⁰ Neurological is in quotation marks: this is a modern retrospective diagnosis, the ancient doctor would not understand this term!

⁸¹ See Stol (1993, note 25 p. 62) with the equation in SpTU II 166 no. 39:3 (*ga-ra-ru* = *pa-la-hu*, *garâru* = to be afraid). The verb was difficult to understand for the ancient scribes ... as for us.

⁸² For the latter see Stol 1993: 62-63 “goose-flesh”, Heeßel (2000: 293) the disease is named after an animal, the sand wasp. For diseases named after an insect’s name see Stol (1998: 344). See also Scurlock (2005: 290) who interprets *hamîtu* with *hamû*, as paralysis, and Salin *mise au point* (2018: 34).

name is *antašubba* the “seizure falling-sickness” which places these diseases under the patronage of convulsive ailments:

BRM 4 32:2-3 ²šu.dingir.ra: *ilī inamzar šillat iqabbi ša immaru imahhaš* šu.dingir.ra; šu.^dinnin.na: ³*hušši hīpi libbi irtanašši u amātušu imtanašši*: Hand-of-the-god: (is when the patient) curses the gods, utters grievous blasphemies, and smashes whatever he finds – (this is) *šudingirrakku*-disease. Hand-of-the-goddess: (is when the patient) without letting up has vice-like heartbreak and keeps forgetting his words – (this is) *šuininnakku*-disease.⁸³

The scribe selected two or three significant signs allowing him to attribute them to special deities or to name a disease. The association of heartbreak with a speech impairment is interesting as this disorder is found in stock lists (§2.2.1, §2.2.2) and with insanity (§2.3). It is also found in BAM 234 (²*i-qab-bu-ú i-maš-ši*) the text at the origin of the search for *hīp libbi*. And, last but not least, the mental suffering *hušši hīpi libbi* is listed with epileptic and behaviour pathology.

6.3.3 Heartbreak within the framework of cases where **scary feelings** dominate the clinical description (Abusch/Schwemer 2011, text 8.10, p. 358 presentation, transcription, p. 359 translation):

Text 8.10: 3-4 “[If a m]an is constantly shivering with fear (even) in his bed (*ina mayyâlišû igdanallut*), without letting up his [heart] oppresses him ([šà]-šû *gaz^{meš}-šû*, [*libbu*]šû *iheneppesu*), his face seems continually to be spinning ([*pânûš*]u *iššanundû*), his feet cause him a stinging pain (*šêpâšu uzaqqatâšu*): figurines of that man have been buried in the tomb of a dead person.”

A similar expression of *ina mayyâlišû igdanallut* is found in text 8.6: 15 (*ina mayyâlišû iptanarrud*, see §2.2.2), and thus, the fright is designated by two synonyms. Moreover, the association of heartbreak and fear is the subject of several clinical cases (see §6.1.2, 6.1.3, 6.1.4, 6.3.3, 6.3.4.3, 6.3.5, 6.4.1). It is, nevertheless, difficult to opt for a general pain syndrome (heartbreak pain and feet stinging pain provoking quiver and fright) or for a mental distress description (fear and anxious heartbreak with strange feelings in the face and paresthesia in the feet). This type of motor and behavioural disorder reminds of the “atypical” somatic heartbreak (BAM 317: 7’ and r 24, BAM 438: 4-13, BAM 445: 10-16 see §6.1.4). If I may venture a retrospective diagnosis, I would imagine complications of alcoholism which could explain the pains, mental disturbance and strange feelings, but of course, it is just a guess.

6.3.4 Within the framework of **rag-bag catalogues: there is no outstanding clinical sign.**

These catalogues are difficult to interpret, especially when the beginning of the list of ailments is broken! They look like juxtapositions of health disorders without any dominant clinical sign. In the following examples, the link between them could be the cause of the pathology –sorcery, curse, supernatural forces, etc.

6.3.4.1 Most of these attestations are related to *witchcraft diagnoses*:

– Text 8.6 (see §2.2.2) with the complete formulation *hûš hīpi libbi irtanašši*.

– Text 2.3 (Abusch/Schwemer 2011: 83-98; lines 42’-46’ = p. 86, 92, 96 manuscript A₂, AMT 85/1)

Text 2.3: 42’-46’ If a man’s face seems continually to be spinning, his skull [...], is blackened, his appearance is st[range?] (*šikinšu itt[anakkir²]*), [his appear]ance² is dark/gloomy ([*šiki*]nšu²

⁸³ Stol 1993: 25-26, Frahm 2011: 235, I used also the transcription and translation given by Nils Heeßel’s during the workshop about fumigation (see note 63).

ûtaṭṭa), what he says [...], without letting up, he has vice-like heartbreak (*[hu]ṣṣa hîpi libbi irtanašši*), his sexual capacity towards women i[s diminished] (*ana sinniṣṭi alâka u[maṭṭa(?)]*), he is constantly short-tempered (*[ik]kašu iktenerru*), his ears buzz.

Several symptoms have been already quoted in other catalogues linked to witchcraft (see for instance §2.2.2). Vice-like heartbreak is just part of the list, without special importance or meaning, eventually representing a psychogenic pain in the chest or delusional ideas of ruin, the strange aspect, and the behaviour of the patient being the salient symptoms, as in the atypical heartbreak form.

– Text 7.2 (BAM 438 // BAM 437): 4-13⁸⁴ the context is unknown due to a break in the tablet.

After four fragmentary lines at the beginning, the first observation (it is possible to restore just before, following Scurlock 2014: 634 *akâla*) *muṭṭu*, he has no appetite for bread) is mutism (*ana dabâbi libbuṣu l[â inaššiṣu]*) and vice-like heartbreak (*hûṣ hîpi libbi irtanašši*). Several of the following clinical signs are already familiar: slowing down, impotence, food problems, odd behaviour with, maybe, an auto-mutilation tendency or uncontrollable behaviour (he bites his lips, saliva drooling, short-temper *ikkašu iktanarru*, and not being able to stay in bed).

It should be noted that in contrast with cases where (vice-like) heartbreak is a salient symptom there is no foolish talks, but mutism. Other particularities are more or less unusual: the patient is impotent and no more attracted by women (*ana sinniṣṭi alâka mu[ṭṭu]* ¹⁰ *ana sinniṣṭi libbuṣu l[â inaššiṣu]*), he also refuses to stay in bed (*mayyala la inašši*). This last symptom represents for me a type of uncontrollable wandering about, or a stubborn attitude.⁸⁵ The treatment consists in 37 plants administrated in a potion. The fact that this case is close to BAM 445 (§6.1.4), where vice-like heartbreak is the first symptom, is problematic regarding the importance of first-rank symptom for the identification of heartbreak as the dominant symptom and, eventually, as a malady name and a clinical diagnosis. It is tempting to explain this fact by a creative scribe who copied two cases one after the other without recognizing heartbreak as the introductory malady, and for whom heartbreak as a disease was questionable. But to criticize the scribes (they didn't understand what they wrote, they were not physicians but mere compilers, etc.) is an easy way to bypass the difficulties and could be equated with our "psychosomatic" etiologies which are merely cunning ways to hide our ignorance.

It should be pointed out that several of these abnormal behaviours could be part of "epilepsy" descriptions⁸⁶ with sialorrhea, biting the lips, speech disturbances, and all the neurological problems (numbness, etc.). This description was (maybe) intended to correlate a psychological disorder, especially heartbreak, to convulsive pathologies (see BAM 202 in Chalendar 2013). This could explain the awkward position of heartbreak.⁸⁷

6.3.4.2 An attestation is related to *Hand of a Curse*: K 2426 i 9'-12'

[*šumma amêlu ...*] *piṭrûṣu irtanammû šittu irtenehhiṣu [...]* *ummi libbi irašši mē iṣṣanamma akalî u šikara rêštâ muṭṭu birdi imtanalla [...]* *ikkašu iktanarru hîp libbi irtanašši ana sinniṣṭi alâka muṭṭu [... qât] māmîti iṣbassu* (K 2426 i 9'-12') "[If a man ...] his *piṭrû* are consistently relaxed, sleep

⁸⁴ Abusch/Schwemer 2011: 118, 119: 4-13. See also Scurlock/Andersen 2005: 171 §8.28 (to be corrected) and 2014: 634.

⁸⁵ Elsewhere, I have commented on this behaviour (Attia 2015: 84): "Se coucher (et dormir) quand on est malade est une attitude courante, un 'médicament' efficace, il est possible que le patient n'arrivait pas ou ne voulait pas se conformer à cet usage".

⁸⁶ It is interesting to read the description of seizure on Medline website: the similarity of the symptoms of seizure and mental disturbance is striking.

⁸⁷ See §6.6 for SpTU I 43 which ties several "neurological" illnesses, including heartbreak, to the organ *libbu*.

keeps flowing over him, [...] he has internal fever, he is continually thirsty for water (but) his appetite for bread and beer is diminished, he is continually full of *birdu*-nodules, [...], he is continually short-tempered, without letting up he has heartbreak (*hîp libbi irtanašši*), his sexual capacity towards women is diminished [...] “hand” of a curse afflicts him (*š]u nam.érim, qât mâmîti*).” Scurlock/Andersen 2005: 561-562, Ap.59.

This syndrome associates somatic ailments, mental and behaviour disturbances with heartbreak preceding impotence. JoAnn Scurlock considers all these disturbances as somatic manifestations: “he is continually short of breath; he continually has a crushing sensation in his chest”. This interpretation is as valid as the “psychiatric” one and shows how difficult it is to identify the symptoms and to give, in consequence, a retrospective diagnosis.

6.3.4.3 Within the framework of a “neuro-psychiatric” rag-bag “syndrome” *linked to a cohort of supernatural causes*:

Marten Stol (1999: 64-65) in his study of psychological disturbances has noticed a text evoking imaginary fears. Mark Geller (2007: 38) has chosen this clinical picture mixing neurological and psychiatric elements to clarify the respective role of the *asû* and the *âšipu*. Gilles Buisson (2016: 29, 46) describes this text and analyzes the purpose of the treatment. This text, edited by Farber (1977: 56, 64-65, l. 1-13) can help to interpret the catalogue-like enumerations.

The text begins with a list of supernatural diseases attributed to deities or demons. Notable is the first one, *qât eṭemmi*: the first mentioned ailment is ‘*uznâšu išaggumâ*, his ears are buzzing (with malicious gossip?)’ which is frequently associated with ghost’s seizure. The following supernatural seizures are more or less related to convulsions ailments (e.g. *bennu*, an.ta.šub.ba, lugal.ùr.ra), to mental disorders (e.g. *šanê ṭêmi*), to different demons and to divine angers. Afterwards, clinical signs or ailments are listed. After tinnitus, the second ailment is our ‘*hîp libbi irtanašši*, without letting up he has heartbreak’ (which can be linked to *šu d’inanna* and/or to different sorts of divine anger) followed by the usual ruin complaints, fears and speech disturbances. Several clinical signs can be linked to ‘*šanê ṭêmi*, foolishness’ like ‘*ṭênšû lâ šabit*, he is not able to act, to make a decision’.⁸⁸ It is difficult to attribute specifically each clinical sign to one of the divine illnesses: there is no unequivocal clinical description for these affections, just a sort of category of clinical signs evoking them.

After attributing all these disturbances to ‘*kimilti ili u ištari*, god and goddess’ wrath’ the conclusion is: ‘*ana pašârimma adirâtîšu lâ kasâdišu u muršî annûti ina zumrišu nasâhi*, to appease (the deities’ wrath) in order (-ma) to prevent his fears from happening to him, and to remove these illnesses from his body.’

This conclusion allows understanding that, for the author, this is a real catalogue and not a multifocal disease. It is also more or less possible to attribute to the different deities, demons or illness categories the pathologies listed after them (see Stol 1999: 26 for other examples of this type of concordances). Noteworthy is the fact that the real ultimate cause of all these diseases and ailments is the divine wrath. It seems to me (following Gilles Buisson 2016: 30) that the conclusion (“to prevent his fears from happening”) highlights their fictitious character, denoting a delusional disorder.

6.3.5 Heartbreak within the framework of **impotence**. An attestation related to evil finger and witchcraft: AMT 71/1

Impotence is the core problem in this case, and additional misfortunes (introduced by *lu/or*) contribute to the psychological breakdown of the patient. The case is found in the fragmentary tablet AMT 71/1. I follow more or less Ebeling’s transcription and translation (1955: 168-

⁸⁸ For *ṭênšû lâ šabit* see Stol (2009a: 3-4)

171),⁸⁹ his restitutions of broken passages are based upon other passages in this tablet and parallels from his *Keilschrifttexte aus Assur religiösen Inhalts* (in particular KAR 228). See a new transcription on Babmed website.

AMT 71/1: ¹diš na [ni-iš] lib-bi-šú kar-ir [⁽⁼⁸⁾hîrtašu u aššātušu]² lu dumu^{meš} lu-u dumu.munus^{meš} lu-[ul] [...]³ mit-ha-riš úš^{meš} lu-u zi.[ga sad-rat-su⁹⁰...] ⁴inim [hul-x]x ina é-šú sa-dír lu [... (=12)huluqqû šahluqtu ša ittišu raksu] ⁵lu hu-luš'(ú)-ša gaz lib-bi g[i-lit-tú ina su-šú gál-ši] ⁶šu.lsi huli-ti egir-šú l[al-at] ⁷ta-[di]-[ra-a']-tú ul-[ta-dir (=13)kišpû ruhû rušû ...], ¹“If a man has been deprived of his potency [his beloved wife⁹¹ and his wives⁹²]² either his sons, either his daughters [...], either [his ...]³ die together, either [he always suffers] loss[es ...]⁴ words [unpleasant⁷] in his house are regular, either⁷ [...the commercial losses, the ruin that are tied to him]⁵ or vice-like heartbreak [(and) fear shiver inside his body]: ⁶an evil finger is pointed against him⁷ he is overshadowed by gloominess: [evil spell, sorcery, dirty witchcraft]”

Unfortunately, the clinical description is very fragmentary but mainly consists of delusional complaints of ruin (see line 12: níg.ha.lam.ma-ti (*šahluqtu*) ruin/disaster). The author considers different possibilities of misfortunes: all are not expected to occur together. It is a rag-bag enumeration!

It is noteworthy that the death of children and probably of other members of the household are mentioned together with misfortune and losses, and are part of a severe and terrifying heartbreak. It seems to contradict what I have written in “Mieux vaut être riche et bien portant que pauvre et malade” about the difference between mourning, and melancholic depression: delusions of ruin is its salient manifestation, mourning just leading to sorrow. But these deaths, similar to those of Job’s family, could be part of the ruin delusional complaints. Noteworthy, apart from the death of the children, that of the wives and probably of the household is included, which is different from Job losing only his children; it may be an exaggeration or a serious reason for a severe nervous breakdown. Important to note the purpose of the treatment is to chase away all the calamities affecting the patient, among them, the vice-like heartbreak (l. 11) and shivering of fear. Another goal is to prevent supernatural forces from approaching the patient. There is no mention of the impotence, and yet, it was the hallmark of the disease. In this text it is possible that *nîš libbi eṭir* is the initial diagnosis and that the following signs lead to *hušša hîp libbi* and *gilittu* which appear like an “intermediate” conclusion or a “complementary diagnosis” before the real one, namely the evil finger (probably followed by all sorts of evil witchcraft in the break). Terror and vice-like heartbreak probably represent the names given to all the sorrows listed after impotence.

6.3.6 Is there something to be learned from these clinical pictures?

Heartbreak as a clinical sign appears in different contexts close to what was found in typical descriptions of heartbreak-disease: convulsive fits, mental and behavioral disorders, impotence and fear. Ruin complaints are often described but the nonsense foolish talk, namely delirium, is missing even if the delusional aspect of heartbreak complaints is sometimes pointed out (e.g. §6.3.4.3). Other contexts, less meaningful and less tangible, like pain, fever

⁸⁹ See Stol 1993: 30 note 62 and Scheyhing 2011: 112.

⁹⁰ Restored with the help of Henry Stadhouders, whom I thank. He pointed to me the association of zi.ga and sadâru, see e.g. Abusch/Schwemer 2011: 144 ritual 7.6.7: 8 against the *bēl lemutti* (ms. H). For ka [hul x]x Stadhouders proposes hul-t]i, which is credible see e.g. Abusch/Schwemer 2011: 166, line 9.

⁹¹ This translation is under the influence of the conference made th 24th of May 2019 at the College of France by Lionel Marti during the Colloquium “Des femmes au pouvoir!?” organized by Thomas Römer and Hervé Gonzales. He proposes “chosen wife” following the meaning of the root (*hâsu* to chose and take as wife). I selected a romantic translation (it could be a choice after one’s own heart) but it could have been a customary arranged marriage.

⁹² Restored with line 8 [munus[?].nita[?].dam[?]-šú[?]] ù dam^{meš}-šú d[umu^{meš}-šú ...]

or skin disease are more or less difficult to connect with this mental disorder. Finally, the presence of a broken heart in the context of pluri-painful diseases makes it necessary to consider that this broken heart corresponds sometimes to special painful symptomatology.

In clearly somatic contexts, heartbreak is reduced to its painful or depressive aspect (but also to both), and its background (terror, delirium, eating disorder) is not part of the clinical description. It is questionable if these mental disturbances are or not implied in it.

When it appears in what I called “rag-bag catalogues”, especially with its complete name, *huṣṣu hîpi libbi*, vice-like heartbreak, I propose that it is a “program name” involving several typical symptoms i.e. ruin complaints and delusions.

It is no surprise that in these complex contexts it is difficult to recognize the *hîp libbi* of everyday language.

6.4 Could incantations, prayers help to understand (*hûṣ*) *hîpi libbi*?

As mentioned in the preamble, incantations and prayers represent a special type of composition. They are part of the scribal repertory of knowledge. Quite often, the composition of the medical incantations (or prayers) seem to reflect the conceptions of the time about the ins and outs –“what”, “when”, “where” and “how”– of pathology. This must be handled with caution since the language of these texts differs from technical and from ordinary language. Nick Veldhuis (1999) analyses the “Poetry of Magic” and states that: “Magic language is usually distinguished from ordinary language.” Furthermore, as demonstrated by Geller (2007), the purpose of these medical incantations was to “illustrate the problem in some way easily understandable by the patient, without being too technical or complex” (p. 397).

However, there are also incantations using medical vocabulary. It is interesting to see how (vice-like) heartbreak was used in these texts. Even if we do not know who exactly composed them (Geller 2007: 393), it can be assumed that they fell under the field of ancient scholarship: scholars (*asûs* or not) composed them and used them for medical purposes. If we follow Mark Geller (2007) and Strahil Panayotov (2017) they were meant to impress and to convince the patient, and probably also the disease and the therapist, of the necessity and the efficacy of healing. For this purpose, the vocabulary used in them was a mixture of technical and everyday language in a poetic form. When incantations seem to describe “physio-pathological” aspects of diseases and to reveal the doctor’s conceptions of sickness, the use of poetic language, images, and metaphors, is not meant to give precise explanations but to convince all the parties of the physicians’ capacity to “defeat” the disease. This type of discourse, close to propaganda, may blur the reality of how they really understood diseases. Similarly the nursery-rhyme style incantations or ritornello are not intended to provide a “scientific” explanation of the sickness but to give a nice story easily understandable by the patient, the doctor, and maybe also, by the disease itself. The fact that I translated *nissatu* with “mal de vivre”, the title of a famous French song, was deliberate and indicates that poetry can reveal a lot, but is far from the scientific realities.

6.4.1 In prayers to Šamaš the sun god of justice.

– Text 8.2⁹³ presents a ritual intended to cure ailments caused by black magic. The clinical case has no symptom of interest for us, but the prayer quotes vice-like heartbreak.

In this prayer appealing to Šamaš’s omnipotence, the patient enumerates his hardship in the same way as the sufferer in *Ludlul*; he lists a series of troubles which are part of catalogues of “available types of mental distress”. Numerous diseases are listed, among which a cluster of mental disorders occupy a prominent place:

⁹³ Abusch/Schwemer 2011: 256-269: 57-61 and 72-77 transcription p. 259-260.

Text 8.2: 57-61 without letting up I have vice-like heartbreak (*hûš hîpi libbi*) terrible fear, dreadful fright, shivering (*gilit[*tu pi*]rittu hurbâšu artanaššû*), I am always gloomy (*âtanamdaru*), (and) terror stricken (*[apt]anallahu*), I keep on talking to myself (*itti libbîya addanabb[ubu]*), I have dreadful dreams (where I talk with⁹⁴ / meet⁹⁵) dead people (*[šu]nâte pardâte anaṭṭalu itti mîtûti [...]*...), my ominous signs are always strange (*idâtû'a ittanakkirû*)... torment constantly overwhelms my heart, I am always confused (*libbî êtanaššašu ittanadlahu*).⁹⁴

Afterwards, several physical complaints introduce another set of psychic disorders bound to nightmares, with sensations of depersonalisation and unreality:

Text 8.2: 72-77 the patient suffers personality problem with lack of control over his life: 'my heart, my intelligence, my understanding, the appearance of m[y] body becomes strange and deranged; I have no control over my own planning and thoughts' (*libbî milki [t]êmi šikin zumrîy[a it]tanakkirû u ištannû tē[m r]amânîya u [m]ilkîya lâ idû*), as well as pathological procrastination, slow-down behaviour and gloomy prostration: 'I linger on (in my disease), I am always grim, sombre (and) constantly overwhelmed' (*uzabbalu ê[tene]rrupu êteneṭṭû attanaktamu*).

This never-ending list of mental disturbances does not correspond to a real case or to a theoretical medical construction but to a purely stylistic composition. The redactor has multiplied the synonyms, the repetitions using a diversified vocabulary. This catalogue is based on (at least) two lists of mental troubles; vice-like heartbreak initiates the first one. It could correspond to the melancholy-disease. The second list depends on nightmares similar to hallucinations. It is noteworthy that the unreality feelings recall psychotic manifestations. It would be remarkable if the ancient physicians were able to distinguish two types of mental syndromes, the "anxious-depressive" ones and the "hallucinatory-psychotic" ones (as suggested by Kinnier-Wilson 1965)! But this text has more ambitious literary purposes than medical ones; as noted above, it is the same type of text as *Luldlul*. Like *Luldlul* it was a literary text composed artificially with the help of medical texts, without the help of real and tangible clinical observations. It was inserted in a natural way in the treatment of the consequences of black magic and divine anger.

– **Text 8.4**⁹⁵ Similarly *hîpi libbi* is found in a list of mental ailments in another prayer to Šamaš, the somatic ailments being listed in another prayer.

– **KAR 228** In this Neo-Assyrian prayer to Šamaš (from Aššur) the supplicant describes his unhappy fate:

'I am exhausted, sleepless, sad, mistreated, defeated (ruined)' (¹⁶*anhu dalpu nassu hablu šagšu*), he has the feeling of being excluded and despised: 'at home quarrel (and) in the street squabble' (¹⁹*ina bîti šaltu ina sūqi puhpuhû*), it is a worrying affliction: 'I am ill, day and night to worry is imposed to me' (²⁰*maršaku urra u mûša nazâqu* ²¹*šaknamma*) with the conclusion: 'vice-like heartbreak is tied to me and does not cease' (²¹*hûš hîpi libbi* = *hu-uš gaz lib-bi* ²²*ittiya raksuma lâ ippaṭṭaru*).

The same type of complaints: unhappiness, "ruin-delusional complaints" lead to the same conclusion as in the letters or the therapeutic clinical descriptions: *hûš hîpi libbi*.

6.4.2 In a prayer to Nabû the text 9.7⁹⁶ provides an interesting element. Tzvi Abusch and Daniel Schwemer point out that "The same version (D = LKA 40a) names *hûš hîpi libbi* 'depression' as the patient's illness instead of the more generic *maruštu* 'distress' of the other sources" (line 17, p. 344). May we deduce that since "(vice-like) heartbreak" alternates with generic "illness (nîg.gig)", heartbreak was a generic name of mental disease?

⁹⁴ It is meaningful that *ašâšu* and *dalâhu* conveying ideas of worry and confusion are coupled.

⁹⁵ Text 8.4 Abusch/Schwemer 2011: 297 tablet KAR 80 r 8 *hi-pi lib-bi*.

⁹⁶ Abusch / Schwemer 2016: 341-355.

6.4.3 Heartbreak is rarely found in lists of curses like in the namerimburruda incantation BM 50558 (edited by Geller, 1998: 131 iv 9):⁹⁷ several disparate somatic and mental ailments, including *hîp libbi*, are listed, but no connecting thread can be identified.

– ***In fine, no hesitation!*** Except for the last case, in the different incantations or prayers, (*hûš*) *hîp libbi* corresponds to a mental disorder. The ruin complaints connect it to melancholia disease.

6.5 In the second part of the Aššur Medical Catalogue⁹⁸

It is impossible to summarize the information derived from this important text listing tablets belonging to the arsenal of treatment methods. As seen in section 6.1, heartbreak is the main topic of several tablets, so it is not surprising to find it as a tablet incipit/title in this list.⁹⁹ It is particularly enlightening to find it linked with *antašubbû*-epilepsy, the falling sickness (there is a third illness lost in a break). Anyway, the association with seizure disorders has already been recorded (§6.2.4, 6.3.2, 6.3.4.3 and further on §6.6). It is noteworthy that the complementary cases introduced by *adi*, “including” (l. 93-98) begin with somatic problems. This could correspond to the “somatic” aspect of heartbreak which has been encountered several times (e.g. discussion in §6.1.4, §6.1.8) and is atypical. The terror (maybe describing a baby or a child crying out of night terror) is a salient symptom of mental diseases. The other *adi* included in the paragraph could be linked to the third unknown incipit.

Even if these three ailments come after paragraphs dedicated to evil powers, divine anger and oracles, which are the frequent causes of mental disorders, they deserve a paragraph of their own and are separated from the causal agents. Another particularity is that this section is followed by impotence which is often associated with heartbreak, as seen in several examples (e.g. §6.1.4, §6.3.4.1, §6.3.4.2, §6.3.5), to find it after *huššu gaz šà* is no surprise.

6.6 In an unclassifiable classification of diseases: the Uruk “taxonomy”.¹⁰⁰

The matching of psychological and “neurological” ailments is again found in a passage of an enigmatic late text –SpTU I 43– which relates several illnesses to organs. The first body part responsible for sickness is the heart, *libbu*.¹⁰¹

This text has been discussed by several scholars. Stol (1993: 26-27) highlights how this text links neurological and mental illnesses. He is sufficiently interested in these similarities to include heartbreak in his book dedicated to epilepsy. Worthington (2003: 3) discusses the signification of the origin of the disease of the head from the stomach, Geller (2014: 3-9) is particularly attentive to the theoretical bases of the relation between organ and diseases. Interestingly he compares this text with BAM 212 which enumerates organ’s diseases from head to toe. He emphasises the fact “that certain inherent factors or properties of these four organs can create conditions which cause disease” and questions the identification of the “four” based on Galen’s classification (2014: 24-25). Steinert (2016: 230-242) explains what type of rationale allowed these associations to four body parts. The illnesses associated with the heart are the painful heartbreak and different types of convulsive syndromes. Steinert

⁹⁷ Reference courtesy Marten Stol.

⁹⁸ For a complete study of this Neo-Assyrian text and the history of its reconstruction see BAM 9 (2018).

⁹⁹ Steinert, Panayotov, Geller, Schmidtchen, Johnson 2018: 216, lines 91-98. See Steinert’s comments about *hûš hîpi libbi* lit. “tenseness (and) heartbreak” p. 258-259. Her analysis differs from mine: she considers that the expression is a hendiadys corresponding to two painful feelings when I believe that the expression is the same type of metaphor for pain as our modern “douleur en étau”.

¹⁰⁰ I borrow this appellation (including the quotation marks) to Geller (2014).

¹⁰¹ *libbu*: ¹ *ultu libbi hîp libbi* from the heart: heart-break ² *ki.min miqtu* (an.ta.šub.ba) ditto seizure ³ *ki.min qât ili* (šu dingir.ra) ditto hand of the god ⁴ *ki.min qât ištari* (šu dⁱⁿⁿⁱⁿ dⁱⁿⁿⁱⁿ) ditto hand of goddess ⁵ *ki.min be[n]nu* ditto epilepsy ⁶ *ki.min d^{lug}[al].«ùr».[r]a* ditto Lord-of-the-roof-epilepsy (Hunger 1976: 50-51, Geller 2014: 3).

(2016: 222), further, points out that the four body parts responsible for several diseases are well-delimited organs and so *libbu* is not a vague denomination of inside organs. It is because *libbu*, the heart, the “Seelen-Organ” (“soul-organ”) is responsible for the mood and of its pathology that it is associated with *hîp libbi*.

We must admit that it is not a philological etiology: the presence of *libbu* in the name of a malady is not crucial for the association of this ailment with the organ designated as responsible for the pathologies. E.g. (line 26) *nîš libbi* (šà.zi.ga) comes from the kidneys (which is clever: they understood that the kidneys were part of the genito-urinary system) and not from the heart (or the digestive tract).

The text is from the Seleucid period, but the fact that already symptoms of convulsion and mental disorder were mixed in older texts is relevant. As Marten Stol states: “This (heartbreak) is naturally a disease of the ‘heart’ according to its name, but there are more texts that group it together with the epilepsies” (1993: 27).

For our purpose, in this article, the main information is that in Seleucid time *hîp libbi* was a disease, i.e. a clinical diagnosis, related to convulsive ailments.

6.7 To summarize

The expression *hîp libbi*, found in everyday life documents, corresponds to an upsetting mental distress –worry, annoyance– more or less serious, often tied to fear and to ruin complaints.

When used in medical documents, its meaning develops into mental illness with a painful feeling in the chest. Heartbreak-disease is different from the abnormal mental manifestations studied previously in this article: several tablets are dedicated to this disease and, it frequently appears as the core ailment of clinical pictures. It is a painful sensation experienced in the “soul” (the “*libbu*”) and in the body, in the chest. It is associated with “ruin complaints” real or delusional, fear, and with weird speeches. But it may also occur in completely different somatic contexts. This contrast is not so inconceivable. Recent research demonstrates that mental pain and physical pain have the same physiological and anatomical origin in the brain and are experienced in the same way.

The ancient physicians and scholars described this distress in clinical pictures often attributed to the anger of the personal god. It was also part of clinical pictures attributed to malevolence (of a witch or an enemy). It was on the same level as neurological ailments, in particular, seizure ailments due to the *libbu*, the heart understood as the organ of mood and feelings. The very clever association of mental disorder and convulsion ailment shows the analytical capabilities of these ancient doctors. Without having any knowledge of what could be a neurological pathology they selected disorders of this type and connected them with mental troubles. They were excellent observers of the body and of the psychological signs; it seems that their conclusions were not so much blurred by prejudice or by preconceived theories. This observation has been stressed by JoAnn Scurlock in 2004 in her article: “From Esagil-kīn-apli to Hippocrates”. We should not reduce their observations to mere old wives’ tales full of magic and superstitions and judge their observations with condescension.¹⁰²

¹⁰² If I may venture a comparison with a “recent” (1751) medical description of melancholy, it is interesting to read the article dedicated to it in Diderot and d’Alembert Encyclopedia. Saint-Lambert et Jaucourt (1751: 307-311) describe a multiform entity not so different from the Mesopotamian *hûš hîpi libbi*: see the clinical picture, the descriptions of delirium (“Ce délire est joint le plus souvent à une tristesse insurmontable, à une humeur sombre, à la misanthropie, à un penchant décidé pour la solitude, on peut en compter autant de sortes qu’il y a des personnes qui en sont attaquées ... on peut rapporter à la *mélancholie*, la nostralgie ou maladie du pays, le fanatisme & les prétendus possessions du démon. Les mélancholiques sont ordinairement tristes, pensifs, rêveurs, inquiets, constans dans l’étude & la méditation, patients du froid & de la faim ; ils ont le visage austere, le sourcil froncé, le teint basané, brun, le ventre constipé”) and the supposed causes of this mental disease (“les chagrins, les peines d’esprit, les passions, & sur-tout l’amour & l’appétit vénérien non satisfait ; les craintes

Several types of treatments are dedicated to curing or preventing its occurrence: liquid or solid preparations to be drunk or swallowed, fumigations, oily ointments, bath, bags containing medicinal ingredients and stone amulets. Often these treatments are similar to those prescribed for internal diseases. Ointments could have a soothing effect on the anxious side of the affection but were probably intended to erase the action of evil oil. The mechanism of action of amulet-bags is mysterious and does not provide any indication of the mechanism of the illness. What is surprising is the absence of “magical” treatment –incantations or rituals– specifically dedicated to this illness. Interestingly in the so-called magical texts, (*hûs*) *hîp libbi* belongs to the mental disorders field. It seems that the painful aspect of the heartbreak was not quoted in these types of texts.

It is, with these characteristics, a coherent entity, provoked by similar causes. It is justified to think that the ancient doctors identified a cluster of signs leading to this clinical diagnosis comparable to psychiatric melancholia. I tried to demonstrate that the complaints of ruin and the nonsense foolish talks belonged to the field of delusion and were recognized as insane but it is not totally and always certain. The fact that “ruin complaints” could correspond to real misfortunes or to delusion does not challenge this conclusion. In the “preamble” I warned against the difference of conceptions of disease and symptoms/clinical signs of the Mesopotamian physicians. In the same way, as it is difficult for a modern physician to discriminate between somatic and psychogenic chest pain, they might have considered that real or delusional “ruin complaints” were similar, and may result in the same type of mental suffering, and thus have the same meaning, the same conclusions, and the same treatments. More difficult to admit, for our “modern logic”, is the description of a medical entity linked to malevolence, but with a clinical picture far away from that of melancholy. I may venture that the initial concept, found in letters, of mental suffering, evolved and that the pain feelings gained importance and thus, heartbreak found another clinical field.

I follow Gilles Buisson: (*hûs*) *hîp libbi* was a real mental disease and a clinical diagnosis. Sometimes, when it appears inside a clinical description or in rag-bag catalogues, it seems to be a simple symptom: it could just be reduced to a psychogenic pain or be a symbol of ruin complaints. We can then assume that a clinical diagnosis could be reduced to one of its characteristic symptoms and used, thus shortened, in varied contexts. This could explain why we have so many difficulties to identify coherent pathological entities. A clinical diagnosis could “vivre sa vie” in manifold directions.

7 – Conclusions

The study of the vocabulary dedicated to mental disorders, mild or severe, allows a relatively unbiased approach to Mesopotamian medicine without the help of the knowledge provided by modern technology. Our understanding, as well as that of Mesopotamian doctors’, of psychic pathologies, is mostly based on interrogation of the patient, or of his entourage. The doctor has to examine the patient by himself. Even if, sometimes, the modern physician needs complementary technical explorations to eliminate a differential diagnosis (e.g. neurological or cardio-vascular problems), in this field, modern and ancient doctors are more or less on an equal footing. So what are the results of this investigation?

The comparison between the use of words or expressions dedicated to mental disability in everyday language and in scientific language shows that they gain a specialized meaning in the technical texts. These expressions could correspond to a clinical diagnosis with specific symptoms or to a mental symptom with some significant value for the physicians. In the

vives & continuelles manquent rarement de la produire : les impressions trop fortes que font certains prédicateurs trop outrés ... Les dérangemens qui arrivent dans le foie, la rate, la matrice, les voies hémorroïdales donnent souvent lieu à la *mélancholie*. Le long usage d’alimens austères ..., les débauches, le commerce immodéré avec les femmes ... quelques poisons lents”.

everyday language, they were used in a larger field with a vaguer meaning, with probably more flexibility than in the technical texts.

Sometimes special expressions or words were used specifically in the medical texts e.g. *ašuštu* or *hûš hîpi libbi*. It must be noted that certain expressions had different significations according to the context (customary language, prayers or medico-technical texts) e.g. *muruş libbi*. It is also possible (if the system of the verbs in the medical texts is relevant) that doctors believed that pains (and maybe other symptoms) were produced by the body-parts, this medical theory is different from what is found in the everyday language of the Old-Babylonian letters.

This overview showed the diversity of ways to name the feelings of sorrow, anxiety, and distress in the medical corpus. The significant number of “psychiatric” medical texts and the variety of treatments dedicated to mental disorders is relevant. It is notably astonishing to have so many words for all sorts of fears. In the same way, the variety of technical terms for mental distress found in the “literary and everyday” corpus is amazing and reflects the interest of the scholars and of the ancient society for mental disorders. It is questionable if this society and its culture were an ideal seedbed for developing anxious and depressive disorders (one should note especially the notion of “where there is smoke there is fire”, i.e. if you are unfortunate you just deserve it, you are guilty). Marten Stol’s pessimistic remark (1999: 68) is significant: “Illness is a stigma transposing a person into the realm of social death”. Notably, this type of technical vocabulary does not reflect a distance between the scholars and their public. The vocabulary of the scholars and their “audience” overlaps. And the specialised medical vocabulary concerning mental distress was understood by medical practitioners, scholars and educated “ordinary people”. Since knowledge of the scribal art was highly respected, it is also possible that the use of technical vocabulary gave more credibility to the specialists’ argumentations.

The scholars likely kept in mind the technical and scientific meaning of the medical vocabulary when they wrote a letter or a literary text; but in several situations, it is possible to state that (as one would expect *a priori*) there is more freedom in the everyday language than in the technical medical expressions. As I stated earlier, there is a to-and-fro movement between every day and medical language. Each one enables the signification to evolve and allows its concept to extend.

I cannot give definitive answers to all my questions about symptoms and clinical diagnosis, just hints. The border between symptom and disease, mental and somatic illness, real ruin and ruin delirium, and finally between madness and reason remains blurred.¹⁰³ To get to the point of wondering about the reality of the ruin symptoms and not being able to affirm without hesitation whether the medical complaints in BAM 234 (and other texts) are real or delusional shows to what extent we are left unsatisfied. But what is the situation nowadays? If a person faces a painful situation, grief, adversity (illness, loss of money, etc. just like in our letters), and if this burden is too difficult to bear, modern physicians can help him with different types of treatments –including psychotropic drugs!

In the same vein, no decisive light has been shed on the notion of mental disease *versus* mental symptom. It is difficult to discriminate symptoms from disease, even when trying to classify according to their rank of occurrence in the clinical descriptions. This difficulty, which was anticipated in the introduction, has been confirmed in my survey. I would like to

¹⁰³ The same harsh facts are one of the subjects of a recent article: “the reliability of DSM-IV is satisfactory for severe pathologies whereas it is mediocre for others. Besides, its validity is weak since most patients suffer from a combination of mental health disorders supposedly distinct and the supposed distinct limit between normal and pathological has proven to be very inaccurate in clinical practice. This lack of scientificity merely reflects our ignorance regarding mental disorders,” (Gonon 2013).

believe that the fact that modern psychiatry encounters the same type of difficulty since progress in this field is challenging.¹⁰⁴

This survey has led to clues indicating that mental and somatic disorders overlapped, and, that this was dependent on the body conceptions of these times. It goes hand in hand with the statement that disease, and especially mental disease, has a culturally linked signification.¹⁰⁵ Anyway, mental and somatic suffering is tied up in the brain by modern physiological arguments. The couple pain–insecurity/anxiety is meaningful and important to investigate since in some pathologies like thoracic or abdominal pain, an anxiogenic aspect of the pain orientates the diagnosis. We may wonder whether the ancient healers detected this relation and were guided by it in their perception of mental pain so that they proposed treatments for these mental disorders that are typical for internal diseases.

This interaction between the body parts and the sphere of feelings and consequently the mental disturbance is also due to the fact that the body parts are in some way responsible for their own disability. As stated previously, several times, in the medical texts a body part is said to provoke symptoms: e.g. the *libbu* provokes heartbreak and foolish talk (see text 7.7/KAR 92: 1-2) §6.1.4, BAM 316 iii 20, 23-24 §5.3 and §6.1.2). And the Uruk taxonomy (§6.6) could be a late witness of this conception of the role of the body in the occurrence of ailments.

One of the topics of this study was the “positive” clinical diagnosis. A useful definition is given by Frederic Dubas.¹⁰⁶ This professor of neurology describes how maladies were named in the past and nowadays, he explains how scientific progress has changed the methods of naming disease. He states:

En pratique, on continue de dire la plupart des maladies comme elles ont été décrites et considérées en tant qu’entités cliniques, parce que constituées de signes cliniques et d’éléments de biologie et d’imagerie *régulièrement associés* formant les *critères d’ensembles clinico-biologiques cohérents* que sont les maladies. C’est de ces ensembles globalement stables, ou phénotypes, dont le médecin clinicien a besoin, pour classer, ce afin d’identifier une maladie et de la traiter.

As mentioned in the preamble, and as Bácskay (2009) states “It has been obvious for a long time that the so-called symptom descriptions in the source groups of Mesopotamian medicine (particularly in prescriptions of therapeutic and diagnostical/prognostic texts) cannot be exclusively applied to specific diseases, as the same symptoms appear in connection with a variety of illnesses, and symptom descriptions relating to individual diseases can be very varied.” Moreover, it is difficult to understand what the medical purpose of naming a disease was for the Mesopotamian physicians. As Dubas states: “L’essai de réponse à la question ‘comment se disent les maladies’ est donc indissociable de ‘quand’ et ‘par qui’ elles sont dites

¹⁰⁴ An article about the history of anxiety by Marc-Antoine Crocq (2015) shows the difficulty of defining mental illnesses linked to anxiety. Even the recent recensions vary in their descriptions. Interestingly Crocq interprets Job’s complaint resembling heartbreak sensation as anguish: “the same relationship between the idea of narrowness and anxiety is attested in Biblical Hebrew. In fact, Job expresses his anguish (Job 7:10) literally with the Hebrew expression “the narrowness (tsar) of my spirit.” (2015: 321)

¹⁰⁵ In this perspective it is important to place all these mental diseases in the context of concepts linked to the body in this civilisation. Ulrike Steinert in her book “*Aspekte des Menschseins im Alten Mesopotamien*” (2012) conclusion (p. 511-534) states that in this civilisation there was no real separation or opposition between the physical body and an immaterial body comprising soul, spirit, emotions. It is then not surprising to find emotions or mental disturbances depending on anatomic localisations: “In der Vorstellung der Babylonier und Assyrer bestand demnach kein Dualismus zwischen Leib und Seele, Körper und Geist, denn nicht nur das Leibesinnere / Herz bildete den Sitz von Empfindungen und Bewußtsein, sondern auch der Körper als Ganzes.” (p. 513). See also her comments p. 233-4 with the note 10 on (*hūš*) *hipi libbi*.

¹⁰⁶ This article (“Comment se disent les maladies?”) is the result of a communication given during a colloquium in Nantes, 2011, entitled: “La santé, quel travail!?” (<http://www.msh.univ-nantes.fr/>).

et conduit à ‘pourquoi’ et ‘pour qui’ elles le sont (ou ne le sont pas).” For us a medical diagnosis means that the disease has been categorized so that the physician can choose the treatment: e.g. the treatment for a red eye is different if it is due to trauma, haemorrhage or infection (etc.). We do not find the same approach in the Mesopotamian ancient texts: the doctors choose the drugs or the magical material in order to alleviate the symptoms (e.g. the redness of the eyes or, even more confusing, a sick eye) and, eventually, to chase away the cause of the disease, but there is no specific treatment for a named eye disease.¹⁰⁷ Must we conclude that it was unnecessary to make a clinical diagnosis in order to treat the eyes? In the same spirit, there is a Middle Hittite text with a prescription for a disease (probably a skin ailment) that has no name.¹⁰⁸ It seems that it was meaningful for the physician if a disease had no name but it was no problem for prescribing treatment.¹⁰⁹ Mark Geller in *Melothesia* (2014: 21) recalls how “Galen criticizes Methodists for failing to distinguish between a disease and disease-symptom” and that he could have in the same way criticized the Mesopotamian doctors for “being confused in their terminology”. Galen would have been disconcerted to find that it lasted until recent times.¹¹⁰ Troels Arbøll (2018: 279) wonders why the same treatments were used for two different illnesses, he proposes: “Possibly it was of little importance whether an illness was diagnosed as *maškadu* or *sagallu* as long as the clinical signs were related to both illnesses and could be relieved with the right treatment”. In this study, I proposed that for (*hûš*) *hîp libbi* there were no specific drugs or way of administration because their targets were the different symptoms constituting the disease and not the disease itself with all its components.

Perhaps the medical diagnoses were connected with the body parts affected and this guided the choice of the methods of drug administration. This would mean that these diagnoses implied a theory of how, and above all where, the diseases damaged the healthy body. But this is a subject for another study.

Another hypothesis, suggested by Gilles Buisson, is that the diseases, once named, were classified and this helped to connect them to the deity responsible for their occurrence. This is based on the fact that in SA.GIG 33 (Heeßel 2000: 357-358, l. 103-123) the diagnoses are correlated with deities’ names. But it is a real challenge to understand how and why a deity was viewed as responsible for a disease. There is only, as stated before, a “family resemblance” in the clinical descriptions linked to a supernatural cause. And so, the relationship between clinical diagnosis and etiological diagnosis not being reproducible, this relationship is problematic.

Maybe the last word must be left to Dubas, the purpose of the clinical diagnosis and the naming of a malady is: “nommer pour classer, classer pour identifier, identifier pour soigner et si possible guérir”. It was similar in these old days. Doctors were looking for medical signs

¹⁰⁷ As a matter of fact the eye illnesses do not deserve any clinical diagnosis, the treatments are mostly symptomatic, the only mentions looking like a disease name concern a skin disease present on the eyelids *kiššatu* (BAM 22 r 13 and parallels), or etiological diagnoses corresponding to a certain type of abnormal visual perceptions e.g. in BAM 516 i 2, i 9, i 43’ šu.gidim.ma, hand-of-a-ghost disease. A special diminution of eyesight deserves a clinical diagnosis “Sîn-lurmâ” in BAM 516 ii 30’-32’, iii 1, but the presence of the moon god in the name makes it look like an etiological disease name.

¹⁰⁸ Weidner 1922, KUB 4, 62: 4- r.3 ⁴*ana* gig *ša ni-ba* nu tuk pa ^{gis}mi.par₇ [...] ²a.gar.gar maš.dà numun ki.dim [...] ¹téš.bi *ta-sàk ina* i.giš he.[he ...] (the following lines are badly broken) “for a nameless sore/disease: leaves of the *lipâru*-tree..., gazelle dung, seeds of *qutru*-plant ..., you pound together [these plants] mix them in oil [...]”. My thanks to Gilles Buisson who helped me to get rid of the “puzzling” *mahiš* of CAD N/2 205a.

¹⁰⁹ Cf. the first three lines of the incantation K 6057+(unpub.) i 1-3 (I give Stadhouders’ transcription and translation 2018: 166 note 19): ÉN *simmū ma’dū šumīšunu ul īdī²miqtū ma’dū nībašunu ul īdī²[sim]mū ma’dū ittašunu ul īdī* “Incantation: diseases are many, I do not know their names; afflictions are many, I do not know their designation; [disea]ses are many, I do not know their identity.”

¹¹⁰ The article of Jean-Joseph Menuret “jaunisse” in the famous Encyclopedia created by Denis Diderot and Jean le Rond d’Alembert is edifying (1766: 1751-1772).

allowing them to classify clinical forms. When these clinical cases were atypical or unusual they tried to find signs guiding the diagnosis: the methodology was good and it is significative or comforting to find typical “medical” reasoning.

The notion of clinical diagnosis is supported by the use of technical ready-made, stereotypical expressions often based on metaphors. I was surprised to state, even if it is a naïve observation, that the ancient Mesopotamian metaphors seem so similar to ours. The “sick heart” of the mourning person has a modern equivalent of a suffering or wounded heart. The šà.gig “heart-belly-disease of the medical texts is found in a French expression for nausea “avoir mal au cœur” or in English “to be sick in one’s stomach”, and *libbu šapil* is comparable to “happy is up, sad is down” or “avoir le moral au plus bas”. The broken, crushed or tight heart is part of our familiar language in French “cœur brisé ou serré”, English “heartbreak”, German “Herzschmerz”, Italian “crepacuore”, etc. The relation between anxiety, worrying feelings and, abdominal or cardiological pathologies are as up to date as they were in the past. Modern medical students learn how to differentiate anxious pain in the chest from a heart attack as it is not obvious at first sight. And the new “fashion” is to tie mental distress to the enteric nervous system or the intestinal microbiota. All these similarities are comforting and at the same time quite common, but, it can also be a real “miroir aux alouettes”, a luring trap, with its narcissistic risk of recognizing ourselves too much in the mirror and allowing to project our own fears instead of identifying the ancient Mesopotamians’ frights. But, despite these warning points of caution, it is important to take into account these similarities when we try to understand Mesopotamian doctors’ system of thought or beliefs.

Bibliography¹¹¹

- Abusch T. 1989.** The Demonic Image of the Witch in Standard Babylonian Literature: The Reworking of Popular Conceptions by Learned Exorcists, in J. Neusner *et al* (eds.), *Religion, Science, and Magic in Concert and in Conflict*, New York: Oxford University Press, 27-60.
- Abusch T. 1999.** Witchcraft and the Anger of the Personal God, in T. Abusch, K. van der Toorn (eds.), *Mesopotamian Magic. Textual, Historical, and Interpretative Perspectives*, Groningen: Styx Publications, 81-121.
- Abusch T. 2002.** *Mesopotamian Witchcraft: Towards a History and Understanding of Babylonian Beliefs and Literature*, Ancient Magic Divination 5, Leiden/Boston/Köln: Brill-Styx.
- Abusch T. 2008.** “The Witch’s Messages: Witchcraft, Omen, and Voodoo-death”, in R.J. van der Spek *et al.* (eds.), *Ancient Mesopotamia. Studies in Ancient Near Eastern World View and Society, presented to Marten Stol on the occasion of his 65th Birthday, 10 November 2005, and from his retirement from the Vrije Universiteit Amsterdam*, Bethesda, Maryland: CDL press, 53-68.
- Abusch T., Schwemer D. 2011.** *Corpus of Mesopotamian Anti-Witchcraft Rituals 1*, Ancient Magic Divination 8/1, Leiden/Boston: Brill.
- Abusch T., Schwemer D. 2016.** *Corpus of Mesopotamian Anti-Witchcraft Rituals 2*, Ancient Magic Divination 8/2, Leiden/Boston: Brill.
- Adamson P. B. 1993.** “An assessment of some akkadian medical terms”, *RA* 87, 153-159.
- Al-Rashid M. 2014.** “A Note on the Meaning of Ḫūšu and Ḫuṣṣu”, *Cuneiform Digital Library Notes* 7. <http://cdli.ucla.edu/pubs/cdlm/php/single.php?id=000034>. [Accessed April 2017].
- Arbøll T.P. 2018.** “Tracing Mesopotamian Medical Knowledge: A Study of *maškadu* and Related Illnesses”, in D. Schwemer *et al.* (eds.), *The Sources of Evil: Complexity and Systematization, Differentiation and Interdependency in Mesopotamian Exorcistic Lore*, Ancient Magic Divination 15, Leiden/Boston: Brill, 261-284

¹¹¹Abbreviations follow the *Chicago Assyrian Dictionary* (volume 20, U and W, 2010), with the exception of SpTU for *Spätbabylonische Texte aus Uruk* (cf. Hunger 1976, von Weiher 1983).

- Attia A. 2000.** “A propos de la signification de šer’ānu dans les textes médicaux mésopotamiens : une question d’anatomie”, *Histoire des sciences médicales* 34, 47-56.
- Attia A. 2015.** “Traduction et commentaires des trois premières tablettes de la série IGI”. *JMC* 25.
- Attia A., Buisson G. 2004.** “Du bon usage des médecins en assyriologie”, *JMC* 4, 9-15.
- Attia A., Buisson G. 2012.** “BAM 1 et consorts en transcription”, *JMC* 19, 22-51.
- Bácskay A. 2009.** “Illness or Symptom? Some Remarks on the Terminology of Mesopotamian Medical Texts”, *Acta Antiqua Academiae Scientiarum Hungaricae* 49, 269-280.
- Bácskay A. 2015.** “Magical-medical prescriptions against fever: an edition of BM 42272”, *JMC* 26, 1-27.
- Bácskay A. 2018.** *Therapeutic Prescriptions against Fever in Ancient Mesopotamia*, AOAT 447, Münster: Ugarit-Verlag.
- Biggs R. D. 1967.** *ŠA.ZI.GA. Ancient Mesopotamian Potency Incantations*, TCS 2, Locust Valley, NY: J.J. Augustin.
- Biggs R. D. 1974.** “A Babylonian Extispicy Text concerning Holes”, *JNES* 33, 351-356.
- Birot M. 1974.** *Lettres de Yaqqim-Addu, gouverneur de Sagarâtum*, ARM 14, Paris: Librairie Orientaliste Paul Geuthner.publisher
- Böck B. 2000.** *Die babylonisch-assyrische Morphoskopie*, AfO Beih. 27, Wien: Institut für Orientalistik der Universität.
- Böck B. 2014.** *The Healing Goddess Gula, Towards an Understanding of Ancient Babylonian Medicine*. Culture and History of the Ancient Near East 67. Leiden/Boston: Brill.
- Boyd J. L. III 1983.** “Ḫuṣṣum, ‘to anger, harass, irritate, trouble’, in TCL VII 58:15”, *Or. NS* 52, 246-247.
- Buisson G. 2016.** “À la recherche de la mélancolie en Mésopotamie ancienne”, *JMC* 28, 1-54.
- Cadelli D. S. 2000.** *Recherche sur la Médecine Mésopotamienne. La Série šumma amêlu suâlam maruṣ*, PhD thesis, Université de Paris I Panthéon Sorbonne/Université de Genève, unpublished.
- Cadelli D. S. 2018.** “Les parties du corps dans la série šumma amêlu suâlam maruṣ”, *JMC* 31, 2-25.
- Chalendar V. 2013.** “Un aperçu de la neuropsychiatrie assyrienne. Une édition du texte BAM III-202”, *JMC* 21, 1-60.
- Campbell Thompson R. 1923.** *Assyrian medical texts from the originals in the British Museum*, Humphrey Milford: Oxford University Press.
- Charpin D. 1992.** “Les malheurs d’un scribe, ou de l’inutilité du sumérien loin de Nippur”, in M. de J. Ellis (ed.), *Nippur at the Centennial. Papers read at the 35e Rencontre Assyriologique Internationale, Philadelphia 1988*, Occasional Publications of the Samuel Noah Kramer Fund 14, Philadelphia: The Samuel Noah Kramer Fund/The University of Pennsylvania Museum, 7-27.
- Charpin D. 2013.** “‘Garde ma lettre en témoignage’. Le rôle de la correspondance dans le système juridique mésopotamien de la première moitié du deuxième millénaire av. n. è. ”, in U. Yiftach-Firanko (ed.), *The Letter: Law, State, Society and the Epistolary Format in the Ancient World. Proceedings of a Colloquium held at the American Academy in Rome 28-30.9.2008*. Legal Documents in Ancient Societies 1, 45-60.
- Clair J. (dir.) 2005.** *Mélancolie. Génie et folie en Occident*. Grand Palais, Paris, 13 octobre 2005-16 janvier 2006, Paris: Gallimard/Réunion des Musées nationaux.
- Clay A. T. 1923.** *Hymns, Omens and Other Texts*, BRM 4, New Haven: Yale University Press.
- Crocq M.-A. 2015.** “A history of anxiety: from Hippocrates to DSM”, *Dialogues in Clinical Neuroscience* 17/3, 319-325.
- Dhorme É. 1963.** *L’emploi métaphorique des noms de parties du corps en hébreu et en akkadien*, Paris: Lecoivre/Gabalda.
- Dietrich M. 2003.** *The Neo-Babylonian Correspondence of Sargon and Sennacherib*, SAA 17, Helsinki: Helsinki University Press.
- Dougherty R. P. 1933.** *Archives from Erech: Neo-Babylonian and Persian Periods*, Goucher College Cuneiform Inscriptions 2, New Haven: Yale University Press/ London: H. Milford, Oxford University Press. [Reprint 1980, New York: AMS Press].
- Durand J.-M. 1988.** “Maladies et médecins”, in J.-M. Durand (ed.), *Archives épistolaires de Mari I/1*, ARM 26/1, Paris: Recherche sur les civilisations, 543-584.

- Durand J.-M. 1997.** *Les documents épistolaires du palais de Mari, tome I*, Littérature Ancienne du Proche-Orient 16, Paris: Éditions du Cerf.
- Durand J.-M. 1998.** *Les documents épistolaires du palais de Mari, tome II*, Littérature Ancienne du Proche-Orient 17, Paris: Éditions du Cerf.
- Durand J.-M. 2000.** *Les documents épistolaires du palais de Mari, tome III*, Littérature Ancienne du Proche-Orient 18, Paris: Éditions du Cerf.
- Ebeling E. 1919.** *Keilschrifttexte aus Assur religiösen Inhalts, Band I*, Wissenschaftliche Veröffentlichungen der Deutschen Orient-Gesellschaft 28, Leipzig: J. C. Hinrichs'sche Buchhandlung.
- Ebeling E. 1923.** *Keilschrifttexte aus Assur religiösen Inhalts, Band II*, Wissenschaftliche Veröffentlichungen der Deutschen Orient-Gesellschaft 34, Leipzig: J. C. Hinrichs'sche Buchhandlung.
- Ebeling E. 1953.** *Litterarische Keilschrifttexte aus Assur*, Berlin: Akademie-Verlag.
- Ebeling E. 1955.** "Ein neuassyrisches Beschwörungsritual gegen Bann und Tod", *ZA* 51, 167-179.
- Farber W. 1977.** *Beschwörungsrituale an Ištar und Dumuzi*, Wiesbaden: Franz Steiner.
- Finkel, I. L. 2000.** "On Late Babylonian Medical Training", in A.R. George, I.L. Finkel (eds), *Wisdom, Gods and Literature. Studies in Assyriology in Honour of W. G. Lambert*, Winona Lake: Eisenbrauns, 137-223.
- Frahm E. 2011.** *Babylonian and Assyrian Text Commentaries: Origins of Interpretation*, Guides to the Mesopotamian Textual Record 5, Münster: Ugarit-Verlag.
- Gaillard R., Lôo H., Olié J.-P. 2010.** "Douleur psychique : un symptôme ?", *Bulletin de l'Académie Nationale Médecine* 194, n°3, 567-581.
- Geller M. J. 2005.** *Renal and Rectal Disease Texts*, BAM 7, Berlin/New York: Walter de Gruyter.
- Geller M. J. 1988.** "New Duplicates to SBTU II", *AfO* 35, 21-22.
- Geller M. J. 1998.** "An Incantation against Curses", in S.M. Maul (ed.), *Festschrift für Rylke Borger zu seinem 65. Geburtstag am 24. Mai 1994, tikip santakki mala bašmu...*, Cuneiform Monographs 10, Groningen: Styx, 127-140.
- Geller M. J. 2004a.** "West Meets East: Early Greek and Babylonian Diagnosis", in H.F.R. Horstmannshoff, M. Stol (eds), *Magic and Rationality in ancient Near Eastern and Graeco-Roman Medicine*, Studies in Ancient Medicine 27. Leiden/Boston: Brill, 11-61.
- Geller M. J. 2004b.** "Anus and Kidneys", *JMC* 4, 1-7.
- Geller M. J. 2007a.** "Incantations within Akkadian Medical Texts", in G. Leick (ed.), *The Babylonian World*, New York: The Routledge World, 389-399.
- Geller M. J. 2007b.** "Comment et de quelle façon les praticiens gagnaient-ils leur vie ?", *JMC* 10, 34-41.
- Geller M. J. 2010a.** *Ancient Babylonian Medicine: Theory and Practice*, Chichester: Wiley-Blackwell.
- Geller M. J. 2010b.** *Look to the Stars: Babylonian Medicine, Magic, Astrology and Melothesia*, Pre-Print, Max-Planck-Institut für Wissenschaftsgeschichte.
- Geller M. J. 2010c.** "Skin Disease and the Doctor", *JMC* 15, 40-56.
- Geller M. J. 2014.** *Melothesia in Babylonia. Medicine, Magic, and Astrology in the Ancient Near East*, Science, Technology, and Medicine in Ancient Cultures 2, Boston/Berlin/Munich: Walter De Gruyter.
- Geller M. J. 2017.** "Some remarks on Babylonian Pharmacology", in L. von Lennart, M. Martelli (eds.), *Collecting Recipes: Byzantine and Jewish Pharmacology in Dialogue*, Boston/Berlin: Walter de Gruyter: 31-34
- Genty T. 2010.** "Les commentaires à TDP 3-40: Première Partie", *JMC* 16, 1-38.
- Giusfredi F. 2012.** "The Akkadian Medical text KUB 37.1", *AoF* 39/1, 49-63.
- Giralt S. 2017.** "The melancholy and necromancer in Arnau de Vilanova's Epistle against Demonic Magic", in S. Bhayro, C. Rider (eds.), *Demons and Illness Theory and Practice from Antiquity to the Early Modern Period*, Leiden/Boston: Brill, 271-290.
- Gonon F. 2013.** "Quel avenir pour les classifications des maladies mentales ? Une synthèse des critiques anglo-saxonnes les plus récentes", *L'information psychiatrique* 89, 285-294.

- Goodnick Westenholz J. 1987.** "A Forgotten Love Song", in F. Rochberg-Halton (ed), *Language, Literature, and History: Philological and Historical Studies Presented to E. Reiner*, AOS 67, New Heaven, Connecticut: American Oriental Society, 415-425.
- Goodnick Westenholz J. 2010.** "The Tale of Two Little Organs: the Spleen and the Pancreas", *JMC* 15, 2-24.
- Goodnick Westenholz J., Sigrist M. 2006.** "The Brain, the Marrow and the Seat of Cognition in Mesopotamian Tradition", *JMC* 7, 1-10.
- Goodnick Westenholz J., Sigrist M. 2008.** "The Measure of Man: The Lexical Series Ugu-mu", in R.D. Biggs, J. Myers, and M.T. Roth (eds), *Proceedings of the 51st Rencontre Assyriologique Internationale, Held at the Oriental Institute of the University of Chicago, July 18–22, 2005*, Studies in Ancient Oriental Civilization 62, Chicago: The Oriental Institute of the University of Chicago, 221-232.
- Guarrigue U. 2004.** "Sur la mélancolie dans l'art", *Sociétés* 86, 79-84.
- Gurney O. R., Finkelstein J. J. 1957.** *The Sultantepe Tablets I*, Occasional Publications of the British Institute of Archaeology at Ankara 3, London: The British Institute of Archaeology at Ankara.
- Gurney O. R., Hulin P. 1964.** *The Sultantepe Tablets II*, Occasional Publications of the British Institute of Archaeology at Ankara 7, London: The British Institute of Archaeology at Ankara.
- Heeßel N. P. 2000.** *Babylonisch-assyrische Diagnostik*, AOAT 43, Münster: Ugarit-Verlag.
- Heeßel N. P. 2004.** "Reading and Interpreting Medical Cuneiform Texts - Methods and Problems", *JMC* 3, 2-9.
- Hunger H. 1976.** *Spätbabylonische Texte aus Uruk I*, Ausgrabungen der Deutschen Forschungsgemeinschaft in Uruk-Warka 9, Berlin: Gebr. Mann.
- Hunger H. 1992.** *Astrological Reports to Assyrian Kings*, SAA 8, Helsinki: Helsinki University Press.
- Jaques M. 2006.** *Le vocabulaire des sentiments dans les textes sumériens : recherche sur le lexique sumérien et akkadien*, AOAT 332, Münster: Ugarit-Verlag.
- Jastrow M. 1913.** "An Assyrian medical tablet in the possession of the college of physicians", *Transactions of the College of Physicians of Philadelphia* 15, 365-400.
- Johnson J. C. 2014.** "Towards a reconstruction of SUALU IV: Can we localize K 2386+ in the therapeutic corpus?", *JMC* 24, 11-38.
- Jouanna J. 2011.** "Médecine rationnelle et magie: le statut des amulettes et des incantations chez Galien", *Revue des Études Grecques* 124, 47-77.
- Kinnier Wilson J. V. 1965.** "An Introduction to Babylonian Psychiatry", in H. Güterbock, T. Jacobsen (eds.), *Studies in Honor of Benno Landsberger on his seventy-fifth Birthday April 21, 1965*, Assyriological Studies 16, Chicago: Chicago Oriental Institute, 289-298.
- Köcher F. 1963a.** *Die babylonisch-assyrische Medizin in Texten und Untersuchungen I. Keilschrifttexte aus Assur 1*, Berlin: Walter de Gruyter.
- Köcher F. 1963b.** *Die babylonisch-assyrische Medizin in Texten und Untersuchungen II. Keilschrifttexte aus Assur 2*, Berlin: Walter de Gruyter.
- Köcher F. 1964.** *Die babylonisch-assyrische Medizin in Texten und Untersuchungen III. Keilschrifttexte aus Assur 3*, Berlin: Walter de Gruyter.
- Köcher F. 1971.** *Die babylonisch-assyrische Medizin in Texten und Untersuchungen IV. Keilschrifttexte aus Assur 4, Babylon, Nippur, Sippar, Uruk und unbekannter Herkunft*, Berlin: Walter de Gruyter.
- Köcher F. 1980a.** *Die babylonisch-assyrische Medizin in Texten und Untersuchungen V. Keilschrifttexte aus Ninive 1*, Berlin/New York: Walter de Gruyter. doute sur 1979
- Köcher F. 1980b.** *Die babylonisch-assyrische Medizin in Texten und Untersuchungen VI. Keilschrifttexte aus Ninive 2*, Berlin/New York: Walter de Gruyter.
- Kouwenberg N. J. C. 2010.** *The Akkadian Verb and Its Semitic Background*, Languages of the Ancient Near East 2, Winona Lake: Eisenbrauns.
- Kraus F.R. 1985.** *Briefe aus kleineren Westeuropäischen Sammlungen*, Altbabylonische Briefe in Umschrift und Übersetzung 10, Leiden: Brill.
- Kupper J.-R. 1998.** *Lettres royales du temps de Zimri-Lim*, ARM 28, Paris: Editions Recherche sur les Civilisations
- Labat R. 1951.** *Traité akkadien de diagnostics et pronostics médicaux 1 : Transcription et traduction*, Paris/Leyde: Académie Internationale d'Histoire des Sciences/Brill.

- Lambert W. G., Millard A. R. 1969.** *Hatra-Hasis: the Babylonian story of the Flood*, Oxford: Clarendon Press
- Leichty E 1988.** “Guaranteed to Cure”, in E. Leichty *et al.* (eds), *A Scientific Humanist: Studies in Memory of Abraham Sachs*, Occasional Publications of the S. N. Kramer Fund vol. 9, Philadelphia: University Museum, Babylonian Section.
- Livingstone A. 1989.** *Court Poetry and Literary Miscellanea*, SAA 3, Helsinki: Helsinki University Press.
- Luukko M. 2012.** *The Correspondance of Tiglath-Pileser III and Sargon II from Calah/Nimrud*, SAA 19, Helsinki: Helsinki University Press.
- Luukko M., Van Buylaere G. 2002.** *The Political Correspondence of Esarhaddon*, SAA 1, Helsinki: Helsinki University Press.
- MacDonald G., Leary M. R. 2005.** “Why does social exclusion hurt? The relationship between social and physical pain”, *Psychological Bulletin* 130, 202-223.
- Menuret J.-J. 1766.** “Jaunisse”, in D. Diderot, J. d’Alembert (eds.), *Encyclopédie ou Dictionnaire raisonné des sciences, des arts et des métiers*, tome 8, Paris, 476-478.
- Panayotov S. V. 2017.** “Eye Metaphors, Analogies and Similes within Mesopotamian Magico-Medical Texts”, in Wee J. Z.-E (ed.), *The Comparable Body - Analogy and Metaphor in Ancient Mesopotamian, Egyptian, and Greco-Roman Medicine*, Studies in Ancient Medicine 49, Leiden/Boston: Brill, 204-246.
- Panayotov S. V. 2018.** “Magico-medical Plants and Incantations on Assyrian House Amulets”, in D. Schwemer *et al.* (eds.), *The Sources of Evil: Complexity and Systematization, Differentiation and Interdependency in Mesopotamian Exorcistic Lore*, Ancient Magic Divination 15, Leiden/Boston: Brill, 192-222.
- Parpola S. 1970.** *Letters from Assyrian Scholars to the Kings Esarhaddon and Assurbanipal, Part I Texts*, Alter Orient und Altes Testament 5/1, Kevelaer: Butzon & Bercker/Neukirchen-Vluyn: Neukirchener Verlag, reprint Winona Lake: Eisenbrauns, 2007.
- Parpola S. 1983.** *Letters from Assyrian Scholars to the Kings Esarhaddon and Assurbanipal, Part II Commentary and Appendices*, Alter Orient und Altes Testament 5/2, Kevelaer: Butzon & Bercker/Neukirchen-Vluyn: Neukirchener Verlag, reprint Winona Lake: Eisenbrauns, 2007.
- Parpola S. 1993.** *Letters from Assyrian and Babylonian Scholars*, SAA 10, Helsinki: Helsinki University Press.
- Parpola S., Watanabe K. 1988.** *Neo-Assyrian Treaties and Loyalty Oaths*, SAA 2, Helsinki: Helsinki University Press.
- Parys M. 2014.** “Édition d’un texte médical thérapeutique retrouvé à Assur (BAM 159)”, *JMC* 23.
- Reiner E. 1958.** *Šurpu: A Collection of Sumerian and Akkadian Incantations*, AfO Beih. 11, Graz: Im Selbstverlage des Herausgebers.
- Reiner E. 1959-60.** “ME.UGU = mēlu”, *AfO* 19, 150.
- Reynolds F. 2003.** *The Babylonian Correspondence of Esarhaddon and Letters to Assurbanipal and Sin-šarru-iškun from Northern and Central Babylonia*, SAA 18, Helsinki: Helsinki University Press.
- Ritter E. K., Kinnier Wilson J. V. 1980.** “Prescription for an Anxiety State: a study of BAM 234”, *AnSt* 30, 23-30.
- Robson E. 2008.** “Mesopotamian Medicine and Religion: Current Debates, New Perspectives”, *Religion Compass* 2/4, 455-483.
- Saint-Lambert J.-F. de, Jaucourt L. de 1751.** “Mélancolie”, in D. Diderot, J. d’Alembert (eds.) *Encyclopédie ou Dictionnaire raisonné des sciences, des arts et des métiers*, tome 10, Paris, 307-311.
- Salin S. 2018.** “Words for Loss of Sensation and Paralysis in Assyro-Babylonian Medical Texts: Some Considerations”, *JMC* 31, 26-37.
- Scheyhing H. 2011.** “Babylonisch-assyrische Krankheitstheorie. Korrelationen zwischen medizinischen Diagnosen und therapeutischen Konzepten”, *Die Welt des Orients* 41, 79-117.
- Schuster-Brandis A. 2008.** *Steine als Schutz- und Heilmittel. Untersuchung zu ihrer Verwendung in der Beschwörungskunst Mesopotamiens im 1. Jt. v. Chr.*, AOAT 46, Münster: Ugarit-Verlag.
- Schwemer D. 2013.** “Prescriptions and Rituals for Happiness, and Divine Favour: the Compilation A 522 (BAM 318)”, *JNES* 65, 181-200.

- Scurlock JA. 2003.** “Collation of the ‘Jastrow’”, *JMC* 3, 16-17.
- Scurlock JA. 2004.** “From Esagil-kīn-apli to Hippocrates” *JMC* 3, 10-30.
- Scurlock JA. 2006.** *Magico-Medical Means of Treating Ghost-Induced Illnesses in Ancient Mesopotamia*, Ancient Magic Divination 3, Leiden/Boston: Brill-Styx.
- Scurlock JA. 2013.** “Marginalia to Mesopotamian Malevolent Magic”, *JAOS* 133/3, 535-540.
- Scurlock JA. 2014.** *Sourcebook for Ancient Mesopotamian Medicine*, Writings from the Ancient World 36: Atlanta, Georgia: SBL Press.
- Scurlock JA. 2017.** “‘Supernatural’ Causes: ‘Cutting of the Breath’: Ritual Messages; Sour Milk (BAM 449)”, in K. Lawson Younger Jr. (ed.), *Context of Scripture IV, Supplements*, [Akkadian Inscriptions: Medical Texts: 4.88L], Leiden/Boston: Brill, 306-308.
- Scurlock JA., Andersen B. R. 2005.** *Diagnoses in Assyrian and Babylonian Medicine*, Champaign: University of Illinois Press.
- Stadhouders H. 2011.** “The Pharmacopoeial Handbook *Šammu šikinšu* - An Edition”, *JMC* 18, 3-51.
- Stadhouders H. 2012.** “The Pharmacopoeial Handbook *Šammu šikinšu* - A Translation”, *JMC* 19, 1-21.
- Stadhouders H. 2018.** “The Unfortunate Frog: On Animal and Human Bondage in K 2581 and Related Fragments with Excursuses on BM 64526 and YOS XI, 3”, *RA* 112, 159-176.
- Stadhouders H. Johnson J. C. 2018.** “A Time to Extract and a Time to Compile: The Therapeutic Compendium Tablet BM 78963”, in S.V. Panayotov and L. Vacin, *Mesopotamian Medicine and Magic. Studies in Honour of Markham J. Geller*, Ancient Magic Divination 14, 556-622.
- Stahl S., Briley M. 2004.** “Understanding pain in depression”, *Human Psychopharmacology* 19 Suppl 1: S9-S13.
- Starr I. 1990.** *Queries to the Sungod: Divination and Politics in Sargonid Assyria*, SAA 4, Helsinki: Helsinki University Press.
- Steinert U. 2012.** *Aspekte des Menschseins im Alten Mesopotamien: Eine Studie zu Person und Identität im 2. und 1. Jt. v. Chr.*, Cuneiform Monographs 44, Leiden/Boston: Brill.
- Steinert U. 2016.** *Körperwissen, Tradition und Innovation in der babylonischen Medizin*, Paragrana, Internationale Zeitschrift für Historische Anthropologie 25(1), Berlin: Walter de Gruyter, 195-254.
- Steinert U. 2018.** “The Assur Medical Catalogue”, in U. Steinert (ed.), *Assyrian and Babylonian Scholarly Text Catalogues: Medicine, Magic, and Divination*, BAM 9, Boston/Berlin: Walter de Gruyter, 203-291.
- Steinert U., Panayotov S. V., Geller M. J., Schmidtchen E., Johnson J. C. 2018.** “AMC Text Edition”, in U. Steinert, *Assyrian and Babylonian Scholarly Text Catalogues: Medicine, Magic, and Divination*, BAM 9, Boston/Berlin: Walter de Gruyter, 209-219.
- Streck M. P. 1997.** *Das amurritische Onomastikon der altbabylonischen Zeit*, AOAT 271, Münster: Ugarit-Verlag.
- Stol M. 1993.** *Epilepsy in Babylonia*, Cuneiform Monographs 2, Groningen: Styx Publications.
- Stol M. 1998.** “Einige kurze Wortstudien”, in S. Maul (ed.), *Festschrift für Rykle Borger zu seinem 65. Geburtstag am 24. Mai 1994, tikip santakki mala bašmu...*, Cuneiform Monographs 10, Groningen: Styx Publications, 343-352.
- Stol M. 1999.** “Psychosomatic Suffering in Ancient Mesopotamia”, in T. Abusch, K. Van Der Toorn (eds.), *Mesopotamian Magic. Textual, Historical, and Interpretative Perspectives*, Ancient Magic Divination 1, Groningen: Styx Publications, 57-68.
- Stol M. 2009a.** “Insanity in Babylonian Sources”, *JMC* 13, 1-12.
- Stol M. 2009b.** “‘To Be Ill’ in Akkadian: The Verb *salā’u* and the Substantive *sili’tu*”, in A. Attia, G. Buisson (eds.), *Advances in Mesopotamian medicine from Hammurabi to Hippocrates proceedings of the International Conference ‘œil malade et mauvais œil’, Collège de France, Paris, 23rd June 2006*, Cuneiform Monographs 37, Leiden/Boston: Brill, 79-104.
- Thureau-Dangin F. 1922.** *Tablettes d’Uruk à l’usage des prêtres du Temple d’Anu au temps des Séleucides*, TCL 6, Paris: Librairie Orientaliste Paul Geuthner.
- Veldhuis N. 1999.** The Poetry of Magic, in T. Abusch, K. van de Toorn (eds.), *Mesopotamian Magic: Textual, Historical and Interpretive Perspectives*, Ancient Magic Divination 1, Groningen: Styx, 35-48.

- Von Soden W. 1995.** *Grundriss der Akkadischen Grammatik*, AnOr 33, Roma: Pontificio Istituto Biblico.
- Weidner E. F. 1922.** *Keilschrifturkunden aus Boghazköi IV*, Berlin: Staatliche Museen zu Berlin.
- Wee J. Z.-E. 2012.** *The Practice of Diagnosis in Mesopotamian Medicine: With Editions of Commentaries on the Diagnostic Series Sa-gig*, PhD. Dissertation, Yale University.
- Weier von E. 1983.** *Spätbabylonische Texte aus Uruk II*, Ausgrabungen der Deutschen Forschungsgemeinschaft in Uruk-Warka 9, Berlin: Gebr. Mann.
- Wilhelm G. 1994.** *Medizinische Omina aus Hattuša in Akkadischer Sprache*, StBoT 36, Wiesbaden: Harrassowitz.
- Winitzer A. 2017.** *Early Mesopotamian Divination Literature: Its Organizational Framework and Generative and Paradigmatic Characteristics*, Ancient Magic Divination 12. Leiden/Boston: Brill.
- Worthington M. 2003.** “A Discussion of Aspects of the UGU Series”, *JMC* 2, 2-13.
- Worthington M. 2005.** “Edition of UGU 1 (=BAM 480 etc.)”, *JMC* 5, 6-43.
- Worthington M. 2009.** “Some notes on medical information outside the medical corpora”, in A. Attia, G. Buisson (eds.), *Advances in Mesopotamian Medicine from Hammurabi to Hippocrates: Proceedings of the International Conference ‘Œil malade et mauvais œil’, Collège de France, Paris, 23rd June 2006*, Cuneiform Monographs 37, Leiden/Boston: Brill, 47-78.
- Zucconi L. M. 2007.** “Mesopotamian Healers as Diviners”, *JMC* 10, 19-33.

Online sites consulted:

- ARCHIBAB**, Archives babyloniennes (XXe-XVIIe siècles av. J.-C.), <http://www.archibab.fr>
- BabMed**, Babylonische Medizin, <http://www.geschkult.fu-berlin.de/e/babmed/Corpora/index.html>
- CDLI**, Cuneiform Digital Library Initiative, <https://cdli.ucla.edu/>
- CMAwR**, Corpus of Mesopotamian Anti-Witchcraft Rituals, <http://oracc.museum.upenn.edu/cmawro/corpus>
- Medical dictionary online**, <https://medical-dictionary.thefreedictionary.com/clinical+diagnosis>
- MEDLINE**, <https://medlineplus.gov/ency/article/003200.htm>
- SAA**, State Archive of Assyria Online, <http://oracc.museum.upenn.edu/saao/corpus>

Addenda:

- Three references have been forgotten in the bibliography in **Attia A. 2018.** “Mieux vaut être riche et bien portant que pauvre et malade”, *JMC* 31, 67-88:
- Appelboom T., Cogan E., Klastersky J. 2007.** “Job of the Bible: Leprosy or Scabies?” *Mount Sinai Journal of Medicine* 74(1), 36-39.
- Groneberg B. 2002.** “‘The Faithful Lover’ Reconsidered: Towards Establishing a new Genre”, in S. Parpola, R.M. Whiting (eds.), *Sex and Gender in the Ancient Near East. Proceedings of the 47th Rencontre Assyriologique Internationale, Helsinki, July 2-6, 2001*, Helsinki: Neo-Assyrian Text Corpus Project, 165-183.
- Held M. 1961.** “A Faithful Lover in an Old Babylonian Dialogue”, *JNES* 15(1), 1-26.

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2003

JMC 1

Attia Annie, Buisson Gilles. Si le crâne d'un homme contient de la chaleur, deuxième tablette, 1-24.

JMC 2

Worthington Martin. A discussion of aspects of the UGU series, 2-13.

Renaut Luc. Lettre aux éditeurs d'UGU 2, 14-15.

Scurlock JoAnn. Collations of the "Jastrow", 16-17.

Worthington Martin, Attia Annie, Buisson Gilles. K 19766, 18.

Worthington Martin. Propositions de lecture pour UGU 2, 18.

Abrahami Philippe. À propos des fonctions de l'*asû* et de l'*âšipu*, 19-20.

Attia Annie, Buisson Gilles. Cabinet de lecture. « Oldies but Goodies » : René Labat, magicien des mots ; « Gleanings from » : Plants of Dhofar ; « Au petit orpailleur médical » : lecture médicalement intéressée de FM VII, 21-24.

2004

JMC 3

Workshop: "Ancient Mesopotamian Medicine", Part 1

49^{ème} Rencontre Assyriologique Internationale (London 2003)

Heeßel Nils P. Reading and interpreting medical cuneiform texts - Methods and problems, 2-9.

Scurlock JoAnn. From Esagil-kīn-apli to Hippocrates, 10-30.

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Workshop: "Ancient Mesopotamian Medicine", Part 2

49^{ème} Rencontre Assyriologique Internationale (London 2003)

Geller Markham J. Anus and kidneys, 1-8.

Attia Annie, Buisson Gilles. Du bon usage des médecins en assyriologie, 9-15.

Kämmerer Thomas R. About the emergence and spreading of smallpox in the Ancient Near East - Did it reach us from camels or from cattle?, 16-25.

Finkel Irving L. Old Babylonian medicine at Ur: lettre aux éditeurs, 26.

2005

JMC 5

Marti Lionel. Recherche d'un remède contre le mal-*ekkêtum*, 1-3.

Ziegler Nele. Les vaisseaux sanguins et *Enûma eliš* VI : 5, 4-5.

Worthington Martin. "Edition of UGU 1 (=BAM 480 etc.)", 6-43.

Mouton Alice. Quand la reine hittite vit en rêve l'herbe qui pouvait soigner Mon Soleil, 44-46.

Worthington Martin. Review of: Volkert Haas, *Materia Magica et Medica Hethitica*, 2 vols., Berlin: De Gruyter, 2003, 47-48.

JMC 6

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Heeßel Nils P. Bibliographie zur altorientalischen Medizin 2000 bis August 2005 (mit Nachträgen aus früheren Jahren), 34-40.

Attia Annie, Buisson Gilles. [A.2025]: « un texte pour les médecins », 41-42.

Coleman Mary. Lettre aux éditeurs: "Reply to Nils P. Heeßel", 43-48.

2006

JMC 7

Goodnick Westenholz Joan, Sigrist Marcel. The brain, the marrow and the seat of cognition in Mesopotamian tradition, 1-10.

Scurlock JoAnn. Whatever possessed them?: Progress and regress in the history of medicine, 11-17.

Worthington Martin. Edition of *BAM* 3, 18-48.

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- Geller Markham J.** La médecine au quotidien, 2-6.
Geller Markham J. Les maladies et leurs causes, selon un texte médical paléobabylonien, 7-12.
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Wyplosz Julien. Quelques réflexions sur l'aruspice mésopotamien et le regard de l'anatomiste de J.-J. Glassner, 24-28.
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2007

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- Geller Markham J.** Médecine et magie: l'*asû*, l'*âšipu* et le *mašmāšu*, 1-8.
Geller Markham J. Charlatans, médecins et exorcistes, 9-15.
Kinnier Wilson, James V., Finkel Irving L. On *būšānu* and *di'u*, or why Nabonidus went to Tema, 16-22.
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- Stol Marten.** An unusual prescription: oral tradition?, 1-3.
Geller Markham J. Textes médicaux du Louvre, nouvelle édition. AO 11447, AO 7760 et AO 6674. Première partie (AO 11447), 4-18.
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2008

JMC 11 et 12

- Attinger Pascal.** La médecine mésopotamienne, 1-96.

2009

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- Stol Marten.** Insanity in Babylonian sources, 1-12.
Reculeau Hervé. Le point sur la « plante à huile » : réflexions sur la culture du sésame en Syrie-Mésopotamie à l'âge du Bronze, 13-37.
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Geller Markham J. Textes médicaux du Louvre, nouvelle édition. Deuxième partie: AO 6774, 28-43.
Veldhuis Niek. BAM 7, 51: an alternative reading, 44-48.

2010

JMC 15

Atelier Médecine Mésopotamienne

55^{ème} Rencontre Assyriologique Internationale (Paris, 2009)

- Goodnick Westenholz Joan.** The tale of two little organs: the spleen and the pancreas, 2-24.
Worthington Martin. Medicine, comedy, power and their interconnections in Babylonia and Assyria, 25-39.

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2011

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Kinnier Wilson James V. A journey through the prescriptions, 1-24.

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2012

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Stadhouders Henry. The Pharmacopoeial Handbook *Šammu šikinšu* - A translation, 1-21.
Attia Annie, Buisson Gilles. BAM 1 et consorts en transcription, 22-51.
Scurlock JoAnn. A plant can have different names in different cultures: a rebuttal to Luc Renaut, 51-52.

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Verderame Lorenzo. A bibliography of Ancient Mesopotamian medicine, 1-42.
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2013

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Chalendar Véréne. « Un aperçu de la neuropsychiatrie assyrienne ». Une édition du texte BAM III-202, 1-60.

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Bácskay András, Simkó Krisztián. Edition of BAM 494. The fifth tablet of UGU or a compilation of recipes against the skin diseases of the head, 1-71.

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Chalendar Vèrène. Éléments de pharmacopée mésopotamienne : retour sur l'ingrédient *rikibtu*, 24-55.

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Abrahami Philippe

- 2003 À propos des fonctions de l'*asû* et de l'*âšipu*. JMC 2, 19-20.
- 2010 Compte-rendu de lecture de : A. Schuster-Brandis, *Steine als Schutz- und Heilmittel*, AOAT 46, Münster, 2008. JMC 16, 39-41.

Arkhipov Ilya

- 2009 L'usage médical du plomb à Mari. JMC 13, 48.

Attia Annie

- 2015 Traduction et commentaires des trois premières tablettes de la série IGI. JMC 25, 1-120.
- 2015 On ne saurait songer à tout. JMC 26: 47-48.
- 2018 Mieux vaut être riche et bien-portant que pauvre et malade » : de BAM III-234 à Job. JMC 31, 43-66.
- 2018 The *libbu* our second brain? Part 1. JMC 31 67-88.

Attia Annie, Buisson Gilles

- 2003 Si le crâne d'un homme contient de la chaleur, deuxième tablette. JMC 1, 1-24.
- 2003 Cabinet de lecture : « Oldies but Goodies » : René Labat, magicien des mots ; « Gleanings from » : Plants of Dhofar ; « Au petit orpailleur médical » : lecture médicalement intéressée de FM VII. JMC 2, 21-24.
- 2004 Du bon usage des médecins en assyriologie. JMC 4, 9-15.
- 2005 [A.2025]: « un texte pour les médecins ». JMC 6, 41-42.
- 2012 BAM 1 et consorts en transcription. JMC 19, 22-51.

Attinger Pascal

- 2008 La médecine mésopotamienne. JMC 11 et 12, 1-96.

Bácskay András

- 2015 Magical-medical prescriptions against fever: an edition of BM 42272. JMC 26, 1-32.
- 2018 'Seize a frog!' The use of the frog in medical and magical texts. JMC 32, 1-16.

Bácskay András, Esztári Réka, Simkó Krisztián

- 2014 Some remarks on Sa-gig I and its commentaries. JMC 24, 1-10.

Bácskay András, Simkó Krisztián

- 2017 Edition of BAM 494. The fifth tablet of UGU or a compilation of recipes against the skin diseases of the head. JMC 30, 1-71.

Beck Suzan

- 2015 *Sāmānu* as a human disease. JMC 26, 33-46.

Borger Rykle, Geller Markham J., Attia Annie, Buisson Gilles

- 2007 K 2392, un nouveau joint pour UGU 2. JMC 9, 47-48.

Buisson Gilles

- 2016 À la recherche de la mélancolie en Mésopotamie ancienne. JMC 28, 1-54.
- 2016 Bavardages autour de BAM III-234 : 6-8. JMC 28, 60-65.

Cadelli Danielle S.

- 2018 Les parties du corps dans la série *šumma amêlu suâlam maruṣ*. JMC 31, 2-25.

Chalendar Véréne

- 2013 « Un aperçu de la neuropsychiatrie assyrienne ». Une édition du texte BAM III-202. JMC 21, 1-60.
- 2018 Éléments de pharmacopée mésopotamienne : retour sur l'ingrédient *rikibtu*. JMC 32, 24-55.

Coleman Mary

- 2005 Lettre aux éditeurs: "Reply to Nils P. Heeßel". JMC 6, 43-48.

Eypper Sona C.

- 2016 Diseases of the feet in Babylonian-Assyrian medicine. A study of text K. 67+. JMC 27, 1-58.

Fiette Baptiste

- 2018 Vaches d'Ur. JMC 32, 17-23.

Finkel Irving L.

- 2004 Old Babylonian medicine at Ur: lettre aux éditeurs. JMC 4, 26.

Geller Markham J.

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- 2007 Charlatans, médecins et exorcistes. JMC 9, 9-15.
- 2007 Textes médicaux du Louvre, nouvelle édition. AO 11447, AO 7760 et AO 6674. Première partie (AO 11447). JMC 10, 4-18.
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Hurowitz Victor A.

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Johnson J. Cale

- 2014 Towards a reconstruction of SUALU IV: Can we localize K 2386+ in the therapeutic corpus? JMC 24, 11-38.

Kämmerer Thomas R.

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Kinnier Wilson James V.

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Langlois Anne-Isabelle

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Lawson Jack N.

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Marti Lionel

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Mouton Alice

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Panayotov Strahil V.

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Parys Magalie

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Rassinier Jean-Paul

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Reculeau Hervé

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Renaut Luc

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Rumor Maddalena

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Salin Silvia

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Scurlock JoAnn

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- 2012 The Pharmacopoeial Handbook *Šammu šikinšu* - A translation. JMC 19, 1-21.
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Steinert Ulrike

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Stol Marten

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Veldhuis Niek

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Verderame Lorenzo

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Watson Wilfred G.E.

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Watson Wilfred G.E., Wyatt Nicolas

- 2014 KTU 1.124 revisited: a second opinion. JMC 24, 41-48.

Worthington Martin

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- 2005 Review of: Volkert Haas, *Materia Magica et Medica Hethitica*, 2 vols., Berlin: De Gruyter, 2003. JMC 5, 47-48.
- 2006 Edition of BAM 3. JMC 7, 18-48.
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Wyplosz Julien

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Zsolt Simon

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