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FESTSCHRIFT FOR CHRISTOPHER WALKER ON THE OCCASION OF HIS 60TH BIRTHDAY

edited by Cornelia Wunsch

ISLET

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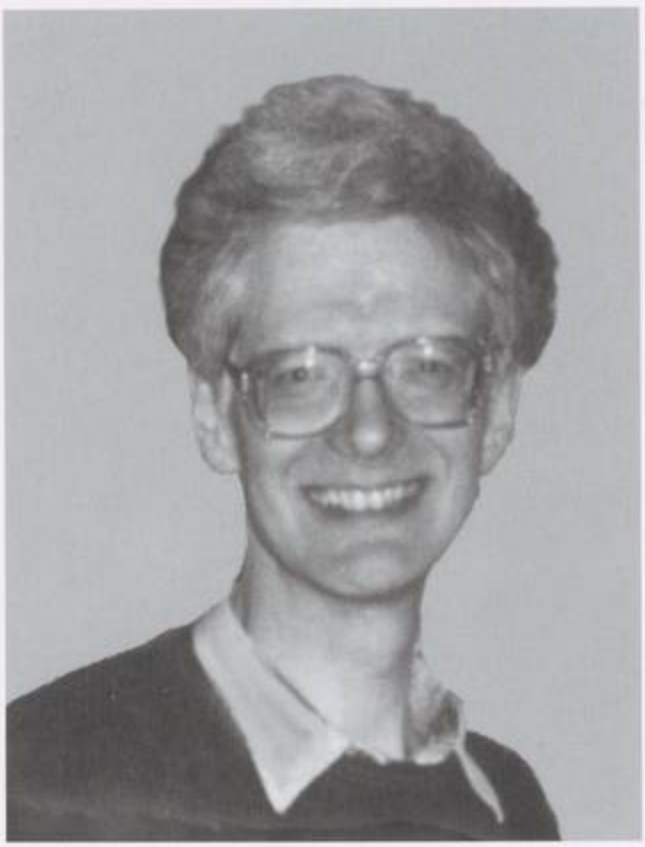

Preface

Recent years have seen an abundance of Assyriological *festschrifts*, marking a generational change in this field. Why another one? And why so seemingly prematurely as to celebrate a dynamic sixty-year old?

Because Christopher deserves one, and because it is an appropriate time. It looks like an era may be ending — an era in which Christopher Walker has played an important rôle.

Christopher has become an institution in Assyriology. In his position overseeing the British Museum's tablet collection he has coordinated a far-reaching cataloguing enterprise, initiated numerous publication projects, catered to the needs of visiting scholars and answered countless enquiries for collations. It is difficult to find an Assyriologist who never met him or does not owe him an intellectual debt.

He always has put his service to the Assyriological community first, actively supporting a change to a liberal policy with regard to providing access and publication rights to unpublished material. He has put endless hours into computer work to create and update files on the British Museum tablets, capped by the great cataloguing project that opened up the Sippar collection to studies on many different topics. He has treated students with the same respect he shows to senior scholars who visit the students' room. As many of us have experienced, he inquires about the focus of our study and soon produces a list of computer entries on unpublished texts with the remark, "See if that helps."

Although he has had no students of his own, Christopher has been a catalyst for an entire generation's work by encouraging dozens of tablet-obsessed beginners to sit down and put in the effort it takes to learn how to read three-dimensional cuneiform. His own academic interest such as in astronomical records and Old Babylonian archival studies could not be pursued as much as he would have liked, given the administrative demands that came with his job and the extra efforts he has made above and beyond his job description. So this Festschrift is meant as a contribution of those who profited from his most generous help and expertise. We could not have done it without him.

We also acknowledge the hospitality that he and his wife Marie-Christine Ludwig always showed, and which the present writer has enjoyed on countless occasions.

When the idea of this book was born, it was thought of asking mainly junior people who had spent some time at the BM. Their response was overwhelming. The book has come to reflect the present state of Assyriology and the dilemma of our generation: great hopes, lots of work, remarkable results, but also much professional disappointment, for jobs are rare and financial security is an alien concept. Many assyriologists subsist on temporary jobs, some already have been obliged to seek employment outside the field, or survive only thanks to their spouses. And like universities throughout the world, museums are coming under financial pressure and the British Museum is no exception. We do not know what the future will hold.

That is why it is time for this festschrift.

Time to inaugurate a new series of Babylonische Archive despite the odds, to go on with what the dedicatee so fervently supported: making texts accessible.

Happy birthday, Christopher, and many happy and productive years to come!

C. W.

Acknowledgements

I would like to express my gratitude to all who have helped to finish this task. Eleanor Robson, Fran Reynolds and Mark Cohen have read English manuscripts at different stages, and David Lewis gave technical advice. Thanks also are owed to the Trustees of the British Museum and the curators of the Columbia Rare Book and Manuscript Library, Harvard Semitic Museum, John Frederick Lewis Collection, Nies Babylonian Collection and University of Pennsylvania Museum for permission to include hitherto unpublished material, and to the museum assistents who patiently endured last-minute demands for tablets. The publication of this volume was made possible through support from the Institute for the Study of Long-term Economic Trends.

C. W.

Contents

Approaches to Akkadian Name-Giving in First-Millennium BC Mesopotamia*

Heather D. Baker — Helsinki

Introduction

The study of Akkadian personal names has hitherto focused primarily on the types of names in use and how they were formed. However, with recent advances in prosopographical research it is now possible to place the study of name-giving in the first millennium BC on a much firmer footing, by relating the names themselves to information about the population in which they were current. This article aims to examine some of the issues involved in investigating Akkadian name-giving.

The study of Akkadian personal names has a long history. In 1906 and 1918 respectively Tallqvist published the basic list of personal names occurring in the Neo-Babylonian and Neo-Assyrian documents available to him, together with analytical indices of name elements. Stamm (1939) classified the different types of Akkadian personal names, analysing their significance to the name-bearer and name-giver. More recently, an extremely useful, concise account of Akkadian names and name-giving has been published by Edzard (1998).[1]

It has long been established that an Akkadian personal name may bear socio-historical information about the name-bearer and his or her immediate family.[2] It is also well known that name-giving reflects the theological orientation of the community — for example, personal names from a particular city are frequently formed with the name of the deity who was the patron god or goddess of that city.[3] However, in spite of the fact that such features of Akkadian name-giving are well known, there has been no systematic attempt to examine how names were actually distributed within the family or within the wider society of the first millennium BC.

* This study was facilitated by access to the Corpus of Neo-Assyrian in Helsinki, by kind permission of Simo Parpola. I should like to thank also Michael Roaf for his helpful comments on a draft of this paper.

1 For a bibliography of onomastic research in the various Semitic languages of the Ancient Near East, including Akkadian, see Streck 2000, 136–138.

2 For example, a name containing *aplu*, that is, "heir," denotes a first-born son, while a name formed with *aḫum*, that is, "brother," refers to a later-born son, and so on.

3 For example, in the city of Sippar, where the principal temple in Neo-Babylonian times was the temple of the sun-god Šamaš, names formed with Šamaš are much more common than in other cities, such as Babylon or Borsippa. Similarly, Uraš names are rare in tablets from cities other than Dilbat.

Recent years have seen major advances in the prosopographical study of cuneiform sources from the first millennium BC, namely, for the Neo-Assyrian period, the progress of *The Prosopography of the Neo-Assyrian Empire* (henceforth PNA), and for the Neo- and Late-Babylonian period the publication of critical editions of large numbers of documents together with detailed discussion of their context and, important for our purposes, indices of personal names.[4] It is now possible to use these resources in order to look for and define patterns in the selection of names and to evaluate their significance. The study which follows is not an exhaustive study of first-millennium BC name-giving, but is intended to demonstrate this potential by providing examples and case studies based on the systematic combination of prosopographical and onomastic data. It also raises questions about the use of onomastic evidence as a building block in historical interpretation.

We begin with some remarks on the methodology of studying naming patterns. These observations are followed by a discussion of the wider social aspects of name-giving, an examination of naming within the context of the family, and some concluding remarks. Since only Akkadian names are considered here, the complex question of the relationship between the ethnicity of the name-bearer and the linguistic affinity of the name is not discussed.[5] The study concentrates on given names; the many interesting questions raised by the use of ancestral or "family" names in first-millennium BC Babylonia is outside its scope.

Methodology

The examination of patterns in name-giving requires both (a) establishing the name repertoire (*i.e.*, the range of names in use at a given place/period), and (b) gathering data on the name-bearers (evidence for family, profession, office, social class etc.). Establishing a name repertoire by city or region according to period facilitates the detection of both regional variation and chronological development in name-giving patterns.[6] The city is a convenient unit because, as observed above, at least in Babylonia the name repertoire of a city tends to be dominated by names formed with its principal deity as a theophoric element. In the major cities of Assyria this factor seems less significant owing to the religious pre-eminence of Aššur. The existence of what might truly be called a "state religion" had the effect of rendering the onomasticon of the major cities more homogeneous than in Babylonia, though it should be noted that in Assyria as in Babylonia Nabû is the most fre-

4 The major recent studies according to city are: Wunsch 1993; 2000a (Babylon, Egibi archive); Jursa 1995; Bongenaar 1997 (Sippar, Ebabbar archive); Stolper 1985; Donbaz and Stolper 1997 (Nippur, Murašû archive); Gehlken 1990; 1996 (Uruk, Eanna archive); Kessler 1991 (Uruk, private archives with some prosopographical links to Eanna archive); Joannès 1989 (Borsippa, private archives). While not all these studies are specifically prosopographical in content, nevertheless the existence of critical editions combined with historical discussion, name indices, etc. significantly enhances the possibilities for the type of investigation envisaged here.

5 The adoption of Akkadian names by foreign individuals settled in Assyria or Babylonia, for example, may constitute evidence for the process of assimilation and integration.

6 For example, the name repertoire of Seleucid Uruk, with its preponderance of names formed with Anu, had become significantly restricted compared to earlier centuries. This fact, exacerbated by the introduction of papponymy, necessitated the citing of up to four generations of ancestry in the legal documents in order to ensure that individuals could be correctly identified. Oelsner 1981, 44 has established a date in the early fourth century BC for the rise of Anu-names in the Uruk onomasticon.

quent theophoric element in the onomasticon. Nevertheless, other deities figure prominently in local name-giving in some of the smaller cities of Assyria.[7]

The unit of study may be defined further according to social criteria, such as the family, or a particular sector of society such as a professional group (or groups) or a class. It is only possible to determine whether certain names or name-types were preferred (or indeed rejected) by a particular sector of society when we know what was the norm among the remainder of the population; that is, there must be some kind of control.

Names in society

The circumstances surrounding the act of name-giving are, of course, significant, but these almost always elude us. It is assumed that personal names were normally given around the time of birth[8] or at least in early infancy.[9] Names that were given later, either in addition to the given name or to replace it, are therefore of exceptional interest.[10] These and other categories of names are discussed below:

a. Throne names

True throne-names in the first millennium BC are rare (or at least, rarely identifiable). The suspicion that Sargon (Šarru-kēn, "True king") was not actually the natural successor has long been mooted. Another likely candidate is Assurbanipal;[11] his name (Aššūr-bāni-apli, "Aššūr is the creator of the heir") is not the kind of name that would have been given to a younger son. In Babylonia, it has been suggested by Finkel 1999, 323ff. that Amēl-Marduk was the name adopted by Nabû-šum-ukīn son of Nebuchadnezzar (II) upon his release from imprisonment; Nabû-šum-ukīn is known as the author of a hymn to Marduk apparently composed while in captivity as a result of false accusations against him.[12]

b. "Programmatic" names

Like throne names, these comprise names carrying a political message, such as the alternative name Aššūr-etellu-mukīn-apli given to Esarhaddon by his father Sennacherib; it cannot be regarded as a true throne name since he scarcely ever used it when he became

7 See, for example, Radner 1998 on the deity Salmānu, who is associated particularly with the town of Dur-Katlimmu and is a frequent element in the names of its inhabitants. Another example would be the number of people from the town of Kannu' bearing names formed with Apladad.

8 Edzard 1998, 109. A graphic example is the Old Babylonian name Ikšud-appašu, "His nose appeared!"

9 In the NB/LB sources the best evidence for the age of naming comes from slave sale documents where slaves are sold as family groups. In some cases the same family can be traced over several years, enabling the ages of the children to be charted. The data suggest that children were given names at c. 2–4 years of age. Whether this was typical of society in general is unclear, though the room for variation must surely be small.

10 Edzard 1998, 109ff. treats these under "Namenwechsel," with the sub-headings "Thronnamen?", "Beamten- und Priesternamen" and "Namen von Ehefrauen".

11 See Weissert, PNA 1/I, 161f.

12 Strictly speaking, the name must have been adopted at least four years before Amēl-Marduk took the throne (Finkel 1999, 338). Similarly, Assurbanipal must have taken the name when he became crown prince.

king, but preferred his given name.[13] The name embodied the element of legitimacy fitting for an heir to the throne, that is, the concept of heirship invested by Aššūr, which his own name (Aššūr-aḫu-iddina, "Aššūr has given a brother") manifestly lacked. Another example is En-nigaldi-Nanna, daughter of Nabonidus, whom the king installed as *ēntu*-priestess at Ur;[14] her given name is unknown.

c. Names associated with a specific office, profession or class of person

The historical implication of the existence of profession- or status-related names is that an individual either took on a new name when he was appointed to a certain position or status, or that he was destined to belong to a particular sector of society from an early age (even from birth), and the status-related name was in this case his primary name (*e.g.*, slaves).[15]

Looking at the names borne by the Neo-Assyrian magnates (Mattila 2000) and eponym officials (Millard 1994), there do not seem to be any features that mark these high officials as a group. It has been suggested that the names of Assyrian *ša rēši* officials ("eunuchs")[16] were somehow distinctive, in particular, that eunuchs showed a preference for names formed with *šarru* "king."[17] But is this actually correct? If we collect all the Neo-Assyrian names formed with the element *šarru*, it is clear that in fact such names were relatively common among the general population; in the fascicles of PNA completed to date and covering names beginning with letters A–N, a total of 190 bearers of such names are attested, and only 10 of these are known to have been eunuchs (see Appendix 1). Even allowing for the fact that this total of 190 may well include some eunuchs who are not explicitly identified as *ša rēši*s in the texts, the figures are hardly compelling. Names of the type DN-šarru-uṣur ("O DN, protect the king!"), which have been singled out as typical "eunuch names," are in fact particularly common, with Marduk-šarru-uṣur, Nabû-šarru-uṣur and Nergal-šarru-uṣur borne by 39, 61 and 46 individuals respectively.[18] To put these figures in perspective, it is useful to look at the most frequently occurring Neo-Assyrian names:

13 Despite the explicit statement of intent in SAA 12 88: "my son, who henceforth shall be called Aššur-etellu-mukīn-apli."

14 See *e.g.*, CT 36 Pl. 22–23: ii 13–14: ... *a-na e-nu-tì áš-ši-ma en-níg-al-di-*^{d}šeš^{ki} mu-*šú am-bi-ma*, "... (daughter whom) I appointed *ēntu*-priestess and called her name En-nigaldi-Nanna."

15 Slave names differ as a group from the names given to the free population. See Stamm 1939, 307ff.; for the Neo- and Late Babylonian period Dandamaev 1984, 108ff., 472 refers to the practice of giving Babylonian names to slaves of foreign extraction. See also Baker 2001, 22 on the types of names given to Neo-Babylonian slaves.

16 I use the translation "eunuch" here; the reader may substitute his or her preferred term. The question of whether the term *ša rēši* represents a eunuch or not is outside the scope of this paper; for a recent, succinct state of the argument see Deller 1999, with reference to previous literature on the subject; for a differing opinion see Dalley 2001.

17 Parpola 1987, xxiv n. 9 (referring to Marduk-šarru-uṣur as a "eunuch name"); he has been followed by Deller 1999, 306, who states that the most frequent type (of eunuch name) is GN-šarru-uṣur, and by Dalley 2001, 205, who uses the supposed frequency of "eunuch names" being formed with the elements *šarru* and *bēlu*, combined with the fact that certain members of the Assyrian and Babylonian royal family bore names containing *šarru*, as support for her idea that men called lú.sag were actually relatives of the king.

18 The counts of numbers of name-bearers per name are, of course, approximate; they are subject to the intractable difficulties of determining whether or not certain attestations represent the

Table 1: Names occurring most frequently in PNA 1–2 (A–N):

Nabû'a	102	Nabû-erība	52	Mannu-kī-Arbail	36
Kanūnāiu	67	Nergal-šarru-uṣur	46	Bābilāiu	35
Kiṣir-Aššūr	64	Lā-qēpu	45	Nabû-aḫu-uṣur	35
Nabû-šarru-uṣur	61	Nabû-nāṣir	44	Arbailāiu	34
Nabû-šumu-iddina	58	Marduk-šarru-uṣur	39	Mannu-kī-aḫḫē	34
Aplāia	57	Aḫu-lāmur	39	Nabû-rēmanni	34
Nabû-aḫu-iddina	56	Mannu-kī-Aššūr	38		
Nanî	56	Mušēzib-Aššūr	37		

On the other hand, it is certainly true that eunuchs avoided names which alluded to the father-son relationship (though references to brothers are permissible). This is clear if we examine the repertoire of names borne by eunuchs (Appendix 2).[19] If the names given to eunuchs were secondary names (*i.e.*, to replace their given names), then we might expect them to differ more markedly from the remainder of the population. However, if they were named at an early age when their eunuch status was already decided or even accomplished, then this is entirely consistent with the fact that they differ from the norm only in avoiding any father-son allusion. In view of these remarks it should be clear that there is a risk of drawing false historical conclusions about name-types preferred by certain groups, unless this is done with reference to the wider population as a control.

In contrast to Assyria, the evidence for *ša rēši* names in Neo-Babylonian Sippar seems rather more compelling. Bongenaar (1997: 100, 108–12) remarked that *šarru* is a common component of the names of *ša rēš šarri*-officials active in connection with the Ebabbar temple; indeed, nine of the forty-four individuals listed by him bore names of this type.[20]

In considering the question of names related to a specific profession one should mention also the extraordinary coincidence of two individuals, both lamentation-priests, bearing names formed with the divine name Ningišzida, listed one after the other in a letter from the Babylonian scholar Marduk-šāpik-zēri to the Assyrian king (SAA 10 160: r. 7–8). These are the only bearers of Ningišzida names known to me from first-millennium sources, with the exception of four individuals attested in tablets from Ur dating from the reign of Assurbanipal through to the reign of Darius (I?).[21] Given the Babylonian con-

same person. In PNA, in the absence of a title and/or father's name different attestations are held to represent different individuals unless there is a reason to link them (such as an archival or prosopographical connection); this is by no means infallible, but at least all cases are subject to the same logic. Attestations derived from lists of personal names are excluded from the counts of name-bearers, as are names that can be shown to represent scribal errors in the eponym lists.

19 For the sake of completeness Appendix 2 includes all names of eunuchs known to me, not simply the Akkadian ones that are the subject of this paper; foreign eunuchs (some of them bearing Akkadian names) are also included.

20 Streck 2001, 112f. (3. "Beamtennamen") discusses the data drawn from Bongenaar's book of 1997, with different emphasis; it seems to me that the names listed by him are not so much profession-names but simply names borne by people whose professions we happen to know.

21 Ningišzida-dānu father of Sîn-bēlšunu (UET 4 19: 8, 17, dated 26.viii.8 Darius); Ningišzida-ēreš son of Palil-iddin (UET 4 32: 21, dated 7.iv.11 Šamaš-šumu-ukīn); Ningišzida-ēreš father of Itti-Sîn-gūzu (UET 4 94: 13, dated 12.v.20 Darius) and Ningišzida-iqbi father of Sîn-mešrû-ilāni (UET 4 87: 10, dated 1.ix.9 Nabopolassar).

text of the letter it is possible that these men came from Ur. However, the fact of two lamentation-priests bearing names formed with Ningišzida, a deity specifically associated with lamentation[22] and, moreover, a very rare component of personal names, is highly suggestive; a direct link between their profession and their names seems likely.

d. Alternative names or "nicknames"

The practice of using second names or "nicknames" is well-attested in first millennium BC Babylonia, but not in Assyria. Names belonging to this category are not simply abbreviated names,[23] but names of a derivation altogether different from the primary name of the individual. Alternative names could be given to both men[24] and women.[25] Sometimes the alternative name was not an Akkadian one: well-known examples include Naqī'a/Zakūtu (mother of Esarhaddon) and, in Seleucid Babylonia, individuals bearing a Greek name as well as an Akkadian name (*e.g.*, Anu-uballiṭ/Kephalon of Uruk).

e. Names of restricted use

The possibility that certain names, particularly those belonging to members of the royal family, were of restricted use should also be considered. This phenomenon is best illustrated by a Neo-Assyrian text published by Kataja in 1987. According to this document a certain Asalluḫi-nādin-aḫi had denounced one man on the grounds that he intended to name his son Assurbanipal; a second denunciation on the same tablet is rather broken but most likely concerns a parallel case of an accused who intended to call his son Sennacherib. Both of the accused men had already undergone the river ordeal and had "turned back," *i.e.*, had admitted their guilt. The text probably dates from late in the reign of Esarhaddon or early in the reign of Assurbanipal. As Kataja 1987, 66 observed, the clear implication is that "giving the name of the ruling king (or the crown prince) to a commoner, or even planning to do so, was a strict taboo…"

In fact, this conclusion is supported by an examination of the distribution of the names borne by the Sargonid kings.[26] To the best of my knowledge there are no other Neo-

22 See Wiggerman 2000.

23 Such as NB/LB Nabû-uṣuršu and Tabnēa < Nabû-tabni-uṣur. The names treated by Streck 2001, 110f. (1. "Doppelnamen") belong to this category of abbreviated names.

24 *E.g.*, several well-known examples from the Egibi archive: Itti-Marduk-balāṭu = Iddina, Marduk-nāṣir-apli = Širku, Nergal-ušēzib = Puršû; see Weingort 1939: 15, 22f.

25 The idea of Ungnad (1935, 321f.) that nicknames borne by women were given by their husband after marriage can be discounted. In the first case cited by Ugnad (^{f}Amat-Ninlil = ^{f}Gigītu) both names were used interchangeably rather than successively; the woman is known as ^{f}Gigītu as early as 533 BC but her dowry was recorded in 529 BC (VS 6 108), and the lack of mention of her husband in the document suggests that it was a provision in advance of any actual betrothal. In the second case (^{f}Ṣīraya = ^{f}Šidātu), the woman was still known as ^{f}Ṣīraya in 529 BC (VS 6 116), some eleven years after her marriage (Nbn 990, dated 540 BC). In the third case (^{f}Tašmē(tu)-damqa(t) = ^{f}Kaššaya), Roth (1991, 36 n. 52) argues that the two names belong to two sisters and are not alternative names for the same woman. For further discussion concerning these women in tablets from the Nappāḫu archive see Baker forthcoming.

26 Note that Edzard 1998, 98 observed a similar phenomenon in Sumerian name-giving, with names such as Eannatum and Šulgi being borne only by the well-known rulers.

Assyrian holders of the name Sîn-aḫḫē-erība.[27] There are six individuals named Aššūr-aḫu-iddina (Esarhaddon) attested in the reigns of Sargon and Sennacherib (PNA 1/I, 145f. nos. 1–6), and one(?) individual attested in the reign of Assurbanipal (PNA 1/I p. 152 no. 8), who might conceivably have been born and named before Esarhaddon became crown prince. No other individuals are known to have borne the name Aššūr-bāni-apli, which was almost certainly a throne name and not Assurbanipal's original given name.[28]

In Babylonia also this restriction on the use of royal names can be observed. As the following table shows, a number of individuals named Nabû-na'id are attested in Babylonian documents of the late seventh and earlier sixth centuries BC, but there is a notable lack of such individuals born after the accession of the king of that name. Even the latest attested person, the father of a man known in a tablet dated 522 BC (no. 30 below), was most likely born and named before Nabonidus' accession in 555 BC.

Table 2: Commoners named Nabû-na'id in Neo-Babylonian texts:[29]

		Text/Reference	Date
1.	no filiation; gardener	Jursa 1995: 44, 211	618–581/580
2.	no filiation	Jursa 1995: 58 no. 11: 5	Npl/Nbk
3.	s. Nabû-erība	AUWE 5 100: 17	Npl/Nbk
4.	s. Aqāru	Nbk 70: r. 1	596
5.	desc. Bēl-iqīša, f. Bēl-aḫḫē-iddin (T5)	Nbk 185: r. 17	577
6.	f. Mannu-iqabbu	Nbk. 194: 4	576
7	f. Nādin desc. Ili-bānī	A 89:12 = Joannès 1989: 265	576
8.	desc. Mandidi, f. Kabtiya (T7)	Nbk 207: 2	575
	desc. Mandidi, f. Nabû-ēṭir-napšāti	Nbk 37: 3 = CM 3 no. 6	574
9.	s. Nabû-īpuš (desc. Kutimmu)	VS 5 10: r. 15	574
		VS 3 19: r. 12	567
		VS 3 30: r. 15	563
		VS 6 55: r. 13	561
10.	f. Nabû-mukīn-zēri desc. Esagil-mansum	L 1671: 13 = Joannès 1989: 255	573
11.	no filiation; *rab-banê*	Jursa 1995: 77	572
12.	desc. Išparu	VS 6 38: r. 16	571
13.	no filiation	VS 6 39: 3	571?
14.	s. Mannu-kî-ili (T2)	Nbk 322:3	568
15.	no filiation; *tamkār šarri*	VS 3 18: 1, 5	568
16.	s. Nabû-gamil (T3)	Nbk 361: 1, 5 etc.	565

27 Sargon was a special case (see above). The names of the Neo-Assyrian kings preceding Sargon, names "recycled" from the second millennium BC to foster the impression of an unbroken lineage, were not given to the offspring of commoners (though note Aššūr-dān 3. and 5. in PNA 1/I 179).

28 As argued by Weissert in PNA 1/I, 161f.

29 The data presented in this table draws on Tallqvist 1906, 140 *s.v.* Nabû-na'id and on the name indices (not all of them productive) in the following works: Beaulieu 2000; Bongenaar 1997; Donbaz and Stolper 1997; Gehlken 1990; 1996; Joannès 1982; 1989; Jursa 1995; 1997; Kessler 1991; Spar and von Dassow 2000; Stolper 1985. Designations of the type "T5" (in brackets) refer to the number assigned by Tallqvist to that individual.

17. f. Nabû-šum-uṣur desc. Ilūta-bāni	L 4735: 10 = Joannès 1989: 259f.	564
18. s. Iddinunu desc. Šangû-Nabû	TuM 2/3 112: 15, 22	562
19. no filiation; *išpar kitê*	Bongenaar 1997: 335	Nbk-Nbn/Cyr
20. s. $^{\text{Id}}$[...]	AUWE 5 132: r. 3	Nbk/Nbn?
21. desc. Rē'î-alpī, f. Šamaš-uballiṭ (T9)	EvM 8: r. 13	561
	Text/Reference	Date
22. s. Bēl-īpuš (T1)	Ner 47: r. 11	557
23. desc. Ṭābiḫu, f. Šūzubu (T8)	Nbn 4: r. 17	556
24. desc. Balāṭu, f. Nabû-mukīn-apli (T4)	Nbn 40: r. 13	555
	Nbn 42: 7	555
	CM 3 99: r. 19	555
25. f. Arad-Innin	YOS 19 284: 7	555
	YOS 19 281: r. 1	553
26. f. Zēriya desc. Nabûnnaya	TuM 2/3 1:22	550
27. desc. Ea-imbi, f. Nabû-šum-ēreš	CM 20B 116: 19	548
desc. Ea-imbi, f. Iqīša	CM 20B 116: 20	548
28. f. Nergal-ašarīd, desc. Arkât-ili-damqā	YOS 19 43: 3	544
29. f. Rēmūt desc. Nūr-Papsukkal	BRM 1 61: 14	Nbn
30. desc. Lē'a, f. Guzānu (T6)	ZA 4 Bard. 1: r. 12	522
31. f. [...]	TBÉR Pl. 18 AO 8160: 11	?
32. no filiation	TBÉR Pl. 1 AO 1942:4	?

In considering names or name-types of restricted use, it should also be noted that the almost complete absence of slaves bearing names formed with the element Marduk in tablets from Babylon of the sixth and early fifth centuries BC suggests a rather deliberate avoidance when naming slaves.[30]

f. Esoteric names

Despite the emphasis here on "current" names in examining naming patterns, the interest of *hapax* or unusual names should not be underestimated. Note, for example, the female slave called $^{\text{f}}$Šilangītu ($^{\text{f}}$*Ši-la-an-gi-tu*$_4$) in the Egibi property division tablet Dar 379: 41 (dated 510 BC); the word is otherwise known only as a lexical item for a kind of fish.[31] One wonders what exactly was going through the mind of the name-giver. Another Neo-Babylonian example is the name Arad-$^{\text{giš}}$má-KU[32] ("Servant of the $^{\text{giš}}$má-KU"), borne by a single individual on present evidence, the son of Nabû-zēr-ušebši, descendant of Malāḫu ("Boatman").[33]

30 Baker 2001, 22.

31 AHw 1235; CAD Š/1 442.

32 On the reading of $^{\text{giš}}$má-KU, the barge of Marduk, see Lambert 2000.

33 Dar 193: 23 = CM 20 no. 212 (516 BC); also $^{\text{I}}$Ir-$^{\text{r}}$$^{\text{giš}}$má$^{\text{1}}$-[KU dumu] $^{\text{r}}$*šá* $^{\text{Id+ag}}$$^{\text{1}}$-numun-gál-*ši* dumu $^{\text{I}}$[$^{\text{ú}}$má.laḫ$_4$] in BM 77551+: r. 25 (BV 96+123 [507 BC]; new edition and copy in Baker forthcoming).

g. Pseudonyms

It has been suggested that the author of a Babylonian letter to the Assyrian king (CT 54 493) used the name Narâm-Sîn as a pseudonym.[34] However, since the circumstances of the letter are unclear, the assumption that its author deliberately intended to disguise his identity remains unproven: in fact the argument seems to be based largely on the singularity of the name itself.

Names within the family

In order to examine patterns of name-giving within the family we first have to have a substantial number of family trees reconstructed.[35] This is somewhat easier for the Neo-Babylonian sources, where the citing of both father's name and ancestral name was normal, than for the Neo-Assyrian material. It is then a fairly straightforward matter to compare different generations. It is clear, for example, that in both Babylonia and Assyria it was not the practice to name sons after the father or grandfather, at least until the Seleucid era in Babylonia when papponymy becomes relatively common. When two Assyrian scholars named Ašarēdu call themselves "the Elder" or "the Younger" it is simply because they were aware of their contemporary namesake and wished to avoid confusion; no family relationship is implied.[36]

If we wish to look at the distribution of names within one generation of the same nuclear family, then we need to be able to determine the order of birth of the siblings. This is more complicated; the following case study draws on archival texts from Babylon of the sixth and early fifth centuries BC in an attempt to address this problem.

When brothers are mentioned together in legal contracts, there is no reason to specify which of them is the oldest, unless it is a matter of inheritance or a similarly important property transaction. In such cases it was an issue, because the oldest son inherited the larger share. For example, in one document a man called Nabû-uballiṭ sells some land; it is described as "the share, which Nabû-uballiṭ had not (yet) divided with Iddin-Marduk, his elder brother, and with Nergal-zēr-ibni, his younger brother, and with Mukīn-Marduk, his uncle."[37] From this we know the exact order of birth of the three brothers.

There are relatively few extant tablets where such information is explicitly given. However, from these cases it is clear that, where the same brothers are mentioned together in other documents, they are nevertheless still named in descending order of seniority. We can deduce from this that it was the general practice to refer to brothers in order of age. It is not too surprising a fact, given that, for example, judges and official scribes are named in order of seniority when they occur together in court records and property transactions.[38]

34 See Dietrich 1967/68, 222f., followed by Arnold 1985, 189ff. and Nissinen 1998, 140 with n. 530. The letter is badly broken and difficult to interpret.

35 A subject that formed part of the author's doctoral thesis.

36 See PNA 1/I, 140 nos. 3–4. Similarly the astrologer Rašil the Elder distinguishes himself from his contemporary, Rašil son of Nurzānu; see SAA 8 nos. 380–408 for their reports to the king.

37 CM 20A, 128: 2–5.

38 See Wunsch 2000b on the judges of Babylon during the reign of Nabonidus; Baker and Wunsch 2001 on the "college" of notaries.

In support of this, we also have the well-known Egibi letter, CT 22 6,[39] in which Iddinâ (*i.e.*, Itti-Marduk-balāṭu) greets all six of his children: first his daughters ᶠTašmētu-tabni and ᶠIna-Esagil-bēlet, then his three sons Širku, Libluṭ and Puršû, and finally his youngest daughter ᶠNanaya-ēṭirat. It is likely that this reflects the actual birth-order of the six siblings.[40] The order of birth of the sons, who are all known in this letter by their nicknames (see above), is confirmed by the evidence of the inheritance documents.[41] The order of seniority of the daughters, as implied by CT 22 6, is supported by the evidence of tablets documenting their dowries and gifts assigned to them.[42]

If we consider the cases from sixth to early fifth century BC Babylon in which the order of birth of the brothers can be ascertained according to the principles outlined above, then a pattern emerges that has not been previously observed:

Table 3: Names of brothers according to order of birth

1st brother	**2nd brother**	**3rd brother**	**4th brother**	**5th brother**
1. ?Mušēzib-Marduk	?Itti-Nabû-balāṭu	Nergal-iddin	Zababa-iqīša	
2. Itti-Marduk-balāṭu	Iddin-Nabû	Nergal-ēṭir		
3. Iddin-Marduk	Nabû-uballiṭ	Nergal-zēr-ibni		
4. Marduk-nāṣir-apli	Nabû-aḫḫē-bulliṭ	Nergal-ušēzib		
5. Marduk-šum-ibni	Nabû-šum-iddin			
6. Marduk-šum-iddin	Iddin-Nabû			
7. Marduk-ušallim	Nabû-mušētiq-uddê			
8. Kidin-Marduk	Nabû-mušētiq-uddê			
Note also:				
9. Ea-zēr-ibni	Nabû-aḫḫē-bulliṭ	Nergal-ina-tēšî-ēṭir	Itti-Šamaš-balāṭu	Zababa-per'u-uṣur

The data upon which Table 3 is based are summarised in Appendix 3. The father's name and family name of the siblings listed are as follows:

1. Marduk-bān-zēri//Bēl-ēṭir	4. Itti-Marduk-balāṭu//Egibi	7. Šāpik-zēri//Nādin-še'im
2. Nabû-aḫḫē-iddin//Egibi	5. Šulaya//Ea-eppeš-ilī	8. Zēriya//Šangû-Gula
3. Nabû-mukīn-zēri//Asû	6. Nabû-bān-zēri//Nappāḫu	9. Nabû-zēru-līšir//Egibi

In these cases the divine elements in the names are distributed systematically, with the oldest brother bearing a Marduk-name, the second bearing a Nabû-name, and the third a Nergal-name. It is clear from this pattern that the way in which sons were named was intended to reflect the divine order, whereby Marduk was the principal deity of the city, with Nabû being the second in rank, and so on. This is despite the fact that Nabû-names were considerably more frequent than Marduk ones in Babylon at this period.[43] Note that

39 The letter has been edited by Ebeling 1949, no. 6.

40 Wunsch 1995/96, 42 n. 66 seems also to understand that this letter names the siblings in order of birth.

41 *E.g.*, Dar 379: 1; see Appendix 3.

42 See Wunsch 1995/96, 41ff. on the daughters of Itti-Marduk-balāṭu.

43 In fact, names formed with Nabû are almost twice as frequent as names formed with Marduk in the name repertoire of this corpus.

documents concerning temple tithes from Babylon refer to the tithes (*ešrû*) of Bēl (*i.e.*, Marduk), Nabû and Nergal, always in that order.[44] An important point to note is that, although we know that Bēl was another name for the deity Marduk, as far as naming practices were concerned the elements "Marduk" and "Bēl" were not interchangeable. The personal names formed with "Bēl" do not fit the scheme outlined above, nor do we find the same person called "Marduk-iddin" in some texts and "Bēl-iddin" in others.

What can be identified among these propertied families of Babylon is, of course, a pattern in name-giving rather than a rule. Exceptions exist,[45] and names formed with both Nabû- and *aplu* were certainly current in Babylon at this period, though it is striking that the propertied families treated in Table 3 avoided such names. The pattern detected is surely not simply a coincidence, but it is difficult to determine what principles governed the choices in name-giving made by this particular group of families. One possibility is that the choice of names was affected by the place of the siblings within the wider extended family. For example, the well-known head of the Egibi family, Itti-Marduk-balāṭu, named his sons according to the scheme outlined in Table 3, but Iddin-Nabû, the elder of his two younger brothers, called his sons Bēl-na'id and Sîn-taqīša-bulliṭ.[46] It should also be noted that such patterns in name-giving may be masked by the practice of abbreviating names, by the use of nicknames, and by the early demise of one or more siblings.

We might consider whether or not a similar pattern can be detected in the names of women within the same family. In determining the birth order of sisters the position is comparable to that of brothers, that is, we rely particularly on texts relating to inheritance and property. The oldest daughter received a larger dowry than her sisters,[47] and when fKaššaya gave a gift of land to her two daughters, the elder, fIna-Esagila-ramât, received a larger share than her sister fAmat-Ninlil.[48] We have very few such cases that enable us to determine the birth order of sisters, but the two best-known Neo-Babylonian women from Babylon at this period were both first-born daughters, and both were called fIna-Esagil-ramât (the daughters of Zēriya, descendant of Nabaya, and of Balāṭu, descendant of Egibi, respectively). It is worth noting that feminine names were not formed with the deity Zarpānītu (spouse of Marduk),[49] as one might expect (compare names formed with Tašmētu, spouse of Nabû), but they could be formed with Esagila, that is, the name of the temple of Marduk.

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44 *E.g.*, *eš-ru-ú šá* ^{d}en ^{d}ag *u* ^{d}u.gur, "the tithes of Bēl, Nabû and Nergal" (VS 6 67: 5).

45 Note *e.g.*, Rēmūt-Gula son of Etellu descendant of Išparu and his younger brothers Nabû-ēṭir-napšāti and Mušēzib-Marduk (CM 20 no. 47).

46 Both sons occur in BRM 1 66 (524 BC).

47 See *e.g.*, Wunsch 1993b, 83f. on the relative size of the dowries of fTašmētu-tabni and her younger sister Ina-Esagila-bēlet, daughters of Itti-Marduk-balāṭu, desc. Egibi. Compare also the dowries of the sisters fIna-Esagil-ramât and fAmat-Ninlil, daughters of Balāṭu desc. Egibi and fKaššaya desc. Kutimmu (see Roth 1991, 36f.; Baker forthcoming).

48 VS 5 43/44; VS 45/46; see Baker forthcoming for text editions and discussion.

49 Zarpānītu names are extremely rare. Tallqvist 1906 lists no Neo-Babylonian examples, but there is now the female slave named fLētka-idî-Zarpānītu in CM 20 no. 68: r. 9′ ([fLēt]-*ka-i-di-i-*^{d}ru$_6$.u$_8$.ú.a, divine name written cryptographically). A single Neo-Assyrian example is known, fZarpānītu-šarrat in CTN 2 15: r. 43.

Conclusions

The judicious use of Akkadian onomastic data can contribute to studies of social and political history. However, as we have seen, the names of individuals or classes of people need to be viewed in a wider context if their significance is to be properly evaluated. Trends in naming practices may be relevant to the investigation of long-term social change,[50] for example, the changes in the onomasticon of late Achaemenid Uruk, which can be related to a reorganisation of the pantheon of that city.[51]

The question of whether or not a name had any significance to the name-giver and name-bearer, or whether its use was so conventional that it had become devoid of meaning, is important in onomastic studies. Even though we may be able to translate an Akkadian name into an English sentence, it should not be assumed *a priori* that the name had that particular resonance every time it was used in antiquity. However, as has long been implicit in studies of the Akkadian onomasticon, the very popularity of names referring to the position of the name-bearer within the family implies that their use was not random. The fact that it is possible to detect patterns in naming, and the deliberate selection of names in certain cases, confirms that we are not dealing with mere fossils.

Individual choices in naming are difficult to evaluate. When a certain Marduk-apla-iddina of Babylon called his son Nabû-bēl-šumāti sometime around the middle of the sixth century BC,[52] did he have in mind the more famous Marduk-apla-iddina II and his notorious grandson, renowned champions of Babylonian independence? We cannot tell. But when we have the resources available to integrate onomastic evidence with historical data, then we can begin to define more precisely the principles governing the selection of names or name-types and to relate them to their social and cultural context.

APPENDIX 1: Names formed with *šarru* in PNA vols 1–2 (A–N)[53]

Name	No. of name-bearers	No. of eunuch name-bearers
Abat-šarri-lā-tenni	1	
Abat-šarri-lē'i	1	
Abat-šarri-uṣur	1	
Adad-šarru-balliṭ	1	
Adad-šarru-ibni	1	
Adad-šarru-uṣur	3	

50 Compare, for example, the rôle of onomastic data in assessing the rate of Christianisation of Roman Egypt, as discussed by Bagnall 1995, 85–89.

51 See Beaulieu 1992, 53ff. The same author has announced a forthcoming monographic study of the Uruk pantheon in the Neo-Babylonian period (Beaulieu 1997, 57 n. 6).

52 $^{\text{Id}+}$ag-en-mu.meš a-*šú šá* $^{\text{Id}}$amar.utu'-a-mu a $^{\text{I.lú}}$ad.kid, "Nabû-bēl-šumāti, son of Marduk-apla-iddina, descendant of Atkuppu" (VS 4 92: r. 13f., dated 16.xi.2 Dar [519 BC]; duplicate VS 4 93: r. 11f.).

53 The names included in this case study include only those which refer to the persona of the king, *i.e.*, names with the element *mār-šarri* "crown prince" are excluded, as are those where *šarru* is a divine epithet, such as Aia-šarru-ibni "Ea-the-king has created," or where it is part of the divine name Ṣalam-šarri.

Name	No. of name-bearers	No. of eunuch name-bearers
Ana-šēp-šarri-iddina	1	
Anu-šarru-uṣur	1	
Aramiš-šarru-uṣur	1	
Aššūr-da''in-šarru	5	1
Aššūr-mutakkil-šarru	1	
Aššūr-rā'im-šarri	3	
Aššūr-šarru-ibni	5	
Aššûr-šarru-uṣur	25	
Balṭi-šarrāni	1	
Balṭi-šarri	1	
Bēl-Ḫarrān-šarru-uṣur	8	
Bēl-rukub-šarru-uṣur	1	
Bēl-šarru-ibni	6	
Bēl-šarru-iddina	1	
Bēl-šarru-irâm	1	
Bēl-šarru-uṣur	24	
Danqā-dibbī-šarri	2	
Dāri-šarru	9	1
Dulli-šarri-daḫu	1	
Ebissi-šarri	1	
Ešarra-šarru-uṣur	1	
Gabbu-ilāni-šarru-uṣur	2	
Illil-šarru-uṣur	(entry in name list)	
Inūrta-šarru-ibni	1	
Inūrta-šarru-uṣur	3	
Issār-šarru-ibni	2	
Lulabbir-šarrûssu	1	
Lū-tērik-šarrûssu	3	
Mannu-kī-šarri	13	1
Marduk-šarru-ibni	1	
Marduk-šarru-uṣur	39	3
Mukīn-šarru	1	
Nabû-bāni-šarri	1	
Nabû-ka''in-šarru	1	
Nabû-nāṣir-šarri	1	
Nabû-šarru-ibni	3	
Nabû-šarru-lēšir	1	
Nabû-šarru-ukīn	4	
Nabû-šarru-uṣur	62	3
Nergal-šarru-uṣur	46	1
Nušku-šarru-uṣur	7	
total	190	10

APPENDIX 2: Eunuchs known by name in the Neo-Assyrian sources[54]

	Name	Title and other information	Date
1.	Abdâ 13.	lú.sag *šá*-igi-é-d[ingir]	–
2.	Adad-issē'a 1.	lú.sag	Adn III/Shal IV
3.	Adad-nāṣir 2.	lú.sag of Manni-kī-māt-Aššūr (gov. Guzana)	Adn III
4.	Aḫḫēšāia? 7.	lú.s[ag]	Esar/Abl
5.	Aḫu-lāmur 17.	lú.ˢsagˀ (purchased by royal charioteer Rēmanni-Adad)	early Abl
6.	?Aia-šarru-ibni 4.	(contextual)	Abl
7.	Amurru-ēṭir[55]	lú.sag lú.*qí-i-pi šá* uru.bàd-^{d}en-líl	Abl
8.	Aššūr-bēlu-ka''in 5.	lú.sag	Esar (+ Senn)
9.	Aššūr-bēlu-uṣur 4.	lú.[sag] of Palil-ēreš (gov. Raṣappa; see 114.)	Adn III/Shal IV
10.	Aššūr-būnā'ī-uṣur	lú.sag gal-lú.kaš.lu[l]	Shal III–ŠšA V
11.	Aššūr-da''inanni 4.	"my eunuch" in royal inscr.; gov. Mazamua, ep. 733	Tp III
12.	Aššūr-da''in-šarru 1.-2.	lú.sag; also diviner (with the title en-umuš "reporter") and probably cupbearer (lú.kaš.lul)	Abl
13.	Aššūr-dūru-uṣur 2.	lú.sag of Bēl-dān (gov. Kalḫu)	Tp III
14.	Aššūr-issē'a 4.	lú.sag *šá* [...]	Abl
15.	?Aššūr-nādin-aḫḫē 5.[56]	*ša* uru.lú.sag.meš	Tp III
16.	Aššūr-nāṣir 11.	lú.gal-sag.meš	Esar
17.	Aššūr-rēmanni 19.	lú.gal-sag *šá* dumu-man; ep. 617*	after Abl
18.	Aššūr-rēṣūwa 1.	lú.sag lú.dub.sar *ša* mí.é.gal	Sg II
19.	Aššūr-šallim-aḫḫē 4.	gal-sag.[meš]	Sg II
20.	Aššūr-[...] 8.	lú.sag ama-man	late Esar/Abl
21.	Atar-ili 2.	lú.sag *ša* dumu-lugal uru.ká.dingir; also *rab-urâti*	late Esar
22.	Awiānu 1.	lú.sag	Esar
23.	Balṭi-Aia 7.	(contextual); also fodder master at the royal court	Abl (also late Esar)
24.	Bar-ūri	lú.sag *ma-qa-al-ta-a-nu* [*ša*] Bēl-rakkab *ša* Sam'al	Esar
25.	Bēl-daiāni	lú.sag	Adn III
26.	Bēl-dēni-amur 2.	one of [pap 4] lú.sag.meš-*ni*; also baker (lú.mu)	Sg II
27.	?Bēl-Ḫarrān-bēlu-uṣur 2.[57]	(iconography); a palace herald, ep. 741	Shal IV–Tp III

54 A question-mark before the name indicates that the status of eunuch is uncertain; a question-mark after the name indicates that the reading of the name is uncertain. Numbers following the name refer to the entry for that individual in PNA I–II (A–N); for names P–Z, to be included in forthcoming fascicles of PNA, letters are used to distinguish homonymous individuals. Where titles are extant the most complete exemplar is cited. The abbreviations used are: Abl (Assurbanipal); Adn (Adad-nērārī); Aei (Aššūr-etel-ilāni); ep. + year (eponym official for the year x); Ašdn (Aššūr-dan); Esar(haddon); gov. (governor); Senn(acherib); Sg (Sargon); Shal (Shalmaneser); ŠšA (Šamši-Adad); Tp (Tiglath-pileser).

55 See ABL 963: 4f.; individual erroneously omitted from PNA 1/I and mistakenly referred to as Issarān-ēṭir in PNA 1/II 332 sub Bēlšunu 8.

56 A typesetting error apparently caused the omission of the beginning of this entry at the top of PNA 1/I p. 201.

57 Not identified in PNA as a eunuch, but cf. Grayson 1995, 98, and note the iconographic evidence discussed by Reade 1972, 94.

28.	Bēl-Ḫarrān-dūrī 2.	one of pap 4 sag.meš	Sg II
29.	Bēl-ibni 18.	lú.sag *šá* [lugal e]n-*i*[*á*];[58] also military commander of the Sealand	Abl
30.	Bēl-iddina 12.	(contextual); gov. Kullimmeri	Esar
31.	Bēl-Ingal-dūrī 1.	lú.sag[!] a-man	prob. 7th c.
32.	Bēl-issē'a 2.	lú.sag of Bēl-tarṣi-ilumma (gov. Kalḫu); also village manager of Kalhu	Adn III–Ašdn III
33.	Bēl-tarṣi-ilumma 1.	lú.a.ba lú.sag *šá* Adad-nērāri; later gov. Kalḫu, ep. 797 (brother of Sîn-ēṭir [see 126.])	Adn III
34.	Bi-ilu	(contextual); gov. (U)pummu	Esar
35.	Birtāiu 1.	lú.sag of Adad-nērārī, king of Assyria	Adn III
36.	Būlu-zakaru	lú.sag	Esar
37.	Dādi-iqbi 2.	[lú].sag	Esar/early Abl
38.	Dādi-[...] 2.	one of pab 4 sag.meš	Sg II
39.	Dāgil-ilī 1.	lú.sag	Abl and later
40.	Dannāia 8.	lú.[!]sag[!]; also a diviner (lú.ḫal, lú.en-*ṭè-me*/umuš)	Abl
41.	Dāri-šarru 2.	lú.sag *ku-sa-a* (*i.e.*, Kushite)	Esar/early Abl
42.	?Ḫamatāiu 3.	(contextual)	–
43.	?Ḫumbappi	l[ú.sag^2] (+ context); probably an Elamite	Abl?
44.	?Iadī' 4.	from uru[!!]-lú.sag[!].meš	Esar
45.	Idrāia 6.	lú.sag-man	late Abl
46.	Ilâ	[!]lú[!].sag *šá* lú.[!]x x[!]	Adn III
47.	Ilî	lú.sag	early Abl
48.	?Il-iāba 3.	lú.s[ag^2]	Abl
49.	Ilu-eppaš 1.[59]	lú.sag *ša* l[ú.gal-sag^2]	Adn III
50.	Ilu-ittīja 1.	lú.sag of Šamši-Adad, king of Assyria; gov. Assur etc., ep. 804	ŠšA V
51.	Ilu-pīja-uṣur 7.	lú.sag	late Abl
52.	Ilu-ṣabtanni	[!]lú.sag-man[!]	Esar
53.	I-ma'in	lú.sag	Sg II
54.	Inūrta-aḫīa-šukšid	lú.sag of Adad-nērārī; also gal-lú.mu.meš lú.na.gada.meš ("chief of the cooks and herdsmen")	Adn III
55.	Inūrta-bēlu-uṣur 2.	lú.sag of Inūrta-ašarēd	ŠšA V
56.	Iqbi-Bēl 1.	lú.sag	Adn III/Shal IV
57.	[Issarān-ēṭir]	see Amurru-ēṭir	
58.	Issarān-mušallim 3.	lú.gal-sag	after Abl
59.	Issār-dūrī 2.[60]	lú.sag of Nergal-ilā'ī (commander-in-chief)	Adn III
60.	Itunî	lú.*šu-ut*-sag of the king of Elam	Abl
61.	Kaqqadānu 3.	lú.sag	Senn
62.	Kummāiu 3.	:. ("ditto," *i.e.*, lú.sag-man)	Sg II
63.	?Kunāia 3.	lú.s[ag^2]	Abl
64.	Lā-mašê 1.	lú.sag	Tp III/Sg II
65.	Mannu-kī-aḫḫē 3.	lú.sag	Tp III
66.	Mannu-kī-Arbail 24.	lú.sag	Abl or later

58 ABL 267 r. 12, letter of Nabû-ušabši to the king.

59 The date of the tablet CTN 2 17 as given in the first instance in PNA is to be corrected from 738 to 783.

60 Grayson 1995, 98 identifies him with the governor of Naṣibina, eponym of the year 774 (Issār-dūrī 3. in PNA).

67.	Mannu-kī-šarri 6.	sag-man; also palace herald, ep. 665	Abl
68.	Mardî 1.	lú.sag	Sg II
69.	Marduk-šarru-uṣur 21.	lú.sa[g], lú.*šu-ut* sag-*ia* (*i.e.*, of the king)	Abl
70.	Marduk-šarru-uṣur 27.	l[ú].sag =71?	late Abl
71.	Marduk-šarru-uṣur 28.	˹lú.sag˺ dumu-lugal = 70?	late Abl
72.	Marduk-šumu-ibni 3.	lú.*šu-ut* sag.meš of Urtaku (king of Elam)	Abl
73.	Milkî	"ditto" (*i.e.*, sag)	after Abl
74.	Milki-nūrī 1.	lú.sag *šá* mí.é.gal	Esar-Abl
75.	?Mīnu-aḫṭi-ana-ištari	(seal iconography)	–
76.	Muqallil-kabti 2.	lú.sag	Sg II
77.	Mušēzib-Aššūr 7.	lú.sag	Esar/early Abl
78.	Mušēzib-Šamaš[61]	(iconography); gov. of the city Dūru	9th/early 8th c.
79.	Mutakkil-Marduk 2.	lú.gal-sag.meš, ep. 798	Adn III
80.	Mutaqqin-Aššūr 1.[62]	lú.gal-sag.meš	ŠšA V
81.	Nabû'a 1.	l[ú˹.s]ag˺	Adn III
82.	Nabû-aḫu-iddina 5.	lú.sag; engaged in scribal instruction	late 8th/7th c.
83.	Nabû-bēlu-šallim	lú.sag.meš of Aia-ḫālu, commander-in-chief	ŠšA V
84.	Nabû-dūr-bēlīja? 1.	[l]ú.*šá*-˹sag˺-*šu* (*i.e.*, of Adad-nērārī)	Adn III
85.	Nabû-dūru-kuṣur	[lú].sag	Esar
86.	Nabû-dūru-uṣur 3.[63]	lú.sag lú.mu *ša* é.gal	Sg II
87.	Nabû-dūru-uṣur 8.	lú.sag	Sg II
88.	Nabû-dūru-uṣur 13.	lú.sag a[ma˹-man]	Esar/early Abl
89.	Nabû-ēpuš 1.	lú.sag	Sg II
90.	Nabû-erība 18.	lú.sag	Abl
91.	Nabû-erība 30.	lú.sag-*iá* (*i.e.*, of the king)	Abl
92.	Nabû-gāmil 2.	lú.sag é.ki.m[aḫ]	Abl
93.	Nabû-killanni 3.	"ditto" (*i.e.*, lú.sag)	Senn
94.	Nabû-nādin-aḫḫē 25.	lú.sag *ša* a-man	7th c.
95.	Nabû-nādin-aḫi 17.	lú.sag *šá* é.ki˹.˺maḫ˺	after Abl
96.	?Nabû-nāṣir 18.	from uru˹-lú.sag˺.meš	Esar
97.	Nabû-qātī-ṣabat 3.	lú.sag	Abl
98.	Nabû-rēmanni 33.	lú.sag	Sg II or later
99.	Nabû-šarru-uṣur 2.[64]	lú.sag of Adad-nērārī, king of Assyria	Adn III
100.	Nabû-šarru-uṣur 29.	lú.gal-sag, Aram. *rbsrs*, ep. 644*	Abl
101.	Nabû-šarru-uṣur 56.	lú.sag	7th c.
102.	Nabû-šēzibanni 10.	lú.sag *šá* uru é.lugal.meš	Senn-Abl
103.	Nabû-tappūtī-alik	lú.gal-sag, ep. 613*	after Abl
104.	Nabû-uṣalla 2.	lú.sag of Sargon, king of Assyria; gov. Tamnuna	Sg II
105.	Nabû-zēru-ibni 2.	lú.sag kur.*ru-*'[*u˹-a-a*] (*i.e.*, Ru'uean)	Sg II
106.	Na'id-ilu 11.	lú.sag	Esar/Abl
107.	Naragê	(contextual); Urarṭian chief tailor	Sg II
108.	Nasḫir-ilu 3.	lú.sag	Abl

61 Omitted from PNA by error; listed by Grayson 1995, 98, and see RIMA 3 p. 201 for further references.

62 Grayson 1995, 98 reads Mutarriṣ-Aššur.

63 In the heading of this entry (PNA 2/II, 824) should be read Sargon II (not Sargon I).

64 Grayson 1995, 98 identifies him as the governor of Talmusu, eponym of the year 786 (Nabû-šarru-uṣur 1. in PNA).

109. Nazia 2.	[l]ú.sag-*šú*; probably an Elamite	Abl
110. Nergal-āpil-kūmū'a[65]	(contextual); palace manager and city overseer of Kalḫu	Ašn II
111. [Nergal-ēreš]	see Palil-ēreš	
112. Nergal-nāṣir 12.	lú.sag	late Abl
113. Nergal-šarru-uṣur 4.	[l]ú[!].sag *ša* lú[!].gal[!]-x[x]	Sg II
114. Nīnuāiu 11.	lú.sag-man	Abl
115. Nuḫšāia 2.	one of pab 4 sag.meš	Sg II
116. Nušku-ilā'ī 10.	lú.sag	Abl
117. Palil-ēreš[66]	lú.sag, gov. Raṣappa, ep. 803, 775	Adn III
118. Pān-Aššūr-lāmur a.	(iconography); gov. Assur, ep. 776, later gov. Arbail, ep. 759	Adn III–Ašdn III
119. Pān-Aššur-lāmur b.	Aram. inscription on seal: *pn'sr[l]mr srs z[!] srgn*	Sg II
120. Pān-Issār-lāmur	sag	late Abl
121. Patamû	lú.sag, one of [pap 4] lú.sag.meš-*ni*	Sg II
122. Rēmanni-Adad	l[ú].sag-man	Sg II
123. Rēmanni-ilu	lú.sag of Bēl-tarṣi-ilumma (gov. Kalhu; see 33.)	Adn III
124. Rēmūt-Nergal?	lú.sag *šá* mí.*ša-kín-te*	Senn?
125. Ruradidi	lú.sag *šá* mí.*ša-kín-te*	Senn
126. Sîn-ēṭir?	[lú.s]ag[?] lú.a.ba (brother of Bēl-tarṣi-ilumma [see 33.])	Adn III
127. Sîn-šarru-uṣur	lú.sag-lugal	Sg II
128. Sîn-šumu-lēšir	lú.gal-sag	Aei
129. Ṣalam-šarri-iqbi	lú.sag-man	after Abl
130. Ṣil-Bēl-dalli	lú.sag; also *ša-muḫḫi-bīti* (of the Nabû Temple of Kalḫu)	Abl
131. Ṣil-Šamaš	one of [pap 4] lú.sag.meš-*ni*; also a confectioner (*karkadinnu*)	Sg II
132. Ša-Nabû-šû	lú.gal-sag, gal-lú.sag.meš	Abl
133. Šallim-ilu	lú.sag	Adn III
134. Šamaš-šarru-uṣur	lú.sag	Abl and later
135. Šamaš-kūmū'a	lú.sag of Adad-nērārī, king of Assyria[67]	Adn III
136. Šamaš-nāṣir?	lú.sag of Adad-nērārī, king of Assyria, lú.igi.dub ("treasurer") of the god Aššūr	Adn III
137. ?Šamaš-ṣabtanni	lú.sag du [...][68]	Abl
138. Šamaš-upaḫḫir	lú.sag	Adn III/Shal IV
139. Šammu-balaṭ	lú.sag	7th c.
140. Šarru-kettu-irâm	lú.sag	7th c.?
141. Šarru-munammir	lú.sag	Adn III
142. Šarru-nūrī	lú.sag	Esar

65 The fact of his being a eunuch is not raised in PNA 2/II, 941; however, see Deller 1999, 307.

66 The name has often been read Nergal-ēreš (*e.g.*, Millard 1994, 34; Grayson 1996, 229); however, Tadmor 1973, 147 n. 32 observes that igi.du represents a different deity in Neo-Assyrian sources. This is borne out by the distribution of Neo-Assyrian names formed with the divine elements Nergal and igi.du; of the many individuals bearing Nergal- names in PNA 2/II none has the divine name written igi.du; conversely, the name of the eunuch in question here is written only with igi.du.

67 Grayson 1995, 98 identifies him with the governor of Arrapḫa, eponym for 811.

68 See SAA 4 268 ad r. 8 for the alternative possibility of reading his title lú.sag.du.

143. Šulmu-šarri a.	lú.sag *šá* é-ki.m[aḫ]	Abl
144. Šulmu-šarri b.	lú.sag kur.*ku-sa-a-a* (*i.e.*, Kushite)	Esar/Abl
145. Šumāia	lú.sag	Senn
146. Tardītu-Aššūr a.	sag$^{?}$-man gal-50	Shal IV
147. Tardītu-Aššūr b.	sag	Abl
148. Tardītu-Aššūr c.	sag	prob. 7th c.
149. Teiṣipidi	lú.sag	Abl
150. ?Tikusu	[lú.sa]g$^{?}$ of Sîn-[...]	Senn
151. Uaianiara	lú.sag	Tp III/Sg II
152. Ušēzib	lú.[s]ag.kur.^{r}x x x x^{1}	Tp III/Sg II
153. Zazî?	lú.sag-lugal	Sg II
154. [...]-ana-kāša-atkal	lú.sag	–
155. [...]-Issār[69]	one of [pap 4] lú.sag.meš-*ni*; also a cupbearer (lú.kaš.lul)	Sg II

APPENDIX 3: Data concerning the birth-order of siblings treated in Table 3.

The data cited below are not necessarily comprehensive but are intended to be representative.

1. The sons of Marduk-bān-zēri, descendant of Bēl-ēṭir

a. Mušēzib-Marduk and Nergal-iddin as co-debtors:

"10 shekels ... the debt of Mušēzib-Marduk and Nergal-iddin, sons of Marduk-bān-zēri, descendant of Bēl-ēṭir ..." (Cyr 240: 1–5; 11.xii.6 Cyr [532 BC]).

b. Itti-Nabû-balāṭu, Nergal-iddin and Zababa-iqīša repay a debt which their father (presumably now deceased)[70] owed to Gabbiya, son of Libbisimmu:

"(Concerning) n kur of dates belonging to Gabbiya, son of Libbisimmu, which is the debt of Marduk-bān-zēri, son of Etellu, descendant of Bēl-ēṭir; the dates, according to their shares, Itti-Nabû-balāṭu, Nergal-iddin and Zababa-iqīša, sons of Marduk-bān-zēri, descendant of Bēl-ēṭir, have paid to Nabû-aqabbi, son of Gabbiya, and ^{f}Nuptaya, wife of Gabbiya ..." (Camb 110: 1–7; 14.iv.2 Camb [528 BC]).

Mušēzib-Marduk is last attested in 6 Cyr and had presumably died by the drawing up of Camb 110, otherwise he would have shared liability for clearing his father's debt. It is likely that he was the oldest brother, but this cannot be verified. Itti-Nabû-balāṭu is relatively well attested because he was the son-in-law of Itti-Marduk-balāṭu, descendant of Egibi.[71] An alternative possibility is that Mušēzib-Marduk was an adopted son of Marduk-bān-zēri who did not actually share in Marduk-bān-zēri's estate (nor in his liabilities).[72]

69 The edition (SAA 1 184) restores [Urdu]-Issar, but there are numerous other possibilities.

70 Marduk-bān-zēri is last attested some eight months earlier (Camb 73, dated 14.viii.1 Camb).

71 He was betrothed, first to ^{f}Tašmētu-tabni, later to her sister ^{f}Ina-Esagil-bēlet; see Wunsch 1995/96, 41f. for discussion.

72 I am grateful to Cornelia Wunsch for drawing my attention to this possibility, based on the unpublished tablet BM 30515, which suggests that Marduk-bān-zēri had only three sons, not four, since in it the father assigns to his youngest son an extra share "in addition to his $^{1}/_{4}$ share" (*i.e.*, implying three sons, with the eldest son receiving a half of the total).

2. The sons of Nabû-aḫḫē-iddin, descendant of Egibi

Itti-Marduk-balāṭu, Iddin-Nabû and Nergal-ēṭir, sons of Nabû-aḫḫē-iddin, descendant of Egibi, settle the division of the assets arising out of the commercial partnership between their deceased father and Bēlšunu (CM 20 no. 10, date lost [between 521 and 519 BC]).
For a discussion of the relationship between Itti-Marduk-balāṭu, who succeeded his father as head of the family enterprise, and his younger brothers, see Wunsch 2000a, 16–19.

3. The sons of Nabû-mukīn-zēri, descendant of Asû

"… the share of Nabû-uballiṭ, son of Nabû-mukīn-zēri, descendant of Asû which he had not divided with Iddin-Marduk, his elder brother, and Nergal-zēr-ibni, his younger brother, and Mukīn-[Marduk], his father's [brother] …" (BM 41602: 2–5 = CM 20 no. 128; 10.v.[–] Cyr [538–530 BC]).

4. The sons of Itti-Marduk-balāṭu, descendant of Egibi

a. In the "testament" of Iddin-Marduk, son of Iqīšaya, descendant of Nūr-Sîn (father-in-law of their father Itti-Marduk-balāṭu):

"… to [Marduk-nāṣir-ap]li, elder son of Itti-Marduk-balāṭu, [and] to Libluṭ (*i.e.*, Nabû-aḫḫē-bulliṭ) and Nergal-ušallim, the younger sons [of Itti]-Marduk-balāṭu …" (Wunsch 1995/96 no. 2: 15–17; [x.x.]0 Camb [529–522 BC]).

b. Dividing the estate of their father Itti-Marduk-balāṭu:

"Tablet of the division of houses (and) slaves which Marduk-nāṣir-apli, Nabû-aḫḫē-bulliṭ and [Nergal-ušēzib], sons of Itti-Marduk-balāṭu, descendant of Egibi, divided between themselves" (Dar 379: 1–2; 24.v.14 Dar [508 BC]).

5. The sons of Šulaya, descendant of Ea-eppeš-ilī

Where Marduk-šum-ibni and Nabû-šum-iddin, sons of Šulaya, descendant of (Ea-)eppeš-ilī are attested together, Marduk-šum-ibni is always named first (BM 77361; 77796; Camb 260; Dar 38; 169; 224; 226. The dates range from 3².vi.3 Camb to 22.vi.7 Dar [527–515 BC]).

6. The sons of Nabû-bān-zēri, descendant of Nappāḫu[73]

a. Dividing the temple prebends of their father Nabû-bān-zēri:

"Tablet of the division of the *ērib-bīti* prebends which Marduk-šum-iddin (and) Iddin-Nabû, sons of Nabû-bān-zēri, descendant of Nappāḫu divided between themselves" (MacGinnis 1991/92 no. 9: 1–3; 16.viii.12 Nbn [544 BC]).

b. In a lease of prebendary duties:

"… the share of Iddin-Nabû, son of Nabû-bān-zēri, descendant of Nappāḫu, which (he shares) with Šum-iddin, his elder brother …" (VS 5 87/88: 3–5; 29.ii.19 Dar [503 BC]).

73 See Baker forthcoming.

7. The sons of Šāpik-zēri, descendant of Nādin-še'im

As co-creditors:

"Six kur of dates, the *imittu* of land on the Ḫazuzu-canal belonging to Itti-Marduk-balāṭu, son of Nabû-aḫḫē-iddin, descendant of Egibi, and Marduk-ušallim and Nabû-mušētiq-uddê, sons of Šāpik-zēri, descendant of Nādin-še'im, (is) the debt of ..." (Camb 174: 1–5 = CM 20 no. 98; 30.vi$_1$.3 Camb [527 BC]).

8. The sons of Zēriya, descendant of Šangû-Gula

As co-debtors:

"... the debt of Kidin-Marduk and Nabû-mušētiq-uddê, sons of Zēriya, descendant of Šangû-Gula ..." (CM 3 no. 291: 4–5; [x.x.]3 Cyr [536/535 BC]).

For further discussion of Kidin-Marduk and his family see Wunsch 2000a, Bd.I, 139ff.

9. The sons of Nabû-zēru-līšir, descendant of Egibi

In the "testament" of their mother ^{f}Gugûa:

"..., the dowry of ^{f}Gugûa, she made over in a sealed tablet to Ea-zēr-ibni, her oldest son; n silver, in the absence of Ea-zēr-ibni, ^{f}Gugûa shared out to her younger sons, to Nabû-aḫḫē-bulliṭ, Nergal-ina-tēšî-ēṭir, Itti-Šamaš-balāṭu and Zababa-per'u-uṣur; Ea-zēr-ibni shall not contest with them over it" (Nbn 65: 7–12; 10.iii.2 Nbn [554 BC]).

Bibliographical Abbreviations

Text sigla etc. follow those used in AHW and CAD, with the addition of the following:

AUWE 5	see Gehlken 1990
CM 3	see Wunsch 1993
CM 20	see Wunsch 2000a
PNA	*The Prosopography of the Neo-Assyrian Empire*, Vol. 1, Part II. A, K. Radner (ed.), Helsinki 1998; Vol. 1, Part II. B–G, K. Radner (ed.), Helsinki 1999; Vol. 2, Part I. Ḫ–K, H.D. Baker (ed.), Helsinki 2000; Vol. 2, Part II. L–N, H.D. Baker (ed.), Helsinki 2001.
RIMA 3	see Grayson 1996
TBÉR	Durand, J.-M., *Textes babyloniens d'époque récente* (Recherche sur les grandes civilisations, Cahier nº 6). Paris 1981.
ZA 4 Bard.	see Strassmaier 1889

Bibliography

Arnold, B.T.

1985 *Babylonian Letters from the Kuyunjik Collection: Seventh Century Uruk in Light of New Epistolary Evidence*. Ph.D. thesis, University of Michigan.

Bagnall, R.S.

1995 *Reading Papyri, Writing Ancient History*. London and New York.

Baker, H.D.

forthcoming *The Archive of the Nappāḫu Family*.

2001 "Degrees of Freedom: Slavery in Mid-First Millennium BC Babylonia," in P. Mitchell (ed.), *The Archaeology of Slavery* (World Archaeology 33/1), 18–26.

Baker, H.D. and C. Wunsch

2001 "Neo-Babylonian Notaries and Their Use of Seals," in W.W. Hallo and I.J. Winter (eds.), *Seals and Seal Impressions. Proceedings of the XLVe Rencontre Assyriologique Internationale, Part II: Yale University*. Bethesda, 197–213.

Beaulieu, P.-A.

1992 "Antiquarian Theology in Seleucid Uruk," ASJ 14, 47–76.

1997 "The Cult of AN.ŠÁR/Aššur in Babylonia after the Fall of the Assyrian Empire," SAAB 11, 55–73.

2000 *Legal and Administrative Texts from the Reign of Nabonidus* (YOS 19). New Haven and London.

Bongenaar, A.C.V.M.

1997 *The Neo-Babylonian Ebabbar Temple at Sippar: Its Administration and Its Prosopography* (PIHANS 80). Istanbul.

Dalley, S.

2001 Review of Mattila 2000, BiOr 58, 198–206.

Dandamaev, M.A.
1984 *Slavery in Babylonia from Nabopolassar to Alexander the Great (626–331 BC)*. DeKalb.

Deller, K.
1999 "The Assyrian Eunuchs and Their Predecessors," in K. Watanabe (ed.), *Priests and Officials in the Ancient Near East*. Heidelberg, 303–311.

Dietrich, M.
1967/68 "Neue Quellen zur Geschichte Babyloniens (II)," WdO 4, 183–251.

Donbaz, V. and M.W. Stolper
1997 *Istanbul Murašû Texts* (PIHANS 79). Istanbul.

Ebeling, E.R.F.
1949 *Neubabylonische Briefe* (Abhandlungen der Bayerischen Akademie der Wissenschaften, phil.-hist. Klasse, N.F. 30). Munich.

Edzard, D.O.
1998 "Namen, Namengebung (Onomastik). A. Sumerisch; B. Akkadisch," RlA 9/1–2, 94–116.

Finkel, I.L.
1999 "The Lament of Nabû-šuma-ukîn," in J. Renger (ed.), *Babylon: Focus mesopotamischer Geschichte, Wiege früher Gelehrsamkeit, Mythos in der Moderne. 2. Internationales Colloquium der Deutschen Orient-Gesellschaft, 24.–26. März in Berlin* (CDOG 2). Saarbrücken, 323–342.

Gehlken, E.
1990 *Spätbabylonische Wirtschaftstexte aus dem Eanna-Archiv I* (AUWE 5). Mainz.
1996 *Uruk. Spätbabylonische Wirtschaftstexte aus dem Eanna-Archiv* (AUWE 11). Mainz.

Grayson, A.K.
1995 "Eunuchs in Power. Their Role in the Assyrian Bureaucracy," in M. Dietrich and O. Loretz (eds.), *Vom Alten Orient zum Alten Testament. Festschrift für Wolfram Freiherrn von Soden zum 85. Geburtstag am 19. Juni 1993* (AOAT 240). Neukirchen–Vluyn.
1996 *Assyrian Rulers of the Early First Millennium BC, II (858–745 BC)*. (The Royal Inscriptions of Mesopotamia, Assyrian Periods, Volume 3). Toronto, Buffalo and London.

Joannès, F.
1982 *Textes économiques de la Babylonie récente (étude des textes de TBÉR - Cahier no. 6)* (Études Assyriologiques 5). Paris.
1989 *Archives de Borsippa. La famille Ea-ilûta-bâni. Etude d'un lot d'archives familiales en Babylonie du VIIIe au Ve siècle av. J.-C.* Geneva.

Jursa, M.
1995 *Die Landwirtschaft in Sippar in neubabylonischer Zeit* (AfO Beiheft 25). Vienna.
1997 "Neu- und spätbabylonische Texte aus den Sammlungen der Birmingham Museums and Art Gallery," Iraq 49, 97–174.

Kataja, L.
1987 "A Neo-Assyrian Document on Two Cases of River Ordeal," SAAB 1/2, 65–68.

Kessler, K.
1991 *Urkunden aus Privathäusern – Die Wohnhäuser westlich des Eanna-Tempelbereichs I* (AUWE 8). Mainz.

Lambert, W.G.
2000 "Another Inscribed Weight," NABU 2000/54.

MacGinnis, J.
1991/92 "Neo-Babylonian Prebend Texts from the British Museum," AfO 38/39, 74–100.

Mattila, R.
2000 *The King's Magnates. A Study of the Highest Officials of the Neo-Assyrian Empire* (SAAS 11). Helsinki.

Millard, A.
1994 *The Eponyms of the Assyrian Empire 910–612 BC* (SAAS 2). Helsinki.

Nissinen, M.
1998 *References to Prophecy in Neo-Assyrian Sources* (SAAS 7). Helsinki.

Oelsner, J.
1981 "Gesellschaft und Wirtschaft des seleukidischen Babyloniens: einige Beobachtungen in den Keilschrifttexten aus Uruk," Klio 63, 39–44.

Parpola, S.
1987 *The Correspondence of Sargon II, Part I. Letters from Assyria and the West* (SAA 1). Helsinki.

Radner, K.
1998 "Der Gott Salmānu ("Šulmānu") und seine Beziehung zur Stadt Dūr-Katlimmu," WdO 29, 33–51.

Reade, J.
1972 "The Neo-Assyrian Court and Army: Evidence from the Sculptures," Iraq 34, 87–112.

Roth, M.T.
1991 "The Dowries of the Women of the Itti-Marduk-balāṭu Family," JAOS 111/1, 19–37.

Spar, I. and E. von Dassow
2000 *Cuneiform Texts in the Metropolitan Museum of Art, III. Private Archives from the First Millennium B.C.* New York.

Stamm, J.J.
1939 *Die Akkadische Namengebung* (MVAeG 44). Leipzig.

Stolper, M.W.
1985 *Entrepreneurs and Empire: The Murašû Archive, the Murašû Firm, and Persian Rule in Babylonia* (PIHANS 54). Istanbul.

Strassmaier, J.N.
1889 "Inschriften von Nabopolassar und Smerdis," ZA 4, 106–152.

Streck, M.P.
2000 *Das amurritische Onomastikon der altbabylonischen Zeit, Band 1. Die Amurriter. Die onomastische Forschung. Orthographie und Phonologie. Nominalmorphologie* (AOAT 271/1). Münster.
2001 "Das Onomastikon der Beamten am neubabylonischen Ebabbar-Tempel in Sippar," ZA 91, 110–119.

Tadmor, H.
1973 "The Historical Inscriptions of Adad-nirari III," Iraq 35, 141–150.

Tallqvist, K.L.
1906 *Neubabylonisches Namenbuch zu den Geschäftsurkunden aus der Zeit des Šamaššumukîn bis Xerxes.* Helsinki.
1918 *Assyrian Personal Names.* Helsinki.

Ungnad, A.
1935 "Babylonische Familiennamen," in *Miscellanea Orientalia dedicata Antonio Deimel, annos LXX complenti.* (Analecta Orientalia 12). Rome, 319–326.

Weingort, S.
[1939] *Das Haus Egibi in neubabylonischen Rechtsurkunden.* Doctoral dissertation, Berlin.

Wiggerman, F.A.M.
2000 "Nin-gišzida," RlA 9/5–6, 368–373.

Wunsch, C.
1993 *Die Urkunden des babylonischen Geschäftsmannes Iddin-Marduk. Zum Handel mit Naturalien im 6. Jahrhundert v. Chr.* (CM 3). Groningen.
1995/96 "Die Frauen der Familie Egibi," AfO 42/43, 33–63.
2000a *Das Egibi-Archiv 1. Die Felder und Gärten* (CM 20). Groningen.
2000b "Die Richter des Nabonid," in J. Marzahn and H. Neumann (eds.), *Assyriologica et Semitica. Festschrift für Joachim Oelsner anläßlich seines 65. Geburtstag am 18. Februar 1997* (AOAT 252). Münster, 557–597.

The "Accession Year" in the Late Achaemenid and Early Hellenistic Period

*Tom Boiy — Leuven**

From the middle of the thirteenth century BC onwards, Babylonian documents were dated to the regnal year of the reigning king. This system of counting the regnal years replaced the practice of naming years after some major event that took place, a dating method used during the Old Babylonian and the beginning of the Kassite period.[1] To keep track of time in this new system of dating it is important to know how the regnal years were counted at the point of transition from one reign to the next. In Babylonia the first year of a new king started on Nisannu 1 (New Year's day) that followed that king's accession to the throne. This means that the period between the death of the previous king and the following new year was not numbered in the date formulas of cuneiform documents. This time span was called mu sag nam.lugal.la (*šanat rēš šarrūti*; year of the beginning of kingship/rule)[2] or the "accession year" of the new king.[3]

The Babylonian method of counting the first incomplete regnal year as "accession year" was still in use during the Neo-Babylonian and Achaemenid period. The youngest examples of dates mentioning an accession year were until recently tablets dated to the reign of Darius II.

Some of the texts from the accession year of Darius II (424/3 BC) mention in the date formula both the last year of his predecessor Artaxerxes I (year 41) and the accession year

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Abbreviations: AD: A. Sachs and H. Hunger, *Astronomical Diaries and Related Texts from Babylonia* (Österreichische Akademie der Wissenschaften. Philosophisch-historische Klasse. Denkschriften 195, 210 and 247). Wien 1988–1996; AJAH: American Journal of Ancient History; SE: Seleucid Era; TAD: B. Porten and A. Yardeni, *Textbook of Aramaic Documents from Ancient Egypt*, Jerusalem 1986–1999; TAPS: Transactions of the American Philosophical Society.

1 On the year names during the Old Babylonian period, see M.J.A. Horsnell, *The Year-Names of the First Dynasty of Babylon*. McMaster University Press 1999.

2 On the Hebrew equivalent r'šyt mlkwt, see J. Finegan, *Handbook of Biblical Chronology: Principles of Time Reckoning in the Ancient World and Problems of Chronology in the Bible*. Cambridge, MA. 1998², 247.

3 On the beginnings of this practice during the Kassite period see J.A. Brinkman, "Mu-ús-sa Dates in the Kassite Period", WdO 6 (1971), 153–156, and *id.*, *A Catalogue of Cuneiform Sources pertaining to specific Monarchs of the Kassite Dynasty* (Materials and Studies for Kassite History 1). Chicago 1976, 397–414, esp. 403.

of Darius II (BE VIII/1 127: 15–16; BE X 4: 29; AMI 16 233–234: 20 and BM 54557: 5–6[4]). According to Parker and Dubberstein[5] the reason for this probably was that "the scribes began to write the accustomed "41" and then, remembering that a new king was ruling, merely added "accession year" and continued with the rest of the date formula." In the revised edition of 1956 (see below) this interpretation was omitted. In view of the amount of tablets mentioning both the year 41 and the accession year and because it is at present known that at other moments of transition both the last year of the previous king and the accession year of the new king were mentioned,[6] the explanation of Parker and Dubberstein is not very plausible.

Since no later cases of "accession years" were attested, it was accepted in Parker and Dubberstein's basic *Babylonian Chronology*[7] that with the arrival of Alexander the "accession year" disappeared from Babylonian usage. A copy of tablet 10 of the Gilgameš epic (BM 35174, now published as a part of CT 46 30) led the first editor Wiseman a few years later to the hypothesis that the accession year had already been abandoned by Darius's successor, Artaxerxes II.[8] Wiseman based his hypothesis in the first place on prosopography: since the father of the tablet owner Itti-Marduk-balāṭu/Iddin-Bēl//Mušēzib was also mentioned in Dar. 196, the text originated according to him from around the end of the fifth century BC. On the basis of a synchronous dating in line 6 of the colophon ([... *šá š*]*i-i* mu-1-k[ám ...]) combined with the prosopographical evidence derived from Dar. 196 Wiseman tentatively proposed that year 1 of Artaxerxes was identified with the last year of Darius II and thus that the practice of accession years had been abandoned.

Oelsner,[9] on the other hand, immediately argued that this prosopographical evidence was not convincing because there also was a person called Itti-Marduk-balāṭu/Iddin-Bēl// Mušēzib during the reign of Antiochus III (end of the third century BC; ZA 3 150–152)[10] and another Itti-Marduk-balāṭu/Iddin-Bēl at the end of the second century BC during the Parthian period (BOR 4 132).[11] Moreover, the synchronous dating in the date formula presupposes a Parthian date: all date formulas from that period mention a double date, one

4 Transliteration and translation of this text (with historical commentary) can be found in S. Zawadzki, "The Circumstances of Darius II's Accession in the light of BM 54557 as against Ctesias' Account", JEOL 34 (1995–1996), 45–49. The identification year 41 = accession year appears in the main body of the text, whereas the date formula only mentions the accession year of Darius II.

5 R.A. Parker and W.H. Dubberstein, *Babylonian Chronology 626 B.C. – A.D. 45* (Studies in Ancient Oriental Civilization 24). Chicago 1946[2], 16.

6 AUWE 13 307 and the Aramaic papyrus TAD B2.2 for the transition Xerxes I – Artaxerxes I, for the correct interpretation of AUWE 13 307 see M.W. Stolper, "Late Achaemenid Babylonian Chronology", NABU 1999/6; BE 55953 for the transition Darius II – Artaxerxes II, see below.

7 R.A. Parker and W.H. Dubberstein, *Babylonian Chronology 626 B.C. – A.D. 75* (Brown University Studies 19). Providence 1956, 19 n. 4.

8 D.J. Wiseman, "Additional Neo-Babylonian Gilgamesh Fragments", in P. Garelli (ed.), *Gilgameš et sa légende* (RAI 7, Cahiers du Groupe François-Thureau-Dangin 1). Paris 1960, 134 and n. 6.

9 J. Oelsner, "Ein Beitrag zu keilinschriftlichen Königstitulaturen in hellenistischer Zeit", ZA 56 (1964), 262 and 272–273.

10 Now also attested in CT 49 133 and 134.

11 Now also attested in CT 49 144 and Iraq 41 139 (AB 247).

according to the Seleucid Era and one according to the Arsacid Era, and therefore the correct restoration probably is [... *šá š*]*i-i* mu-1 m[e x-kám] instead of [... *šá š*]*i-i* mu-1-k[ám].[12] As far as the problem of the accession year is concerned, Oelsner logically returned to the conclusion proposed by Parker and Dubberstein.[13]

In a recent note on "Late Achaemenid Babylonian Chronology" Stolper finally proved that the beginning of the reign of Artaxerxes II (405/4 BC) was still called the accession year.[14] He mentions an unpublished tablet from the Kasr archive at Babylon only known from excavation photographs (BE 55953), which is dated to "[m]u-19-kám mu sag ^{m}*Ar-<tak>-šá-as-*^{r}*su*$^{?1}$." Because the last year of the previous king is also mentioned, there is no doubt about the date of this text: 405/4 BC is the only possibility since Darius II was the only Achaemenid king who ruled for 19 years.

The so-called Esagil archive, a Babylon archive dating from the Late Achaemenid and Early Hellenistic period, provides new information concerning the existence of the accession year practice after the reign of Artaxerxes II. The archive consists mainly of ration lists describing the amount of barley, dates or wool distributed to temple personnel.[15] Each list describes the rations of one or a few months for one professional group and mentions all individual names with patronym.

Some of the British Museum tablets — ration lists dating to the Early Hellenistic period — were published in 1968 by Kennedy in CT 49 and were studied by Joannès together with similar texts from the Louvre and the Ashmolean Museum dating to the Achaemenid kings Artaxerxes and Darius.[16] Because these tablets clearly belong to the same archive as the CT 49 texts dating from the Early Hellenistic period, they have to be dated to the end of the Achaemenid period and the kings mentioned in the date formulas can only be Artaxerxes III and Darius III. It was not until the publication of CBT 2[17] that a large number of ration lists from the British Museum were added to the corpus known at that time. In his review of the volume Zadok[18] dealt with the ration lists from the Esagil archive, most of them dating from the Late Achaemenid period. He also mentioned in the same review similar tablets from the Harvard Semitic Museum, all ration lists from the Esagil archive and dating to both the Late Achaemenid and Early Hellenistic period.

12 For the reconstruction of the colophon see also H. Hunger, *Babylonische und assyrische Kolophone* (AOAT 2). Neukirchen-Vluyn 1968, 58 (n° 148).

13 J. Oelsner in ZA 56 (1964), 273: "Es handelt sich demnach auch nicht um einen Text aus einem ersten Regierungsjahr eines Königs, so daß die von Parker—Dubberstein vertretene Auffassung, daß erst mit der makedonischen Herrschaft Akzessionsjahre außer Gebrauch gekommen sind, weiterhin zu Recht besteht."

14 M.W. Stolper, *Late Achaemenid Babylonian Chronology*, NABU 1999/6.

15 The name "Esagil archive" was coined by P.-A. Beaulieu, *Late Babylonian Texts in the Nies Collection* (Catalogue of the Babylonian Collections at Yale 1). Bethesda 1994, 6. Although this name is not undisputed (see M. Jursa, *Der Tempelzehnt in Babylonien vom siebenten bis zum dritten Jahrhundert v. Chr.* (AOAT 254). Münster 1998, 73 n. 260), no other name has yet been suggested.

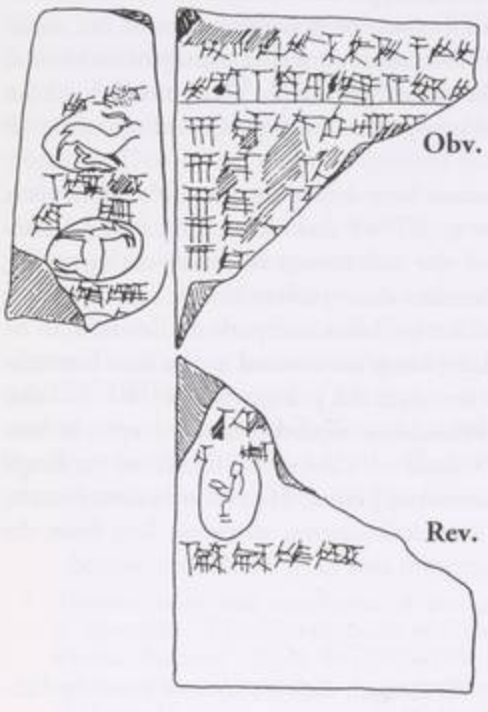
16 F. Joannès, *Textes économiques de la Babylonie récente* (*Étude des textes de TBER-Cahiers n° 6*) (Recherche sur les grandes civilisations. Cahiers n° 5). Paris 1982, 331–351.

17 M. Sigrist, H.H. Figulla and C.B.F. Walker, *Catalogue of the Babylonian Tablets in the British Museum 2*. London 1996.

18 R. Zadok, *review of CBT 2*, AfO 44/45 (1997/98), 293–306.

Two of the Harvard texts cited by Zadok in the CBT 2 review are of immediate interest for our present study of the accession year. The date formulas of HSM 1893.5.29 and HSM 1909.5.669 mention the accession year (mu sag)[19] of king Darius and, as argued above, the only possible identification in the context of the Esagil archive is the last Achaemenid king Darius III. Thanks to this attestation in the Esagil archive it is now finally certain that the practice of dating with an accession year continued to exist until the very end of the Achaemenid dynasty.[20]

Nº 1: HSM 1893.5.29



Obv. 1 [... *l*]ᵀ*u*¹-*bu-šú* munus.meš
šá ˡᵘgír²[...]
mu sag ᵐ*da-ri*²-*ia-a-muš* lu[gal kur.kur]

6 ma.na ᶠᵈ[...]
6 ma.na ᶠ[...]
5 6 ma.na ᶠ[...]
6 ma.n[a ...]
6 ma.[na ...]

Rev. [...].kišib
(seal impression)
ᵐ*ta-nit-tu*$_4$-ᵈen

L.E. na$_4$.kišib
(seal impression)
ᵐᵈag-[...]

na$_4$.kišib
(seal impression)
[ᵐ*man-nu*]-ki-ᵈag

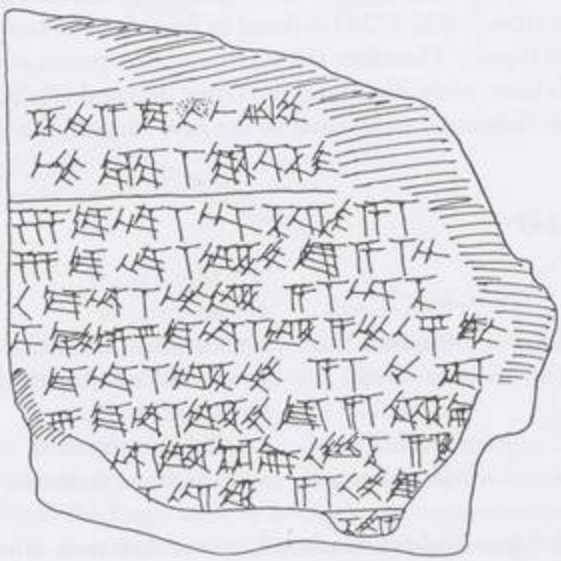
19 Abbreviated form of mu sag nam.lugal.la (see J.A. Brinkman, MSK 1, 403–404 n. 28 and AHw 975b).

20 A recently published Aramaic papyrus reveals that in the Aramaic documents too the accession year was in use until the very end of the Achaemenid empire. DJD 28 WDSP 1 is dated to the second year of Arses and the accession year of Darius III (l. 1: *b* 20 *l'dr šnt* 2: *r'š mlkwt* [*d*]*ryhwš mlk'*; see p. 26 f. for examples of Babylonian tablets dated to both the last year of the previous king and the accession year of the new king and see n. 6 for another Aramaic papyrus). For the edition of this text and commentary, see D.M. Gropp, *Wadi Daliyeh II. The Samaria Papyri* (Discoveries in the Judaean desert 28). Oxford 2001. My thanks are due to Prof. B. Porten for providing this reference.

Nº 2: HSM 1909.5.669

Obv.

Rev.



Obv. 1′	[…] x x […]	
	[4+]2 ma.na	^{md}[šú-gi a ^{m}…]
	[2+]4 ma.na	^{m}[^{d}en-tin-*su* a ^{md}b]e-kád
	10 ma.na	^{m}[mu-^{d}en a ^{md}š]ú-mu-uru$_3$
5′	$^1/_2$ gu[n 4 ma.na	^{md}en-a-mu a ^{m}]^{d}en-pap *u* 4 [dumu.meš-*šú*]
	10 ma.na	^{md}[en-mu a ^{m}]nu.téš
	16 ma.na	^{md}en-tin-*su* dumu *šá* ^{m}[tat-tan-nu]
	19 ma.na	^{md}en-nigin-*ir u* šeš-*šú* d[umu.meš]

Rev. 1′ šuk.ḫi.a *lu-*$^{\lceil}$*bu-uš*$^{\rceil}$*-t*[u_4 …]
mu sag ^{m}*da-ri-i*[*a-muš* lugal kur.kur]

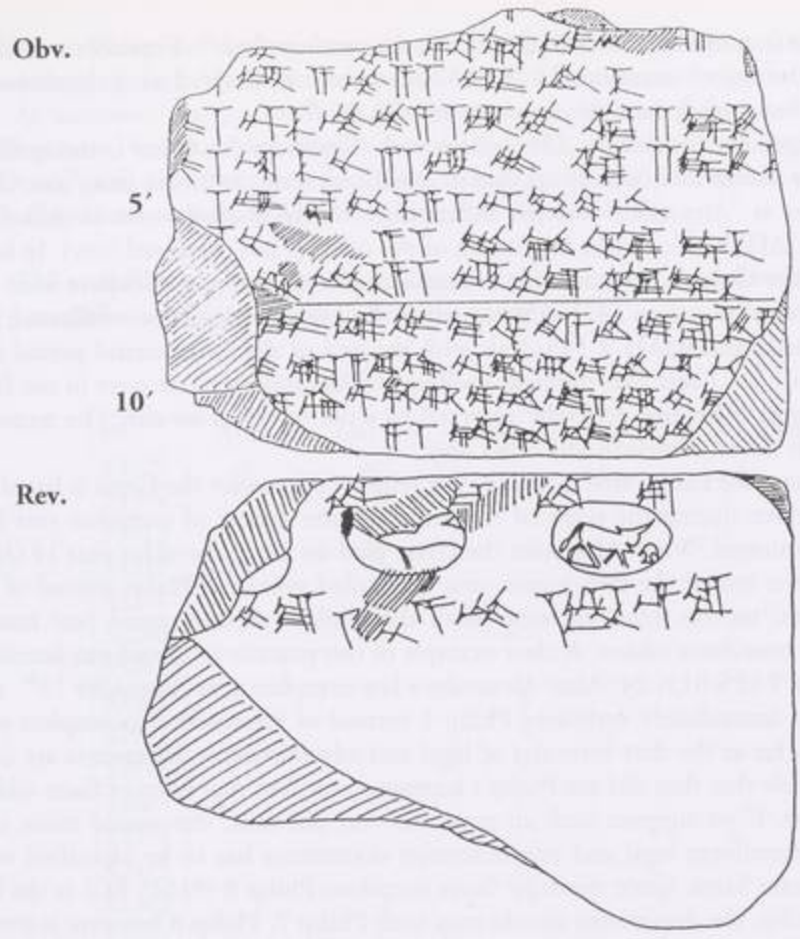
	6 ma.na	^{md}šú-gi a ^{m}[…]
	6 ma.na	^{md}en-tin-*su* a ^{md}[be-kád]
5′	10 ma.na	^{m}mu-^{d}en a ^{md}šú-[mu-urù]
	$^{1}/_{2}$ gun 4 ma.na	^{md}en-a-mu *u* 4 dumu.[meš-*šú*]
	[10] ma.na	^{md}en-mu a ^{m}nu.téš
	[1]6 ma.na	^{md}en-tin-*su* a ^{m}*tat-ta*[*n-nu*]
	[19 ma.]na	^{md}en-nigin-*ir u* šeš-*šú* a.meš[…]
10′	[…]	]-x-^{d}en a ^{m}umun-tin-*su* […]
		šu]k.ḫi.a[…]

The same Esagil archive also provides information on the use of "accession year" in date formulas after the end of the Achaemenid dynasty. BM 87241 is a ration list from the British Museum belonging to a collection not treated in CBT 2, but which was also mentioned in Zadok's review.[21] BM 87241 is dated to the accession year of Alexander (mu sag ^{m}*a-lek-sa-an-da-ri-is* lugal). Therefore the accession year practice must have been in use until at least 5 years later, when Alexander the Great defeated Darius III at Gaugamela and cuneiform tablets in Babylonia were dated to the new Macedonian sovereign.

Nº 3: BM 87241

Obv. 1′	[…]	]	^{r}a ^{m}*ta-nit-tu*$_4$-^{d}[…]
	[…]	^{r}m^{d}en-a-mu	a ^{md}ag-uru$_3$-*šú*
	[5(]b)	^{md}šú-mu-mu	a ^{md}en-kám *ù* 2 dumu.meš-[*šú*]
	[5(]b)	^{m}en-*šú-nu*	a ^{md}en-kám *ù* 2 dumu.meš-*šú*
5′	[…]	^{md}ag-*ku-ṣur-šú*	a ^{md}amar.utu-pap
	[…]	^{m}nu.[téš]	a ^{m}*lib-luṭ ù* dumu-*šú*
	[…]	[^{m}]^{d}en-uru$_3$-*šú*	a ^{md}en-tin-*su ù* dumu-*šú*
	[…] 8 gur zú.lum.ma šuk.ḫi.a ^{lú}ad.kid.meš *šá* […]		
	[ta MN m]u sag ^{m}*a-lek-sa-an-da-ri-is* lugal en til [MN]		
10′	[mu-7-kám ^{m}*a-le*]*k-sa-an-da-ri-is* lugal *ina* šu^{II} ^{md}en-tin-s[u…]		
			a ^{m}*ta-nit-tu*$_4$-^{d}en ^{lú}[…]
Rev.	[…]	na$_4$.[…]	na$_4$.kišib
	(seal impression)	(seal impression)	(seal impression)
	[…]-tin-*su*	[…]-a$^{?}$-mu	^{md}en-sur-*ru*

21 R. Zadok, AfO 44/45 (1997–98), 303.



Zadok dated BM 87241 to the accession year of Alexander IV and restored ^{m}*a-lik-sa-an-da-ri-is* LUGAL [DUMU *šá*$^{?}$ ^{m}*a-lí*]*k-sa-an-da-ri-is* for the royal name in the date formula in obv. 9′–10′.

Study of the tablet in the British Museum showed that the signs "en til" are present after lugal in obv. 9′, which means that Zadok's interpretation is impossible. Comparison with other ration lists from the Esagil archive results in the restoration proposed above. The ration lists often deal with several successive months and they describe these in the date formula as "ta MN (mu-#-kám) en til/*a-di qí-it* MN mu-#-kám RN" or "from month a (of the year b) until month x of the year y of king z" (see e.g. CT 49 25: 1–2 and BM 16904: rev. 3′–4′). Therefore the appearance of *Aleksandaris* both in obv. 9′ and 10′ does not mean that Alexander's son Alexander IV was intended, but rather that the year was mentioned not only after the second month name, but after the first month name too. Because the month names are not preserved and the second indication of the year is incomplete, it is not clear which year is meant in obv. 10′. If all months mentioned occured in one and the same Babylonian year, the Esagil ration lists normally contained one year number only after the last month name.[22] Only if two different Babylonian years were

22 See *e.g.* OECT 12 B2: 4′ ([t]a ^{iti}sig en til ^{iti}apin mu-5-kám[…]).

involved, was the first month also completed with the year number.[23] Therefore it is likely that the end of the rations mentioned in BM 87241 cannot be dated during the accession year 331/0 BC, but during the following year 330/29 BC.[24]

A second argument to identify *Aleksandaris* with Alexander the Great is the spelling. The Greek name Alexander normally appears in cuneiform script as ^{m}*a-lek-sa-an-dar*. Only on two occasions is "Alexander" written differently: $^{[m]}$*a-lek-sa-an-dar-ri-is* in AD -330 'Rev.' 11′ and AJAH 2 145: 8′ (the beginning of the name is not preserved here). In both cases Alexander the Great is intended. Since both cuneiform texts probably date from the beginning of Alexander's reign (AD -330 describes the events immediately following the battle at Gaugamela and AJAH 2 145 deals with the end of the Achaemenid period and Alexander's reign), it is likely that different spellings of Alexander's name were in use for a limited period until it became generally accepted to write ^{m}*a-lek-sa-an-dar*. The name of Alexander IV was never written in any other way.

A last argument for dating BM 87241 to the reign of Alexander the Great is based on chronological habits: during the reign of Alexander IV the system of accession year had already been abandoned. When Alexander the Great died on 29 Ayaru of his year 14 (June 11 323 BC),[25] the rest of the Babylonian year was called year 1 of Philip instead of his accession year and on the following new year's day Philip's second regnal year started according to the cuneiform tablets. A clear example of this practice in cuneiform literature is the Solar Saros TAPS 81,6 24. After Alexander's last complete year Alexander 13[26] this astronomical text immediately mentions Philip 1 instead of Alexander's incomplete year Alexander 14. As far as the date formulas of legal and administrative documents are concerned, it is possible that they did use Philip's accession year, but that none of these tablets is preserved today. If we suppose such an accession year did exist, this would mean that Philip 1 of the cuneiform legal and administrative documents has to be identified with Philip 2 of the Solar Saros. Since the Solar Saros mentions Philip 8 (316/5 BC) as the last regnal year of Philip, the documents should stop with Philip 7. Philip 8 however is attested in legal and administrative cuneiform documents, and it is therefore demonstrated that the date formulas of legal and administrative cuneiform documents also abandoned the accession year system. It is impossible to assume that the Solar Saros left out Philip 9 (315/4 BC), because it would mean that the cuneiform tablets dated two years posthu-

23 See OECT 12 B7: rev. 3′-4′ ([t]a ^{iti}gan mu-12-kám *a-di-i qí-it* ^{iti}[gu]$_4$ mu-13-kám ^{m}*ar-tak-šat-su* lugal) and BM 132271: rev. 14′-15′ (ta ^{iti}gan mu-5-kám [en til] ^{iti}gu$_4$ mu-6-kám ^{m}*pi-il-ip-su* lugal).

24 Because the Babylonian scribes counted Alexander's reign according to his Macedonian regnal years, the year following his accession year was not year 1, but year 7 (for a cuneiform tablet mentioning Alexander 7 as the year following Darius III 5, see LBAT 1397: rev. col. II: 16′–25′).

25 For this date see L. Depuydt, "The Time of Death of Alexander the Great: 11 June 323 B.C. (–322), ca. 4:00–5:00 PM", WdO 28 (1997), 117–135.

26 The Solar Saros notes Alexander 7 because it counts according to Alexander's Babylonian regnal years instead of his years on the Macedonian throne as is done in the legal and administrative documents.

mously to Philip (he died in the summer of 317 BC) instead of one and the rest of the chronology of the Early Hellenistic period would be compressed together too tightly.[27]

An accession year in cuneiform date formulas is also out of the question for the reign of Alexander IV. Since Alexander IV 6 was 311/0 BC, as is clear from the Solar Saros[28], his first year[29] can only have been 316/5 BC, which is the year that started as Philip 8. There is thus no room to include an accession year of Alexander IV.

The available cuneiform evidence allows us to reconstruct the following chronology for the Late Achaemenid and Early Hellenistic period:

BC	Arses	Dar. III	Alex. III	Philip	Alex. IV
336/5	2	acc.			
335/4		1			
334/3		2			
333/2		3			
332/1		4			
331/0		5	acc.		
330/29			7		
329/8			8		
328/7			9		
327/6			10		
326/5			11		
325/4			12		
324/3			13		
323/2			14	1	
322/1				2	
321/0				3	
320/19				4	
319/8				5	
318/7				6	
317/6				7	
316/5				8	1
315/4					2

27 For a complete survey of the dating methods used during the Early Hellenistic period see T. Boiy, "Dating Methods during the Early Hellenistic Period," JCS 52 (2000), 115–121.

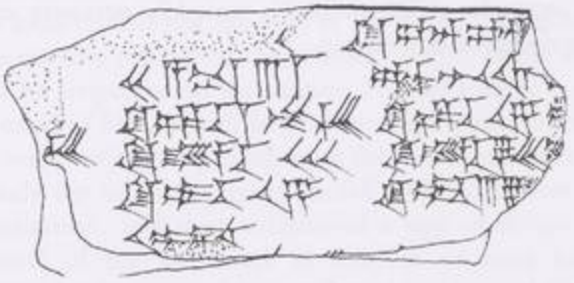
28 See TAPS 81/6 24: obv. col. III: 4–15 for the reign of Alexander IV. Since l. 16 mentions 7 SE it is no problem to date Alexander's reign.

29 Alexander IV 1 is only attested once in the unpublished tablet BM 78948 (see M. Jursa, "Neu- und Spätbabylonische Texte aus den Sammlungen der Birmingham Museums und Art Gallery," Iraq 59 (1997), 133).

Remarks on BM 37361

John P. Britton — Wilson, Wyoming

BM 37361 (80–6–17,1118) is a small fragment, 4cm×2cm×2.5cm [w,h,d], of what from its thickness must have been a sizeable tablet from the 80–6–17 collection. A. J. Sachs's unpublished annotated list of astronomical texts at the British Museum includes it with the comment, "Star Catalogue?". The upper edge is preserved and includes traces running over from the reverse, showing that what can be read is from the obverse. This consists of two columns (plus scant traces of a third to the left), of which a total of 6 lines are readable, to wit:[1]



	col I′	col II′	col III′
1		...]+10	KI MUL.MUL ˹x¹ [...]
2	...]	20 A.RÁ 3 1	˹MUL *dele-bat*¹ 1˹5 x¹ [...]
3	...]˹x¹	KI SAG ŠÚ 1 MU MEŠ	KI SAG ŠÚ 15 ˹Ú²¹ [...]
4	...] MEŠ	KI $MURUB_4$ ŠÚ 30	KI $MURUB_4$ ŠÚ 7 30 I[TI²...]
5	...]	KI GÌR ŠÚ 15	KI GÌR ŠÚ 3 8! [...]
6	...]	GE_6 UŠ	(blank) [...]

The substance and purpose of the text is obscure. In column II′, line 2 is the statement, "20 times 3 = 1,0", which may relate to line 3 where we find, "when[2] disappearance[2] (occurs) at the beginning, 1,0 years." Lines 4 and 5 repeat this formula for "middle" and "end" with successive halving of the number of years. Line 6 then makes reference to "night," followed by UŠ (station[2]) of uncertain meaning. Column III′, line 1 refers to the

1 Published with kind permission of the Trustees of the British Museum. Copy (scale 1:1.5) by Cornelia Wunsch, to whom I am indebted for several improved readings and unflaggingly cheerful editorial help.

Pleiades, written with the older form, MUL, suggesting an early date of composition. Line 2 mentions "Venus" followed by "15" and an unreadable fragment of a sign. Lines 3 to 5 repeat the same formula as in column II′ with successive halvings for "disappearances" at "beginning," "middle" and "end," but beginning with 15 in place of 1,0 in column II′. In line 5, "3;8" is presumably a rounded scribal error of 3;7,30 instead of 3;45 for half of 7;30.

Of interest is the term GÌR, normally *šēpu* "foot," in the series, SAG, $MURUB_4$, GÌR, evidently meaning "beginning, middle, end." Hitherto, "end" has normally been found denoted in astronomical texts by TIL = *qatû* "complete," *e.g.*, in BM 76738[2]: line 7′ff. for 4 Kandalanu (-643), in W22797[3]: line 3 for 28 Nebuchadnezzar (-576), and in Diaries[4] for -567 (line 14) and later.

GÌR as "end," however, also occurs twice in a fragment of a Babylonian compilation of Mars observations (HSM 1490)[5], in reports for years 35 and 36 Nebuchadnezzar (-569/8), and it was the difficulty of making any sense of this sign which had held up publication of that tablet for several years. As it happened, on a visit to London, Christopher asked me when the text would be published, having an interest in the three otherwise unattested intercalations it contains, and I mentioned that it was held up by a pair of inexplicable GÌRs.[6] He immediately rushed off and returned with BM 37361, saying something to the effect of, "See if that will help." It did, of course, and HSM 1490 will be published shortly, a characteristic example of Christopher's uniquely pervasive contributions to the advancement of Assyriological scholarship.

2 C.B.F. Walker, "Babylonian Observations of Saturn during the Reign of Kandalanu," in N.M. Swerdlow (ed.), *Ancient Astronomy and Celestial Divination* (Cambridge, MA and London, 1999), 61–76.

3 E. von Weiher, *Uruk* 4, Text 171, p. 111; copy p. 189.

4 A.J. Sachs and H. Hunger, *Astronomical Diaries and Related Texts from Babylon*, Vienna. Vol. I (-651 to -261), 1988; Vol. II (-260 to -164), 1989; Vol. III (-163 to end), 1995.

5 J.P. Britton, "An Early Observation Text for Mars: HSM 1899.2.112 (= HSM 1490)," (to appear in a forthcoming festschrift for David Pingree).

6 I originally read the sign as GAN, but considering the context and after discussions with Paul-Alain Beaulieu and Hermann Hunger, GÌR seems more likely the correct reading.

The Level of the Euphrates

*David Brown — Oxford and Berlin**

"A good reign — righteous days, years of justice,
copious rains, huge floods, a fine rate of exchange."

Appropriate as this is to Christopher Walker's time at the British Museum, to London's weather, and to Sterling vis-à-vis the Euro, it was in fact the Assyrian Adad-šumu-uṣur who wrote this in a letter to King Assurbanipal in 661 BC.[1] In so doing, the king's exorcist points to a connection between the price of agricultural goods in ancient Mesopotamia and both the amount of local rainfall and the level of the rivers.[2] Adad-šumu-uṣur was based in Nineveh, but was quoting from works of southern origin, where the level of the rivers was more significant for irrigation-fed agriculture. The chief scribe is also probably trying to account for the period of high rainfall and for the huge floods in terms of "years of justice" and the "good reign" of the king, a punning that works rather better in English than Akkadian. It was likely the belief that good rainfall and floods were a divine reward for appropriate royal behaviour, and their withdrawal a sign of divine ire, that led to the recording of the level of the Euphrates at Babylon in texts known today as the "Astronomical Diaries." In this paper, I have collected and plotted all the available data in the Diaries on the level of this river. From this I have derived a measure of the rainfall, not in Mesopotamia, of course, but in the Anatolian highlands, for many years between c. 300 and 50 BC. These data are remarkable, for they provide us with one of the world's earliest direct records of precipitation on a year-to-year basis for an extended period of time, and can usefully be compared with existing proxy data for the same. I also show that these data have the potential to assist in establishing an absolute Near Eastern chronology, and in testing contemporary climate models, as well as providing information supplementary to the ever-growing picture of the economy of Mesopotamia. I am extremely pleased to dedicate

* This work was initially undertaken while I was funded by the British Academy and working at Wolfson College, Oxford, and was completed while at the Freie Universität, Berlin, funded by the Humboldt-Stiftung.

1 S. Parpola (1993) No. 226: 9. Parpola translates *mīli gapšūti* as "huge floods." *Mīlu* (Sumerogram illu) in the Diaries means rather "river level," since it is applied throughout the year, so perhaps this is also meant here. High water in the Diaries is usually designated by *mīl kiššati*.

2 Floods bode both good and ill, as we might expect. For example, in Hunger (1992) No. 4: rev. 7 the flood is predicted to "carry off the land." Clearly, excessive flooding was potentially as much of a problem as too little.

this work to Christopher, who on numerous occasions has provided me with much needed guidance into the extensive collections of astronomical-astrological cuneiform texts held by the British Museum, of which the Diaries are but a part. Some of his own publications have shown to what extent these and related texts contain information of value to the work of contemporary scientists,[3] and he has assisted many others in their work on these matters.[4] This paper is written in the spirit of continuing that interface between the arcane and the contemporary.

The Sources

In this study I have used data concerning the level of the Euphrates at Babylon recorded in the Diaries,[5] tree-ring width data from Comacchio (Ferrara)[6] and Elaia (near Pergamon),[7] and varve data from Lake Van.[8] My statistical work was undertaken using the SPSS package, and I gratefully acknowledge the assistance of Dr. F.H.C. Marriott at the Department of Statistics, Oxford, in the matter of cross-correlations with incomplete data (see below). The original stimulus for this work came from a chance meeting some years back with Dr. Steve Tobias and Professor Nigel Weiss at the Department of Applied Mathematics and Theoretical Physics, Cambridge, who were at that time working on models for sunspots and their impact on the weather. In order to test the quality of their models for the long-range predicting of weather, they, like many scientists interested today in climate change,[9] sought weather data, particularly fine-detailed data, from pre-modern times, and so began my interest in gathering some of that data. The following is the first publication of some results of this endeavour.

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3 *E.g.*, *Halley's Comet In History*, London (British Museum Publications) 1985, with F.R. Stephenson, H. Hunger, and K.K.C. Yau. At the recent International Astronomical Union Meeting (Joint Discussion 6) in Manchester, I learnt that the interval between comet returns is in some small way affected by the comet's spin. In some cases, accurate records of comet appearances *long* in the past can help determine a comet's spin, revealing yet another contemporary use of ancient data, such as those found in the Diaries.

4 In particular, he has assisted F.R. Stephenson in his work on the retardation of the earth's rotation. See now Stephenson "Modern Uses of Ancient Astronomy," in Walker (ed.), *Astronomy before the Telescope*, London (British Museum Press) 1996, 329–341, for a summary of earlier literature.

5 The Diaries = H. Hunger and A. Sachs, *Diaries* (texts are quoted according to the year whose events they report, *e.g.*, -651). Preliminary introductions to the Diaries are to be found in Sachs and Hunger, *Diaries*, vol. 1, 11–38, and in A. Sachs (1974). On the complementary roles played by observation and prediction in the Diaries, and the possible purpose behind their compilation see Rochberg (1991); Hunger and Pingree (1999): 139f.; Brown (2000): 97–103.

6 Kuniholm et al. (1992).

7 Kuniholm (1985).

8 In particular data gathered during the 3rd International Lake Van Expedition in 1990, the results of which are discussed now in Lemcke and Sturm (1997). Results based on earlier data can be found in Kempe and Degens (1978) and in Schoell (1978).

9 *E.g.*, Fritts (1991): 2: "A well-documented history of past climatic conditions is needed to understand the causes of the variation and to differentiate between natural variation and inadvertent anthropogenic changes," and Smith(1981): 302: "The finest possible detail of the climatic record is needed to determine the causes of past fluctuations and to predict future climatic developments."

I am not the first to work on the river level data in the Diaries. A.L. Slotsky's book (1997) contains an in-depth analysis of the economic information in the Diaries, and in Chapter 5, pp. 88–98, discusses the data on the level of the Euphrates. Our approaches to the data do not overlap to any great extent. K. Hecker and J. Kamminga also worked on the Euphrates level data. They collaborated with H. Hunger, who very kindly sent me copies of what, to the best of his knowledge, they had produced.[10] Hecker and Kamminga's work utilised the river level data in order to elicit trends on longer time scales than here. They compared their discoveries with climatic trends discernable from a number of other sources in Egypt and Europe — the Nilometer, sea sediment and carbon isotope records and so forth. This study concentrates on the evidence for shorter-term variability in precipitation, and so barely coincides with their work.

The Treatment of the Data

Mar-Issar, Esarhaddon's agent in Babylonia writes:[11]

> [There are] shi[ps …] across the Borsippa river. In the days of Sargon and the father of the k[ing, my lord], as the Borsippa river was narrow, they trod a ra[mp] on them, but it did not stay in good condition. N[ow] in the times of the king, my lord, the river has swollen much; they have improved the ramp, but it will not stay in good condition … This year the waters have increased and risen up the wall of Ezida.

This undoubtedly refers to a high level of the Euphrates in -668, and to increasing levels in the decade prior to that. This is perhaps our earliest datable reference to high water in the Euphrates. The data in the Diaries cover the period from -651 until -60. As well as records of the relative depths of the Euphrates, the Diaries contain astronomical, meteorological, economic and historical information recorded from day to day, but incompletely preserved. With these they can usually be dated precisely and with confidence.

The information has been extracted from the three-volume edition of the Diaries text-by-text and plotted. This has led to the most complete data-set possible, for it is only through a close scrutiny of the translations, the transliterations and occasionally the copies that the magnitudes of gaps in the texts can be estimated. Sometimes it is only by knowing the size of these gaps that the months into which the data must fall can be assessed, and whether or not the figures pertain to the end of the month, say. It is impossible in this article to justify each of the values plotted, but it should be possible to work back from each line in Graph 1 to the text edited by Sachs and Hunger, should that be needed.

All dates assigned to the weather data or to the values for the level of the Euphrates are those given to the pertinent texts by Hunger. For each month and day of the regnal years of the Babylonian calendar, Hunger has provided enough information to transform these into Julian dates. The Julian calendar wanders slowly against the equinoctial year so I have made a small adjustment in order to plot (to within a day) the data against the seasons.[12] That is, March 21st in Graph 1 is the Vernal Equinox.

10 Project cited in Sachs and Hunger, *Diaries*, vol. 1: 28. References to publications in Müller (1999/2000): 205.

11 Parpola (1993) No. 364 = LAS 291. Cited in Neumann and Parpola (1987): 182, No. 18. Parpola conjectures that the "strong flood" *mīlu dannu* in Parpola (1993) No. 361:r. 14 = LAS 294 refers to the same year.

12 Sosigenes was asked by Julius Caesar to regulate the Roman Republic calendar. He established the Julian calendar, which began in -45, and defined the year to be $365^{1}/_{4}$ days long. A leap year

The data concerning the level of the Euphrates comes in a number of forms in the Diaries.[13] One form — that using the so-called "NA-gauge" — has proven particularly useful. The very earliest preserved datable Diary from -651 records, for example, that on the 27th of the XIIth lunar month "the river rose a little" (-651: iv 21[14]). It also states that that year there was only "little rain." The next earliest datable Diary (-567) contains still more information. It records that between the 8th and 28th of lunar month XII_2 (the intercalary month) "the river rose 3 cubits and 2 fingers[15] and that $^2/_3$ cubits [were still wanting] to the high flood (mark)." "High flood" is here written illu šú.

In texts datable to the period after -293, the differences in heights of the river were more commonly measured relative to a gauge, referred to only as a "NA" measure. Whether the gauge itself was called a NA or merely the units in which it measured is not known. In these texts a fixed equation exists between the change in river height as measured by the NA-gauge and that measured in cubits and fingers. One cubit is equal to a change in NA value of 6, one finger equates to a ΔNA of 0.25. The lowest level recorded for the river is 40 NA, and the "peak flood" (illu šú-*tú*, *e.g.*, in -134:B rev. 8), also called the "apertures of the peak flood" (*apâtu ša* illu šú, in -251:u.e. 2, just *apâtu* in -246:11) is 0 NA (in -156:A 19 this is called NA nu tuk).[16] The gauge clearly descended into the river numbered from top to bottom.[17] Assuming that no change had taken place in the length of cubits between -567 and -293, and that the illu šú "peak flood (mark)" was more or less the same, we can reinterpret the data from the earlier Diary to read that the river level rose from $22^1/_2$ NA to 4 NA between March 28th and April 16th -567 in the equinoctially corrected Julian calendar. This has been plotted in Graph 1, from the beginning of the 28th to the end of the 16th.[18]

The next earliest data that may be transformable into the NA-gauge form, date to -382. Therein (-382:rev. 3f.) it is stated that from the 24th to the end of month X "the river level — *babtu* $^1/_2$ a cubit — rose 22 fingers" (= ΔNA of $5^1/_2$), and that "until the 6th of month XI the river level — *babtu* 1 cubit — rose 1 cubit 20 fingers" (= ΔNA of 11). At first sight

was thus assigned once in every four years. However, the interval between equinoxes — the equinoctial or seasonal year — is 365.2422 days. The Julian calendar over-estimated the length of the year by about 7.8 days every 1000 years. Working back to a time before 46 BC in the Julian calendar, every 130 years or so the date of the vernal equinox moves forward a day, to the 22nd March, the 23rd and so forth. Consequently for dates between -111 and -240, I have subtracted one day from the Julian date given by Hunger. For all dates between -241 and -370 I have subtracted two, and so forth.

13 Slotsky (1997): 88–93 and Sachs and Hunger, *Diaries*, vol. 1: 34–36, also discuss the manner in which the data on the level of the Euphrates were recorded in the Diaries and rather than repeat their findings, I refer the reader to these works.

14 This gives the date of the Diary in question, the column and line number.

15 1 cubit = 24 fingers, here. 1 cubit in linear measure = c. 50 cm. 1 finger = c. 2 cm.

16 A change in the height of the river of c. 8 cm corresponds to a fall or rise of 1 NA. The height difference between the end points of the gauge is c. 330 cm.

17 It was perhaps hung from a bridge, as suggested by Sachs (1974): 47. See also Slotsky (1997): 91.

18 The 8th of month XII_2 = March 30th/31st (the Mesopotamian day commences in the evening) in the Julian calendar according to the information provided by Hunger. Subtracting 3 days due to the equinoctal drift gives March 27th/28th. I have consistently plotted the second day of such pairs, the 28th in this case.

it would appear as if *babtu* means here "remainder" (CAD B 13, meaning 3), and describes the depth below the peak flood mark. However, the calculations here make this unlikely. A depth below the peak flood mark of $^1/_2$ a cubit would be a 3 NA value, which makes what is described in month XI nonsense. *Babtu* is used in a number of fourth and third century Diaries, -382 III, X, XI; -380 XI, XII; -372 I, IV; -346 XI; -343 XI; -324 IV, VI; -322 X, XI; -304 I; -273 XII; -266 V; -203 VIII. However, until a clear understanding of what is meant by *babtu* is discovered these data cannot be used for this study.[19]

In -369:5, -346:rev. 33 and in the later years of -107, -85 and -77 the statement illu tar-*is* "the high water was cut off" seems to suggest that the spring surge in river-flow (see below) did not take place to any great extent in that year. High water no doubt implied the filling of many irrigation canals, which in such years did not take place, hence the expression "cut off."

The Pallukatu canal, north of Babylon, is mentioned in at least five dated Diaries.[20] In each case the canal is blocked at the point at which the river as recorded in Babylon is at its lowest, namely in September. Clearly the intention was to permit more water to flow to the metropolis, and it is safe to assume that in those years the river was *lower* than usual.

To summarise, all the data on the level of the Euphrates expressed or expressible in terms of the NA-gauge are plotted in Graph 1. Supplementary to those we can assume the following about the level of the Euphrates, as determined from cuneiform tablets:

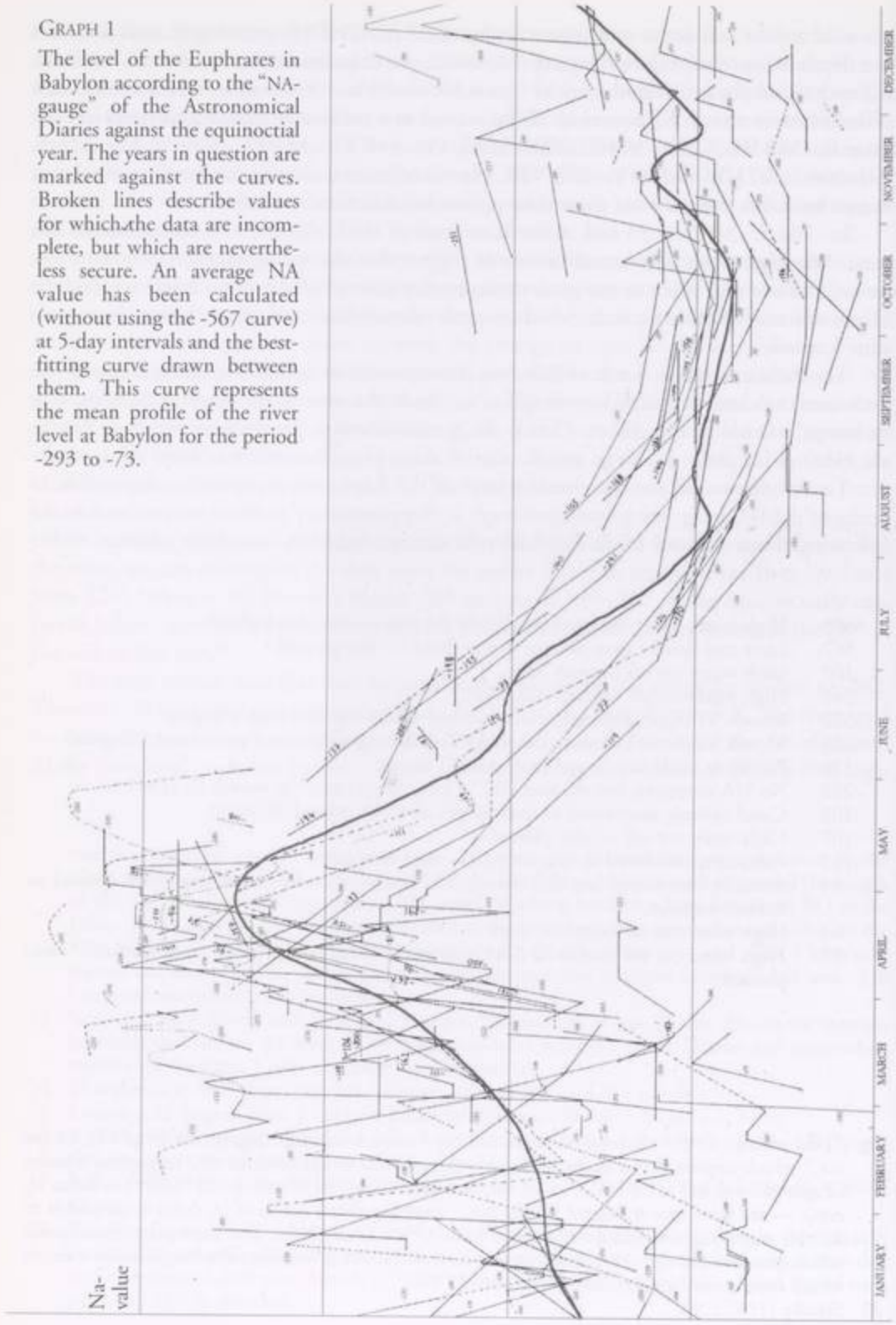
-668 High water. Over the previous decade the waters were also high(er).
-567 Later and smaller than average spring flood — also plotted.
-369 High water cut off (month XII?).
-346 High water cut off (month XII, Mar).
-332 Month VI (Sept) Pallukatu canal blocked (and?) the river rose 4 fingers.
-328 Month VI (Sept) Pallukatu canal blocked and the river rose 2 cubits and 8 fingers.
-324 Pallukatu canal mentioned in month VI (Sept).
-232 No NA measures, but the line (38) "a great flood came" in month IX (Dec).
-108 Canal *opening* mentioned at river height of 4 NA (month II, May).
-107 High water cut off — also plotted.
-105 Pallukatu mentioned in fragment D — date uncertain.
-94 Some NA measures, but also month VI: "the river level receded very much beyond its normal measure."
-84 High water cut off month X (Jan).
-77 High water cut off month XI (Dec), month VIII (Sept) Pallukatu canal blocked — also plotted.

19 "That month, 1st–5th the level — *babtu* 1 cubit — rose 1 cubit 20 fingers (= ΔNA of 11); 19 the NA," which implies that a *babtu* of 1 cubit corresponds to the level 30 NA, suggesting a *babtu* of zero to be either at 36 NA or at 24 NA. In Diary -203 VIII "from the 23th–25th — *babtu* $^5/_6$ cubit — the level rose 8 fingers; 30 the NA," implying that a *babtu* of $^5/_6$ cubit corresponds to 32 NA, suggesting a remainder of zero to be at 37 NA or at 27 NA. The most plausible solution which also best fits the -382 data seems to be that the *babtu* describes the height *above* a depth which corresponds approximately with 36–37 NA.

20 Slotsky (1997): 90.

GRAPH 1

The level of the Euphrates in Babylon according to the "NA-gauge" of the Astronomical Diaries against the equinoctial year. The years in question are marked against the curves. Broken lines describe values for which the data are incomplete, but which are nevertheless secure. An average NA value has been calculated (without using the -567 curve) at 5-day intervals and the best-fitting curve drawn between them. This curve represents the mean profile of the river level at Babylon for the period -293 to -73.



I chose to plot the data in this way, because it has allowed me to interpolate values between surviving data. The river profile is consistent enough for this purpose, with essentially one peak in the level of the river sometime between March and May, and a shallow point sometime between August and October. Interpolated values have been given as much weight as surviving values in producing the mean curve. My results differ immediately from those found by Slotsky (1997): 93f. and Appendix B who (a) plotted only the NA values in texts that also contained data on prices, (b) plotted NA values against months, that is against the lunar year. Clearly, one look at Graph 1 shows that the NA value can change dramatically within a month, and because the lunar year wanders against the equinoctial by up to a month, Slotsky's approach "smudges" the results of what is in essence a seasonal phenomenon. Plotting the data has, instead, ensured that the maximum amount of information is preserved, including in many cases my interpretations of fragmentary passages.

Sources of Error

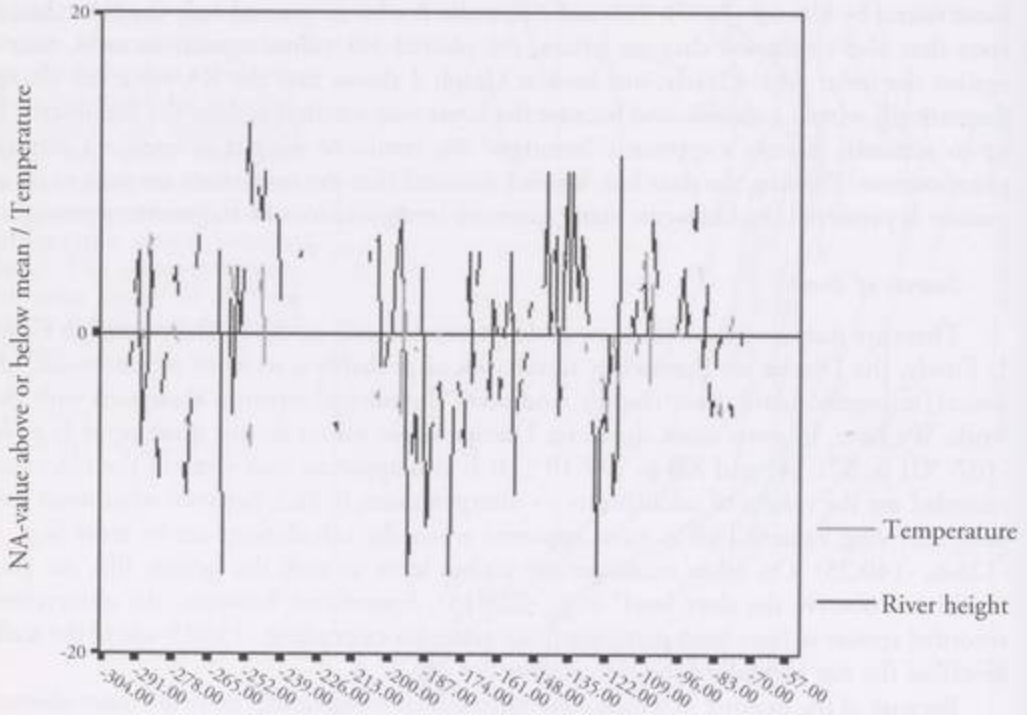
There are numerous sources of possible systematic error in the results plotted in Graph 1. Firstly, the Diaries are themselves summaries of probably a series of astronomical, historical, economical and other records, and show the normal attrition associated with that work. We have, in some cases, duplicate Diaries whose values do not quite agree (*e.g.*, for -107: XII p. 371:14′ and XII p. 377:19′). It is also apparent that some of the NA values recorded are the results of calculations — interpolations, in fact, between what must have been surviving values. This is most apparent when the calculations are in error (*e.g.*, in -126:6, -140:28). On other occasions the scribes leave us with the laconic illu nu pap, "I did not observe the river level" (*e.g.*, -225:15). Sometimes, however, the observations recorded appear to have been particularly accurate, for example in -156:19 where the scribe describes the rise and fall of the river *during* the day.

Because of the manner in which cuneiform tablets disintegrate, there are more absences at the beginning and ends of tablets, and because in most cases the relevant data were contained in summaries at the end of each month they were particularly vulnerable to damage. However, although the "standard Diary" was for six months,[21] the data were distributed differently over different copies, and certainly, as a look at Graph 1 shows, in the case of the Euphrates-level data, there appears to be no particular shortage of data for certain months.

In terms of the use of this data to determine Anatolian precipitation rates, potentially the most serious source of statistical error is that caused by the extent to which the Babylonians themselves manipulated the height of the river. The references to the Pallukatu canal cited above show how the level of the water in the river in Babylon, when particularly low around September, could be raised by closing this canal. What is noteworthy, however, is that in the vast majority of cases the level of the river is recorded to fall gradually to the lowest point, and to rise there after. Those profiles which show a very steep rise *from a low position* in the period August to October, and then a fall, before another rise, are suggestive of man-made manipulation of the river level (-197; -178; -149; -142; -132; -107), but as is also clear from the Graph the extent of the manipulation is only small in comparison to the overall profile of the river.

21 Hunger and Pingree (1999): 142–144.

The high-water level may also have been manipulated, as the reference to a canal opening in -108 suggests. However, the very fact that on numerous occasions the level of the river far exceeded the "apertures of the peak flood" suggests that this played only a minor role, if any, in affecting the streamflow.



GRAPH 2 — The approximate average annual volume of water carried by the Euphrates, expressed in terms of the NA value above or below the mean, against time. Temperature is also plotted (without units).

On the basis, then, that for at least the period between -293 and -73 the gauge used to determine the "NA" at Babylon was applied consistently, and in the light of the comments above, I have determined from Graph 1 a measure of the volume of water carried by the Euphrates for this period. I have done this by judging the amount in NA by which the recorded amounts exceed, or are less than, the average profile of the river, as determined from this same data set. I feel this to be justified for two reasons. Firstly, the flow of the Euphrates as reconstructed from proxy data (see below) suggests that the volume of water carried by the river at this time was *on average* constant, and secondly because, as Graph 2 shows, throughout the interval of 221 years the volume of the river rose repeatedly above and below the mean. In other words, there is no evidence that during this period the flow of the river was either on a dramatic upturn or a downturn, which would have meant that the mean curve would itself vary over time.

In some cases, judging the amount by which the river height exceeded the average is straightforward, particularly when the peak flood or low point has been noted, or the

recorded profile runs parallel with the average one, as for example in -137, or in -245. In others, for example -86 whose profile runs directly through the average profile, a more careful assessment has to be made. Since the profiles are for the most part consistent in shape it is justifiable, in my opinion, to extrapolate backwards or forwards a short way in order to assess the final peak flood achieved. Also, it is clear that where the peak flood was higher/lower than average, the river level *remained* above/below average until the end of the year — indeed until February the following year. Where records are preserved only for February and January, I have treated those values as pertaining to the level of the river in the *previous* year. Inevitably, many of the judgements contain a measure of subjectivity, and improvements may be possible in the future. I have not drawn in "error-bars" in Graph 2, but clearly something of the order ±3 NA would be about right.

I have also plotted in Graph 2 values for the flow of the river in -232 (value +5) and -84 (value -5), based on the arguments above, although their magnitudes cannot be accurately assessed. Values are adduced for 99 of the 221 years from -293 and -73, some 45%. Lastly, I have plotted a measure of the temperature (no scale) against years for the same period, as deduced from Graph 1 — see further below. Graph 2 represents the centrepiece of this work, and constitutes what remains of the human testimony of the magnitude of the streamflow of the Euphrates for more than two centuries more than two millennia ago, and I anticipate that it will prove of use in many differing contexts, some of which I will now explore.

Economic Correlations

Some form of correlation between streamflow and prices in southern ancient Mesopotamia may be expected on the basis that much agriculture there was dependent on irrigation. However, unlike the deserts beside the Nile in Egypt, Babylonia received not insignificant amounts of rainfall, and its "desert" retained a significant population.[22] Low levels of precipitation in Anatolia, and a consequent low streamflow, are and were not always contemporaneous with low rainfall in Mesopotamia itself.[23] Also, through the opening and closing of canals, and other water management techniques,[24] the problems associated with unusually low or high water levels could in part be alleviated, and, lastly, countless other factors impact on the price of goods.[25] Despite this, it may reasonably be assumed that particularly large flows may have damaged dwellings and crops, and, more significantly perhaps, that periods of *sustained* low flow may have had a profoundly detri-

22 Butzer (1995): 142.

23 Kay and Johnson (1981): 257 show that for modern times at least "anomalously large streamflow through Mesopotamia need not be related to high precipitation in Mesopotamia," and *even* that at the large scale "we may adduce oppositely-signed anomalies in streamflow from proxy evidence from southern parts of the study region (Mesopotamia)." Assessments of Mesopotamian rainfall have been adduced from cuneiform sources, *e.g.*, Neumann and Parpola (1987); van Driel (1992); Sigrist and Neumann (1978): 239. However, given the findings below, the significance of local as opposed to Anatolian rainfall on the economy of Babylonia may be less than is sometimes argued.

24 See, for example, Eyre (1995): 181 and bibliography to earlier literature.

25 Neatly expressed by P.I. Kuniholm in his cautionary "Archaeological Evidence and Non-Evidence for Climatic Change" (1990): 645–646.

mental impact on the local economy. In the following I look at the prices for commodities as recorded in the Diaries during periods of particular low streamflow.

Slotsky[26] showed that, broadly speaking, the prices of barley, dates, mustard/cuscuta, cress/cardamom, sesame and wool decreased from c. -430 to c. -185, and then increased. While there is evidence that the market was in part controlled and that prices did not fully reflect supply and demand, it is nevertheless remarkable that the turn in prices should have occurred just when the Euphrates was suffering a number of lows. Graph 2 shows us on which occasions the river was particularly low, and I have utilised the data provided by Slotsky (1997): 84–85, Table 10, and Appendix B, to see if any connection can be found between very low river levels and price increases.[27]

-289 to -288	Barley and dates are substantially more expensive than in years previous and following.
-260	Cress/cardamom and sesame are more expensive than in years previous and following.
-219	No data.
-194 to -170	Prices in general began to increase in -195, although mustard was still cheap until -183. Prices were cheap again only in -186, -182 and -181, but expensive again by -180, and remaining so until -168.
-155	Barley is much more expensive, dates cheaper, in this year than in years previous or following.
-126 to -118	Both before and after this period, goods were substantially cheaper.
-84 and -82	Barley seems to have been cheaper *during* those years.
-77	Goods appear to have been more expensive that year, as compared to years prior and after.

While, of course, not excluding the possibility of other factors at work raising prices during these periods of low flooding, it is noteworthy that despite prices in general falling until c. -185 and then rising, prices *rose above the general tendency* in almost all cases when the river was low.

The level of the river was but one factor among many that determined the prices of commodities in Babylonia. However, as and when the extent of the streamflow of the Euphrates can be calculated to within a year or so from proxy records of precipitation in Anatolia, as I hope this work will show it should be possible to do, a new and valuable tool will be provided to the historian of Mesopotamia's economy.

26 Slotsky (1997): 50–87, but see in particular the graphs on pp. 79–81 and p. 83. Müller (1999/2000): 203f. criticises this part of Slotsky's work in particular in his review of her book, concluding (p. 207) that a direct relationship between the level of the river and prices could not in fact be shown to exist through the statistical methods she used. Because the interest here is in short periods of exceptionally low river level Müller's conclusions do not apply.

27 Müller (1995/96) also plots the prices of commodities recorded in the Diaries at 10-year intervals between -450 and -160, revealing peaks centred around c. -310, -270, -230 and -175. He shows also (Abb. 2) that barley peaked in price around -280, -275, -260, -248, -230, -210, -190, -180, and -175. Clearly his findings also show that rising prices more or less correlate with falling river levels.

Correlations with Volcanic Behaviour

K.P. Foster and R.K. Ritner (1996): 1–14 discuss a re-dating of the cataclysmic eruption of Thera to c.1530 on the basis of Egyptian evidence, but they also mention on pp. 4 and 8 its smaller eruption of c.197 BC (= -196), referred to by Strabo *inter alia* classical sources. Following a suggestion by R.D. Biggs, and enlisting the help of A.L. Slotsky, the authors argue that a contemporaneous record of the *consequences* of this eruption can be found in the Diaries. They also suggest that the effects of the eruption of Vulcano may have been unwittingly recorded in the -182 Diary. A.L. Slotsky kindly sent me a copy of an unpublished seminar paper she presented on the evidence for these two volcanic eruptions in the Diaries. Only months X to XII of the Diary for -197/-196 survive, corresponding to January to March -196. From mid-February on bad weather is therein recorded. Slotsky also mentions in her paper that the Euphrates showed a peak flood at the end of March, unusually early, concluding that this may indeed have been connected to the eruption. Foster and Ritner (1996): n. 40 note that the classical authors had not assigned a date to Thera's eruption any more accurate than c. 197 BC, and suggest that the evidence of the bad weather and early flood recorded in this Diary may permit a more accurate dating to early 197 BC.

However, Thera's location just west of mainland Turkey means that were its eruption to have had an impact on the weather (itself by no means certain) it was much more likely to have affected the level of precipitation in the Euphrates basin in the Anatolian highlands than in Mesopotamia itself. As Graphs 1 and 2 show, the streamflow of the Euphrates in early -196 was both early and unusually high, and that by the next year this had gone. It is indeed conceivable that this was caused by rainfall in January or February of -196, but it could equally have been caused by snowmelt from excessive rainfall the winter before (see below). Interestingly, the river rose rapidly in late October, early November -197, suggestive of heavy rainfall, which as the cold set in would then have fallen as snow, and only be realised as streamflow during the spring thaw. Rather than positing a date for Thera's eruption in early -196, I would suggest that the evidence *as it is* of the river levels suggests that it occurred on or before October -197, and so far as I can tell from the evidence gathered by Foster and Ritner (1996): n. 40, the classical sources do not exclude this slightly earlier date.

Connection to Weather in Anatolia

The connection between rainfall in Anatolia and the streamflow of the Euphrates has been mentioned on a number of occasions already. Essentially, the Euphrates basin is in a Mediterranean climate regime with a wet winter and a dry summer. The rainfall in the area is caused by the westward flow of storms from the Eastern Mediterranean into Anatolia, and from the Black Sea on a more northerly track. Rain from the Mediterranean penetrates far inland, because the mountains run SW to NE, and in winter falls on the mountains as snow. It melts the following year and is combined with some spring rain. Kay and Johnson (1981): 255 argue that particularly wet winters in the basin area occur when cyclonic flow draws storm activity from the eastern Mediterranean across eastern Anatolia toward the Caspian Sea, and also (p. 257) that analyses of these storm tracks show that cool conditions in Anatolia may be added to the evidence for wet conditions in the Euphrates headwaters. I plotted on Graph 2 some evidence for the temperature in the basin area as derived from

Graph 1. This was done on the *simple* premise that the time of the snowmelt would be reflected in the time of the spring flood — in a warmer year the flood occurred earlier, and vice versa. Only a few points have been plotted, by estimating roughly the extent to which any given profile rises earlier or later than the mean curve. The resultant values are unitless, but bear some relationship to the headwater area temperature, I argue. The values show only that the temperature (as measured in this way) varied either side of the mean, throughout the period of concern, and that Kay and Johnson's assertion that cold = wetter, and warm = drier is largely meaningless on a yearly scale.

Contemporary records show that there is a very good correlation between winter precipitation and streamflow.[28] That means, that, in general terms, a high level of the Euphrates implies a wet year, the year before in eastern Anatolia, and vice versa. In Graph 1, the smaller undulations in the average profile reflect spring and autumnal rain, but the main shape of the curve indicates that in the period c. 300 to 50 BC snowmelt was very much the dominant determinant of streamflow, and that the position that pertains in modern times pertained then.

While the precipitation from the Black Sea over the Euphrates basin area is not without importance, and while spring and autumn rainfall from whichever source is not small, with the result that one year of strong rain may create a large streamflow in the Euphrates in that same year *and* in the next, and while the effect of higher temperature causing *more* snow to melt and vice versa cannot being taken into account, Graph 2 still provides a rough measure of the level of Mediterranean-sourced rainfall over eastern Anatolia, year by year. This provides much needed information on the weather in the Mediterranean region as a whole, and can now be compared with other rainfall-dependant sources of data.

Correlations with Proxys

Lake Van

A series of expeditions to Lake Van since the late 70s has produced varved records dating back some thousands of years of a number of variables dependent, at least in part, on precipitation in that area — slightly east to the Euphrates basin area. Interpretation of the data is fraught with difficulties, most significant of which is knowing which climatic signals are actually expressed in the proxy record, and to what extent. In the case of the pollen records, for example, the extent of human alteration of the environment (*e.g.*, in deforestation) is also important to know.[29] Nevertheless, Kempe and Degens (1978) treated the thickness of the varve and the rate of sedimentation as a signal of winter and spring precipitation, and Schoell (1978) used the ^{18}O variations tied to the varve record as a proxy for both precipitation and temperature, on the basis that times of oxygen-18 depletion marked cold-wet climates. Kay and Johnson (1981) argue that the broad features of these results are indicative of streamflow through Mesopotamia, and reconstruct a coarse streamflow curve for the period from -4000 to the present (fig. 4 — also in Butzer (1995): 133,

28 Kay and Johnson (1981): 253–255 found a correlation of r = 0.74 between rainfall in Erzurum in the headwaters region in January-February and the flow of the river at Hit (slightly further upstream from Babylon) in May for the period 1939–1964, showing the key role played by winter precipitation in the basin area in the extent of streamflow through Babylonia.

29 See also the criticisms outlined in Bryon and Bryson (1999): 2–3.

fig. 2). The detail is so coarse, that there is no point reproducing their results here, other than to comment that for the period c. -300 to -50 BC they argue that the river levels were higher than today, and relatively constant. Lemcke and Sturm (1997) derive their results from the long piston core taken during the third international Lake Van expedition in 1990, and argue pp. 672–673 that a phase of $\Delta^{18}O$ enrichment at Van began around 4190 years BP reaching maximum values between 3040 years BP and 2000 years BP, including the period covered by the data under discussion here. This enrichment reflected a stable, but lower temperature and humidity than today, but with increased precipitation in the area after 3040 years BP.

Most of the estimates for precipitation rates, humidity and temperature in the period c. 500 BC to 1 BC thus far produced from the Van cores have had a resolution of c. 10 years or worse, and are thus insufficiently detailed for meaningful comparison with the data in graph 2 to be made. The potential for higher resolution exists, and in the case of precipitation at Van it may soon become possible to connect that directly with the streamflow recorded year by year at Babylon. Indeed, it may then be possible to reconstruct the streamflow of the Euphrates to within one or two years from the Van proxy records of precipitation, and thus improve on the work of Kay and Johnson (1981). The possibilities afforded for further insights into Mesopotamia economics and history by such a reconstruction would be substantial.

Trees

The use of tree ring width data in the reconstruction of past climate begins at least as early as A.E. Douglass in 1901.[30] Their use in reconstructing local precipitation patterns, and indeed streamflow directly has also been attempted.[31] With this in mind I sought tree ring width data from Anatolia for the period of concern, in the hope that I might find some broad correlations between them and Graph 2. I am fully aware of the dangers inherent in seeking correlations between data sets determined from varves, tree rings widths and streamflows, say, dependent as they each are on a series of differing and independent variables, such as temperature, humidity, pressure, soil moisture, as well as precipitation. Christopher, himself, has on occasion grumbled "garbage in, garbage out" in reference to the over-eager use of computer programs for dating purposes, or for finding correlations. Nevertheless, I have pushed ahead *merely as a first step*, arguing that the *possibility* of correlation is at least justifiable on the following grounds:

The only data so far published suitable for this purpose come from a Roman shipwreck found at Comacchio near Ferrara in Italy (see n. 6 above) and from the sarcophagus of the Elaia Tumulus near Pergamon on Turkey's Aegean Sea coast (see n. 7, above).[32] The tree at Elaia was a yew, and it produced a "floating" sequence of 307 years beginning c. 150 BC

30 For an introduction to the subject see Fritts (1991), see n. 9, above.

31 *E.g.*, Stockton (1975): Ch. 1 argues that for this to be achieved one must know the location of the relevant trees, the temperature, the water run-off, the evaporation, and the soil moisture capacity. None of these things are known for the Euphrates basin.

32 Other tree ring data have been extracted for this period, but are not, so far, available — from Athlit, from Amorium, and perhaps from Herculaneum, as detailed in Kuniholm et al. (1992): 292, and in Reports of the Cornell Dendrochronology Project run by P.I. Kuniholm. These reports are available online at http://www.arts.cornell.edu/dendro.

or earlier. In an area with a hot, dry summer, periods of good rainfall would be expected to promote growth in trees in marginal areas. The sequence at Elaia does show evidence that the yew in question grew under stressed conditions with some years of extremely low and others of high growth. In those "pointer years" the amount of local precipitation may have played a key role in the amount of growth, and, given the predominance of Mediterranean-fed rain in the Euphrates basin area, might then have shown up as correspondingly low or high streamflows at Babylon.

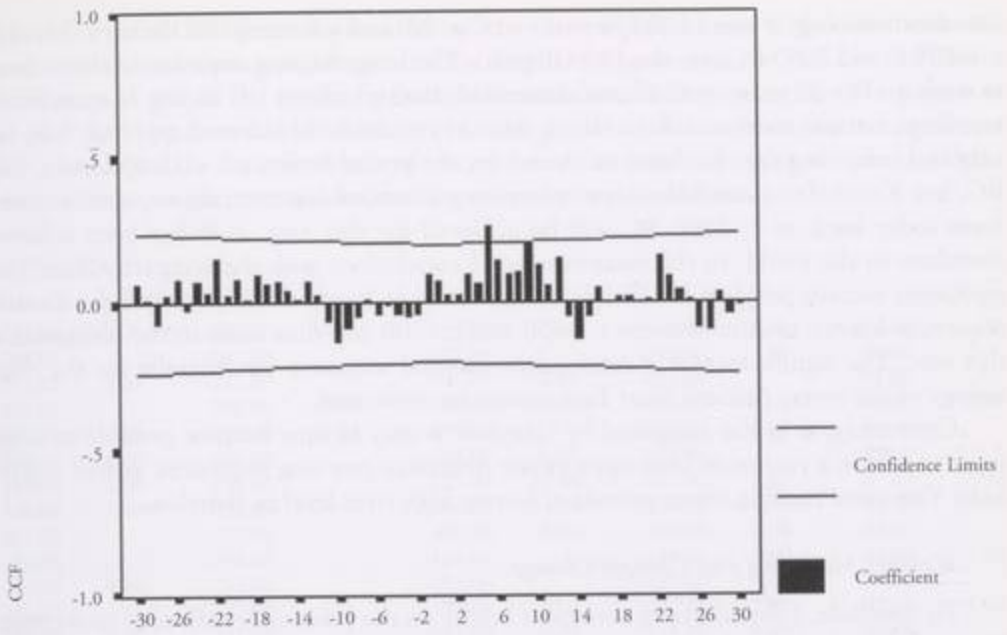
The trees found as part of the shipwreck in Italy were Buxus, and they together have produced a floating 503-year sequence, beginning in 12 BC or slightly earlier, on the basis that they were accompanied by lead ingots stamped with the name "Agrippa," who died in that year. The sequence has been crossdated with a sequence from Darende in Anatolia[33] and the Buxus may indeed have come from Anatolia, and certainly grew under stressed conditions (Kuniholm et al. (1992): 298–299). Again, good cross-correlations are unlikely, but "pointer years" may show up in both the tree ring widths and in Graph 2.

I begin by inserting the tree ring data from Comacchio and Elaia as published by Kuniholm et al. against years into the SPSS statistical programme on the assumption that the last known tree ring at Comacchio dates to -13, and at Elaia to -149. I then perform cross correlations with the NA data recovered from Graph 1 and used to produce Graph 2, (these data are in the Appendix, below) in order to see if, for a given time lag between the tree ring data and the NA data, a reasonable correlation exists. Were it to exist, this would suggest on the basis that the NA values correspond to the streamflow of the Euphrates, and that the streamflow is strongly correlated to precipitation levels in the basin area, that the width of the tree rings also correlate to the *same* precipitation levels. Since the NA data is accurately dated, knowing the time lag would permit an absolute dating of the tree ring sequences.

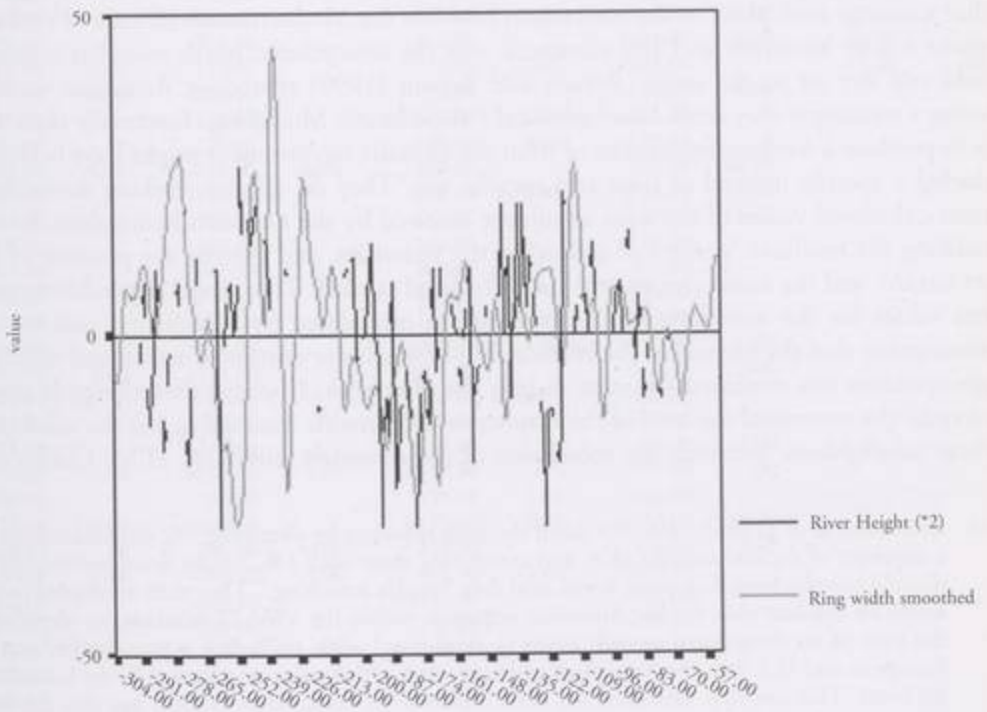
In the case of the Elaia tree ring data, the best fit occurred with a lag of +5 years — cross-correlation factor of 0.164 with a standard error of 0.134. In the case of the Comacchio data, a better fit (r = 0.201, standard error = 0.101) occurred with a lag of 0 years. However, by smoothing the tree ring data (using T4253H smoothing) the correlation improves. For the Comacchio data r = 0.260 with a standard error of 0.103 with a lag of +5 years (implying that the Buxus tree ring sequence begins in 17 BC — see Graph 3), and for the Elaia data r = 0.198 with a standard error of 0.177 for a lag of +29 years (implying the Yew tree ring sequence begins in 179 BC). None of these correlations are particularly impressive, but as Graph 4 shows visually, the fit between the smoothed, Buxus tree ring data from Comacchio and the river level data is quite good *when* the former begins at 17 BC. Periods of low growth (narrow tree rings) do correspond with periods of low river levels, and vice versa.

The results are, as expected, largely inconclusive, though some form of correlation may exist between the widths of the Buxus tree rings and the level of the Euphrates in the period c. -300 to -50, and there is little doubt that with more tree ring data from Anatolia itself the possibilities of correlation would be higher. Two long tree ring sequences exist for Anatolia to date, one running from today back to c. AD 362 (as stated in Cornell's Aegean

33 Near Malatya in Turkey — right in the Euphrates basin area, but the 116-year Cedar sequence is slightly too late for our purposes.



GRAPH 3: Cross-correlation values for the height of the river Euphrates (expressed in NA) and tree ring widths from Buxus found at Comacchio (Ferrara)



GRAPH 4: The level of the Euphrates expressed as 2*NA and the T4253-smoothed tree ring sequence from Comacchio beginning at 17 BC.

Dendrochronology Project 1995 Report — cf. n. 32) and a floating one dating to between c. 627 BC and 2660 BC (see the 1999 Report). The long, floating sequence has been dated to within +76/-22 years at 95% confidence with high-precision ^{14}C dating of some of the tree rings, but any more accurate a dating has not yet met with universal approval.[34] So far, very little tree ring data has been recovered for the period between c. AD 400 and c. 700 BC, but Kuniholm is confident that before long a continuous tree ring sequence running from today back to c. 2500 BC will be achieved for this area, as it has been achieved elsewhere in the world. In the meantime good correlations with the accurately dated precipitation records implied by Graph 2 may be able to tie down some of the floating sequences known to date between c. +400 and c. -700 and thus assist in the realisation of this aim. The significance of a dendrochronological sequence for Anatolia for the chronology of the entire Ancient Near East cannot be overstated.

Conversely, as is also suggested by Graph 4, it may in time become possible to determine to within a year or so from appropriate Anatolian tree ring sequences, as well as from Lake Van varve records, those periods of low or high river level in Babylon.

Weather Modelling and Climate Change

To conclude, I would like to comment briefly on the possibilities afforded to the wider issues of climate change by fine-detailed records of precipitation, such as those implied by Graph 2.

Firstly, the period immediately after 500 BC has been identified as an important one by climatologists[35] — the beginning of a cold, wet phase, after a drier one. This suggests that a change took place in the interaction between the Mediterranean climate of cyclonic moist winter westerlies and arid summers, and the anticyclonic north easterlies injecting cold and dry air to the south. Bryson and Bryson (1999) reproduce Anatolian weather using a technique they term Macrophysical Paleoclimatic Modelling. Essentially their aim is to produce a working hypothesis of what the climatic environment might have been like during a specific interval of time at a specific site. They do this by working down from retro-calculated values of the solar irradiance received by the northern hemisphere, to calculating the resultant "centres of action" of the westerlies, and thereby the position of the jet stream, and the anticyclones, and lastly the local rainfall. This model depends on modern values for the extent to which irradiance is modulated by volcanicity, and on the assumption that the physics of the relationship between the centres of action and monthly precipitation has remained constant during the Holocene. I believe that alongside proxy records, the records of the level of the Euphrates will provide material to test the validity of these assumptions, and thus the robustness of these models. Similarly, H.M. Cullen and

34 Kuniholm et al. (1996): 780–783 dated the long sequence by obtaining ^{14}C determinations on a sequence of decadal samples of it, and comparing these with 14C results from precisely dated decadal sample, from European wood, and then "wiggle matching." They then attempted to pin down an absolute date for the Anatolian sequence within the +76/-22 window, by identifying the year of an exceptional growth event (a thick ring) with 1628 BC, a year marked out in European and U.S. tree ring sequences and associated with a volcanic eruption in the Greenland ice cores. This last step, however, has been criticised by C. Renfrew (1996). See also the concerns raised by D. Collon (2000), who also refers to other relevant literature.

35 Apparent in the Van Cores, for example (see above), but also on a hemispheric scale since it is reflected in the Greenland Ice Cores. See D.A. Meese et al. (1994): 1680–1682, where they describe the period 2450 BP to 1950 BP as "a little ice age type event."

P.B. deMenocal (2000) use modern records to show a dependence of the Mediterranean storm tracks, and thus precipitation in the Euphrates basin area, on the North Atlantic Oscillation. A test of the model for such cold water oscillations by extrapolating them to the past could be provided by the data in Graph 2, and in this way cuneiform records can play a small part in the refinement of the so-called "atmosphere-ocean coupled models," which offer so much potential for the future of weather prediction.

Appendix

Data used to form Graph 2 — Year v ΔNA (measure of Euphrates streamflow)

-293.00	-2.00	-243.00	.	-193.00	-15.00	-143.00	10.00	-93.00	.00
-292.00	.	-242.00	.	-192.00	.	-142.00	.00	-92.00	.
-291.00	4.00	-241.00	.	-191.00	-5.00	-141.00	.	-91.00	.
-290.00	.	-240.00	7.00	-190.00	-8.00	-140.00	6.00	-90.00	8.00
-289.00	-7.00	-239.00	2.00	-189.00	.	-139.00	-5.00	-89.00	.
-288.00	-4.00	-238.00	.	-188.00	4.00	-138.00	.	-88.00	.
-287.00	-2.00	-237.00	.	-187.00	-12.00	-137.00	2.00	-87.00	-2.00
-286.00	5.00	-236.00	.	-186.00	-11.00	-136.00	10.00	-86.00	3.00
-285.00	.	-235.00	.	-185.00	-6.00	-135.00	2.00	-85.00	.
-284.00	.	-234.00	.	-184.00	.	-134.00	10.00	-84.00	-5.00
-283.00	-9.00	-233.00	.	-183.00	.	-133.00	5.00	-83.00	.
-282.00	.	-232.00	5.00	-182.00	-3.00	-132.00	2.00	-82.00	-1.00
-281.00	-2.00	-231.00	.	-181.00	-5.00	-131.00	6.00	-81.00	.
-280.00	.	-230.00	.	-180.00	.	-130.00	.	-80.00	.
-279.00	.	-229.00	.	-179.00	.	-129.00	2.00	-79.00	.
-278.00	.	-228.00	.	-178.00	-15.00	-128.00	.	-78.00	.
-277.00	4.00	-227.00	.	-177.00	-5.00	-127.00	.	-77.00	-5.00
-276.00	.	-226.00	.	-176.00	.	-126.00	-7.00	-76.00	.
-275.00	.	-225.00	.	-175.00	-3.00	-125.00	-15.00	-75.00	.
-274.00	.	-224.00	.	-174.00	.	-124.00	-6.00	-74.00	.
-273.00	-10.00	-223.00	.	-173.00	-7.00	-123.00	.	-73.00	.00
-272.00	-6.00	-222.00	.	-172.00	.	-122.00	-6.00		
-271.00	.	-221.00	.	-171.00	5.00	-121.00	.		
-270.00	.	-220.00	.	-170.00	-3.00	-120.00	.		
-269.00	6.00	-219.00	-6.00	-169.00	.	-119.00	-10.00		
-268.00	.	-218.00	.	-168.00	5.00	-118.00	-7.00		
-267.00	.	-217.00	.	-167.00	.	-117.00	11.00		
-266.00	.	-216.00	.	-166.00	.	-116.00	.		
-265.00	.	-215.00	.	-165.00	.	-115.00	.		
-264.00	.	-214.00	.	-164.00	.	-114.00	.		
-263.00	.	-213.00	.	-163.00	2.00	-113.00	.		
-262.00	.	-212.00	.	-162.00	1.00	-112.00	.00		
-261.00	5.00	-211.00	.	-161.00	.	-111.00	2.00		
-260.00	-15.00	-210.00	.	-160.00	-4.00	-110.00	.		
-259.00	.	-209.00	.	-159.00	.	-109.00	3.00		
-258.00	.	-208.00	.	-158.00	1.00	-108.00	3.00		
-257.00	2.00	-207.00	5.00	-157.00	.	-107.00	.00		
-256.00	.	-206.00	.	-156.00	5.00	-106.00	.		
-255.00	4.00	-205.00	.	-155.00	-10.00	-105.00	7.00		
-254.00	.00	-204.00	6.00	-154.00	.	-104.00	3.00		
-253.00	1.00	-203.00	-2.00	-153.00	-3.00	-103.00	.		
-252.00	.	-202.00	.	-152.00	.	-102.00	.		
-251.00	13.00	-201.00	.	-151.00	.	-101.00	.		
-250.00	8.00	-200.00	.00	-150.00	.	-100.00	.		
-249.00	.	-199.00	.00	-149.00	2.00	-99.00	.		
-248.00	.	-198.00	3.00	-148.00	.	-98.00	.		
-247.00	9.00	-197.00	5.00	-147.00	.	-97.00	.		
-246.00	7.00	-196.00	7.00	-146.00	.	-96.00	.00		
-245.00	10.00	-195.00	.00	-145.00	.	-95.00	3.00		
-244.00	.	-194.00	-2.00	-144.00	3.00	-94.00	4.00		

BIBLIOGRAPHY

Brown, D.R.
2000 *Mesopotamian Planetary Astronomy-Astrology* (Cuneiform Monographs 18). Groningen.

Bryson, R.A. and R.U. Bryson
1999 "Holocene Climates of Anatolia: As Simulated with Archaeoclimatic Models," TÜBA-AR II, 1–13.

Butzer, K.
1995 "Environmental Change in the Near East and Human Impact on the Land," in J. Sasson (1995): 123–151.

Collon, D.
2000 "Implications of Introducing a Low Mesopotamian Chronology," 13th British Association of Near Eastern Archaeology Newsletter, July 2000, 6–9.

Cullen, H.M. and P.B. deMenocal
2000 "North Atlantic Influence on Tigris-Euphrates Streamflow," International Journal of Climatology 20, 853–863.

van Driel, G.
1992 "Weather: Between the Natural and the Unnatural in First Millennium Cuneiform Inscriptions," in D.J.W. Meijer (ed.), *Natural Phenomena – Their Meaning, Depiction and Description in the Ancient Near East.* Amsterdam, 39–52.

Eyre, C.J.
1995 "The Agricultural Cycle, Farming, and Water Management in the Ancient Near East," in J. Sasson (1995): 175–189.

Fritts, H.C.
1991 *Reconstructing Large-Scale Climatic Patterns from Tree-Ring Data.* Tucson—London

Hunger, H.
1992 *Astrological Reports to Assyrian Kings* (SAA 8). Helsinki.

Hunger, H. and D. Pingree
1999 *Astral Sciences in Mesopotamia.* Leiden—Boston—Köln.

Kay, P. and D. Johnson
1981 "Estimation of the Tigris-Euphrates Streamflow from Regional Paleoenvironmental Proxy Data," Climatic Change 3, 251–263.

Kempe, S. and E.T. Degens
1978 "The Lake Van Varve Record: The Past 10,420 Years," in E.T. Degens and F. Kurtman (eds.), *The Geology of Lake Van.* Ankara, 56–63.

Kuniholm, P.I.
1985 "Dendrochronological Analysis of the Elaia Sarcophagus," Kline, Istanbuler Mitteilungen 35, 168–182.
1990 "Archaeological Evidence and Non-Evidence for Climatic Change," Philosophical Transactions of the Royal Society of London, A 330, 645–655.

Kuniholm, P.I., C.B. Briggs, S.L. Tarter and H.E. Kuniholm
1992 "Comacchio (Ferrara). A 513-Year Buxus Dendrochronology for the Roman Ship," Bollettino di Archeologia, 291–299.

Kuniholm, P.I. et al.
1996 "Anatolian Tree Rings and the Absolute Chronology of the Eastern Mediterranean, 2220–718 BC," Nature 318 (27/6/1996), 780–783.

Lemcke, G. and M. Sturm
1997 "$\Delta^{18}O$ and Trace Element Measurements as Proxy for the Reconstruction of Climate Changes at Lake Van (Turkey): Preliminary Results," in N. Dalfes, G. Kukla, and H. Weiss (eds.), *Third Millennium BC Climate Change and Old World Collapse* (NATO ASI Series I, no. 49). Berlin (Springer), 653–678.

Meese, D.A. et al.
1994 "An Accumulated Record from the GISP2 Core as an Indicator of Climate Change Throughout the Holocene," Science 266 (9/12/1994), 1680–1682.

Müller, G.G.W.
1995/96 "Die Teuerung in Babylon im 6. Jh.v.Chr.," AfO 42/43, 163–175.
1999/2000 "Kurse, Preise, Wasserstände," AfO 46/47, 201–207.

Neumann, V.H. and S. Parpola
1987 "Climatic Change and the Eleventh-Century Eclipse of Assyria and Babylon," JNES 46, 161–182.

Parpola, S.
1993 *Letters from Assyrian and Babylonian Scholars* (SAA X). Helsinki.

Renfrew, C.
1996 "Kings, Tree Rings and the Old World," Nature 381 (27/6/1996), 733–734.

Rochberg, F.
1991 "The Babylonian Astronomical Diaries," JAOS 111, 323–332.

Sachs, A.
1974 "Babylonian Observational Astronomy," in F.R. Hodson (ed.), *The Place of Astronomy in the Ancient World* (Philosophical Transactions of the Royal Society of London, A276). London, 43-50.

Sachs, A. and H. Hunger
Diaries *Astronomical Diaries and Related Texts from Babylonia*. Vol. 1: 652 BC to 262 BC (1988), Vol. 2: 261 BC to 165 BC (1989), Vol. 3: 164 BC to 61 BC (1996). Wien.

J. Sasson (ed.)
1995 *Civilizations of the Ancient Near East*. 4 vols. New York.

Schoell, M.
1978 "Oxygen Isotope Analyses on Authigenic Carbonates from Lake Van Sediments and Their Possible Bearing on the Climate of the Past 10,000 Years," in E.T. Degens and F. Kurtman (eds.), *The Geology of Lake Van*. Ankara, 92–97.

Sigrist, R.M. and J. Neumann
1978 "Harvest Dates in Ancient Mesopotamia as Possible Indicators of Climatic Variations," Climatic Change 1, 239–256.

Slotsky, A.
1997 *The Bourse of Babylon: Market Quotations in the Astronomical Diaries of Babylonia*. Bethesda.

Smith, D.G. (ed.)
1981 *The Cambridge Encyclopaedia of Earth Sciences*. Cambridge.

Stockton, C.W.
1975 *Long-term Streamflow Record Reconstructed from Tree Rings*. Tuscon.

Schafe, die „aus den Häusern" herbeigeführt wurden: BM 78910 und die Rolle des privaten Spenders (*kāribu*) im neubabylonischen Sippar*

Rocío Da Riva — Würzburg

Über die Rolle der privaten Spender im neubabylonischen Opferwesen ist wenig bekannt, denn in den Quellen gibt es kaum Information über dieses Phänomen. Um die Figur des privaten Spenders zu untersuchen, haben wir einerseits religiöse Texte, Dokumente über Rituale und Texte, welche die Vergabe von Pfründen registrieren; andererseits würde man auch in den Wirtschaftstexten Information über diese Personen erwarten. Dennoch sind die Verwaltungsurkunden ihres Charakters wegen weniger explizit als es zu wünschen wäre. Glücklicherweise gibt es eine etwas ergiebigere Gruppe von Ebabbar-Urkunden, die die Viehzucht betreffen. Es handelt sich um Listen von aus dem Tempelherden stammenden Opferschafen, die in „Häusern" an verschiedene Privatpersonen anvertraut sind.

I. Die interne Organisation der Viehhaltung des Ebabbar

Die Viehzucht des Ebabbar, des Tempels des Sonnengottes Šamaš in Sippar (mod. Abū-Ḥabba in Irak), ist sehr gut repräsentiert im frühen Archiv des Tempels (ca. 640–580 v. Chr.), dessen Texte sich hauptsächlich in den ersten Sippar-Sammlungen des British Museum befinden, besonders in der 82–3–23-Sammlung.[1] Man kann wohl von einem richtigen „Viehzuchtarchiv" sprechen, denn fast ein Viertel der frühen Urkunden handelt von der Viehhaltung.

G. van Driel hat zwei Bereiche in der Viehzucht des Tempels identifiziert: eine interne und eine externe Organisation, mit eigenem Personal und Kompetenzen.[2] Zweck der internen Organisation ist das Mästen und die Lieferung von Tieren für die Opfergabe. Wir werden uns hier dieser Problematik zuwenden.

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* Den Trustees des British Museum (London) sei für die Erlaubnis gedankt, unpublizierte Texte zu zitieren und zu edieren. Die verwendeten Abkürzungen folgen, wenn nichts anders vermerkt, der Zeitschrift *Archiv für Orientforschung*.

1 Für die Sammlung s. J. Reade in E. Leichty, CBT 6, xxxii.

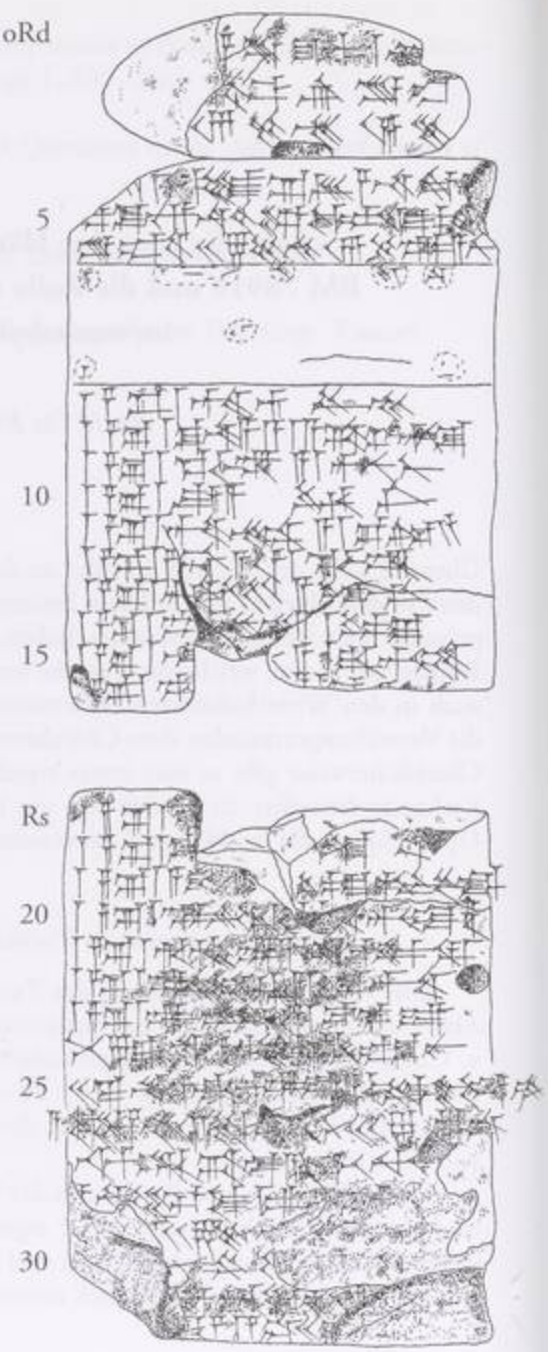
2 Siehe G. van Driel, BSA 7, 224.

II. Die Opferschafe der „Häuser"

Im Bereich der internen Organisation gab es in Sippar ein besonderes Phänomen beim System von Aufzucht und darauffolgender Lieferung von Opfertieren: Gewisse Personen müssen in ihren „Häusern" ein Opferschaf aus den Tempelherden mästen.[3] Diese Personen und ihre Opfergabe sind in Listen registriert.

Erstmals erscheinen derartige Dokumente in der Zeit des Nabopolassar und sind dann unverändert bis in die persische Zeit belegt.[4] Unseren bisherigen Quellen nach zu urteilen, gibt es keine Parallelen in anderen Kultorten; allerdings ist die Existenz eines solchen Systems in anderen babylonischen Städten nicht auszuschließen.[5] Aus den Urkunden ergibt sich, daß es sich immer um für Opferung bestimmtes Kleinvieh (udu-nitá) handelt. Die verantwortlichen Personen gehören verschiedenen sozialen Gruppen und Institutionen von Sippar, aber auch von Babylon an. Es ist zu vermuten, daß es sich um eine Obligation dem Tempel gegenüber handelt, obschon wir keine sicheren Informationen darüber haben. Anscheinend ergänzt dieses System von Schafen, die in den „Häusern" aufgezogen werden, die „normalen" bzw. „gewöhnlichen" Lieferungen von Opfertieren der externen und internen Herden.[6]

Der Text BM 78910 (88-5-12,96)[7] soll hier als Beispiel dienen: Es handelt sich um eine Liste von Personen, die für ein Schaf zuständig waren. Im Text erfahren wir, daß die Schafe nach Babylon fortgeführt wurden, um dort geopfert zu werden.



3 Siehe G. van Driel, BSA 7, 226ff.
4 Siehe G. van Driel, BSA 7, 227.
5 Zu dieser Problematik s. G. van Driel, BSA 7, 226 mit Anm. 52.
6 In BM 49887 sind die Schafe als *ginû*, also „gelegentliches" Opfer, bezeichnet.
7 Für die Sammlung und ihre interessante Geschichte s. C.B.F. Walker in E. Leichty et al., CBT 8, xivff.

BM 78910 (88–5–12,96) 6,9×4,8 cm Npl 28.10.16

	Transliteration	*Übersetzung*
oRd	[udu.nitá] *šá* ^{iti}bára ^{m}x [x x]	[Schafe], die im Monat Nisan P[N ...],
	[x x x ^{m}]^{d}utu-zalág^{ir} ^{iti}ab	[...] Šamaš-unammir,
	[ud].16.kam mu.16.kam	16.10.16.
Vs	[udu.ni]tá *šá* [*u*]*l-tu* é^{meš} *šá ina* UD.KIB.N[UN^{ki}]	[Scha]fe, die aus den Häusern von Sip[par] herbeigeführt wurden, hat man nach Babylon
5	[*a*]*b-ku-nu a-na* tin.tir^{ki} *ab-ki-a*[*m*]	fortgeführt(!).
	^{iti}ab ud.28.kam mu.16.kam ^{d}ag-a-pab	28.10.16 Nabopolassar.

Abstand von ca. 3 Zeilen mit Rasuren

	1 *šá* é ^{md}utu-šur ^{lú}mu	1 aus dem Haus des Šamaš-ēṭer, des Bäckers.
	1 *šá* é ^{m}*ku-na-a* a ^{m}*a-ta-mar-an-nu-su*	1 aus dem Haus des Kūnāja//Ātamar-anūssu.
	1 *šá* é ^{m}*si-lim-*^{d}en a ^{md}bad-pab	1 aus dem Haus des Silim-Bēl//Ea-nāṣir.
10	1 *šá* é ^{m}ba$^{šá-a}$ ^{lú}mušen.dù	1 aus dem Haus des Iqīšāja, des Vogelfängers.
	1 *šá* é ^{md}utu-mu-gin a ^{m}*dan-né-e-a*	1 aus dem Haus des Šamaš-šum-ukīn//Dannē'a.
	1 *šá* é ^{m}níg.du a-*šú šá* ^{m}*si-lim-*^{d}en	1 aus dem Haus des Kudurru/Silim-Bēl.
	1 *šá* é ^{md}di.kud-kam a ^{lú}gal.dù	1 aus dem Haus des Madān-ēreš//Rab-banê.
	1 *šá* é ^{md}a[g-m]u-m[u] a ^{m}lú-sipa	1 aus dem Haus des Na[bû-šu]m-idd[in]//Rē'û.
15	1 *šá* é ^{md}x [x x] x a ^{m}da-^{d}amar.utu	1 aus dem Haus des [PN]//Ile'i-Marduk.
	1 *šá* é ^{md}e[n x x] a [^{m}za]lág-^{d}u[tu$^{?}$]	1 aus dem Haus des B[ēl-x]//N[ūr]-Ša[maš$^{?}$].
Rs	1 *šá* é ^{md}x-[x x x x]	1 aus dem Haus des [PN ...].
	1 *šá* é ^{m}*ku-*[x x a] ^{lú}azlag	1 aus dem Haus des Ku-x//Ašlāku.
	1 *šá* é ^{m}*a-qa*[*r*]*-a* [a] ^{lú}sipa.anše.kur.ra	1 aus dem Haus des Aqāra//Rē'i-sisê.
20	1 *šá* é ^{md}ag-šeš-*bul-liṭ* a [^{m}ì]r-^{d}gir$_4$.kù	1 aus dem Haus des Nabû-aḫ-bulliṭ//Arad-Nergal.
	1 *šá* é ^{m}*re-mut-*^{d}ag a ^{md}en-*è-ṭe-ru*	1 aus dem Haus des Rēmūt-Nabû//Bēl-eṭēri.
	1 *šá* é ^{md}ag-ḫi.li-dingir^{meš} a $^{m.lú}$sanga-^{d}utu	1 aus dem Haus des Nabû-kuzub-ilāni// Šangû-Šamaš.
	1 *šá* é ^{md}ag-lugal-[še]š$^{?meš}$-*šú* a ^{m}*ba-si-ja*	1 aus dem Haus des Nabû-šar-a[ḫḫē$^{?}$]-šu//Basia.
	pab 17 udu.nitá *šá* [*u*]*l-tu* é^{meš} *ab-ku-nu*	Insgesamt 17 Schafe, die von den Häusern herbeigeführt wurden;
25	20 udu.nitá *šá la* igi ^{md}ag-*ia-a-lì* ^{lú}gal *bu-lu*$_4$ *šá* lugal	20 Schafe von Nabû-ajjālu, dem Chef der Herden des Königs,
	a-ki še.bar *šá* mu.12[+x$^{?}$].kam	*für* Gerste des 12+x? Jahres,
	^{m}[^{d}ag-a-pa]b pab 37 udu.nitá	Nabopolassar. Gesamtsumme: 37 Schafe
	ina igi ^{m}*il-ta-la-a* [lú][g]al 10^{ú} [o]	zur Verfügung von Iltalā('), dem Chef der Zehnergruppe,
	a-na tin.tir^{ki} *ib-b*[*a*$^{?}$]-*a*[*k*$^{?}$]-*š*[*ú*$^{?}$-*nu-ti*(?)]	[er?] wird [sie?] nach Babylon fort[führen(?)].
	[^{iti}ab u]d.28.kam m[u].12[+4.kam]	28.[10.]1[6],
30	[^{md}ag-a-p]ab [lu]gal ti[n.ti]r$^{ki[ti]}$ [o]	[Nabopola]ssar, [Kö]nig von Babyl[on].
	[x x x] še.bar x x mu.12[+4$^{?}$.kam]	... Gerste ... 12. Jahr(?). ...
	[^{m}x x a]-*šú šá* ^{m}níg.du 20 u[du$^{?}$.nitá$^{?}$ x]	[PN], Sohn des Kudurru: 20 Sch[afe?...].

Kommentar

Maßstab der Kopie 1:1.

1 Außer BM 78910 sind mir noch folgende Texte über Lieferungen von Schafen „aus den Häusern" bekannt: BM 77960 (Npl 14.12.10), BM 50495 (Npl 18.12.16), BM 49887 (Npl 29.5.20), BM 114774 (Nbk 16.4.1), CT 44 72 (Nbk 12.9.6) und VS 6 252+276 ([Npl/Nbk]).

5 Die erste Form ist Stativ 3 pl. *abāku* mit Ventiv *-nu*. Man würde für die zweite Form keinen Ventiv erwarten, denn die Schafe sind *nach* Babylon geliefert worden. Die korrekte Form wäre trotzdem *abkū-nu* oder *abkū-nim*, keine singularische (und jedenfalls grammatikalisch bedenkliche) Form *abki-am*. Letztere Form sollte man vielleicht unpersönlich übersetzen. Ein ähnliches Formular findet man in BM 77960, 1–2: [udu.nitá] *šá ul-tu* é^{meš} *ab-ku-nim ma-la* ugu ^{giš}da / [x] x x ^{iti}še ud.14.kam mu.10.kam ^{md}ag-a-ù[ru]. „[Schafe], die aus den Häusern herbeigeführt wurden, gemäß dem, was auf der Wachstafel [geschrieben wurde(?)] 14.12.10 Nabopola[ssar]".

7ff. Zu den Personennamen s. die Prosopographie in A.C.V.M. Bongenaar, *Ebabbar*. Hier werden nur die häufig belegten Personen kommentiert. (PN/VN; PN/(VN)/FN: für die Abkürzungen s. Anm. 8.)

8 Der Bäcker Kūnāja//Ātamar-anūssu erscheint außerdem in BM 49774: 5 (Npl 6.6a.5), BM 50732: 21 (Npl 4.8.6) und als Zeuge in den offiziellen Verträgen BM 50877: Rs 2′ (Npl 9.11.17, Sippar) und BM 51160: Rs 6′ (Nbk 10+.6.x, Sippar).

9 Silim-Bēl//Ea-nāṣir ist als Zeuge in RT 19, 109, Nr. 7: 10 (Nbk 9.10.0A, Sippar) belegt.

10 Der Vogelfänger Iqīšāja erscheint auch in BM 50101: 24 (Npl 18?.8.3) und als *širku* in BM 50732: Rs 10′ (Npl 4.8.6).

11 Der Bäcker Šamaš-šum-ukīn//Dannē'a ist gut bekannt. Er ist oft als Partei oder Zeuge in verschiedenen Texten erwähnt: BM 49958: 4, Rs 7′, 8′ (Npl –.–.15?), BM 50180: Rs 5 (Npl 27.7.17, Sippar), BM 49349: 9 (Npl 24.12.17, Sippar), BM 52360: Rs 2′ (Npl 1.8.x, Sippar), ZA 4, Nr. 16: 4–5 (Npl 25.1.18, Sippar), BRM 1, 41: 13 (Npl 1.12.18, Sippar), BM 49603: 8 (Nbk 7.11.1, Sippar) mit Duplikat CT 55 81: 7.

13 Madān-ēreš//Rab-banê erscheint als Zeuge in der Privaturkunde BM 49231: 10 ([x x.x.x], Sippar).

15 Der Personenname ist vielleicht ^{m}*l[a-ba-š]i* zu ergänzen, aber dies ist unsicher, da kein Lābāši//Ile'i-Marduk prosopographisch bezeugt ist.

21 Rēmūt-Nabû/(Bēl-aḫ-iddin)/Bēl-eṭēri ist der am häufigsten belegte Schreiber des Ebabbar aus dieser Zeit. Fast die Hälfte der gut erhaltenen Urkunden (ca. 50 von etwa 110) sind von ihm geschrieben.

25 Es gibt einen Hirten namens Nabû-ajjālu in den Sippar-Texten, aber es ist unklar, ob er mit dem Chef der Herden des Königs zu identifizieren ist.

27 Der Hirte und *rab ešerti* („Chef einer Zehnergruppe") Iltalā(') ist auch in den folgenden Texten belegt: BM 50136: 13 (Npl –.9.7), BM 54025: 2 (Npl x.2.9), BM 78908: 3 (Npl –.8.11), BM 50159: 4 (Npl 15.2.12), VS 6 10: 2 (Npl 16.8.12), BM 54579: 4′, 12′ (Npl 16.12.13), BM 114755: 3, 13 ([Npl] 25.1.14), BM 49980: 4 (Npl 7?.3.16), JCS 31, 144 Nr. 19: 8 (Npl 18.8.16), BM 78910: 27 (Npl 16.10.16), BM 50223: 2 (Npl x.x.20), BM 49997: 14 ((Npl)), BM 78068: 4 (Npl x.x.x).

28 Die Verbalform ist schwer zu lesen, aber eine Form von *abāku* ist zu ergänzen.

31f. Die beiden letzten Zeile sind kaum mehr lesbar.

32 Kudurru ist ein gut belegter Hirte in den Ebabbar Urkunden: BM 50609: 6 (Sši 10.1.3), BM 50169: 2 (Npl 10+.7.13), BM 50223: 17 (Npl x.x.20), CT 55, 460: 6 ((Kan/Npl)).

III. Die Lieferanten

Aus der Prosopographie von BM 78910 und der anderen Urkunden ergibt sich, daß es sich entweder um Häuser von Einwohnern Sippars, insbesondere der Notabeln, Tempelbeamten und Tempelarbeiter, oder um Häuser von Personal verschiedener Institutionen — z.B. Ebabbar-Tempel, Königshaus, *rab mugi*, *simmagir*, *šakin māti* usw. — handelt.

In anderen Texten ist von Häusern von Einwohnern Babylons die Rede, wie in BM 77960; hier ist auch zu vermuten, daß die Lieferung in dieser Stadt stattgefunden hatte bzw. die Opfergabe dort ausgeführt wurde. In CT 44 72 gibt es viele Ausländer unter den genannten Personen. Dies hat eine einfache Erklärung: Die Häuser dieses Textes lagen am Hafen von Sippar, d.h. im Handelsviertel; so daß die Anwesenheit von Ausländern keine Überraschung darstellt. Andere Lieferanten sind in den Listen nach Herkunft oder Zugehörigkeit zu einer bestimmten Institution klassifiziert. Die vorkommenden Wendungen sind:

- *ša* é PN(/VN/FN)[8]
- *ša* é PN(/VN/FN) mit Angabe von BN
- *ša* é PN *ša* ON bzw. mit Nisbe
- *ša* é PN *ša ina* é PN_2 / BN *ša* PN_2 / *aššābu ša* PN_2 („Mieter von PN_2")
- *ša* é PN *ša* é Tempel- bzw. Staatsinstitution

IV. Das Schafopfer als Verpflichtung der Häuser, die Rolle des Königs und die Figur des kāribu

Die Formulierung der Texte weist einige Varianten auf, allerdings ist in allen Fällen von an bestimmte Personen anvertrauten Schafen die Rede. Diese Personen gehören den verschiedensten Gruppen und Institutionen der babylonischen Gesellschaft an und müssen(?) jeweils für ein Schaf verantwortlich zeichnen.

Zunächst ist zu fragen, ob diese „Häuser" in anderen Typen von Texten auftauchen. Wenden wir uns den Opferlisten des Ebabbar-Archivs zu:

- In BM 50740 (Npl $11^{?}$.8.x) ist ausdrücklich vermerkt, daß manche Schafe aus den Häusern stammen, Rs 5–6: 4 udu.nitá^{meš} ud.18.kam *šá* ud.x [kam] / *ina* šà 2 *šá* é^{meš}... „4 Schafe: 18. Tag, von dem x. Tag, von denen 2 von den Häusern ...". Später wird in etwas unklarem Kontext die Gesamtsumme genannt, Rs 13′–14′: 24 udu.nitá *šá* ^{lú}sipa *gi-né-e* / 4 udu nitá^{me} *šá* é^{meš}: „24 Schafe vom Hirten der regelmäßigen Opfer, 4 von den Häusern". Ein ähnliches Beispiel bietet BM 78050 (Npl 7.4.4), wo auch von Opferschafen aus den Häusern (*šá* é^{meš}) die Rede ist.
- Manchmal werden die Schafe aus den Häusern mit den Tieren der Tempelherden gemeinsam dem Hirten der Opfergaben übergeben, wie z.B. in VS 6 10 (Npl 16.8.12). Hier sind 68 Schafe von drei externen Hirten dem *rē'i ginê* übergeben worden; zusätzlich sind 13 Tiere der Häuser ebenfalls dem Hirten der Opfergabe geliefert worden.

8 Abkürzungen: PN: Personenname; VN: Vatername; FN: Familienname; BN: Berufsbezeichnung; ON: Ortsname.

Parallel zu den „Schafen aus den Häusern" ist in BM 78910 von Schafen aus den Königsherden die Rede:

- Opferschafe aus Herden, die königliches Eigentum sind, kommen auch in den Sippar-Opferlisten häufig vor. Die Liste BM 77288 (Nbk 8.4.24) betrifft eine Lieferung von Schafen des Königs, die an den Hirten der Opfergaben des Ebabbar übergeben wurden. Die Schafe werden nach Babylon gebracht und als *sattukku*, d.h. als „regelmäßiges Opfer" geschlachtet.

Warum Opferschafe „von den Häusern"? Es ist schwer zu erklären, warum die Schafe diesen Personen „übergeben" wurden. Man könnte eventuell beim Mästen eines Opferschafs an eine Verpflichtung oder eine Art Abgabe der Mieter der „Häuser" denken, vielleicht als Miete für die Wohnungen, die sich auf Tempelland befanden bzw. dem Ebabbar gehörten. Man kann zwei Erklärungen anbieten:

a. In einigen Mietverträgen kommen zusammen mit dem Mietzins Bestimmungen über andere Leistungen zur Miete. Diese Nebenleistung oder *nūptu* ist in Silber dreimal jährlich bezahlt.[9] Parallel zu der *nūptu*-Leistung wird auch in den Verträgen von einem *kīnajjātu*-Opfer als zusätzliche Mietleistung gesprochen.[10] Es handelt sich in beiden Fällen um Abgaben für religiöse Feierlichkeiten. Es läßt sich nicht entscheiden, ob diese Abgabe eine Verpflichtung aller Mieter war, oder ob es sich nur für die Mieter von Häusern Eigentum des Tempels beschänkte.

b. Das Phänomen der Opferschafe „von den Häusern" könnte auch eine andere Erklärung haben, die allerdings die genannte „Leistung zur Miete"-These nicht unbedingt ausschließen soll. Diese zweite und auch hypothetische Erklärung gründet sich auf einen Vergleich zwischen der Terminologie der Verwaltungsurkunden des Ebabbar (vor allem der *niqû-Sippar*-Listen) und jener der Bestallungsurkunden.[11]

In den Verwaltungsurkunden wird folgendermaßen Bezug auf Opferschafe aus den Königsherden und Opferschafen aus den Häusern genommen:

Königsherden →	(*bīt urê*)[12] →	*rē'i ginê*	→ *niqû*-Opfer (des Königs)
Tempelherden →	(*bīt urê*) →	*rē'i ginê*	→ *niqû*-Opfer
Tempelherden →		Häuser	→ *niqû*-Opfer[13]

Die Bestallungsurkunden registrieren die Vergabe von Tempelpfründen durch den König bzw. Tempel und die Rechte an Anteilen an den Opfern des Königs bzw. des *kāribu*, die dem Begünstigten einer gewissen Pfründe zustehen.[14] In diesem Zusammenhang ist von *niqû šarri* und *niqû kāribi/ī* die Rede.

9 Siehe z.B. die Texte VS 5 61; VS 5 64; VS 5 77; F. Joannès, TÉBR Nr. 86 und weitere Belege in CAD N/2, 343a.

10 Siehe CAD K, 380a.

11 Für die Bestallungsurkunden s. R. Da Riva und E. Frahm, „Šamaš-šum-ukīn, die Herrin von Ninive und das babylonische Königssiegel", AfO 46–47 (1999–2000), 156–182, bes. 161f.

12 „Maststallungen".

13 Die Schafe der „Häuser" scheinen direkt geliefert worden zu sein, sie waren schon gemästet.

14 Die Zusammensetzung dieser Opfer ist gut bekannt, z.B. BBS 36 v 16f.: *ina* sískur $gu_4^{meš}$ *u* udu.nitá^{meš} / *šá ka-ri-bi* „von den Groß- und Kleinvieh-Opfern des *kāribu*". Diese Texte sind in der Regel auf Kudurrus überliefert. Als Ausnahme gilt die Tontafel BM 77611+77612, s. die Edition in R. Da Riva und E. Frahm (Anm. 11), 156ff.

Die Bedeutung des Wortes *kāribu* ist unklar; es kommt nur in bestimmten Typen von Texten vor und scheint ein kultischer Terminus zu sein. Im Zusammenhang mit Lieferungen von Opfergaben wird der Begriff in den Wörterbüchern als ein bestimmter Priestertyp verstanden.[15] Dieser Auffassung sind viele Texteditionen gefolgt, allerdings erscheint sie unwahrscheinlich: erstens, weil das Wort nie mit dem Determinativ [lú] geschrieben wird,[16] und zweitens, weil der *kāribu* in keiner Liste von Kultpersonal vorkommt. Es ist klar, daß für den Begriff eine neutralere Bedeutung anzusetzen ist.

Die von Thureau-Dangin (RA 16, 132) vorgeschlagene Übersetzung „le comun des dévots, fidèles (par opposition au roi)" wird auch von van Driel vertreten, der in den *niqû kāribi* gelegentliche Opfergaben, im Gegensatz zu den regelmäßigen königlichen Opfern, sehen will.[17] Eine ähnliche Position nimmt Landsberger ein, der für *kāribu* die Übersetzung „frommer Stifter" vorgeschlagen hat und überdies vermutete, daß die *niqû šarri* und die *niqû kāribi* „durch königliche Stiftungen gesicherte Institutionen der babylonischen Tempel" seien.[18] Dabei nahm er Bezug auf den Brief ABL 1202 (= SAA 10, Nr. 353), der sich mit Unregelmäßigkeiten im Opferwesen des Nabû-Tempels zu Borsippa beschäftigt. Auch Parpola hat auf der Grundlage dieses Briefs die Figur des *kāribu* zu erklären versucht; er ist zum Schluß gekommen, *kāribu* sei „a designation of any person wealthy enough to bless the king by dedicating to a temple a royal offering".[19]

Aus diesen Vorschriften geht hervor, daß der *kāribu* eine Privatperson ist, die parallel zum König bestimmte Opfergaben dem Tempel zur Verfügung stellt. Daß der Begriff *kāribu* ein kultischer Terminus ist, könnte erklären, warum er in den Verwaltungsurkunden so gut wie nie zu finden ist.

V. Schlußfolgerungen

Beim Terminus *kāribu* handelt es sich um einen allgemeinen Begriff für einen „privaten Spender". Der Ausdruck *niqû kāribi* bedeutet vielleicht nicht nur ein „freiwilliges Opfer" sondern auch das „freiwillige" Mästen eines Opferschafs, wie in den Fällen von den Schafen „aus den Häusern". Allerdings wissen wir nicht, ob dieses Mästen in Verbindung mit der Miete eines Hauses steht oder nicht, aber dies ist für die Bedeutung des Wortes unwichtig, da der Begriff *kāribu* eine breite Interpretation fordert. Unter diesem Terminus dürften verschiedene „Spender" subsummiert sein:

15 AHw, 449a: „1. ein Fürbittpriester"; CAD K, 216b : 1. (designating a person performing a specific religious act), 1 a „designating a priest". In CAD N/2, 257a wird *niqû kāribi* mit „the offering of the pious" übersetzt.

16 Zur Problematik des Begriffes s. R. Da Riva—F. Frahm (Anm. 11), 165, Komm. zu 6′.

17 Siehe G. van Driel, BiOr 50 (1993), 560f.

18 BBEA, 55 mit Anm. 102.

19 LASEA 2, 274. In allen diesen Fällen werden die Begriffe *šarri* und *kāribi* als *genitivi subjectivi* verstanden, also geht es um Opfer des Königs bzw. des *kāribu*.

1. die im Brief SAA 10, Nr. 353 genannten Personen;
2. diejenigen, die z.B. in den astronomischen *Diaries* erwähnt werden;[20]
3. jene Spender, die in ihren Häusern ein Opferschaf aus den Tempelherden mästen müssen, unabhängig davon, ob dies eine „Obligation" der Mieter von Tempelhäusern war.

Auch wenn man diese These beim derzeitigen Quellenstand nicht beweisen kann, halte ich sie für wahrscheinlich. Neue Daten aus Tempelarchiven, vor allem in Ritualen und ähnlichen Urkunden, können in Zukunft den Begriff *kāribu* weiter präzisieren.

20 Siehe K. Kessler, „In diesem Monat hörte ich … — Einige Bemerkungen zu den Astronomical Diaries", in J.M. Córdoba Zoilo (Hrsg.), *Actas del I Symposium Internacional: Una década de estudios sobre el Oriente antiguo (1986–1996). Homenaje al Prof. Dr. Horst Klengel en su sexagésimo aniversario* (ISIMU 1), Madrid 1998, 167–172; bes. 168f.

The Kassite Cross Revisited

Erica Ehrenberg — New York

In 1994, I ensconced myself in the departmental study room at the British Museum to look at sixth-century Late Babylonian period impressions on tablets from Babylon and Sippar. Upon arrival, Christopher Walker, whom I had not previously met, presented me with a copy of his own database of the tablets indicating which bear sealings, their dates and types. The information he provided was not only crucial for an art historical approach to sealing practices, but provided immediate access to the relevant material. Without his kind, unrequited assistance, my research would not have been fully realized. Hence, it is with pleasure that I write a piece for his Festschrift based on two of those Babylon impressions whose study he facilitated. These impressions have recently been published by the editor of this volume, C. Wunsch, and H. Baker and their drawings are reproduced here (fig. 1a, b).[1] The focus of this present study is the meaning of the cross that appears among the symbols in the fields of both impressions.

An archetypal symbol, the cross makes its appearance in protohistoric times, particularly in Iran. It is an equilateral cruciform with four short arms, aligned with horizontal transom and vertical upright. The cross also takes the form of the so-called Maltese cross, with the arms outwardly flaring. Although primeval and of requisite salience to serve as a sole motif of some Susa I pottery and figure prominently on Proto-Elamite cylinder seals,[2] the cross sees its floruit in the second half of the second millennium on Kassite cylinder seals and hence is called the Kassite cross. This limited visual context, along with the absence of any textual clues, has rendered the meaning of the Kassite cross abstruse to modern scholarship.

1 H.D. Baker and C. Wunsch, "Neo-Babylonian Notaries and their Use of Seals," in W.W. Hallo and I.J. Winter (eds.), *Seals and Sealing Impressions* (CRRA 45, Part II), Bethesda, Maryland 2001, fig. 4, seals 1 and 2.

2 For a good example of a Susa I bowl, see P.O. Harper, J. Aruz, F. Tallon, *The Royal City of Susa*, New York 1992, 36 no. 5; and for Proto-Elamite seals, 71 no. 40, and 74 no. 45. Other seals are pictured in P. Amiet, *Glyptique Susienne II*, Paris 1972, nos. 1064, 1086, 1090, 1096.

The most thorough analysis of the cross motif is that undertaken by P. Calmeyer,[3] which concludes, through a study of first-millennium BC remains, that the cross is a symbol of the sun/Šamaš, who more commonly is shown as the winged disk. He points to the fact that on pendant necklaces worn by Neo-Assyrian kings in statuary and reliefs, the cross is sometimes found in place of the expected symbol of Šamaš, who is one of the major deities. Additionally he notes that, on some monuments, a cross shape can be inscribed within the disk of the winged disk, that wavy rays like those of the sun can emanate between the arms of the cross, and that the cross can sprout plant-like bands, similar to those that can fall from the winged disk. Recognizing that these variants likely have differing associations, Calmeyer also highlights the close connections between the winged disk in its numerous modalities with the Assyrian king and remarks on the supremacy of Šamaš as ruler of the pantheon. Particular attention is paid to two stelae, those of Šamši-Adad V from Nimrud and Adad-nirari III from Tell Rimaḫ, in each of which the king's chest is adorned with one large pendant cross rather than a necklace of numerous pendant symbols.[4] Describing the Šamši-Adad stela, Calmeyer cites the opinion of A. Moortgat concerning the unusual garb (aside from the pendant) of Šamši-Adad (and by extension Adad-nirari) that this garb is Babylonianizing and reflects the personal preferences and leanings of this king and his Babylonian wife Sammuramat/Semiramis.[5] He also cites the opinions of T. Madhloom and J. Reade that the beard and inscription on the stela are archaizing.[6] In contrast, Calmeyer feels the peculiarities are not Babylonian-inspired but a "spin" on the traditional Assyrian format, to render the rule of these two kings palatable for a non-Assyrian audience as the Assyrians strengthened control particularly over the southern lands of Babylonia.[7] Building on these observations, specifically the use of the cross in place of the sun symbol pendant on necklaces, the acceptable fluidity of symbolic meanings, and the attempt of the two Assyrian kings to find acceptance among Babylonians, as well as on the evidence of Kassite cylinders and the British Museum Babylon impressions, it is here suggested that the cross is not a symbol of the sun god *per se*, but an abstraction of the numinous quality and cosmic light of supreme celestial power, codified by the Kassites, that came to be associated with supreme divinity, or Marduk, in Babylonia.

The Kassites may well have adopted the cross, already an elemental motif on some of the earliest Iranian works, to represent their sovereign divinity. When they conquered Babylonia and readily adopted this alien culture, the symbol of the cross could well have been assumed by the paramount deity of the Babylonians, namely Marduk.[8] While

3 P. Calmeyer, "Das Zeichen der Herrschaft… Ohne Šamaš wird es nicht gegeben," AMI 17 (1984), 135-154.

4 Photographs of these stelae are available in J. Börker-Klähn, *Altvorderasiatische Bildstelen und vergleichbare Felsreliefs* (BaF 4), Mainz 1982, nos. 161 for Šamši-Adad, and 164 for Adad-nirari.

5 Calmeyer (see n. 3), 135 and n. 3. A. Moortgat, in A. Scharff and A. Moortgat, *Ägypten und Vorderasien im Altertum*, Munich 1950, 405, speaks of Šamši-Adad's Babylonian wife and his inscriptions utilizing second-millennium Babylonian language.

6 Calmeyer (see n. 3), 135 and n. 4.

7 Calmeyer (see n. 3), 148–149.

8 A. Moortgat, "Der Ohrschmuck der Assyrer," AfO 4 (1927), 192–193 is also of the opinion that the Kassites brought the cross motif to Babylonia from Iran, but maintains that it is a sun symbol and sees the cross form in a preferred form of Neo-Assyrian royal earring that resembles the cross although with no top arm where the earring attaches to the ear.

Marduk's Babylonian iconography of spade, relating to his agricultural character, and *mušḫuššu* dragon became standard during the Kassite period,[9] especially on the *kudurru*-stones, the cross seems to have expressed the divine essence in a more impalpable way, as opposed to the tangible figurative elements of divinity — tool (spade) and acolyte animal (dragon) — which were actually fashioned as sculptural temple paraphernalia. The observations of Calmeyer could then be addressed thus: the presence of the cross as one of the divine pendants on Assyrian necklaces was not a substitution for the sun symbol but the opposite: a symbol in its own right and NOT the same as the sun, for what would prompt the Assyrians to replace the primary sun symbol with a secondary one; the fluid nature with seemingly solar associations of the iconography was what allowed the motif both to be transferred to a Babylonian god and co-exist along with the god's other symbols, and to be ascribed to a regnant cosmic deity; and the cross pendant worn by the Assyrian kings was a method by which to co-opt the national deity of the Babylonians for themselves as they attempted to solidify their rule in Babylonia.

Historically, the Kassite period of the second half of the second millennium witnessed the progressive entrenchment of Marduk as supreme deity. Already in the Old Babylonian period of the earlier half of the second millennium, Marduk was elevated to the ranks of the great gods and toward the end of the second millennium, Marduk was ruling supreme in Babylonia, having displaced Enlil and Anu.[10] In Old Babylonian letters, Marduk and Šamaš are often invoked together and affiliated because of their benevolence,[11] raising the possibility that the two gods could also partake of similar solar visual representation, hence the circumscription of the cross in the winged disk, referred to by Calmeyer as reason to identify the two.[12] On Kassite cylinders, Marduk takes precedence as the god addressed in the inscribed prayers,[13] lending weight to the theory that the cross, which takes precedence among the symbols on the cylinders, represents Marduk. During the Kassite period, Babylon, whose deity was Marduk, remained the preeminent religious and political capital.[14]

To turn to the earliest bulk of evidence concerning the cross, the Kassite cylinders supply a number of intriguing hints.[15] A majority of Kassite cylinders follow a few simple for-

9 Numerous scholars have written on the iconography of Marduk. For a summary, see D. Rittig, "Marduk. B. Archäologisch," RlA 7 (1987–90), 372–374, who notes textual references to the spade as symbol of Marduk in Old Babylonian sources, and that the *mušḫuššu* was the acolyte animal of Marduk at least since the mid-second millennium, but that it is assumed that the deity accompanied by the *mušḫuššu* on Old Babylonian seals is Marduk.

10 W.G. Lambert, "The Historical Development of the Mesopotamian Pantheon: A Study in Sophisticated Polytheism," in H. Goedicke and J.J.M. Roberts (eds.), *Unity and Diversity: Essays in the History, Literature, and Religion of the Ancient Near East*, Baltimore 1975, 194, 198; see also W. Sommerfeld, *Der Aufstieg Marduks: Die Stellung Marduks in der babylonischen Religion des zweiten Jahrtausends v. Chr.* (AOAT 213), Kevelaer 1982, for a study of the rise of Marduk; and the review thereof in W.G. Lambert, "Studies in Marduk," BSOAS 47 (1984), 1–9.

11 W. Sommerfeld, "The Rise of Marduk – Some Aspects of Divine Exaltation," Sumer 41 (1985), 99.

12 See discussion above, and specifically Calmeyer (see n. 3), 140.

13 Sommerfeld (see n. 10), 157.

14 J. Oates, *Babylon*, rev. ed., London 1986, 89.

15 Drawings of Kassite seals are readily available in D.M. Matthews, *Principles of Composition in Near Eastern Glyptic of the Later Second Millennium B.C.* (OBO Series Archaeologica 8), Freiburg, Switzerland 1990.

mats: seated figure, divine or presumably deified, before symbols in the field; seated figure approached by worshiper with symbols in the field between the two figures; worshiper before symbols in the field. Of the symbols in the field, the cross takes primacy of place. It is present more often than not, can appear as the sole symbol, and often floats at the top of the field above the other symbols. It is almost invariably of straight-arm rather than Maltese shape (the variety donned as pendants by the Assyrian kings, raising the slight possibility of a difference in meaning, but this is diminished by the occasional Maltese Kassite example) and often has a secondary cross inscribed within the outline. Clearly it must be of primary significance, and that it is not necessarily a sun-god symbol may be indicated by the presence among the symbols of a rosette-like motif consisting of a circular center from which spring either floral-shaped petals or linear spokes ending in circles, with this second type sometimes simplified to a central circle surrounded by a ring of smaller circles.[16] Formally, this rosette-motif holds much greater verisimilitude to the sun than does any other Kassite symbol, and resembles the assumed sun-symbol on Old Babylonian seals, with drilled central circle surrounded by a circle of smaller drillings.[17]

In two Kassite cylinders involving a seated figure, one from the Hermitage and one from the British Museum (fig. 2), the symbol being adored is the spade standard, which stands on the ground-line before the figure, in contrast to symbols that usually hover in the field.[18] The spade-standard is the typical Babylonian Marduk symbol, and the only standard venerated in this type of Kassite scene. In both examples, multiple cross symbols appear above the standard: in the Hermitage scene, two crosses flank the standard, slightly above its pinnacle; in the British Museum scene, three crosses appear in metopes across the top of the scene. It is telling that these worship scenes involving more than one cross also center on the spade-standard, as if to emphasize a connection or even congruence between the spade-standard and the abstract cruciform.[19] If this connection can be taken as meaningful, then the cross should be viewed as an alternative Marduk symbol.

Another key for unlocking the meaning of the cross comes in the symbol of the rhomb, or pointed oval-shaped motif frequently encountered among the symbols in the field on Kassite cylinders. As is the case with the cross, the symbolic identity of the rhomb has proven elusive. Hypotheses range from talisman rather than divine symbol, to symbol of the eye, vulva, or grain of corn, similar to the Sumerian pictogram. Following up on the grain of corn suggestion, E.D. van Buren notes that as a grain of corn, the rhomb could be associated with Ṣarpānītu, goddess of childbirth and wife of Marduk.[20] This is a tempting theory, and would well explain the prevalence of the rhomb, as symbol of Marduk's consort, and often accompanied by the cross, on the Kassite cylinders. Like the cross, the rhomb is an abstract symbol, and not known to have been a tangible object of devotion.

16 For example, see Matthews (see n. 15), nos. 25, 30, 34, 36, 41, 47, 53, 96, 112, 128.

17 For example, see D. Collon, *Catalogue of the Western Asiatic Seals in the British Museum, Cylinder Seals III: Isin-Larsa and Old Babylonian Periods*, London 1986, pl. 31 nos. 428, 430, 435.

18 For the Hermitage seal, see Matthews (see n. 15), no. 27.

19 In this context, mention can also be made of a later Neo-Elamite cylinder seal of the earlier first millennium, in which there is only one cross but it hovers as the sole symbol in the field above a bull who rears between two large spade standards, see E. Porada, *Corpus of Ancient Near Eastern Seals in North American Collections I: The Collection of the Pierpont Morgan Library* (Bollingen Series 14), Washington, D.C. 1948, no. 636.

20 E.D. van Buren, *Symbols of the Gods in Mesopotamian Art* (AnOr 23), Rome 1945, 115.

Similarly, it does not appear on *kudurru*-stones, the symbols on which are assumed to represent sculptured icons, mounted on pedestals, of the deities before whom the oaths concerning the inscribed grants on these stones were sworn. There is, however, an exception, and that is the rhomb on a pedestal on a British Museum Sippar tablet seal impression dated to year twenty-seven of Darius I and published by J. MacGinnis.[21] The impression is relevant here because the rhomb is placed next to a spade on the same pedestal, reinforcing the connection between the two symbols, as also noted by MacGinnis. One of the more famous Kassite cylinders, the Philadelphia plowing scene (fig. 3), reaffirms this association of cross and rhomb and agriculture/fertility: above the scene of men tilling the field with oxen-drawn plow, hover a cross and rhomb, to the exclusion of any other symbols. The suggestion that the prominence of the cross and rhomb on the seals indicates that they represent high gods of the pantheon is strengthened by the frequent appearance on the seals of the dog, symbol of Gula, the city goddess of Isin, who was given honor as one of the high gods in the Kassite pantheon.[22]

Turning to the use of the cross symbol by the Neo-Assyrian kings, it cannot be said with certitude that the symbol held the same meaning in the north as it did in Babylonia, but the contexts in which it appears in Assyria also argue for a reading of the cross as a Marduk symbol. The first king known to don the pendant necklace with cross is Aššurnaṣirpal II. He wears it on the famous Nimrud stele in which the figurative image occupies a panel set into the lengthy inscription.[23] The cross is enclosed in a ring around its perimeter, which Calmeyer takes to point to its solar character,[24] but other symbols of gods can also be circumscribed by disks: the moon crescent of Sîn often appears within a disk as does the star of Ištar. Enclosure in a disk once again points to the supreme, cosmic nature of the deity represented by the cross. The other emblems on the necklace are: star of Ištar, crescent of Sîn, horned crown of Aššur and lightning rod of Adad. Aššurnaṣirpal again dons the pendant necklace with cross, this time not circumscribed by a disk, on a stela from Nimrud in which the figure occupies the entire field.[25] The king wears the necklace also on a relief from the Northwest Palace in which his image flanks the sacred tree above which hovers the winged disk.[26] It was during the reign of the Neo-Assyrian Aššurnaṣirpal in the ninth century that Assyria began to reassert its power, on the wane since the close of the Middle Assyrian period toward the end of the second millennium, and expand out of the north. The king, however, did not antagonize Babylonia, which the Assyrians regarded with awe as the homeland of a scholarly, cultural tradition stretching back to the time of Hammurabi. It would not therefore seem strange for Aššurnaṣirpal to acknowledge Marduk of Babylon as one of the great gods, worthy of a place on his necklace. In fact,

21 J. MacGinnis, *Letter Orders from Sippar and the Administration of the Ebabbara in the Late-Babylonian Period*, Poznań, 1995, 172 where he also points out two other examples of seals with rhombs on pedestals, one in the Brett Collection (OIP 37), no. 146, and one from Persepolis, unpublished.

22 E. Nagel-Strommenger and B. Hrouda, "Isin (Išān Baḥrīyāt)," AfO 25 (1974–77), 221.

23 See Börker-Klähn (see n. 4), no. 137.

24 As above, n. 12.

25 See E.A. Wallis Budge, *Assyrian Sculptures in the British Museum, Reign of Ashur-nasir-pal, 885–860 B.C.*, London, 1914, pl. II; and Börker-Klähn (see n. 4), no. 136.

26 See Budge (see n. 25), pl. XI.

there is a Neo-Assyrian cult commentary that identifies the figure of the Assyrian king with Marduk rather than Aššur, as well as evidence of the existence of a Marduk cult in Assyria as early as the Middle Assyrian period.[27]

Aššurnaṣirpal's son and successor, Shalmaneser III maintained good relations with Babylon, even signing a treaty with the Babylonian ruler who seems to have been independent of the Assyrian. Like his father, Shalmaneser respected Babylonian culture and made a show of it by supporting Babylonian cult centers.[28] It is not surprising then that Shalmaneser was also partial to a pendant necklace including the symbol of the cross, as worn on his statue from Aššur,[29] and perhaps on his stela from Kurkh,[30] although the pendants are eroded and it is unclear whether one is a star or cross. What is of interest here, though, is that one of the pendants is a winged disk, thereby demonstrating that Assyrians did fashion winged disk pendants. It thus becomes more difficult to argue that the winged disk was a substitute for the cross, even if the cross is not represented on this necklace, for why should there be such a substitution when the cross was already legitimized as a pendant?[31]

Although relations between Assyria and Babylonia began on a cooperative note when Shalmaneser's successor Šamši-Adad V took the throne, they deteriorated as a result of a treaty upending Assyria, whose monarch wreaked military revenge, overthrew successive Babylonian rulers, and assumed the olden title of the land, "King of Sumer and Akkad." The stelae of Šamši-Adad and Adad-nirari III, his son and successor, form the starting point of Calmeyer's study of the cross because of the prominence of the motif in these two works.[32] The king in each example wears a necklace but one that has only a single pendant, a large-scale cross. Actual pendant crosses made of metal in both large and small scale, and presumably of Kassite date, were found at Aššur, so the fashion exhibited on the stelae very likely reflects at least historic, if not current, sartorial practice.[33] It would be fitting for Šamši-Adad, as the Assyrian king, to lay claim to Babylonia, to have adorned his chest with a large image of the god whose land he had conquered, thereby advertising the terrestrial victory and the newly gained divine affiliation of the Assyrian monarch, now protector of and protected by the deity of the esteemed cultural traditions of Babylonia. Again, the evidence seems to point to the cross as a symbol of Marduk.

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27 B. Pongratz-Leisten, *Ina Šulmi Īrub: Die kulttopographische und ideologische Programmatik der akītu-Prozession in Babylonien und Assyrien im I. Jahrtausend v. Chr.* (BaF 16), Mainz 1994, 109–110 for the cult commentary which reads, "der König ist…Marduk"; and 96 for the Middle Assyrian Marduk cult.

28 Oates (see n. 14), 109–110.

29 See E. Strommenger, *Die neuassyrische Rundskulptur* (AbhDOG 15), Berlin 1970, pl. 6a.

30 See S. Smith, *Assyrian Sculptures in the British Museum from Shalmaneser III to Sennacherib*, London 1938, pl. I; and Börker-Klähn (see n. 4), no. 148.

31 J.E. Reade, "Shikaft-I Gulgul: Its Date and Symbolism," IrAnt 12 (1977), 38 n. 8 holds that it is an unusual necklace with an extra Adad symbol and winged disk rather than cross.

32 See above, n. 4, for references to illustrations.

33 W. Andrae, *Das wiedererstandene Assur*, 2nd ed., Munich 1977, 58 and pl. 38 for cross pendants of silver, bronze and gold, found in the area of the Aššur temple; also W. Orthmann, "Babylonisch-Assyrisches Kunsthandwerk," in *Propyläen Kunstgeschichte* 14, 331 and no. 253b, where the pendants are dated to the Kassite period on the basis of a cylinder seal found with them and the circular reasoning that the cross is associated with Kassite iconography.

An oft-cited hallmark of the reign of Adad-nirari, initially under the regency of his Babylonian mother Sammuramat/Semiramis, is the construction of a Nabû temple in Nineveh, taken as a sign of these rulers' Babylonianizing tendencies.[34] W.W. Hallo remarks that the celebration of Nabû's cult in Assyria "meant a cultural reconciliation with Babylonia, perhaps at the instigation of the Babylonian queen mother, who may have been from Babylon...."[35] The son of Marduk, Nabû gradually gained stature as a supreme deity and during the first millennium came to rule on equal footing with his father in Babylonia.[36] A king who honored the Babylonian Nabû would clearly also have been a worshiper of Marduk, and could have announced this loyalty through the prominent display of the god's symbol as his personal adornment; yet another reason to see Marduk symbolism in the image of the cross. In the upper field surrounding the king's head on his stela float divine symbols, including some that appear as pendants on royal Assyrian necklaces, such as the crescent, star, horned crown and lightning bolt. Present too are the winged disk, which commonly features among the divine symbols accompanying the Assyrian king on monuments (as it does, for example, on the stela of Šamši-Adad and the above-mentioned stelae of Aššurnaṣirpal) and also the spade of Marduk and stylus of Nabû. For a king who apparently promoted the Babylonian cult of Nabû, it would seem *de rigueur* to include the symbol of this god and his father among the great gods under whose protection he stands. Curiously, the king chose the spade symbol for the field while wearing the cross as a pendant. If the cross is indeed symbolic of supreme Babylonian divinity, as personified by Marduk, perhaps the king wished to emphasize this abstract, celestial nature of Babylonian divinity upon his person, as his predecessor had done, and simultaneously reiterate the god's identity and multi-valence by also representing him and his son in their utilitarian guises as spade and stylus. In this manner, the intent would be similar to that of the Kassite seal in the British Museum pictured above, wherein the spade-standard receives worship yet is reinforced by the presence of the cross.

When in the mid-eighth century Tiglath-Pileser III assumed the Assyrian throne after a period of waning Assyrian influence, growing tribal power and eventual unrest in Babylonia prompted his military intervention and the establishment of Assyrian administration in the south. Denying Babylonians their previous level of independence, the king himself played the starring role in the Babylonian New Year festival, symbolically taking the hand of Marduk at its climax, thereby proclaiming his suzerainty and personal relationship with the deity. Like Šamši-Adad, Tiglath-Pileser took the ancient Babylonian title "King of Sumer and Akkad." Among the narrative reliefs from his Central Palace in Nimrud are scenes of the siege of a southern land, clearly Babylonia, perhaps even Babylon

34 As discussed above, and n. 5 above. Also Pongratz-Leisten (see n. 27), 96, who notes that the cult of Nabû becomes meaningful in Assyria in the first millennium but had antecedents in Middle Assyrian times with the founding of the first Nabû temple in Aššur during the reign of Shalmaneser I in the thirteenth century.

35 W.W. Hallo and W.K. Simpson, *The Ancient Near East: A History*, 2nd ed., Fort Worth, Texas 1998, 126.

36 Lambert (see n. 10, 1975), 198; W.G. Lambert, "Nabû Hymns on Cylinders," in B.Hruška and G. Komoróczy (eds.), *Festschrift Lubor Matouš II*, Budapest 1978, 79; and W.G. Lambert, "Divine Love Lyrics from the Reign of Abi-ešuḫ," Mitteilungen des Instituts für Orientforschung 12 (1966–67), 44.

itself. Found in disarray, the reliefs have been reordered so that the Babylonian campaign culminates in a scene, preserved in a drawing, of the king enthroned and receiving audience (fig. 4).[37] In the upper field, before the king, float three symbols, in a line: a crescent, a circle with a smaller inscribed circle, and the cross. It is common for the king to face divine symbols in relief carving, but this is the only known example in which a cross is among those symbols. If this scene marks the aftermath of the Babylonian siege, it would be appropriate for the king to enlist Marduk as one of the supreme gods witnessing and condoning the new world order. The crescent is clearly the symbol of Sîn, and the circle would seem to be a sun-symbol, arguing against the cross as sun-symbol. The cross could thus be Marduk in appropriate abstract form to accompany the celestial symbols and embody highest Babylonian divinity. Further, the use of the cross form of Marduk would serve to link the king to his royal forebears who first took control of Babylonia and wore a cross pendant. Tiglath-Pileser himself sports a necklace with cross pendant in another one of his reliefs, this one found in Esarhaddon's Southwest Palace where it was apparently stacked to be reused. It shows the king subduing an enemy underfoot and the inscription on the panel tells of the king's campaigns against Media.[38] The necklace is akin to those worn by Aššurnaṣirpal and Shalmaneser, with multiple pendants, in this case crescent, cross, star, horned crown, and lightning bolt.

At the end of the eighth century, Sargon, like Tiglath-Pileser, marched against Babylon, whose ruler had enlisted southern tribes and Elamites to agitate against Assyria, and took its kingship. There is one image of the king wearing a necklace with pendants, possibly including the cross, and that is on his stela from Nadjafahbad, although the preservation does not allow for certain identification of the cross.[39] This would be the last known example of an Assyrian king to wear the cross pendant. Sargon's son Sennacherib also campaigned to quell southern provocations, and, some years after the capture of his son whom he had placed upon the throne of Babylon, engaged in the complete destruction of the city, having "abandoned the long-standing Assyrian policy of leniency towards the city they viewed as the cultural capital of the world."[40] Sennacherib took the Marduk statue from Babylon to Assyria, and strove to replace worship of Marduk with that of Aššur, while the Assyrians eventually rationalized the existence of the Marduk temple in Aššur by devising a new genealogy that gave Marduk as the son of Aššur.[41] The antipathy Sennacherib felt toward Babylon and its deity would explain his lack of penchant for donning the cross pendant. Although Sennacherib's son Esarhaddon restored peaceable relations with Babylon, the fashion of displaying the cross never seems to have been revived.

Never revived, that is, until the carving of the cylinders that left the impressions on the British Museum tablets that spurred this investigation. These impressions (fig. 1a, b) were rolled by a notary, one Kabti-ilī-Marduk, operating in Babylon, as a member of a seem-

37 See R.D. Barnett and M. Falkner, *The Sculptures of Aššur-naṣir-apli II (883–859 B.C.), Tiglath-Pileser III (745–727 B.C.), Esarhaddon (681–669 B.C.) from the Central and South-West Palaces*, London 1962, xvi–xvii and pl. VIII, where it is noted that part of the eponym for the year 745 relays that the king "marched to the territory between the rivers," which must be a reference to the Babylonian plain.

38 See Barnett and Falkner (see n. 37), 20–23 and pl. XCV–XCVI.

39 Calmeyer (see n. 3), 139 n. 33, says that the cross is visible in the drawing; see Börker-Klähn (see n. 4), no. 173.

40 Oates (see n. 14), 119–120.

41 Pongratz-Leisten (see n. 27), 104 n. 106, and 115.

ingly circumscribed group of professional notaries specializing in land-sale contracts. Kabti-ilī-Marduk used two different seals, one on tablets dating from the reign of Amēl-Marduk to the accession year of Neriglissar, and the other on tablets dating from the reign of Neriglissar into the reign of Nabonidus. What marks both impressions is the symbol of the cross, and in the popular Kassite format with straight rather than flaring arms. In the portion that remains of the earlier impression, the cross is accompanied by other symbols, namely a star, a small bull on a plinth, a winged disk and a stylus. The presence of the winged disk clearly argues against the cross being a sun symbol alternative to the winged disk, while the presence of Nabû's stylus fortifies the identification of the cross with Marduk since the stylus is invariably accompanied by Marduk, in the form of the spade, in Late Babylonian seal impressions. The second impression contains the cross and stylus along with two small animals, one avian and the other unidentifiable, all of which are aligned before the standing figure of a lion-man *uridimmu* grasping a ring-standard. The *uridimmu*, who can also be shown with a spade-standard, has been linked to Marduk, pointing again to a bond between the cross before which the creature stands and Marduk. Further, the *uridimmu* is affiliated by association with Šamaš, thus conflating aspects of Marduk and Šamaš, as perhaps reflected in the cross-in-disk motif. [42] At the time these impressions were made, the cross was an archaic motif, the standard iconography for Marduk being the spade and *mušḫuššu* dragon. But the kings of the Late Babylonian dynasty are notorious for their antiquarianism, and Nebuchadnezzar seemingly selected Gula, one of the high Kassite gods, as his personal deity.[43] It was common for official scribes to follow royal practice and also revive ancient imagery.[44] In fact, scribes were especially renowned for archaizing and as W. Lambert notes, even perpetuated particular names dating back to Kassite times as family names for centuries.[45] B. Foster remarks that the "idea that their professions were founded on tradition of hoary antiquity was appealing to scribal scholars. They were interested in the history of their professions, proud of their own mastery and of the achievements of their predecessors."[46] In Kabti-ilī-Marduk's choice of seal designs incorporating the Kassite cross, perhaps it is no coincidence that his name contains the theophoric Marduk, for the accumulated evidence laid forth above weighs heavily in favor of viewing the cross as an abstract embodiment of the paramount Babylonian divine essence, popularized by the Kassites and merged in identity with the sovereign deity Marduk in Babylonia.

42 E. Ehrenberg, "Der uridimmu und seine Symbolstandarte," in U. Finkbeiner et al. (eds.), *Beiträge zur Kulturgeschichte Vorderasiens: Festschrift für Rainer Michael Boehmer*, Mainz 1995, 103–105, publishes a Late Babylonian seal impression of the *uridimmu* with a spade standard and a ring standard, the latter taken by scholars to be a sun-symbol, and notes that the role of the *uridimmu* is similar to that of the bull-man *kusarikku*, who is associated with Šamaš in addition to Marduk.

43 For Gula, see discussion above and n. 22. For Nebuchadnezzar's connection to Gula, see E.N. von Voigtlander, *A Survey of Neo-Babylonian History* (Ph.D. dissertation, University of Michigan), Ann Arbor 1963, 130.

44 See E. Ehrenberg, "Archaism and Individualism in the Late Babylonain Period," in J. Prosecky (ed.), *Intellectual Life of the Ancient Near East* (CRRA 43), Prague 1998, 125–138, for a discussion of Late Babylonian antiquarianism and Late Babylonian sealers of Eanna tablets who occasionally employed glyptic imagery harkening back to Neo-Assyrian and even Kassite times.

45 W.G. Lambert, "Ancestors, Authors, and Canonicity," JCS 11 (1957), 1–14.

46 B. Foster, "Wisdom and the Gods in Ancient Mesopotamia," OrNS 43 (1974), 348.

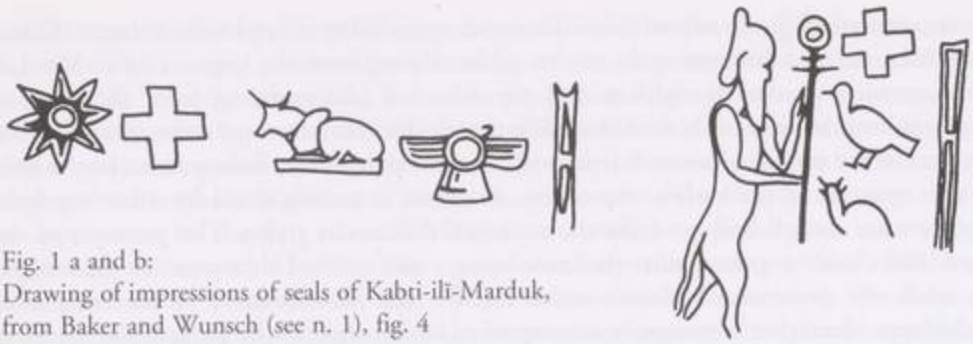

Fig. 1 a and b:
Drawing of impressions of seals of Kabti-ilī-Marduk, from Baker and Wunsch (see n. 1), fig. 4

Fig. 2:
Impression of British Museum seal BM 89240, British Museum

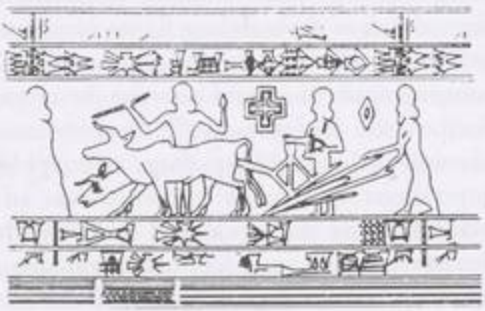

Fig. 3:
Drawing of impression of Philadelphia seal 569, University Museum, University of Pennsylvania

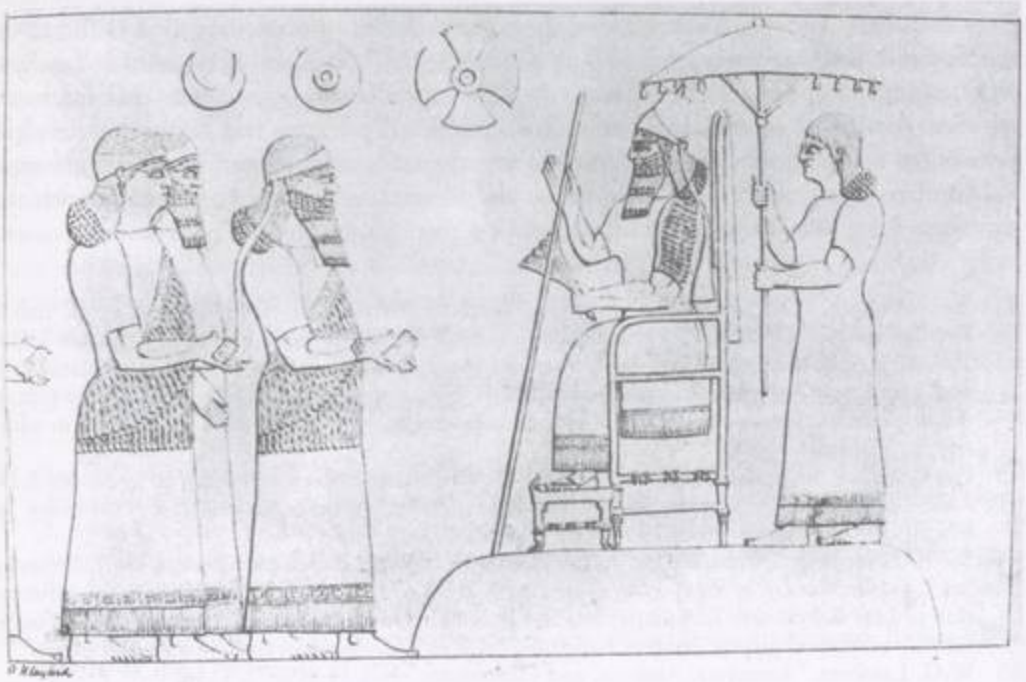

Fig. 4: Drawing of Tiglath-Pileser III relief, from Barnett and Falkner (see n. 37), pl. VII

Ur-gigir, a Sumerian Cosmopolitan

Claudia Fischer — Heidelberg

I am delighted to dedicate this article to Christopher B.F. Walker, who has never tired of sharing his vast knowledge of the cuneiform sources of ancient Mesopotamia. His generosity and support have long created a salubrious research atmosphere, granting access to unpublished material with rich rewards for scholars. As a specialist working on seal impressions on tablets, I have greatly appreciated the open, friendly and stimulating environment provided by Christopher.

My contribution to this compendium focuses on a member of the Ur III administration and his extraordinary seal that represents — apart from its symbolic value — an elegant link to the seals of the Old Babylonian period, in which Christopher has an interest.

Between 1922 and 1934, the splendid capital of the Ur III Empire was excavated under the guidance of Sir Leonard Woolley, in a joint expedition by the British Museum and the University Museum in Philadelphia. In twelve seasons, more than 3,500 Ur III texts were uncovered. These texts, which are currently kept in the British Museum, the University Museum and the Iraq Museum, as well as several other collections, cover different aspects of Ur's wide-ranging administrative system. The majority are balanced accounts dating to the reign of Šu-Suen and Ibbi-Suen, providing fascinating information about the cultic and industrial activities of a centralized bureaucratic system during the second half of the Third Dynasty of Ur.

Among the thousands of clay tablets uncovered by the excavators at Ur, one was found which had been impressed by a cylinder seal carved with unique imagery. This imagery embodied three different cosmic domains: the heavens, the netherworld/earth, and the Apzu, indicating that its owner, Ur-gigir, was a truly cosmopolitan Sumerian. This man, the extraordinary scene depicted on his seal and the symbolism it contains is the focus of this paper.[1]

1 I would like to thank the Trustees of the British Museum and the curators of the cuneiform tablet collection at the University Museum, Philadelphia, for the right to publish figures nos. 1–4. I am indebted to R. de Maaijer for access to his Ur data bank. Special thanks go to M. Browne.

All drawings were done by the author at a scale of 1 : 1.

The following abbreviations are used: Š = Šulgi; AS = Amar-Suen; ŠS = Šu-Suen; IS = Ibbi-Suen; UET III = L. Legrain, *Business Documents of the Third Dynasty of Ur*. Vol. I. London (1937); UET IX = D. Loding, *Economic Texts from the Third Dynasty*. London (1976); UE X = L. Legrain, *Seal Cylinders*. Oxford (1951).

Ur-gigir was an overseer of the finishers (lú.ázlag) who handled the final industrial activities of the textile manufacturing process.[2] At this time Ur was, along with Lagaš, one of the centers of the textile industry of the Ur III Empire.[3] The textile sector engaged a weaving workforce (géme-uš-bar) of approximately 12,000 to 13,000 employees in numerous mills scattered over the capital Ur and its suburbs, producing cloth for domestic needs and export. Contrary to their status in Lagaš, where the finishers were subordinate to the supervisors of the weavers, at Ur they seem to have been part of an organization that was independent of the weaving mills. The extensive nature of this organization is reflected by the names of the people employed in it, like Lugal-dumugi, one of the scribes of the finishers,[4] Lu-balašaga, one of the finishers,[5] and even Ur-gigir's name itself: "the one of the chariot."

1. The Man and His City

Ur-gigir is mentioned in several texts from Ur. His seal (fig. 1) is preserved on a tablet in the British Museum, a balanced account that dates to the eighth year of Šu-Suen's reign.[6] Before we have a closer look at seal fig. 1, I would like to mention the contents of this tablet because it highlights Ur-gigir's place in the administrative system. The text runs as follows: "398 pieces of cloth of minor quality[7] has he received, delivered by the scribe Ur-Sianna, 30 by the equerry Lu-Nanna, 37 by the equerry Ur-Ištaran, 12 by Ašaga and his son, 15 ex Šunamugi, total: 482 pieces of cloth of minor quality, he has received the cloth and brought (in), Ur-Gigir has received in Gaeš (date)."[8]

The two-line seal inscription gives Ur-gigir's occupation — overseer of the finishers.[9] Of further interest is that, unlike the majority of Ur III seals that carry a two-line inscription including the father's name, this seal is one of the few that does not. We learn from this and several other texts, dating between Šu-Suen's eighth year and Ibbi-Suen's fourth,

2 Waetzoldt 1972, 153–154, prefers the translation "finisher" instead of "fuller".

3 For an overall view of the Ur III textile industry, see Waetzoldt 1972; for Ur specifically, pp. 102–108.

4 Cf. UET III no. 1581 (IS 2); UET III no. 1731 (IS 7); UET III no. 1654 (IS 1): Lugal-dumu-gi$_7$ dub-sar lú.ázlag.

5 See UET III no. 1600 (IS 4); UET III no. 1603 (IS 4): Lú-bala-ša$_6$-ga lú.ázlag.

6 U. 3833 (BM 130496, UET III no. 1644) was formed out of lower-grade clay and is almost completely preserved. There is an erasure on the obverse of the tablet, over which the scribe wrote the corrected quantity of cloth. The tablet was first written and then Ur-gigir's seal was rolled upon its obverse and reverse. The tablet's find spot is unknown; it was probably uncovered, together with the majority of the textile texts, during the third season at the Dublamaḫ site.

7 Probably due to a lack of documentation, the archive links Ur-gigir's activity only with minor-quality cloth. According to Waetzoldt 1972, 112, 'túg (sag)-uš-bar' must have been a rather coarse, irregular fabric, because the wool that was used for manufacturing contained impurities like straw and burdocks and thus could not be finely and evenly spun.

8 398 túg sag uš-bar mu-tuku$_5$, ki Ur-^{d}Si$_4$-an-na dub-sar-ta, 30 ki Lú-^{d}Nanna kuš$_7$-ta, 37 ki Ur-^{d}Ištaran kuš$_7$-ta, 12 ki Á-ša$_6$-ga ù dumu-na-ta, 15 ki Šu-na-mu-gi$_4$-ta, šu+nigín 482 túg sag uš-bar, túg mu-tuku$_5$ mu-TÚM, Ur-^{giš}gigir šu ba-an-ti, šà Gaeš$_5^{ki}$, iti 12-kam, mu má-gur$_8$-maḫ ba-dím.

9 Seal inscription: Ur-^{giš}gigir / ugula lú.ázlag (Legrain, UET III no. 1644, overlooked the sign 'ugula' in the second line).

that Ur-gigir's place of employment was Gaeš, where he held several supervisory positions throughout his career.[10] This is also indicated by the officials with whom he dealt in his daily work. Later, he was most likely promoted to dispatch-rider[11] — an interesting position befitting the meaning of his name.

Gaeš[12] was important for the Ur economy since goods, among them textiles, were collected there and shipped to various destinations within Sumer but also outside of it, to Magan, for instance. Furthermore, Gaeš' significance was enhanced because it encompassed the cultic and administrative center of Karzida. Here were located the é-kar-zi-da which was founded by Šulgi, the é-^{d}Nanna, the Gipar of the high priestess (en), a metal manufacturing site, and a storage house (é-kišib-ba) that issued regular offerings to Nanna of Karzida. In addition, cupbearers (sagi) took care of the water drinking places (ki-a-nag) of the dead kings and high priestesses. This indicates that Ur-gigir's site of employment was of empire-wide importance. His position is reflected in his extraordinary seal. Moreover, Ur-gigir's seal offers evidence about religious concepts during the Third Dynasty of Ur that have been, for the most part, lost in time.

2. Three Divine Elements

The extraordinary nature of Ur-gigir's seal becomes apparent when examining the scene depicted on it. Whereas almost all Ur III seals with worship scenes preserved as impressions from various sites of the Ur III realm are of anthropomorphic character, this one is different: the seal shows a scene of symbol worship.

On the far right side of the seal impression is a standing goddess attired in a pleated garment and simple headgear. Her right hand is raised;[13] her left hand is at her hip, clenched into a fist except for an extended forefinger. She faces three figures to the left. A badly preserved wingless monster is visible next to one of the goddess' legs. It has a slim body, forelegs of a lion and the hind legs of a bird; its head is unidentifiable. Because it is wingless, its type of legs, and because of similar examples found at Ur (fig. 4), the monster

10 Cf. UET III no. 1407 (IS 4, month not given): Ur-gigir, the overseer of the finishers, assigned 380 workers in Gaeš to the harvest; UET III no. 1747 (date not preserved): receipt of cloth in Gaeš via the scribe Ur-egal. Ur-egal worked — based on his name — for the palace. See also UET III no. 1593 (ŠS 8), UET III no. 1664 (IS 3) and UET III no. 1677 (IS 4). According to a text from Puzriš-Dagan (Neumann 1993, 150, IS 2), Ur-Gigir occupied the position of overseer although now of the leather workers (Ur-^{giš}gigir ugula ašgab).

11 Upon receiving this promotion, he would have held the position from at least the first month of Ibbi-Suen's fourth year on, see UET III no. 1690: delivery of cloth via the dispatch-rider Ur-gigir and the scribe Ur-Lama (gìri Ur-^{giš}gigir rá-gaba ù gìri Ur-^{d}Lama dub-sar). Ur-gigir's promotion from overseer to dispatch-rider could have very well happened since other texts document the interaction between overseer (ugula) and dispatch-rider (rá-gaba), cf. UET III no. 1499 (AS 9); UET III no. 272 (year not preserved) mentions a-ru-a gifts presented by several people who occupied different areas of responsibility within the textile industry, which were logistically connected by production and transport, up to the distribution of goods. Among them: ugula uš-bar and rá-gaba.

12 See Edzard and Farber 1974, 50–51, for a source listing of Gaeš; for the cultic activities of this site cf. Sallaberger 1993/1, 170–172. Please note that textual evidence is only provided when it specifically supports the arguments laid out in this paper.

13 Several seal impressions from Lagaš show a goddess, with the same arm positions, worshipping a seated goddess, cf., for example, Fischer 1997, no. 21.

is most likely a snake-dragon. Next to the snake-dragon kneels a nude "hairy" figure, holding a vessel out of which water streams. An eagle, with an elongated body, hovers above both figures. Its oversized form indicates its significance. The eagle's talons are depicted in such a way that they come close to the figures beneath but do not seize them. Several curls of the kneeling figure, however, are cut over the eagle, an indication that the eagle was inserted first, followed by the other two figures. A crescent with a disc is depicted beside the eagle's head. Traces of two standing figures (which are not shown on fig. 1), possibly a worshipper and an introducing goddess, are visible in the same field. The depiction was, therefore, likely cut from an introduction scene with a seated deity, which was the most common type of scene in circulation during the Third Dynasty of Ur. It is impossible to determine whether the seal with the former introduction scene had already belonged to Ur-gigir and was then recut or whether he acquired a recut seal. The seal was originally adorned with metal caps, reflecting Ur-gigir's elevated societal status. But contrary to the finely carved inscription, the scene itself was executed in a mediocre manner.

Ur-gigir's seal is challenging because it is not standard iconography. I would like to stress that it was obviously of great importance for Ur-gigir to not own a 'mainstream' scene of the type prevalent in this period, but a highly individual one. The seal is unique because Ur-gigir selected certain symbols for personal reasons while excluding others. This poses intriguing questions and a fecund range of interpretations. Below, I will attempt to present what I believe is the most plausible answer to why Ur-gigir chose such imagery.

3. Three Symbols and Their Significance

Most Ur III seals had an anthropomorphic main scene and carried at least one additional motif, which was inserted later, together with the seal inscription. These motifs were placed either above, beneath or within the inscription, or between the main anthropomorphic figures (Fischer 1997, 147). Ur-gigir's seal, on the other hand, is unique because three symbols are worshipped rather than an anthropomorphic deity and all these symbols were placed in a contextual relationship to each other. Furthermore, his seal can be seen as a link to the seals of the Old Babylonian period, where anthropomorphic deities were frequently replaced by symbols.[14]

In the following, I will argue that three important Sumerian deities of cosmic character are depicted in the form of symbols on Ur-gigir's seal (fig. 1). Of great interest is that his seal does not show an eagle seizing two creatures, in contrast to imagery in the form of an Anzu bird grasping one lion in each talon, an embodiment, for instance, of the Lagashite god Ningirsu.[15] Consequently the question arises, who are these deities who are symbolized by the eagle, the snake-dragon, and the kneeling "hairy" figure? In addition, why were only three depicted? This triad was surely not constructed on a whim.

Let us open the analysis with the eagle. In ancient as well as modern times, the eagle has been a figure of rich symbolic significance, spanning a wide variety of cultures and

14 Cf. Braun-Holzinger 1996, nos. 57, 59, 60, 273, 495, 498, 610, 1115a: these examples lack an anthropomorphic deity, and the depicted symbols refer to the deities mentioned in the seal inscriptions. To my knowledge, however, there is not any Old Babylonian example of a triad similar to the one shown on fig. 1.

15 For an Early Dynastic representation of this on a relief, see Orthmann 1975, no. 88. For Anzu seizing two herbivores on Ur III seals from Lagaš, cf. Fischer 1997, 149 with fn. 316.

encompassing strength,[16] authority and divine power — a universally accepted symbol. It is not surprising therefore, that this bird and its associated imagery played a major role in Sumerian mythology as, for example, in the story of Etana. In this myth the hero Etana desires to visit heaven and finally succeeds with the help of an eagle.[17] The eagle symbolizes the heavenly realms, particularly An, the sky-god. On Ur-gigir's seal the hovering eagle clearly commands the scene. Just as the eagle dominates the center of seal fig. 1, so Ur dominated the center of the Ur III Empire and thus Ur-gigir's and his contemporaries' worldview.

The eagle and its relationship with the heavens lead us to Ur and an examination of the connection between the moon-god Nanna/Suen and the sky. The moon-god's most important Sumerian cult center was located at Ur. An additional cult center, which was closely connected with Ur, was situated at Gaeš, where Ur-gigir worked. Of particular interest is that the moon-god was also known as "the eye of the sky god," as attested by Ur III Sumerian personal names.[18] Akkadian personal names also connect the moon-god with the eye,[19] showing that this was not an exclusively Sumerian concept.

The sky-god was also worshipped at Ur. Indeed, Ur-Namma, the founder of the Third Dynasty of Ur, "planted for him a lofty garden (and) built for him a shrine/dais in a pure place."[20] Šu-Suen, for another example, from whose reign the tablet with Ur-gigir's seal dates, expresses his close relationship with An in a building inscription by calling himself "Purification Priest of An." Additionally, Ituria, an ensi of Ešnunna, characterizes this very

16 The Sumerian word for eagle is made up of the words strength + bird (á^{mušen}). Cf. Wiggermann 1992, 149: the symbolic value of the eagle is "aggression, power (in the sky)".

17 This myth is frequently depicted on Akkadian seals in a pastoral setting where Etana mounts an eagle's back, see Green 1997, 135–137. The same image is used in 2 Genesis 19, 4, where God's concern for his chosen people is compared with an eagle carrying its offspring on its wings towards the heavens.

18 See, for instance, UET III no. 1157 (IS 7): oil rations from the chief administrator of Nanna (šabra ^{d}Nanna) via Igiannakezu (gìri Igi-an-na-ke$_4$-zu); seal inscription: I [^{d}I-b]í-^{d}Suen/ dingir-kalam-ma-na / [lu]gal-kal-ga / [lugal-Uri$_5^{ki}$-ma / lugal-an-ub-da-limmú-ba-ke$_4$]// II ^{d}Nanna-zu / dub-sar/ … / i[r$_{11}$-zu]. While the seal inscription names Nanna-zu ("Nanna knows" or "<the one who> knows Nanna", cf. the Akkadian variant "Suen knew" [*Ida-Suen*], see Roberts 1972, 49) as the seal's owner, the tablet's content connects Igiannakezu ("the eye of the heavens knows" or "<the one who> knows the eye of the heavens") with the expenditure, *i.e.*, the same person is listed under two different names that possess the same meaning. This is verified by further variants on names attested for the same person. From these examples it is clear that Sumerian naming was neither highly individual nor as rigid as some scholars believe. In ancient Egypt sun and moon were seen as the eyes of the god of the heavens. As a symbol of spiritual seeing, wisdom, and omniscience, the eye was the window to the world. Its apotropaic character is reflected by the Sumerian personal name ^{d}Lamma-igi-ḫul ("the protective goddess <has> an apotropaic eye").

19 See, for instance, Stamm 1939, 227: "Sin is the eye of the land" (^{d}*Sin-i-na-ma-tim*). The eye relating to a deity is found in Assyrian personal names as well, cf. "God's eyes" (*Eni-il*) or "Eye of God" (*In-ili*), see Radner 1999, 397, and Baker 2000, 544.

20 Cf. Frayne 1997, 27 no. 5. See as well Sallaberger 1993/2, 109 table 62,b: tablet from Puzriš-Dagan (Š 44), animal sacrifices that took place during the Akiti festival in the seventh month: "one animal for the pedestal of An and five animals as an offering in Nanna's Gipar" (1 bará an-na, 5 siskúr gi$_6$-par$_4$ ^{d}Nanna).

same king as "the one who was named by An."[21] Furthermore, the "Festival of the Heavens/An" (iti ezem an-na) was celebrated in the eleventh month of the Ur calendar[22]. Also of interest is that the heavenly element (an) had not only made up a part of the names given to the en-priestesses of Nanna at Ur since the Akkadian period but was also of significance for cultic activities at Ur, for instance as the "Heavenly Emblem."[23] Additional support for this argument is that names embodying the 'theophoric' element "Vizier of An" (sukkal-an-na, an epithet of the god Ninšubur) are well attested at Ur.[24] Finally, the "House of the Word of the Heavens/An" (é-inim-ma-an)[25] belonged to the realm of the high priestess and was most likely located in the Gipar. One may speculate that the priestess could have promulgated the moon-god's pronouncements there.

Thus, we come full circle with the eye of the heavens, a cult site of the heavens, and the eagle of the heavens.

The second symbol depicted on Ur-gigir's seal is the kneeling "hairy" figure holding a vessel from which water streams. Above, I argued that elements of cosmic nature were represented on Ur-gigir's seal. The "hairy" figure has been convincingly identified with *laḫmu*, a supernatural attendant of Enki/Ea (Wiggermann 1982, 99–104), god of Sweet Waters and the southern marshes, whose home was the Apsu, the primeval sea. The Apzu was thought to be located under the earth's surface and extended toward the east where the sun rises. Enki/Ea's main cult center was in Eridu, which was situated only 20 km from Ur[26] and by tradition the oldest city in Sumer. He was also the god of all cultural achievements, such as crafts[27] and irrigation. This is expressed in the myth 'Enki and Ninsikila' (Römer 1993, 367–369), which can perhaps also be interpreted as the mythical foundation of irrigated agriculture. Enki/Ea was important for the agricultural cycle, where irrigation began in January/February, when the first seedlings appeared after a period of inactivity. Eridu and its main god had always played a major role during the Third Dynasty of Ur.

21 For the inscriptions, see Frayne 1997, 328 no. 17 (išib an-na) and 322 no. 12 (mu-pà-da an-na).

22 A text dating to the month of the "Festival of the Heavens" in Ibbi-Suen's first year of his reign (UET IX no. 9) lists Šu-anna ("the one of the heavens") together with Lu-dingirra.

23 Cf. UET III no. 257 (IS 8): one basket of dates for the "Boat of the Heavenly Emblem" (1 má šu-nir an-na-ka); see as well UET III no. 242 (IS 7). According to Sallaberger 1993/1, 180 with fn. 849, the "Heavenly Emblem" received important offerings during the Akiti festival in the first and seventh months. Cf. also UET III no. 162 (IS 6): offerings for the "Boat of Heaven/An" (síškur má an-na-ka) in the month of the "Festival of the Heavens/An". The moon-god's epithet was "Great Boat of the Heavens" (má gu-la an-na), cf. Tallqvist 1938, 443. For the 'Boat' as the moon in its last stage of waxing, including the full moon, see Stol 1992, 249.

24 Cf. UET III no. 1659 (IS 2): cloth delivered by Lu-sukkalanka, received by the finisher Ibni-Adad.

25 See UET III no. 911 (year not given) mentioning provisions for Ennirzianna ("high priestess, true splendor of heaven").

26 Mallowan 1977, 53, gives an evocative description of this view: "The holy city of Eridu, (...) from Ur was an unforgettable sight seen at dawn or shortly after sunrise, shimmering in the mirage twelve miles away. Its ziggurat, a ruined pile, then suddenly appeared to assume its ancient form as a staged tower and mysteriously stood up in the soft light of dawn, its architecture dramatically reanimated and transformed through a fine film of gossamer".

27 Enki, the great craftsman (dEn-ki giš-kin-ti [gu-la]), received regular offerings during the three moon festivals (Sallaberger 1993/1, 59 with fn. 247).

However, the month of the "Eating of the Male *gir*-fish of Enki," attested in Sargonic times, no longer existed in the Ur III period, which was probably part of a process of "moving the cultic calendar almost exclusively to Nanna" (Cohen 1996, 14, 18 with fn. 35). One can almost speculate about a syncretism of Ur with Eridu at that time,[28] as was the case with Babylon in later days (George 1992, 5). A close relationship between Enki/Ea and Nanna/Suen is also evident in figs. 2 and 3, where a *laḫmu* and a crescent, the symbol of the moon-god, were inserted in addition to the anthropomorphic deities.[29]

While the eagle on Ur-gigir's seal embodies the heavenly realm of An, the *laḫmu* symbolizes Enki/Ea and his life-giving watery domain. Furthermore, the *laḫmu* is the only monster for which a connection with the early cosmos can be proven (Wiggermann 1992, 155) because of its association with water, which is a well-attested element in third-millennium cosmogony.

This leads us to the remaining symbol to be analyzed on Ur-gigir's seal — the snake-dragon. I have reconstructed this monster using the impression itself and from the known iconography of this motif found on other Ur seal impressions such as fig. 4, which depicts the snake-dragon *mušḫuššu*, a symbol of the chthonic god Ningišzida ("lord of the true tree").[30] Ningišzida was an important deity in the Ur pantheon. This can be seen from personal names containing the god's name as a 'theophoric' element + 'ur-', in the case, for example, of the two officials named Ur-Ningišzida documented in texts from Ur. One of these men was in charge of the granary in the Great Marshes,[31] the other was the overseer of the weavers in Šunamugi.[32] Ningišzida's main cult center in Sumer was located in Niš-bàn-da^{ki}, not far from Ur, upstream and in the vicinity of Kiabrig and Enegi. An interesting point here — showing the interrelatedness of Ningišzida and Nanna — is that a person named after Niš-bàn-da^{ki} worked in Ur as a purification priest of Nanna.[33]

Ningišzida was associated with pastures and fields,[34] growth and decay, snakes and the netherworlds. The death of vegetation from mid-summer to mid-winter was embodied by

28 According to the Ekišnugal Hymn, Enki created Nanna's Abzu and established its purification rituals, cf. Ekišnugal Hymn 56: "shrine abzu, lofty dais of Ur" (Green 1975, 162). See also UET III no. 106 (IS 4): abzu ^{d}Nanna-šè.

29 This relationship is to be seen on Old Babylonian seals as well, cf. Braun-Holzinger 1996, nos. 824, 825.

30 For Ningišzida, s. Wiggermann 1997, 39–41, ibid. 2000. The latter is a handy compilation which profited from R. de Maaijer's superb knowledge of Ur III sources. For a seal associating the *mušḫuššu* with Ningišzida, see Fischer 1997, no. 14: the seal owner is a boatman of Ningišzida and the seal depicts a standard crowned with a *mušḫuššu*. Like his son Ningišzida, Ninazu was also associated with this type of snake-dragon (Wiggermann 2000, 370), but — interestingly — no personal name containing Ninazu as a 'theophoric' element has been documented in Ur so far. Like the queen of the netherworlds, Ereškigal, Ningišzida is associated with the constellation Hydra in late astrological texts.

31 See UET III no. 1107 (date not preserved): ki Ur-^{d}Nin-giš-zi-da ka-gur$_7$ ambar-maḫ-ta.

32 Cf. UET III no. 1686 (IS 4): ki Ur-^{d}Nin-giš-zi-da ugula uš-bar-ta.

33 UET III no. 1206 (IS 7): ki Ur-Niš-bàn-da išib ^{d}Nanna-ta.

34 According to an Old Babylonian temple hymn, Ningišzida's main cult center was located in the fields, cf. Wiggermann 1997, 40 with fn. 69. In Nutur, which may be identical with modern Tall-al-Ubaid, Ningišzida of Nišbanda received animal offerings together with Ninḫursag in the seventh month of the Akiti of the Seeding Season. According to Sallaberger 1993/1, 189 fn. 896, the multitude of records at the beginning of this month shows that these sacrifices were connected with the Akiti festival in Ur.

his cyclical journey to the netherworld. Ningišzida was raised in the Apsu and was a scion of An.[35] This bond between heaven and water is reflected in the accumulation of names containing Ningišzida as a 'theophoric' element that appear together with those incorporating zikum in the meaning of heaven written as engur.[36] Engur is the most common Sumerian name for the cosmic Apsu. This bond reflects a tradition that the heavens, like the earth, were created from water (Horowitz 1998, 224) and both were surrounded by water. Two seal impressions from Lagaš further emphasize Ningišzida's relationship with the watery element since Ningišzida is not only associated with zikum but also with a water-related profession mentioned in the seal inscription.[37] Significantly, the *mušḫuššu* dragon lived in the midst of the sea, according to an Ur III incantation.[38]

Thus we have the three important points of reference in our cosmic triad: An, overseeing all from the sky, Enki symbolizing water and the creation of life from water and, closing this cosmic scheme, Ningišzida's chthonic realm,[39] encompassing the rhythms of growth and decay. All three deities show a contextual relationship to each other — an interactive triad, symbolized by the eagle, the "hairy" figure, and the snake-dragon.

4. From Cosmic Triad to Regional Symbolism

Let us now examine these same symbols as found on seals owned by 'average' people — those working in the industrial and agricultural sectors of Ur who did not hold supervisory positions. Contrasting these different seals serves two purposes: showing how such symbols — in an individual setting — were commonly used while highlighting the exceptional qualities of Ur-gigir's seal.

An important aspect in this discussion is that, in contrast to Ur-gigir's seal with its cosmic imagery, seals owned by 'average' people typically consisted of at least one motif that was usually inserted after the main scene had been cut. For the most part, these motifs are images containing regional symbolism that was associated with specific deities. One should keep in mind, however, that the divisions between cosmic and regional, earthly and heavenly, are blurred and that these symbols possessed multi-layered meanings. This is especially true when one takes into consideration the fact that political affairs on earth

35 Cf. Gudea Cyl. B XXIII, 18 (Edzard 1997, 100): "Your (personal) god is Ningišzida, grandson of An". See UET III no. 68 (year not given/xi. month), offerings for Ningišzida (sískur ^{d}Ningiš-zi-da) in the month of the "Festival of the Heavens/An".

36 The Sumerian 'zi-ku-um$_{ENGUR}$', equivalent to the Akkadian *šá-mu-ú*, is known from lexical lists and commentaries (Horowitz 1998, 229). For the creation of heaven and earth from water, see also Lambert 1994, 567.

37 Fischer 1992, no. 10 (Š 46) was owned by a fisherman, seal inscription: Ur-^{d}Nin-giš-zi /-da ŠU-ḪA / dumu Ur-zikum-ma; the other seal, Fischer 1997, no. 14 (year not given), was the property of Ur-Alla whose father is mentioned in the inscription as a boatman of Ningišzida, seal inscription: Ur-^{d}Al-la / dumu Ur-zikum-ma / má-lah$_4$ ^{d}Nin-giš-[zi]-da. The seal owner's name contains Alla as a 'theophoric' element who was Ningišzida's vizier; in addition, a *mušḫuššu* is inserted into the depiction.

38 Cf. Wiggermann 1989, 126 fn. 5, referring to Steinkeller: "the lion, the *mušḫuššu*-dragon, which lives in the midst of the sea". In the 'Labbu' myth, which according to Wiggermann must have been compiled before Hammurabi's conquest of Ešnunna, Enlil creates this specific monster that is brought forth by Sea (Wiggermann 1989, 118).

39 Note that, according to Horowitz 1998, 268, "most names for earth are also names for the earth's surface and the underworld".

mirrored events in heaven, according to the standard theology of Sumer and Akkade. Nevertheless, differences in symbolism and imagery did exist.

Below, I will discuss three examples of seals, each of which contains one of the symbols found on Ur-gigir's seal. Two come from the textile industry, the other from agriculture. None of their owners held a supervisory position.

During the Ur III period, the textile industry of Ur was divided into different regional sectors. These sectors are known to us from several balanced accounts that mention a certain Lugal-azida who took cloth that was delivered by an overseer of the weavers and received by the finishers.[40] This brings us to Lu-Ninšubur's seal (fig. 2). As the finisher receiving cloth in Lagaš, he is mentioned together with Lugal-azida.[41] Lu-Ninšubur's seal shows an introduction scene to a seated goddess.[42] A flaming incense burner stands before her. Plus, a crescent is inserted above the worshipper's head, a scorpion lurks underneath the inscription panel and — of great importance to my argument here — an eagle sits squarely in the center of the panel. This eagle is very familiar to us from numerous sealed texts from Lagaš (cf. Fischer 1997, passim) and can be seen as a symbol of regional importance. It is not surprising that Lu-Ninšubur, who worked as a finisher for the central Ur administration in Lagaš, owned a seal engraved with his region's symbol, the eagle.

Another administrative sector was called the Great Marshes (ambar-maḫ), an area between Ur and Eridu, which in those days was filled with a series of lakes and marshes.[43]

The Great Marshes were significant for the industrial and agricultural sectors of the Ur economy because a granary[44] was located there and it was the place of employment for weavers and finishers. Numerous seals from Ur were engraved with the *laḫmu,* especially those of individuals who were involved in the expenditure of barley rations. With the help of several documents identifying the Great Marshes as these seal owners' place of employment we know that the *laḫmu* was the regional symbol for that area. One of these seal owners was Agua.[45] From the inscription on his seal (fig. 3) we read that he was a servant

40 According to the texts, Lugal-azida took cloth at Gaeš, the Great Marshes (ambar-maḫ), Šunamugi, é-^{d}Nin-mar^{ki}-ka, Nanna-gugal, and Lagaš.

41 Cf. UET III no. 1658 (IS 3): different types of cloth received by the finisher Lu-Ninšubur in Lagaš, Lugal-azida took in charge via the scribe Lu-Ninšubur, whose seal was rolled upon the tablet, seal inscription: Lú-^{d}Nin-šubur / dub-sar / dumu ^{d}Nanna-kù-zu / nu-bànda. See also UET III no. 98 (IS 3): same topic, this time cloth was received via the scribe Nanna-maba in Lagaš.

42 The tablet U. 3544 (UM 47-29-423, UET III Nr. 1656, IS 2), which Lu-Ninšubur's seal is rolled upon, is a badly preserved balanced account: Lu-Ninšubur has received 10 pieces of cloth of minor quality delivered by Ur-Šulgira, seal inscription: Lú-^{d}Nin-šubur / ^{lú}ázlag / dumu Gìri-né (the first sign of the father's name is to be read 'Gìri' instead of 'Lú'). The same seal is probably impressed on two additional tablets, cf. UET III nos. 1667 and 1657 (both IS 2). The seal is likely a recut seal from the Akkadian period.

43 Cf. UET III no. 1370 (date not preserved): "in the Great Marshes, in front of Ur" (a-šà ambar-maḫ, ma-da Uri$_5^{ki}$-ma).

44 See UET III no. 1107 (date not preserved): the official in charge of this granary was Ur-Ningišzida (Ur-^{d}Nin-giš-zi-da ka-gur$_7$ ambar-maḫ).

45 U. 13620 (BM 130531, UET III no. 1794; UE X no. 399). The sealing was found in Pit F (PFT.D7) during the eighth season, seal inscription: A-gu-a / ir$_{11}$ Lú-^{d}Nan[na]. An impression of the same seal is found on the sealing U. 13621 (UET III no. 1795) and is from the same find spot as U. 13620.

of Lu-Nanna, the overseer of the weavers at the Great Marshes.[46] Agua occupied the same position as Ur-zikumma, who was a servant of Ur-Ningišzida, the overseer of the weavers in Šunamugi.[47] Agua's seal is of minor quality and shows an introduction to a seated goddess. Visible between the introducing and seated goddess is a kneeling *laḫmu*. Additionally, just as with Lu-Ninšubur's seal, a crescent is engraved above the worshipper's head.

It is not surprising to find the *laḫmu* as a regional element for people working at the Great Marshes. They had a logical connection with Enki/Ea, the god of the southern marshes.[48]

Fig. 4 shows a standard crowned by the snake-dragon *mušḫuššu*. The owner of the seal was the scribe Lušaga.[49] The seal also depicts an introduction to a seated goddess. An additional motif in the form of a standard crowned with a snake-dragon, which is typologically similar to the one on Ur-gigir's seal, is visible between the seated goddess and the three-line inscription panel. The seal was originally planned for a four-line inscription and the emblem was added into the blank space.

The seal owner was assigned to the agricultural sector. Several texts connect him with cultivators and draught cattle.[50] Contrary to the owners of seals figs. 2 and 3, we do not know Lušaga's place of employment. Since Ningišzida was also a god of agriculture, however, the snake-dragon — as a symbol of Ningišzida — fits quite well.

There are many complex levels functioning in the seals presented here. The seals contain visual codes on regional and cosmic levels associated with specific deities who are represented by symbols. The point is, however, that Ur-gigir's seal combined three cosmic spheres emphasizing the cosmopolitan nature of Ur-gigir's status and position.

5. Cult Topography

As we have seen, the impression of Ur-gigir's seal depicts the snake-dragon of Ningišzida to the right, Enki/Ea's "hairy" figure to the left and the sky-god's eagle suspended above. The placement of these three elements was not by mere chance.

When the seal cutter engraved Ur-gigir's seal he most likely had a specific image in mind, reflecting the temple layout in Ur. The map of the excavated city of Ur for the Ur III and early Old Babylonian periods reveals three cult places laid out in a triangular pattern

46 See UET III no. 1665 (IS 3): 136 pieces of cloth were delivered by Lu-Nanna, the overseer of the weavers (ki Lú-^{d}Nanna ugula uš-bar-ta), the accounting took place in the Great Marshes (šà ambar-maḫ).

47 Cf. UET III no. 1721 (IS 6): Ur-zikum-ma ir_{11} Ur-^{d}Nin-giš-zi-da.

48 In Gudea Cyl. A XXV, 1 (Edzard 1997, 84), Ningirsu's Abzu is compared with a great marsh: "Its timber room (?) is 'dark water', an enormous marsh" (é-giš gar-ra-bi a-gi_6 ambar-maḫ).

49 U. 30214, an unpublished tablet fragment, which is kept in the British Museum and whose find spot is unknown, dates to Ibbi-Suen's reign and carries a seal impression on obverse and reverse; the contents are unidentifiable because of the fragmentary condition of the tablet, seal inscription: Lú-$ša_6$-g[a] / dub-sar / dumu Lugal-du_{24}-ùr-re. Although the scene is of minor quality, the inscription was carefully cut.

50 Cf. UET III no. 1243 (IS 8): balanced account listing cultivators and draught cattle, Lú-$ša_6$-ga ì-dab_5; see also UET III no. 1096 (IS 7) and UET IX no. 1106 (date not given). Of extreme interest is the fact that according to Jacobsen and Alster 2000, 317, Ningišzida's sisters were "clearly herders' deities;" one sister was Ama-šilama ("Mother of cows") and the other one was named Labar-šilama ("Tender of cows").

(Woolley and Mallowan 1976, pl. 116). This triangular shape is virtually the same as that found on Ur-gigir's seal although when rolled, of course, the position of the "hairy one" and the snake-dragon are reversed, that is, in mirror image form.

The apex of the Ur triangle is the magnificent ziggurat that was located at the north-eastern end of the temenos preserved for the main god of Ur, Nanna/Suen. The ziggurat was apparently of special importance as the place of worship of the moon-god since no lower temple for him has yet been unearthed. A reed shrine (èš-gi) — and probably not, as commonly reconstructed, a temple — could have existed on the uppermost terrace; reed shrines have been documented as cult places for various gods during the Ur III period.[51] The ziggurat, therefore, may have been the center of the cultic activities for the "Eye of the Heavens." It was most likely seen as a "stairway to heaven",[52] connecting earthly and heavenly domains.

The significance of the ziggurat's position for Ur cult topography is evident when surveying certain features of the Ur cultic entity: the temples of two deities about whom we have already spoken attract our attention — the Enki temple, located approximately 750 meters south-east of the ziggurat, and the Ningišzida temple, which was situated west of the Enki temple. Both temples are clearly oriented toward the ziggurat because they were erected along straight lines at nearly the same distances from the ziggurat, more or less forming the sides of an imaginary triangle. The shape of the city of Ur is that of a large oval pointed towards the south; this means that, mathematically, the length of each side does not form an exact distance to the ziggurat. Nevertheless, the cult topography followed a cosmological concept that is most likely reflected on Ur-gigir's seal.

Let us look at the Enki temple that stood on the rampart at the south-eastern limits of the town on the wall line. The temple was founded during the Ur III period, indicated by bricks stamped with Amar-Suen's name; it was later restored under Rim-Sîn of Larsa.[53] Woolley assumes that the Ur III temple was similar to the Larsa temple but had different proportions. Stamped bricks found throughout the city mention that Amar-Suen built for Enki "his beloved Abzu"[54] — this is likely the temple I am describing here. The location of the temple in the eastern part of the city was surely no accident, for the sun rises in the east, bringing both light and life.

The temple of the chthonic god Ningišzida, which consisted of several building phases, was situated to the west of the Enki temple just inside the main city wall.[55] The remains of a temple erected under Ur-Namma were found under the western part of the Old Baby-

51 For the reed shrine of Šara in Umma, see Owen 1991, no. 9 (ŠS 6): "royal sacrifices for the reed shrine of Šara" (síškur lugal èš-gi ^{d}Šara-šè). A predecessor of such a shrine could have existed on top of the Anu ziggurat in Uruk, cf. Heinrich 1982, 62–63. For lightweight building structures in archaic Uruk and their significance, see Eichmann 2001.

52 The ziggurat of Šamaš in Sippar was called "House, Pure Stairway of Heaven" (é-kun$_4$-an-kù-ga), see George 1993, 115. Cf. also Gudea Cyl. B XXIV, 9 (Edzard 1997, 101): "O House that reaches to heaven like a great mountain" (é kur-gal-gim an-né ús-sa).

53 For the temple, see Woolley and Mallowan 1976, 64–67, Pl. 120,a.

54 Cf. Frayne 1997, 260–262 no. 15: abzu-ki-ág-gá-ni; bricks with the same inscription were found in Eridu. According to an Old Babylonian hymn, Amar-Suen built a temple for Nanna in Ur, cf. Sollberger 1965, nos. 32, 33.

55 See Woolley and Mallowan 1976, 69. Ningišzida, the "chamberlain of the netherworld," had a temple in Babylon located in the city's central quarter Eridu, see George 1992, 309–310.

lonian temple. They made up a square room measuring 6 meters in length. With the help of clay cones mentioning Rim-Sîn it is possible to identify this early Old Babylonian building as the temple of Ningišzida.[56] Since there is no Ur III textual evidence that Ningišzida only had a cella in the temple of Nanna at Ur,[57] he could have very well been worshipped in his own temple during the Ur III period.[58] In addition, we can see a clear cultic continuity for almost all temenos buildings from the Ur III to the early Old Babylonian periods.

Like the temple of Enki, the location of the Ningišzida temple was deliberately chosen: the sun sets in the west — the direction of darkness and death. It is no surprise that the periodical ritual washing of Ningišzida is documented for Ur in the eighth month (September/October) when Ningišzida traveled to the netherworlds.[59]

Enki/Ea and Ningišzida have other qualities that were important for maintaining the cosmological order established by the gods on earth and in heaven. Enki/Ea was the guardian of the "Sacred Measures" for earthly and heavenly organization; Ningišzida was a "reliable" god — a quality that was even encoded in his name (-zi-da). He was concerned with law and order not only in the netherworld, but also on earth (Wiggermann 2000, 371). Both gods, therefore, embodied important issues that formed the pillars of an ideal world.

It is beyond the scope of this paper to fully delve into Sumerian cult topography.[60] The interesting aspect here, however, is that Ur-gigir's seal in all probability mirrors the symbolically important layout found in the city of Ur itself.

56 L. Woolley interpreted this building as a double temple for Ningišzida and Ninazu. In a detailed discussion, however, T. Richter questions this interpretation, cf. Richter 1999, 427–429.

57 See UET III no. 69 (year not given): baskets with dates for Ningišzida (^{d}Nin-giš-zi-da), his father Ninazu (^{d}Nin-a-zu), his spouse Ninazimu (^{d}Nin-a-zi-mú), and other deities associated with Ningišzida. Cf. also UET nos. 68 and 69 (no year is given for either text), nos. 264 and 278 (the date is not preserved on either text). Even the badly preserved tablet UET IX no. 972 (IS 7) is no proof against a separate temple of Ningišzida. This balanced account mentions offerings for various deities regarding the Akiti of the Seeding Season; see Sallaberger 1993/1, 184. Cultic activity for Ningišzida during the reign of Šulgi documents a fragment of a bowl from Diqdiqqah; for the inscription, cf. Frayne 1997, 226 no. 2042.

58 For Ningišzida's temple in Girsu at the edge of the town see Sallaberger 1993/1, 299.

59 Cf. UET III no. 1685 (IS 4), expenditure of cloth for the ritual washing of Ningišzida in the month of the festival of Šulgi (a-tu$_5$-a ^{d}Nin-giš-zi-da-ka-šè). An economic text from the second year of Ibbi-Suen's reign — whose provenience is unknown — mentions barley for the festival of Ningišzida (ezem ^{d}Nin-giš-zi-da), see Cohen 1993, 160.

60 For detailed research on Babylon's cult topography, as well as other cities based on textual and archaeological evidence from the first millennium, see George 1992. According to the Akkadian cosmic creation myth, Enuma Eliš, composed late in the second millennium, Marduk's temple Esagil in Babylon was not chosen arbitrarily; it was placed at the center of a vertical axis made up of three cosmic domains, cf. Maul 1997, 114.

6. Further Horizons

In this paper we have seen that Ur-gigir's seal possesses a unique collection of symbolic imagery. I have provided an analysis of what I believe to be the most likely explanation of the fascinating figures gracing this intriguing seal. The field of possible interpretations is broad, the evidence fragmentary, but such a seal demands attention.

In addition, Ur-gigir's seal generates a whole host of fascinating topics and interpretations that I will touch upon here but not in great detail because of the constraints of space. One significant symbol that has been present throughout this paper, but not yet mentioned, is the number three, the number of completeness and absoluteness. This is clearly depicted on Ur-gigir's seal, where three gods — including their corresponding cosmic entities, their abodes — are displayed. Three is also the number of the sun cycle — sunrise, zenith and sunset — with obvious parallels to the life cycle of birth, adulthood and death.

The number three and its associated cosmic domains[61] also play a major role in the epic of Gilgameš.[62] In this myth, the hero Gilgameš experiences all three realms: when he fights the celestial bull that was sent by An to avenge Ištar, when he opens a hole in the underworld and the ghost of Enkidu comes forth and, finally, when visiting Uta-napišti in his domain beyond the cosmic ocean. On his way to Uta-napišti, Gilgameš has to cross the ocean "and midway laid the waters of death blocking the passage," which he reaches after a three-day journey that for a non-heroic individual would have normally taken a month and a half — in other words, under normal conditions, his entire journey to Uta-napišti would have lasted three months.

The number three was also of major importance throughout the ancient agricultural year since agriculture provided the foundation for Sumerian civilization. There were three stages of field preparation: sowing, ploughing and harvesting. This, in turn, provides a link to Nanna/Suen of Ur. While the sun-god was essential for the marking of the agricultural year, the fertility of the land fell within the moon-god's responsibility.[63] It is he who commanded the rise of the waters that was important for flooding the land in preparation for the sowing season. In Ur, three important festival days existed per month for the moon-god, as well as, in the Ur III period, three cultic festivals that were connected to the position of the moon in the sky:[64] the Akitu of the Harvesting Season in the first month, the Akitu of the Seeding Season in the seventh month, and the "exalted festival" (ezem maḫ) in the

61 According to Babylonian astronomy, three also refers to the organization of the sky in Astrolabes, where three stars are listed for each month of the year: one star each for the paths of Ea, Anu and Enlil, see Walker and Hunger 1977, 33. Furthermore, the Enuma Eliš reflects the conception of a three-level universe, one each for Anu, Enlil and Ea, cf. Lambert 1983, 221. Three is also of significance for the Sumerian cosmological concept concerning the beginning of the universe, for example in 'Gilgameš and the Ḫuluppu Tree,' where, after the separation of heaven and earth, An carries the heavens and Enlil the earth away, and the goddess Ereškigal was given the netherworlds to rule, cf. Horowitz 1998, 135.

62 For the epic of Gilgameš, see George 1999.

63 This is expressed, for instance, in the Akkadian personal name "Suen is my creator" (*Suen-bani*), see Roberts 1972, 49.

64 See UET III no. 115 (IS 5) for wood and reed for Nanna's temple as evening offerings when the moon is in its house on the fifteenth day, *i.e.*, a full moon; for the different moon festivals, cf. Sallaberger 1993/1, 39–41.

tenth month. The moon's phases indicated the passage of time[65] according to Old Babylonian hymns (Jacobsen 1976, 122). It was believed that the disappearance of the moon symbolized its passage through the underworld, marking the completion of the month.

Furthermore, the repeating cycles of beginning and end are reflected in the myth 'Enki and Ninḫursaga', where Enki impregnates three goddesses, the Mother Goddess Nintu, his daughter Ninnisiga, and his granddaughter Ninkurra (Römer 1993, 372–376). All three goddesses give birth after nine days — a multiple of three. Mathematically, 3×9=27; the sidereal month — the average period of revolution of the moon around the earth in reference to the fixed stars — equals 27 days, 6 hours and 43 minutes of mean solar time; further evidence of three as the number of completion. In later times, the Akkadian name of the mood-god — Suen/Sîn — could be written as the number thirty, a type of cryptography. His epithet (Tallqvist 1938, 443) was "god of the thirtieth day."

The symbolic theme of completion is also reflected on Ur-gigir's seal where Enki and Ningišzida are arranged horizontally across from each other, indicating a temporal axis. Enki/Ea was seen as the life-giving god associated with the primeval ocean, while Ningišzida was the chtonic god of decay and the netherworlds. Thus, another bridge is built to the epic of Gilgameš. In the ocean Gilgameš finds the plant of eternal youth. In the end, however, he loses the plant in a pool when a snake, the symbolic chthonic creature, bears it off. The symbolic cycle here is youth, maturity, and loss.

These and other themes are ripe fields to be harvested by further research. In this paper I have attempted to show that the Ur III period is not only a bountiful field of research for economic questions but presents a multitude of avenues for combined archaeological and textual approaches. In many aspects, Ur-gigir's seal remains enigmatic, for it is not merely a presentation of three major gods but an overall cosmic concept as well. This, in turn, is reflected in Ur-gigir's supervisory position within an empire-wide organization. His name implies the ultimate cosmic wheel.[66] A play on words, perhaps, for this ancient cosmopolitan.

65 The Ur III personal name A-rá-zal-la ("the cycle has ended") can also be included in this context, which is documented for Ur. Significantly, this name is mentioned in a balanced account from the first year of the Ur calendar, see UET III no. 787 (AS 8); the seal that was impressed on the tablet was owned by the scribe Arazalla and mentioned Amar-Suen.

66 Note that the early pictographic sign for "chariot" is a wheel. Of interest here is the suggestion that Sumerian rites for days 6 or 7 of the month were named "The Chariot." According to W.W. Hallo, this could be an abbreviation of "the crescent of a chariot," a segment of the wheel, a symbolic identification of the half-moon (cf. Stol 1992, 246–247 with reference to Hallo).

BIBLIOGRAPHY

Baker, H.D.
2000 *The Prosopography of the Neo-Assyrian Empire. Vol. 2, Part I: Ḫ–K.* Helsinki.

Braun-Holzinger, E.A.
1996 "Altbabylonische Götter und ihre Symbole," BaM 27, 235–359.

Cohen, M.E.
1993 *The Cultic Calendars of the Ancient Near East.* Bethesda.
1996 "The Sun, the Moon, and the City of Ur," in A. Berlin (ed.), *Religion and Politics in the Ancient Near East.* Bethesda, 7–20.

Edzard, D.O.
1997 *Gudea and His Dynasty* (RIME 3/1). Toronto—Buffalo—London.

Edzard, D.O. und G. Farber
1974 *Die Orts- und Gewässernamen der Zeit der 3. Dynastie von Ur* (Répertoire Géographique des Textes Cunéiformes II). Wiesbaden.

Eichmann, R.
2001 "Die 'leichte' Bauweise in den 'archaischen Schichten' von Uruk-Warka," in R.M. Boehmer and J. Maran (eds.), *Lux Orientis. Archäologie zwischen Asien und Europa. Festschrift für Harald Hauptmann zum 65. Geburtstag* (Studia honoraria 12). Rahden, 121–127.

Finkel, I.L. and M.J. Geller (eds.)
1997 *Sumerian Gods and Their Representations* (Cuneiform Monographs 7). Groningen.

Fischer, C.
1992 "Siegelabrollungen im British Museum auf neusumerischen Tontafeln aus der Provinz Lagaš," ZA 82, 60–91.
1997 "Siegelabrollungen im British Museum auf Ur-III-zeitlichen Texten aus der Provinz Lagaš," BaM 28, 97-183.

Frayne, D.R.
1997 *Ur III Period* (RIME 3/2). Toronto—Buffalo—London.

George, A.R.
1992 *Babylonian Topographical Texts.* Leuven.
1993 *House Most High.* Winona Lake.
1999 *The Epic of Gilgamesh. A New Translation* (Penguin Classics). London.

Green, A.
1997 "Myths in Mesopotamian Art," in Finkel and Geller 1997, 135–158.

Green, M.W.
1975 *Eridu in Sumerian Literature* (PhD Diss. University of Chicago, 1975).

Heinrich, E.
1982 *Die Tempel und Heiligtümer im alten Mesopotamien. Text* (Denkmäler Antiker Architektur 14). Berlin.

Horowitz, W.
1998 *Mesopotamian Cosmic Geography.* Winona Lake.

Jacobsen, T.
1976 *The Treasures of Darkness*. New Haven—London.

Jacobsen, T. and B. Alster
2000 "Nigišzida's Boat-Ride to Hades," in A.R. George and I.L. Finkel (eds.), *Wisdom, Gods and Literature. Studies in Assyriology in Honour of W.G. Lambert*. Winona Lake, 315–344.

Lambert, W.G.
1983 "Kosmogonie," RlA 6, 218–222.
1994 "Akkadische Mythen und Epen," in K. Hecker et al. (eds.), *Mythen und Epen II* (TUAT III/4). Gütersloh, 565–602.

Mallowan, M.E.L.
1977 *Mallowan's Memoirs*. London.

Maul, S.M.
1997 "Die altorientalische Hauptstadt: Nabel und Abbild der Welt," in G. Wilhelm (ed.), *Die Orientalische Stadt: Kontinuität, Wandel, Bruch* (CDOG 1). Saarbrücken, 109–124.

Neumann, H.
1993 *Handwerk in Mesopotamien* (SGKAO 19). Berlin (2nd edition [1987]).

Orthmann, W. (ed.)
1975 *Der Alte Orient* (PKG 14). Berlin.

Owen, D.I.
1991 *Neo-Sumerian Texts from American Collections* (MVN XV). Roma.

Radner, K.
1999 *The Prosopography of the Neo-Assyrian Empire. Vol. 1, Part II: B–G*. Helsinki.

Richter, T.
1999 *Untersuchungen zu den lokalen Panthea Süd- und Mittelbabyloniens in altbabylonischer Zeit* (AOAT 257). Münster.

Roberts, J.J.M.
1972 *The Earliest Semitic Pantheon*. Baltimore—London.

Römer, W.H.Ph.
1993 *Weisheitstexte, Mythen und Epen. Mythen und Epen I*. (TUAT III). Gütersloh.

Sallaberger, W.
1993 *Der kultische Kalender der Ur III-Zeit. Teil 1 und 2*. Berlin—New York.

Sollberger, E.
1965 *Royal Inscriptions. Part II* (UET VIII). London.

Stamm, J.J.
1939 *Die akkadische Namengebung* (MVAG 44). Leipzig.

Stol, M.
1992 "The Moon as Seen by the Babylonians," in D.J.W. Meijer (ed.), *Natural Phenomena*. Amsterdam—Oxford—New York—Tokyo.

Tallqvist, K.
1938 *Akkadische Götterepitheta* (Studia Orientalia VII). Helsinki.

Waetzoldt, H.
1972 *Untersuchungen zur neusumerischen Textilindustrie* (Studi economici et tecnologici I). Roma.

Walker, C.B.F. and H. Hunger
1977 "Zwölfmaldrei," MDOG 109, 27–34.

Wiggermann, F.A.M.
1982 "Exit *Talim*! Studies in Babylonian Demonology I," JEOL 27, 90–105.
1989 "Tišpak, His Seal and the Dragon mušhuššu," in O.M.C. Haex et al. (eds.), *To the Euphrates and Beyond. Archaeological Studies in Honour of Maurits N. van Loon*. Rotterdam, 117–133.
1992 *Mesopotamian Protective Spirits* (Cuneiform Monographs 1). Groningen.
1997 "Transtigridian Snake Gods," in Finkel and Geller 1997, 33–55.
2000 "Nin-gišzida," RlA 9, 368–373.

Woolley, L. and M. Mallowan
1976 *The Old Babylonian Period* (UE VII). London.

Fig. 1

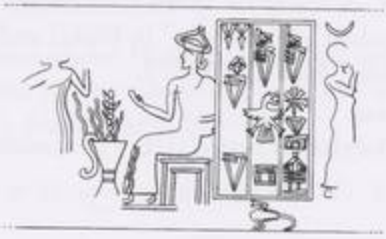

Fig. 2

Fig. 3

Fig. 4

An Adoption Document from the Kisurra Collection in the British Museum

*Anne Goddeeris — Leuven**

Introduction

In the forthcoming catalogue of the Babylonian collection of the British Museum, over two hundred texts belonging to a formerly unknown[1] corpus from Kisurra are described. Christopher Walker was so kind as to allow me to study the Kisurra documents and to give me his own notes on the texts. It is thus a pleasure for me to present a tablet from this collection in a volume presented to him on his sixtieth birthday. Through its pecularities, this document makes up a piece on its own and therefore may be published separately.

The Old Babylonian text corpus from Kisurra known until now consists of the documents excavated by the German team at the beginning of the last century and published by Kienast (1978), and of some thirty tablets dispersed over different collections (Charpin 1982, 156 and Sommerfeld 1983, 205f.).[2] For the largest part, the documents record loans of barley and silver and administrative procedures. Besides, there are two letter archives, some real estate purchases, and a few contracts concerning family relations. In the frame of the publication and edition of the documents excavated by the German mission, Kienast provided a study of the history of Kisurra and of the legal and economic institutions underlying the contracts. His reconstruction of the history and the chronology of Kisurra has been refined in several reviews of the book (Kingsbury 1980, Charpin 1982 and Sommerfeld 1983). Although progress has been made in the matter, the succession of the local rulers and the exact relations of the town to the more powerful kings of the neighboring city-states of Isin, Larsa, Uruk and Babylon remain problematic. The documentary texts simply do not provide enough data for a chronological reconstruction.

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* Post-doctoral fellow at the research fund of the K.U. Leuven.

1 Except for three documents included by Finkelstein in his CT 48 publication: CT 48 86, 87 and 88.

2 More texts of unidentified provenance probably come from Kisurra. A formerly unattributed text, TIM 5 7, could be situated in Kisurra on the basis of findings in this article.

The Kisurra tablets in the British Museum

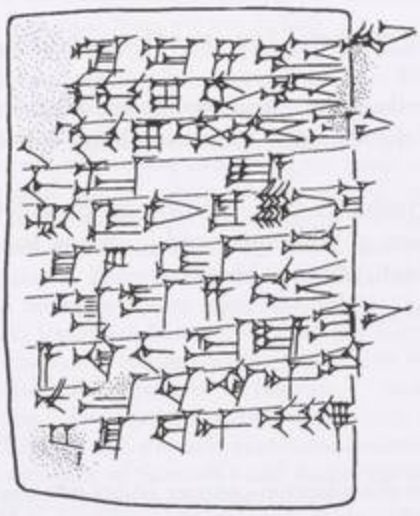
The forthcoming catalogue of the British Museum cuneiform collections, presenting the tablet numbers 23619–30000 and 85000–85980, all acquired by purchase in 1898 and the beginning of 1899, provides us with somewhat more than two hundred new Kisurra texts. They originate from archives other than the excavated ones, the letter archive of AbB 2 117–129, and the documents kept in Baghdad and Yale — which are connected prosopographically only to FAOS 2 93. Some witnesses and individuals from the BM collection recur in the FAOS 2 texts, confirming the date and origin of the texts, but the protagonists are not yet documented.

Since the Kisurra documents form part of a lot of tablets purchased on the antiquities market, their place of origin must be identified on the basis of circumstantial evidence. The presence of a year-name of one of the Kisurra rulers forms a first decisive means to identify Kisurra as the site of origin of a tablet. Prosopographical and intrinsic parallels to these dated texts, as well as typical phrasings, allow us to assign many more documents to the site. Some formal characteristics may serve as a means of identification as well. The Kisurra tablets, which are made of coarse clay, are most often cushion shaped. The script is relatively large and coarse, but not cursive. The loan and purchase documents are sealed with a bur.gul seal of the debtor or the seller respectively. As will be illustrated by the document discussed in this article, the Sumerian orthography of the Kisurra documents is poorly formed. In the discussion of another adoption contract from Kisurra, YOS 14 351, Charpin (1979: 190) described the Sumerian redaction as "fâcheusement négligée."

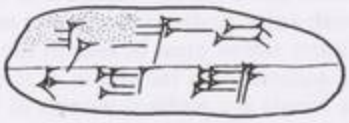
Except for the document studied here, the Kisurra documents in the British Museum record loans, administrative documents and a few real estate purchases. The real estate purchase documents, which are made of finer clay, nearly all involve the same buyer, a trader called Ilum-rē'ûm. The loan documents mention a limited number of creditors as well. The most extensively documented, one Sîn-bāni, occurs as a recipient in several of the administrative documents as well. The other creditors in these administrative documents seem to deliver assets. Perhaps we are dealing with the archive of one single organization here. The relations between the different protagonists in the British Museum documents will be investigated in a historical study involving all the identified documents from Kisurra.

BM 85456

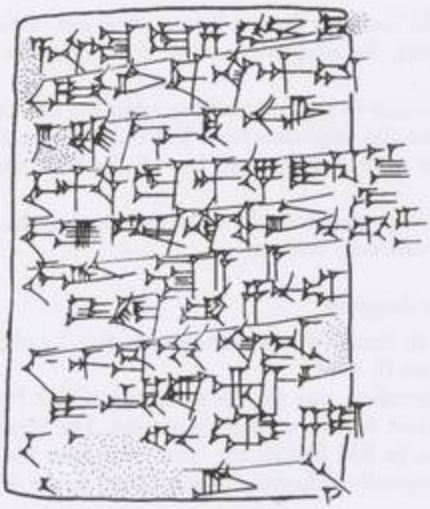
Obv.



Lower Edge



Rev.



Upper Edge

Seal

Transcription

Obv.

1 [1]*La-ma-sà-tum* mu.ni
2 [dumu].munus *Gu-lu-up-tum*
3 ki *Gu-lu-up-tum* ama.ni
4 *Ši-ma-ia*
5 nam.dumu.ni.šè in.KU
6 tukum.bi
7 *La-ma-sà-tum*
8 *a-na Ši-ma-ia* ama.ni
9 nu ama ba.na.an.du
10 [kù].šè ba.an.mu.sum

Lower Edge

11 tukum.bi
12 *Ši-ma-ia*

Rev.

13 *a-na La-ma-sà-tum* dumu.munus
14 nu dumu.munus.ni ba.na.an.du
15 níg̃ nam.me.en nu.tuk
16 igi ^{d}Utu-ma.an.sum dumu *Ḫu-šu*^{1}*-tum*^{2}
17 igi *Ú-ṣi-na-wi-ir* nu.^{giš}kiri$_{6}$
18 igi Lú-*la-a-a*
19 dumu *Ka-am-za-nu-um*
20 igi ^{d}Da.mu-*na-da*
21 dumu ^{d}EN.ZU-*re-me-ni*
22 igi […]-*nu-um* dumu *Za-ia*
23 i[ti še].kin.ku$_{5}$

Upper Edge

24 mu ^{d}*Su-mu-a-b*[*u-um*]
25 lugal.e

Seal enrolled twice on the damaged left edge of the tablet:

[*Gu*]-*lu-up*-[*tum*]
[du]mu AN[…]

Translation

1–5 Šimaia takes a person named Lamassatum, the daughter of Gulluptum, from her mother Gulluptum as her child.

6–10 If Lamassatum says to Šimaia, her mother, "You are not my mother," she will sell her.

11–15 If Šimaia says to Lamassatum, her daughter, "You are not my daughter" (literally "she is not her daughter"), she (Šimaia) does not have any claim (on Lamassatum).

16–22 In front of Utu-mansum, son of Ḫuššutum (?); Uṣi-nawir, the gardener; Awīlaia, son of Kamzānum; Damu-nādā, son of Sîn-rēmēni and [...]num, son of Zaia.

23–25 The twelfth month of the year: Sumu-abum is king.
Sealed by Gulluptum, daughter of [...].

Discussion

1–5: The actual adoption

The fact that only women are mentioned in this adoption contract points to a possible cultic status of Šimaia. Except for the letter FAOS 2 157, which mentions the *nadiātum* of Ninurta as a group and thus illustrates that they were numerous, female cultic professions are never mentioned in Kisurra documents. Maybe this lack of titles in the Kisurra tablets must be seen in the light of the increasing "professionalization" observed in economic documents in the course of the Old Babylonian period. Anyhow, there is reason to believe that Šimaia is a *nadītum* woman or has another cultic status.

mu.ni after the adoptee's name points to the fact that she is a former slave girl. This hypothesis is confirmed by the penalty imposed on Šimaia, the adoptive mother, if she does not fulfill her obligations.

The expression nam.dumu.ni.šè in.KU occurs in the fragmentary adoption document TIM 5 7 as well. Therefore, I believe that this document also originates from Kisurra. The standard phrase for adoption is *ana marūtim leqûm*, in Sumerian nam.dumu.ni.šè šu—ti. Perhaps read the sign KU as ḫun, "to hire."

As will be observed in the discussion of the next sentences, the Sumerian used in the economic texts from Kisurra is very characteristic and it is carelessly written.

6–10: Contract not fulfilled by the adoptive daughter

The sign DU is used in line 9 and line 14 to render the Sumerian verb du_{11}, a phenomenon occurring in FAOS 2 1 as well (Kienast 1978, Part II, 4–5).

Line 10 is the Sumerian version of the expression *ana kaspim nadānum* (CAD N/1, 49 *s.v. nadānum* 1h 1′). The verbal chain ba.an.mu.sum reflects corrupt Sumerian. The form probably originates from the verbal chain ba.an.sum.mu. In BM 85456, the -mu- may have been wrongly "corrected" as a conjugation prefix, whereas it originally indicates the *marû* stem in the original verbal form.

11–15: Contract not fulfilled by the adoptive mother

In the rendering of the standardized phrase "you are not my daughter" in this contract, the third person possessive suffix -ni is wrongly added, probably analogous to the comparable phrasing nam.dumu.ni.šè in line 5, where it is used correctly.

Line 15 is an incomplete translation of the Akkadian clause *eli* PN *mimma ul īšu*, correctly rendered in Sumerian by ugu PN níĝ.nam.me.en nu.tuk, "(s)he does not have any claim on PN." This clause confirms that Lamassatum, the adoptive daughter, is a manumitted slave girl, otherwise Šimaia would "forfeit house and gear" if she did not uphold the contract.

16–22: List of witnesses

23–25: Date

In the documents from Kisurra, the names of kings of neighboring cities are preceeded by an AN sign. The local kings are not deified.

Sommerfeld (1983, 220–221) and Horsnell (1999, part II, 48)[3] claim that this year-name, which is encountered only in documents from Kisurra, and which is the only year-name of Sumu-abum occuring in documents from the town, refers to the first year after Sumu-abum conquered the city. Sommerfeld places it around Sumu-abum's 12th or 13th regnal year.

However, year-names containing the name of the king followed by lugal.e only always refer to the first regnal year of a king (Damerow and Sigrist nd). Moreover, Sommerfeld bases his reconstruction on the assumption that the list of year-names reflects the correct order of Sumu-abum's regnal years and that Sumu-abum was Sumu-la-ēl's predecessor, and thus assumed power in the same year as Sumu-ēl. Recently (Goddeeris 2002, 319–324), I have demonstrated not only that Sumu-abum and Sumu-la-ēl were contemporaries — a fact acknowledged since the publication of some Tell ed-Dēr letters (al-Adami 1967) but not fully evaluated — but also that the order of the year-names in the lists is corrupt. Sumu-abum's first regnal year must not be identified with the "year in which he built the great wall of Babylon,"[4] and could rather be "the year in which Sumu-abum became king." Two questions remain unsolved, namely why this is the only year-name of Sumu-abum in Kisurra, and why this year-name is attested only in Kisurra.

The sequence of Sumu-ēl's and Sumu-abum's presence in Kisurra established by Sommerfeld (1983: 220–221) may be retained.

3 Where Horsnell discusses TIM 5 13, under the heading "unidentified year-names of Sumu-abum." However, he mentions the same year-name, this time written on YOS 14 128, under the heading "Sumu-abum 1," without further comments.

4 The reasons for this identification, discussed most recently Horsnell (1999, part I: 4), can be countered if we acknowledge that the year-name on the document (Gautier, Dilbat 1) belongs to Sumu-la-ēl (attested as his sixth year-name in the list) and that Sumu-la-ēl was the "sovereign" of Sumu-abum, by whom the oath is sworn.

BIBLIOGRAPHY

al-Adami, Kh.
1967 "Old Babylonian Letters from ed-Dēr," Sumer 23, 151–165.

Charpin, D.
1979 Review of S.D. Simmons, *Early Old Babylonian Documents* (YOS XIV). New Haven—London, in BiOr 36, 188–200.

1982 Review of Kienast 1978, in JAOS 102, 156–160.

Damerow, P. and M. Sigrist
nd *Mesopotamian Year-names: Neo-Sumerian and Old Babylonian Date Formulae*. http://www.mpiwg-berlin.mpg.de/Year-names/yn_index.htm/

Goddeeris, A.
2002 *Economy and Society in Northern Babylonia in the Early Old Babylonian Period (ca. 2000-1800)* (OLA 109). Leuven.

Horsnell, M.
1999 *The Year-names of the First Dynasty of Babylon*. McMaster University Press.

Kienast, B.
1978 *Die altbabylonischen Briefe und Urkunden aus Kisurra* (FAOS 2), Wiesbaden.

Kingsbury, E.
1980 Review of Kienast 1978, in BiOr 37, 63–66.

Sommerfeld, W.
1983 "Untersuchungen zur Geschichte von Kisurra," ZA 73, 204–231.

Ein neubabylonisches Rezept zur Berauschung und Ausnüchterung

Nils P. Heeßel — Heidelberg

Wo Menschen in geselliger Runde beisammen sitzen, gehören Bier, Wein oder Spirituosen oft zu den bevorzugten Getränken. Der Genuß von Alkohol wurde auch in der mesopotamischen Gesellschaft als Steigerung der Lebenslust angesehen,[1] wie ein sumerisches Sprichwort illustriert: „Wer das Bier nicht kennt, weiß nicht, was gut ist; (erst) das Bier macht ein Haus angenehm."[2] In einem sumerischen Trinklied wird ebenfalls die Freude am Biertrinken lebendig zum Ausdruck gebracht: „Mundschenk, Diener und Brauer sollen aufwarten, während ich mich dem Überfluß an Bier zuwende, mich herrlich, mich wundervoll fühle. Beim Bier bin ich glücklich, beim Alkohol bin ich froh!"[3] Es ist der Rausch infolge des Genusses von Bier und Wein, der hier gesucht wird. Im Rauschzustand entspannt man von der Mühsal des Lebens und vergißt Ärger und Zorn.

Doch die berauschende Wirkung des Alkohols hat auch ihre Schattenseiten. Können geringe Mengen von Bier oder Wein entspannen und versöhnlich stimmen, so führt der Genuß von größeren Mengen zur starken Beeinträchtigung des Urteilsvermögens und zu Ausfallerscheinungen.[4] Während die in einem Brief erwähnten „auf ihren Pferden herumjagenden Säufer inmitten von Kalḫu" ein nicht ungefährliches Ärgernis darstellen,[5] kann die Aggressivität von betrunkenen Soldaten noch größere Probleme verursachen. Ein Briefschreiber beklagt sich: „Diese drei Männer sind Säufer; wann immer sie betrunken sind, kann keiner von ihnen das Eisenschwert von seinem Gesellen fernhalten."[6] Über-

1 Zur sozialen Bedeutung der Alkoholgenusses siehe St.M. Maul, „Der Kneipenbesuch als Heilverfahren", in D. Charpin und F. Joannès, *La circulation des biens, des personnes et des idées dans le Proche-Orient ancien. Actes de la XXXVIIIè Rencontre Assyriologique Internationale (Paris, 8–10 juillet 1991)*, Paris 1992, 389–396, und J. Bottéro, „Boisson, banquet et la vie sociale en Mésopotamie", in L. Milano (Hrsg.), *Drinking in Ancient Societies. History and Culture of Drinks in the Ancient Near East* (HANES VI), Padua 1994, 3–13.

2 W. Röllig, *Das Bier im alten Mesopotamien*, Berlin 1970, 77.

3 M. Civil, „A Hymn to the Beer Goddess", in *Fs. Oppenheim*, Chicago 1964, 71, Z. 70–74. Die Passage ist auch von W. Röllig, *Das Bier im Alten Mesopotamien*, Berlin 1970, 75, übersetzt worden.

4 Zur Trunkenheit in Mesopotamien siehe W.v. Soden, „Trunkenheit im babylonisch-assyrischen Schrifttum", in *Al-Bahit. Fs. Joseph Henninger* (Studia Instituti Anthropos 28), St. Augustin 1976, 317–324 und W. Farber, „Drogen im alten Mesopotamien — Sumerer und Akkader", in G. Völger (Hrsg.), *Rausch und Realität. Drogen im Kulturvergleich*, Köln 1981, 270–272 und 289–291.

5 CT 53 829, u.R.–Rs. 4. Siehe S. Parpola, *The Correspondance of Sargon II, Part I* (SAA 1), Helsinki 1987, 123, Nr. 154. Der Beleg zeigt, daß der Gebrauch von Fortbewegungsmitteln im angetrunkenen Zustand nicht erst in der Moderne ein Problem darstellt.

6 ABL 85, Rs. 6. Siehe CAD Š/1 157b.

haupt scheint der Alkoholgenuß in der Truppe überaus beliebt gewesen zu sein, wie eine Anmerkung über die Bedürfnisse der Soldaten zeigt: „Womit sollen wir sie (d.h. die Soldaten) verköstigen? Sie werden essen wollen! Sie werden Wein trinken wollen bis zur Trunkenheit!“[7] Übermäßiger Alkoholgenuß ist aber nicht nur ein bei einfachen Soldaten auftretendes Phänomen, auch gesalbte Häupter können dabei über die Stränge schlagen. Der babylonische König Adad-šumu-uṣur kanzelt seine Kollegen, die Könige Aššur-narāri III. und Ilu-ḫadda, in Assyrien mit den Worten ab: „Durch den Verlust der Selbstbeherrschung, andauerndes Betrinken und Unüberlegtheit kam euer Verstand immer wieder durcheinander.“[8]

Angesichts der nicht unerheblichen Folgen von Trunkenheit darf man wohl erwarten, daß der Beschwörer (*āšipu*), „der über das Leben der Menschen wacht“,[9] oder der Heilkundige *asû* über Mittel und Wege verfügten, den Rauschzustand zu kurieren und für schnellere Ausnüchterung zu sorgen. Tatsächlich findet sich unter den zahlreichen Tontafeln der „Sippar“-Sammlung[10] des British Museum in London eine Tontafel, die nicht nur zwei Rezepte zur Ausnüchterung eines Betrunkenen, sondern auch ein Rezept zur Berauschung einer nüchternen Person enthält.[11]

BM 59634 (82–7–14, 4044)

Vs.	1	[*šá-ki*]-ʳ*ru ana ṣu-um-mi-i*	Um einen Betrunkenen nüchtern zu machen, gibst du ihm altes? … einer Gazelle zu trinken und er wird nüchtern. Dito (= um einen Betrunkenen nüchtern zu machen), zerstößt du ungekochte Pistazien-Nüsse in Wasser, seihst (sie) durch, gibst (es) ihm zu trinken und er wird nüchtern.
	2	ʳx SUMUN *šá* MAŠ.DÀ	
	3	ʳNAG-*šú-ma i-ṣa-am-mu*	
	4	DIŠ KI.MIN *bu-ṭu-na-ta*	
	5	*la ba-áš-le-e-tú*	
u.R.	6	*ina* A.MEŠ SÚD *ta-šá-ḫal*	
Rs.	7	NAG-*šú-ma*	
	8	*i-ṣa-am-mu* (Strich)	
	9	*ṣa-mu-u a-na šu-uk-ku-ru*	Um einen Nüchternen betrunken zu machen, zerstößt du *rapādu*-Pflanze in Feinbier, seihst es durch, auf leerem Magen gibst du es ihm zu trinken und er wird betrunken werden.
	10	ú*ra-pa-du ina ku-ru-un-nu*	
	11	[SÚ]D *ta-šá-ḫal*	
	12	[NU *pa*]-*tan* NAG-*šú-ma*	
o.R.	13	[*i*]-*šak-kìr* (Strich)	

7 A. Livingstone, *Court Poetry and Literary Miscellanea* (SAA 3), Helsinki 1989, 120, Nr. 50, Z. 24 („Na'id-Šiḫu-Epos“).

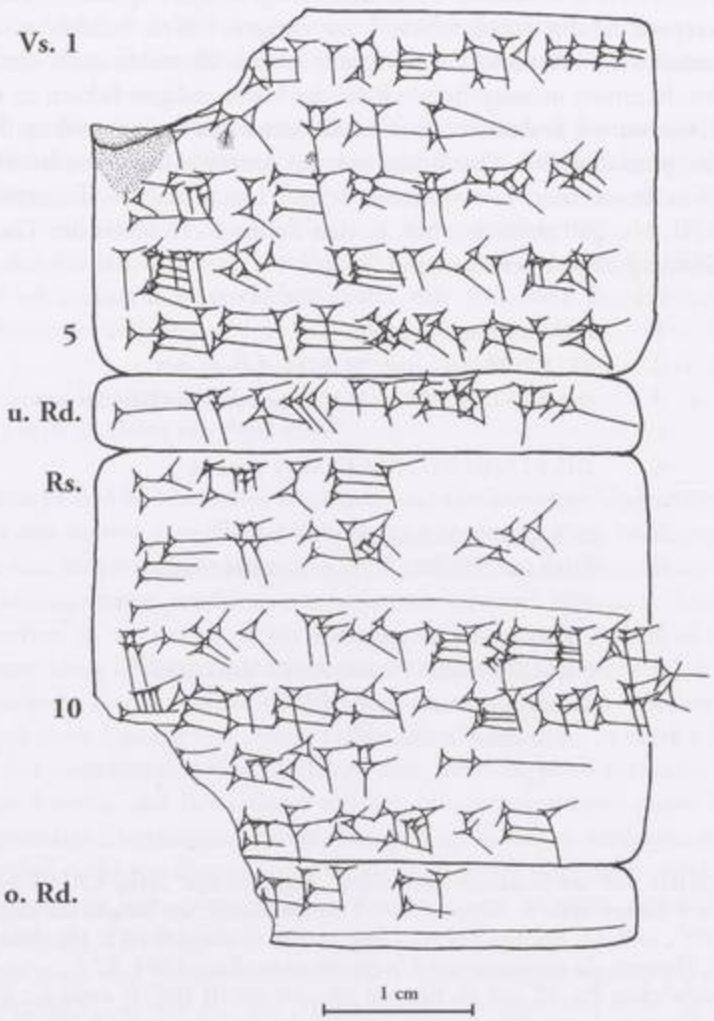
8 Übersetzung mit Änderungen nach E. Weidner, *Die Inschriften Tukulti-Ninurtas I. und seiner Nachfolger* (BAfO 12), Graz 1959, 48, Nr. 42, Z. 6–7, und W. v. Soden, *Al-Bahit. Fs. Joseph Henninger*, 318f. Vgl. auch CAD M/1 399b.

9 I.L. Finkel, „Adad-apla-iddina, Esagil-kīn-apli, and the Series SA.GIG“, in E. Leichty (Hrsg.), *A Scientific Humanist*. Fs. A. Sachs, Philadelphia 1988, 143–159, bes. 148, A 69, und N.P. Heeßel, *Babylonisch-assyrische Diagnostik* (AOAT 43), Münster 2000, 104.

10 Der allergrößte Teil der umfangreichen 82–7–14-Sammlung stammt aus Sippar, doch finden sich auch einzelne Tafeln aus anderen Orten. Siehe J.E. Reade, „Rassam's Babylonian Collection: The Excavations and the Archives“, in E. Leichty, *Catalogue of the Babylonian Tablets in the British Museum VI: Tablets from Sippar 1*, London 1986, XXXIIIa.

11 Die Tafel BM 59634 wird mit freundlicher Erlaubnis der Trustees des British Museum publiziert.

BM 59634



Obwohl die gut erhaltene Tontafel im Breitformat nur an der oberen linken Ecke leicht beschädigt ist, fällt es schwer, den Anfang der zweiten Zeile zu ergänzen. Der Platz reicht höchstens für die Ergänzung eines Zeichens, wahrscheinlich sind die erhalten Zeichenspuren vor dem Zeichen BAD jedoch als Ende dieses Zeichens aufzufassen. Da die in dieser Zeile erscheinende Ingredienz dem Patienten unaufbereitet zu trinken gegeben wird, muß es sich um eine Flüssigkeit handeln. Wird das Zeichen GAR als das dem Genitiv vorangestellte Determinativpronomen aufgefaßt, muß das vorhergehende Zeichen BAD logographisch verstanden werden, da hier ein Akkusativ zu erwarten ist. Eine Lesung Ì.SUMUN erscheint möglich, wenn auch nicht ganz zu den Zeichenspuren passend, jedoch ist „ranziges Fett einer Gazelle" keine Flüssigkeit, die getrunken werden kann. Zahlreiche weitere Ingredienzen enthalten die Angabe, daß sie von einer Gazelle stammen, doch läßt sich keine dieser sicher oft Decknamen für Pflanzen darstellenden Rezeptbestandteile mit

den erhaltenen Zeichenresten in Einklang bringen.[12] Es kann nicht ausgeschlossen werden, daß das Zeichen BAD an dieser Stelle *dāmu*(MÚD) „Blut" zu lesen ist und davor, was allerdings äußerst ungewöhnlich wäre, eine Mengenangabe erscheint. Das Blut von Tieren wird in Rezepten häufig verschrieben;[13] in einigen Fällen handelt es sich hierbei sicher um Decknamen für Pflanzen,[14] andererseits konnte Blut aber auch direkt zu Trinken gegeben werden. In einem neuassyrischen Brief des Heilkundigen Ikkaru an den König Asarhaddon beschreibt er, wie er dessen Sohn Šamaš-šum-ukīn drei Tage lang Blut zu trinken gibt.[15]

Ein ganz ähnlicher Text findet sich auf der im Museum zu Istanbul unter der Nummer A 215 aufbewahrten, in assyrischer Schrift beschriebenen Tontafel, die Franz Köcher in BAM III, Nr. 260 publiziert hat. In den Zeilen 1–10 bietet der Text ebenfalls Rezepte zur Berauschung und Ausnüchterung.[16]

1 DIŠ NA *a-na šu-uk-ku-ri*
2 KU.KU ^{giš}TÚG *ina* ^{túg}GADA *t[a]-ra-kás*
3 *ina* GEŠTIN ŠUB-*di* NAG-*ma i-šak-kir* (Strich)

4 DIŠ KI.MIN KU.NIM KI.MIN (Strich)

5 DIŠ KI.MIN ÉLLAG *šá-g[a]$^{?}$-al-te*[17]
6 SÚD *ina* GEŠTIN ŠUB-*di* KI.MIN (Strich)

7 DIŠ NA *a-na ṣu-um-me-e*
8 NUMUN ^{ú}GEŠTIN.KA$_5$.A GU ^{r}GIG.MEŠ[18]
9 *sa-al-qa-te e-ta$^{1?}$-na-ka[l$^{?}$]*[19]
10 *i-ṣa-am-mu* (Strich)

12 Zu den von der Gazelle stammenden „Ingredienzen" siehe CAD Ṣ 43b f. und zu Decknamen für Pflanzen siehe F. Köcher, „Ein Text medizinischen Inhalts aus dem neubabylonischen Grab 405", in R.M. Boehmer et al.: *Uruk — Die Gräber* (AUWE 10), Mainz 1995, 203–217.
13 P. Herrero, *La thérapeutique Mésopotamienne*, Paris 1984, 52.
14 Siehe oben Fn. 12 und als Beispiel URU.AN.NA III 106: Ú *a-mu-še* | AŠ MÚD *ḫab-li*.
15 S. Parpola, *Letters from Assyrian and Babylonian Scholars* (SAA 10), Helsinki 1993, Nr. 328, Rs. 12–17.
16 Der Rest der Tafel enthält in Zeile 11 einen leider sehr beschädigten Herkunftsvermerk der vorhergehenden Rezepte, ein Rezept gegen Husten (*guḫḫu*, Z. 12–15) und den Vermerk, daß es sich bei der Tafel um eine *u'iltu*-Tafel des Kiṣir-Aššur handelt.
17 Eine Lesung des beschädigten Zeichens als ga paßt zu den Spuren; was allerdings die Niere einer Schlachtung in diesem Zusammenhang genau bedeuten könnte, bleibt unklar. Kann es sich dabei um eine frische Niere handeln? An eine Ergänzung zu *šá-la^{1}-al-te* im Sinne von „zwei bis drei (Nieren)" ist weniger zu denken, da dies nicht zu den erhaltenen Spuren paßt und das Bezugswort im Plural und *šalāš* aufgrund der Geschlechtspolarität im Maskulin zu erwarten ist. Die beschädigten Zeichen haben unter Form (*šá*) *sa-al$^{?}$-te* ein eigenes Lemma in CAD S 106a erhalten, obwohl dort die Form als eventuell korrupt angesehen wird.
18 Die Lesung von GU GIG.MEŠ als Hanf (*qû*) und Weizen (*kibtu*) ist unsicher; man würde für *kibtu* die Schreibung ŠE.GIG.MEŠ erwarten. Vielleicht ist auch von einem sonst nicht zu belegenden Logogramm GU.GIG.MEŠ auszugehen.
19 Zur Lesung *e-ta-na-kal* siehe CAD S 103b.

1–3 Um einen Mann betrunken zu machen, bindest du Pulver vom Walnußbaum in ein Leinenkleid, legst (es) in Wein, gibst es (ihm) zu trinken und er wird betrunken.
4 Um dito (machst du es) ebenso, (nur mit) der *saggilatu*-Pflanze.
5–6 Um dito zerstößt du die Niere einer Schlachtung[?], in Wein legst du es, dito.
7–10 Um einen Mann nüchtern zu machen, ißt er wiederholt Samen der 'Fuchswein'-Pflanze, Hanf, Weizen (sowie) gekochten Schrot, (und) er wird nüchtern.

Ein Duplikat zu den beiden Rezepten der Zeilen 1–4 in A 215 ist in A 3488 (BAM IV, Nr. 414), Rs. 7′–8′, einer neuassyrischen Tafel mit Rezepten zur Heilung von Erkrankungen der Harnwege, erhalten:

7′ DIŠ NA *ana šu-uk-ku-r*[*i* …]
8′ DIŠ KI.MIN KU.NIM *ina* tú[ŠGADA[20] …]

Das neu edierte Rezept BM 59634 belegt eindeutig, daß die bisherige Übersetzung von A 215, Z. 7, als *amēla ana ṣummê* „um einen Mann durstig zu machen" zu revidieren ist.[21] Durch den Gegensatz mit *šukkuru* „betrunken machen" und *šākiru* „der Betrunkene" muß *ṣummû* in diesem Zusammenhang „nüchtern machen, ausnüchtern" bedeuten. Einen Betrunkenen durstig machen zu wollen ist nichts anderes, als Eulen nach Athen zu tragen. Das Verb *ṣamû* bedeutet daher in bestimmten Kontexten „nüchtern sein/werden", bzw. im Dopplungsstamm „nüchtern machen, ausnüchtern". Der gleiche Gegensatz von betrunken und nüchtern liegt auch einer Passage von „Ištars Höllenfahrt" zugrunde, in der die Unterweltsgöttin Ereškigal den zwischen den Geschlechtern stehenden *kurgarrû* verflucht:[22] *šakru ù ṣa-mu-ú lim-ḫa-ṣu le-et-ka* „der Betrunkene wie der Nüchterne mögen deine Wange schlagen".[23] Die tiefgründige Demütigung dieser Passage liegt in der so niedrigen sozialen Stellung des *kurgarrû*, daß nicht nur Betrunkene, die sowieso gerne über die Stränge schlagen, sondern sogar Nüchterne keinen moralischen Anstoß daran nehmen, ihn öffentlich durch Schläge ins Gesicht zu erniedrigen.

Der Anwendungsbereich von diesen beiden kleinen Rezeptsammlungen ist leider auf den Tontafeln nicht vermerkt, so daß wir auf Mutmaßungen angewiesen sind. Sicherlich gab es im Leben der babylonischen Heilkundigen manche Situation, in der Rezepte zur Ausnüchterung oder Berauschung praktisch sein konnten. Bei dringenden Terminen wie

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20 Die Spuren nach KU.NIM könnten auch als GADA gedeutet werden, eine Entscheidung ist nur durch eine Kollation des Originals zu fällen.
21 So AHw 1081b, CAD Ṣ 95b und F. Köcher, BAM III, S. XX.
22 CT 15 47, Z. 108.
23 Dieser Beleg veranlaßte 1962 das CAD Ṣ 95 dazu, erstmals eine Bedeutung „nüchtern (sober)" für das Adjektiv *ṣamû* anzusetzen. Dem folgen auch die neuesten Übersetzungen, vgl. G.G.W. Müller, TUAT III, Gütersloh 1993, 765, Z. 108 und B. Foster, *Before the Muses* I, Bethesda, Maryland, 1993, 408. Anders („der Durstige") übersetzen R. Labat, *Les religions du Proche-Orient asiatique*, Paris 1970, 264, Z. 28; E. Reiner, *Your Thwarts in Pieces — Your Mooring Rope Cut*, Michigan 1985, 44; J. Bottéro, *Lorsque les dieux faisaient l'homme*, Paris 1989, 323 und V. Haas, *Babylonischer Liebesgarten*, München 1999, 75.

Staatsgeschäften oder Geschäftsverhandlungen konnte es wohl vorkommen, daß Herrscher, ihre Beamten oder Geschäftsleute nach durchzechter Nacht wieder einen klaren Kopf bekommen mußten. Andererseits kann es in den gleichen Situationen — diplomatische oder geschäftliche Verhandlungen — grundsätzlich von Nutzen sein, ein sicheres Rezept zur Berauschung des jeweiligen Verhandlungspartners zu kennen, auch wenn wir den Babyloniern nicht unterstellen wollen, daß sie zu solch drastischen Maßnahmen griffen.[24]

Allerdings läßt die Gegenüberstellung von Ausnüchterung und Berauschung in den Rezepten besonders an eine Anwendung im medizinischen Bereich denken. Tatsächlich werden ja die Symptome der Trunkenheit medizinisch wahrgenommen und wie andere Krankheitssymptome beschrieben und behandelt. Zwei Rezeptanweisungen mit solchen Symptombeschreibung finden sich in der zweiten Tafel der medizinischen Serie *suālu*:

K 71b iii 49–54 (BAM 575)[25]

49 DIŠ NA KAŠ.SAG NAG-*ma* SUḪUŠ.MEŠ-*šú pa-al-qa di-ig-la ma-a-ṭi ana* TI-*šú* NUMUN ^{ú}SIKIL NUMUN ^{ú}AŠ NUMUN ^{giš}*bi*$^{?}$-[*ni*]

50 NUMUN ^{ú}*am-ḫa-ra* NUMUN ^{ú}AŠ.BAD 5 Ú.ḪÁ ŠEŠ 1-*niš* SÚD *ina* GEŠTIN SÌG-*aṣ* NU *pa-tan* NAG-*ma ina-eš* $^{?}$ (Strich)

51 DIŠ NA KAŠ NAG-*ma* SAG.DU-*su* DAB.DAB-*su* INIM.MEŠ-*šú im-ta-na-áš-ši ina* DUG_4.DUG_4-*šú ú-pa-áš-šaṭ*

52 *ṭè-en-šú la ṣa-bit* LÚ BI IGI.II-*šú* GUB-*za ana* TI-*šú* ^{ú}IGI-*lim* ^{ú}IGI-*niš* ^{ú}*tar-muš* ^{ú}ḪAR.ḪAR

53 ^{ú}SIKIL ^{ú}AŠ KA.A.AB.BA ^{ú}NU.LUḪ.ḪA NUMUN ^{ú}NÍG.GÁN.GÁN ^{ú}*kam-ka-du* ^{ú}*eli-kul-la* 11 Ú.ḪÁ ŠEŠ

54 1-*niš* SÚD *ina* Ì.GIŠ *u* KAŠ *ana* IGI ^{d}*Gu-la tuš-bat ina še-rim la-am* ^{d}UTU MÚ-*ḫi la-am ma-am-ma iš-ši-qu-šú* NAG-*ma ina-eš* (Strich)

49–50 Wenn ein Mann Bier erster Qualität trinkt und dann seine Beine wie zerschlagen sind, seine Sehkraft gering ist; zu seiner Genesung: ... (es folgen Samen von fünf Pflanzen), (diese) fünf bitteren Pflanzen(teile) zerstößt du zusammen, in Wein rührst du es, auf nüchteren Magen trinkt er es und wird gesunden.

51–54 Wenn ein Mann Bier trinkt und er dann Kopfschmerzen hat (wörtl.: sein Kopf ihn andauernd packt), er seine Rede immer wieder vergißt, beim Reden sich widerspricht, keinen Entschluß fassen kann, die Augen dieses Mannes stehen;[26] zu seiner Genesung: ... (es folgen elf Pflanzen), (diese)

24 Dies setzt voraus, daß die verwendeten Ingredienzen nicht herauszuschmecken waren. Da im Zuge von Verhandlungen der Konsum von Alkohol wohl nicht unüblich war und sich so Gelegenheit geboten haben mag, den Rauschzustand beim Verhandlungspartner auf herkömmlichem Wege herbeizuführen, würde eine solche Vorgehensweise, die, dies sei betont, nicht textlich nachzuweisen ist, von einiger Verzweiflung zeugen.

25 Ein Duplikat zu dem Rezept Z. 51–54 findet sich in BAM 59, Z. 21–25.

26 Zu „stehenden Augen" siehe J.C. Fincke, *Augenleiden nach keilschriftlichen Quellen* (Würzburger medizinhistorische Forschungen 70), Würzburg 2000, 112 und 233.

elf bitteren Pflanzen(teile) zerstößt du zusammen in Öl und Bier, vor (dem) Gula(stern) läßt du es über Nacht stehen, am Morgen, bevor die Sonne aufleuchtet, bevor noch irgend jemand ihn geküßt hat, trinkt er es und er wird gesunden.

Während sich diese über die Nacht hinziehenden Behandlungsanweisungen vor allem gegen den gefürchteten, nach dem Rausch einsetzenden „Kater", also die Folgen der Trunkenheit, richten, zielen die kleinen Rezepte in BM 59634 und A 215 auf die schnelle und direkte Ausnüchterung bzw. Trunkenheit ab. Es ist durchaus möglich, daß im medizinischen Kontext die Berauschung, vor der Erfindung anderer Narkosemittel, der Herbeiführung der Schmerzunempfindlichkeit diente. Da manche therapeutische Behandlung äußerst schmerzhaft gewesen sein dürfte, konnte der Rauschzustand zumindest eine gewisse Unempfindlichkeit des Zentralnervensystems bewirken.[27] Hier ist nicht so sehr an Schmerzbetäubung bei direkten chirurgischen Eingriffen[28] zu denken, sondern an schmerzhafte Behandlungsmethoden wie z.B. bei Zahnschmerz oder Harnwegserkrankungen. Nach erfolgter Behandlung konnte der Patient dann wieder ausgenüchtert werden.

Es stellt sich natürlich die Frage, ob die in den Rezepten verabreichten Ingredienzen tatsächlich die gewünschten Wirkungen erzielen konnten. Zu einer abschließenden Beurteilung wird man hierbei kaum gelangen können, da wir leider bei den meisten babylonischen Pflanzennamen weit davon entfernt sind, ihre modernen Entsprechungen sicher identifizieren zu können. Bei zwei der genannten Rezeptbestandteile können jedoch bestimmte Wirkungsweisen nachgezeichnet werden. Das in BM 59634, Z. 4–8, genannte Rezept schreibt vor, ungekochte Pistazien in Wasser zu zerstoßen, sie durchzuseihen und das Wasser den Patienten zur Ausnüchterung trinken zu lassen. Pistazien sind überaus reich an Fetten und die Zufuhr von Fett bei Alkoholkonsum führt zu einer Verlangsamung der Resorption des Alkohols aus dem Magen und dem Darm.[29] Die Verabreichung von fetthaltigen Substanzen kann also tatsächlich dazu dienen, das Ansteigen der Alkoholkonzentration zu verlangsamen. Eine tatsächliche Verstärkung der Elimination, d.h. des

27 Vgl. etwa G. Kuschinsky und H. Lüllmann, *Kurzes Lehrbuch der Pharmakologie und Toxikologie*, 8. Auflage, Stuttgart 1978, 406: „Am Zentralnervensystem wirkt Äthanol grundsätzlich nicht anders als Narkosemittel, wie zum Beispiel Äther. So lassen sich wie mit Äther alle Stadien der Narkose auslösen". Alkohol kann in Babylonien durchaus als Anästhetikum gebraucht worden sein, da andere Narkosemittel wie zum Beispiel Opium den Babyloniern nicht zur Verfügung standen, vgl. A.D. Krikorian, „Were the Opium Poppy and Opium Known in the Ancient Near East?", Journal of the History of Biology 8 (1975), 95–114. Auch der Konsum von Haschisch läßt sich im Alten Orient nicht sicher nachweisen, siehe W. Farber, „Drogen im alten Mesopotamien — Sumerer und Akkader", in G. Völger (Hrsg.), *Rausch und Realität. Drogen im Kulturvergleich*, Köln 1981, 271.

28 Zur Frage, ob es chirurgische Eingriffe in Mesopotamien gegeben hat, siehe H. Freydank, „Chirurgie im alten Mesopotamien?", Altertum 18 (1972), 133–137, und R.D. Biggs, „Medicine, Surgery, and Public Health in Ancient Mesopotamia", in J.M. Sasson et al. (Hrsg.), *Civilizations of the Ancient Near East*, Bd. III, New York 1995, 1911–1924.

29 Prinzipiell ist es gleich, ob Fett vor oder während des Alkoholkonsums aufgenommen wird. Der Alkoholkonsum darf dabei natürlich ein gewisses Maß noch nicht überschritten haben, da sonst das Fett ein Vomieren des Mageninhalts zur Folge haben kann.

Abbaus des Alkohols in der Leber, ist dagegen nicht möglich. Dieses Rezept führt daher zu einer Verlangsamung des Rauschzustandes, eine tatsächliche schnelle Ausnüchterung kann damit jedoch nicht erzielt werden. In einem Rezept der Tafel A 215 (Z. 4) wird vorgeschrieben, die wahrscheinlich alkaloide[30] *saggilatu*-Pflanze in ein Leinenkleid zu wickeln, dies in Wein zu legen und dann dem Patienten den Wein zu geben, damit er betrunken wird. Beim Alkoholkonsum verlangsamt sich die Atmung, was zu einer Steigerung des Kohlendioxidspiegels und damit zu einer Veränderung des pH-Verhältnisses zugunsten des sauren Bereichs führt. Eine alkaloide Pflanze wirkt als basische Substanz ausgleichend auf das pH-Verhältnis, wodurch mehr Alkohol getrunken werden kann. Durch den höheren Alkoholkonsum kann seine anästhetische Wirkung länger ausgenutzt werden. In der Anwendung als Narkotikum hat daher der Rauschzustand nicht nur Schattenseiten, sondern er kann dem leidenden Menschen durchaus hochwillkommen sein.

Es ist mir eine besondere Freude, diese kurze Studie Christopher Walker zu widmen, der mich bei meinen Aufenthalten im Student's Room des British Museum als erster auf ein Bier eingeladen hat.

30 R. Campbell Thompson, *Dictionary of Assyrian Botany*, London 1949, 31–35.

Florilegium babyloniacum:

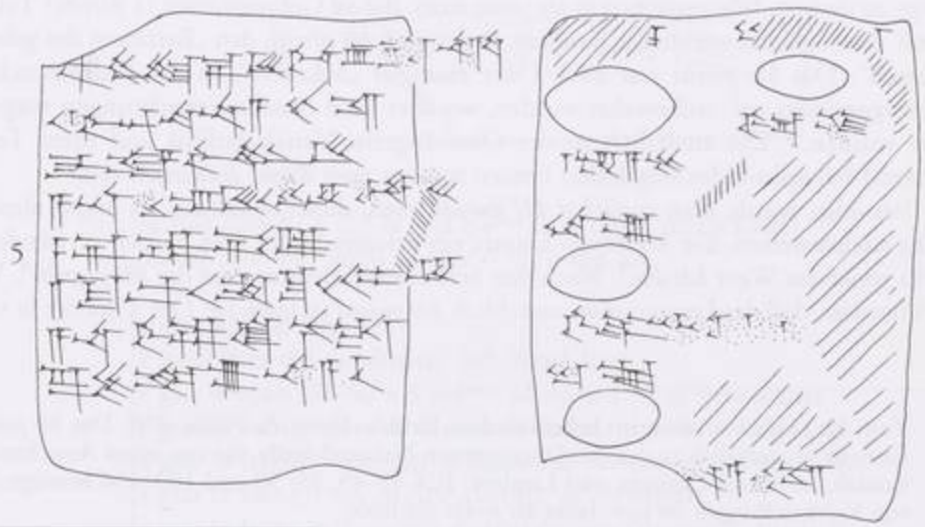
Neue Texte aus hellenistischer und spätachämenidischer Zeit

Michael Jursa — Wien

Die im folgenden mit Genehmigung der Trustees des British Museum edierten Texte aus der babylonischen Spätzeit lassen sich zum großen Teil in bekannte Dossiers und Archive einordnen, wobei sie nicht nur unsere Kenntnisse dieser Textgruppen in mehreren Aspekten erweitern, sondern auch eine Anzahl neuer Wörter und Ausdrücke und neuer realienkundlicher Informationen bieten.[1] Texte 1–8 stammen sicher aus dem Esangila-Archiv, und Nr. 9 ist entweder Teil eines Privatarchivs aus Babylon oder eines „Satellitendossiers" des Esangila-Archives. Nr. 10 ist in Hursangkalama geschrieben, könnte aber, da vom Zehnten Bēls die Rede ist, dennoch ebenfalls aus Babylon stammen. Wir widmen diese „Blütenlese" Christopher Walker mit Dank für seine vielfältige Unterstützung unserer Arbeiten im British Museum.

A. Ein Brief aus dem Esangila-Archiv

Nr. 1: BM 80711



1 Für Hinweise danke ich M. Weszeli.

1 ⌜im⌝ lúku$_4$.émeš mí*pir-sa-*⌜*ta*⌝*-na-a-tú*
u <<⌜f⌝>> mí.d*na-na-a-*tin-*iš*
gal-*tu*$_4$ *šá* mínarmeš
a-na ⌜fú⌝umbisagmeš *u* lúen-sig$_5$[me]š
5 *šá* é.sag.íl
2 túggada *u* [1]*et* túg*gam-mi-*[*d*]*at*
a-na misag.ki-kud.da
lu-še-bil-ú-na-a-šú

Rs. [na4kiš]ib — n[a4kiši]b
(Siegel) — (Siegel)
lden-a-mu — mikal-*tu*$_4$-[dgašan (?)]
na4kišib
(Siegel)
midumu-*ti-*⌜x x x⌝
na4kišib
(Siegel)
[mi.d*na-n*]*a-a-*tin-*iš*

„Brief der Tempelbetreter, der (weiblichen) *Initiierten* und von Nanaja-bulliṭiš, der Vorsteherin der Sängerinnen, an die Schreiber und die Beauftragten des Esangila. Man soll uns zwei Leinengewänder und ein *gammidatu*-Gewand für die ...-Offiziantin zukommen lassen.

(Siegelbeischriften auf der Rückseite:)

Siegel von Bēl-aplu-iddin, Siegel von Dannat[-Bēltu?], Siegel von Mārat?-[...], Siegel von Nanāja-bulliṭiš."

Dieser bemerkenswerte Brief, der nicht genauer als in die spätachämenidische oder (frühe) hellenistische Zeit zu datieren ist, enthält trotz seiner Kürze zwei Hapax Legomena. Die Übersetzung „Initiierte" ist ein Versuch, das Wort **pirsātānītu* auf etymologischem Wege zu deuten. Wir verstehen es als „eine Frau, die an Geheimnissen (< *pirištu*) Teil hat", somit als mögliches weibliches Pendant zu den *ērib bīt pirišti*, den „Betretern des geheimen Raumes". Das *bīt pirišti* war nach Doty eine Art „Sakristei", in der Kultgerätschaften, Göttergewänder usf. aufbewahrt wurden, wo aber auch rituelle Verrichtungen vorgenommen wurden.[2] Die zusätzlich zu der Obersängerin Nanāja-bulliṭiš und (dem Tempelbetreter) Bēl-aplu-iddin siegelnden Frauen müssen zwei dieser *Initiierten* sein.

lúen-sig$_5$ würde man zunächst *bēl dumqi* lesen, dieser Ausdruck ist n/spB aber sonst nicht nachzuweisen. Ein *bēl dumqi* könnte ein privater Stifter sein, jedoch verwendet man dafür sonst das Wort *kāribu*.[3] Nach den Schreibern erwartet man die *bēl piqnēti*[4]. YOS 7 125 beweist, daß das Logogramm tatsächlich *bēl piqitti* zu lesen ist: Der Titel des *ša rēš šarri*

2 Zum *bīt pirišti* vor allem im hellenistischen Uruk s. Doty, *Fs. Hallo*, 87ff. Das *bīt pirišti* des Esangila ist zusätzlich zu der von Doty zitierten Nabonid-Stelle, die von seiner Ausschmückung handelt, im Ritual Çağirgan und Lambert, JCS 43–45, 95: 50 und 100: 156 bezeugt; hier ist von Kulthandlungen im bzw. beim *bīt pirišti* die Rede.

3 Dazu Da Riva und Frahm, AfO 46/47, 165 und Jursa, *Bēl-rēmanni*, 66[264].

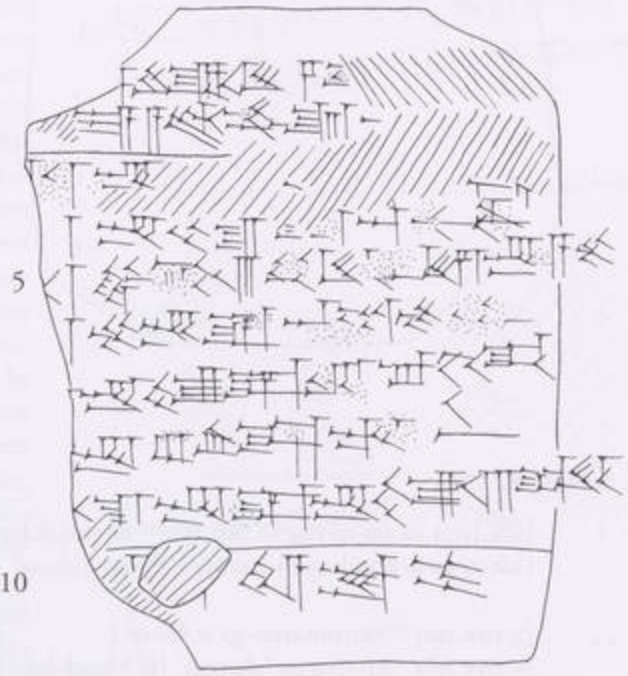
4 Vgl. z. B. BM 87240. 87266. 87285, CT 49 10, Joannès, TÉBR Nr. 120.

bēl piqitti Eanna Nabû-aḫu-iddin (Kümmel, *Familie*, 144) wird in Z. 4 ^{lú}en *pi-qit* <é>.an.na („Haplographie"), in 20, 10 und 23 aber ^{lú}en-sig$_5$ … geschrieben.

^{mí}sag.ki-kud.da in Zeile 7 können wir nicht deuten. Ein bekannter akkadischer (oder westsemitischer) Name läßt sich aus den Zeichen nicht gewinnen. Sollte es sich um eine Berufsbezeichnung im weitesten Sinn handeln, könnte man das Wort als Logogramm für ein (künstliches) sumerisches Lehnwort **sakkikuddītu* über sag.ki = *sakkû* „Riten" und kud(.da) = *parāsu* „abtrennen, absondern" zu erklären versuchen: „eine für (bestimmte) Riten isolierte Offiziantin"? Wie wäre dann die Relation dieses Wortes bzw. dieser Offiziantin zu **pirsātānītu*?

B. Spätachämenidische Rationenlisten aus dem Esangila-Archiv

Nr. 2: BM 78999



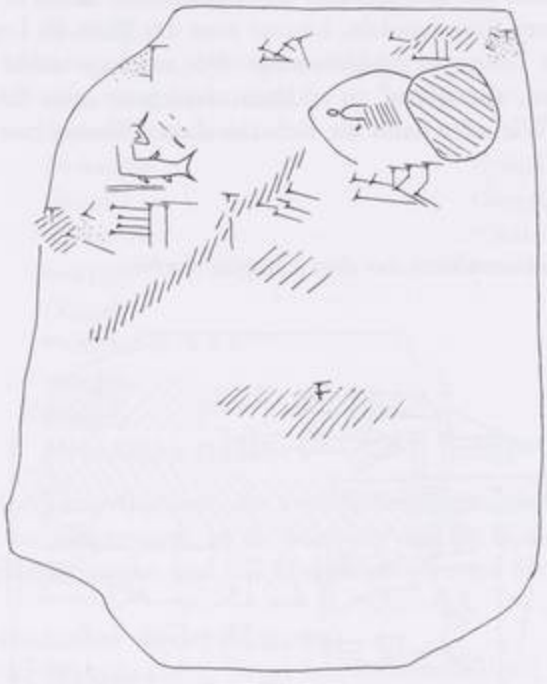
1 [še.bar pad.ḫi.a (?)] *šá* ^{lú}šu.ḫa^{meš} *šá* it[i.gan mu.x.kam]
[^{I}*da-rí*]-*ia-a-muš* lugal *ina* šu^{II} ^{If}d$^{?}$][en-tin-*su*]

[x gur 4 b]án ^{Id}en [ ]
[x gur] ^{Id}en-tin-*su* ^{f}dumu$^{?}$ [*šá*] ^{Id}bad-kád
5 [x gur 4 b]án ^{I}*lib-luṭ u* 3 še^{meš}-^{r}*šú* dumu$^{?meš}$ *šá* ^{Id}en-a-mu
[x gur (x bán)] ^{I}mu-^{d}en dumu *šá* ^{Id}amar.utu-mu-^{r}ùru$^{?}$
[x gur (x bán)] $^{f?}$$^{?d}$en-tin-*su* dumu *šá* ^{I}*tat-tan-nu u* dumu-*šú*
[x gur (x bán) ^{I}]^{d}en-nigin^{ir} dumu ^{r}*šá*$^{?}$ ^{Id}en-pab
[x gur (x bán) ^{I}ti]n-*su*-^{d}en dumu *šá* ^{Id}en-tin-*su u* 3 dumu^{meš}-*šú*

---

10 [pab x gur (x (pi))] ^{r}1 bán pad$^{?}$.ḫi.a iti.gan

Rs.	[^{na4}kiši]b	^{na4}kišib <<x>>
	(Siegel)	(Siegel)
	[^{d}e]n-tin-*su*	^{l}mu-^{d}en



Nr. 3: BM 87251

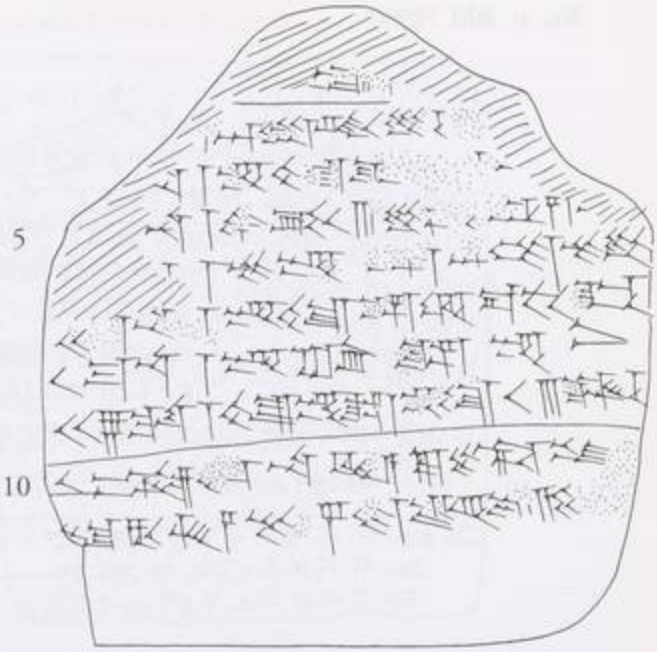
1 [sík.ḫi.a *lu-bu-uš-tu*$_4$ *šá* ^{lú}šu.ḫa^{meš} *šá* mu.4.kam]
[^{l}*da-ri-ia-a-muš* lugal] *ina* šu^{II} [^{d}en-tin-*su*]

[x ma.na] [^{l}^{d}amar.utu-gi *u* šeš-*šú* [ ]
[x ma.n]a ^{d}en-tin-*su* ^{r}dumu$^{?}$ [*šá* ^{d}bad-kád]
5 [x ma].na ^{l}*lib-luṭ u* 3 šeš$^{r meš}$-*šú* dumu$^{?meš}$(Text: *šú*) *šá* ^{l}[^{d}en-a-mu]
[x ma.n]a ^{l}mu-^{d}en ^{r}dumu *šá*$^{?}$ ^{d}amar.utu-mu-ùru
20 [m]a.na ^{d}en-tin-*su* dumu *šá* ^{l}*tat-tan-nu u* dumu-*šú*
10 ma.na ^{d}en-nigin^{ir} dumu *šá* ^{d}en-pab
28 ma.na ^{l}tin-*su*-^{d}en dumu *šá* $^{lf d}$en-tin$^{?}$-*su u* 3 dumu^{meš}-*šú*

10 pab 2 gú.un 20 [+x] ma.na sík.ḫi.a *lu-bu-uš-tu*$_4$
[*šá*] ^{lú}šu.ḫa^{meš} *šá* mu.4.kam ^{l}*da-ri-ia-a-m*[*uš* lugal]

Rs.	[^{na4}]kišib	[^{na4}kišib]
	(Siegel)	(Siegel)
	[^{d}e]n-tin-*su*	^{l}mu-^{d}e[n]

Diese beiden Rationenlisten aus dem Esangila-Archiv betreffen mit Ausnahme der an erster Stelle genannten Person dieselben Fischer.[5] Es sind die ersten Rationenlisten für diese Berufsgruppe aus diesem Archiv, die publiziert werden.[6] Die Datierung der achämenidenzeitlichen Texte aus diesem Archiv ist ein gewisses Problem. Die allermeisten Tafeln datieren aus der Regierungszeit eines Artaxerxes, aber welches der drei in Frage kommenden Könige dieses Namens? Auch bei Darius besteht die Wahl zwischen Darius II. und Darius III. Eine prosopographische Verbindung zwischen Texten aus der Regierungszeit eines Artaxerxes oder eines Darius und solchen aus der makedonischen Periode herzustellen ist u.W. bisher nicht gelungen; allerdings müßten die zahlreichen unpublizierten Tafeln aufgearbeitet werden, bevor derartige prosopographische Untersuchungen unternommen werden. Das Format der achämenidischen Tafeln unterscheidet sich jedenfalls nicht von jenem der späteren Texte; wir würden daher davon ausgehen, daß in der Regel Artaxerxes III. bzw. Darius III. gemeint sind, sofern keine gewichtigen Gründe dagegen sprechen.[7]

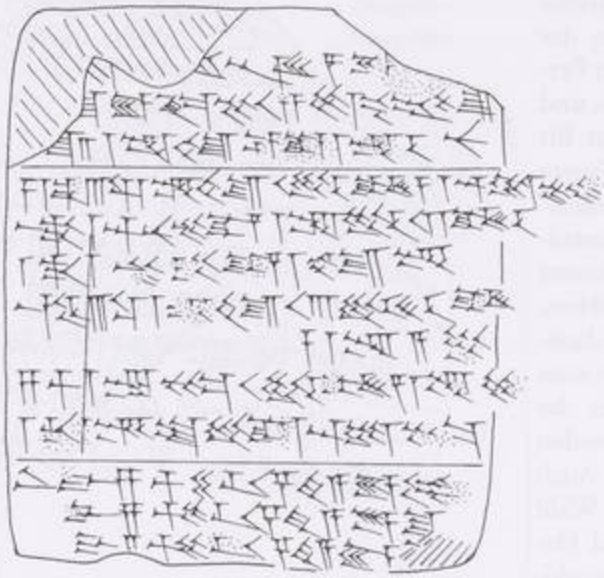


5 Ist Bēl-[...] in Nr. 2 der Bruder von Marduk-ušallim in Nr. 3?

6 Für das Esangila-Archiv im allgemeinen und diese Rationenlisten im besonderen s. vorläufig Zadok, AfO 44/45, 301ff. und Jursa, Iraq 59, 130ff.

7 Jahreszahlen über 5 bei Darius und über 21 bei Artaxerxes.

Nr. 4: BM 78997



1 [š]e.ʳbar¹ [*šá* l]ú̀ḫalᵐᵉš *šá* iti.[sig$_4$]
[iti.š]u iti.ne mu.1ʳ5¹.kam l*ár-tak-šat-su*
[*ina*] šuᴵᴵ ᵈen-tin-*su*-e dumu-*šá* ᵈen-*šú-nu*

3 (pi) 4 bán 3 *qa* ᵈen-tin-*su u* šeš-*šú* dumuᵐᵉš *šá* ᵈamar.utu-mu-mu
5 1 (gur) 5 bán ᵈbad-mu dumu *šá* ᵈen-ùru-*šú u* 2 dumuᵐᵉš-*šú*
1 (pi) 4 bán ˡmu-ʳurùʾ dumu *šá* ˡtin-*su*-ᵈen
1 (gur) 2 pi 3 *qa* ᵈen-tin-*su u* 3 šešᵐᵉš-*šú* dumuᵐᵉš
šá ᵈen-a-ùru
4 (pi) 1 bán ᵈag-numun-giš *u* šeš-*šú* dumuᵐᵉš *šá* ᵈen-kam
10 1 (pi) 4 bán ᵈen-ad-ùru dumu *šá* ᵈamar.utu-mu-giš

pab 4 (gur) 4 (pi) 1 bán še.bar pad.ḫi.a iti.sig$_4$
4 (gur) 4 (pi) 1 bán še.bar pad.ḫi.a iti.šu
4 (gur) ʳ4 (pi)¹ 1 bán še.bar pad.ḫi.a iti.[ne]

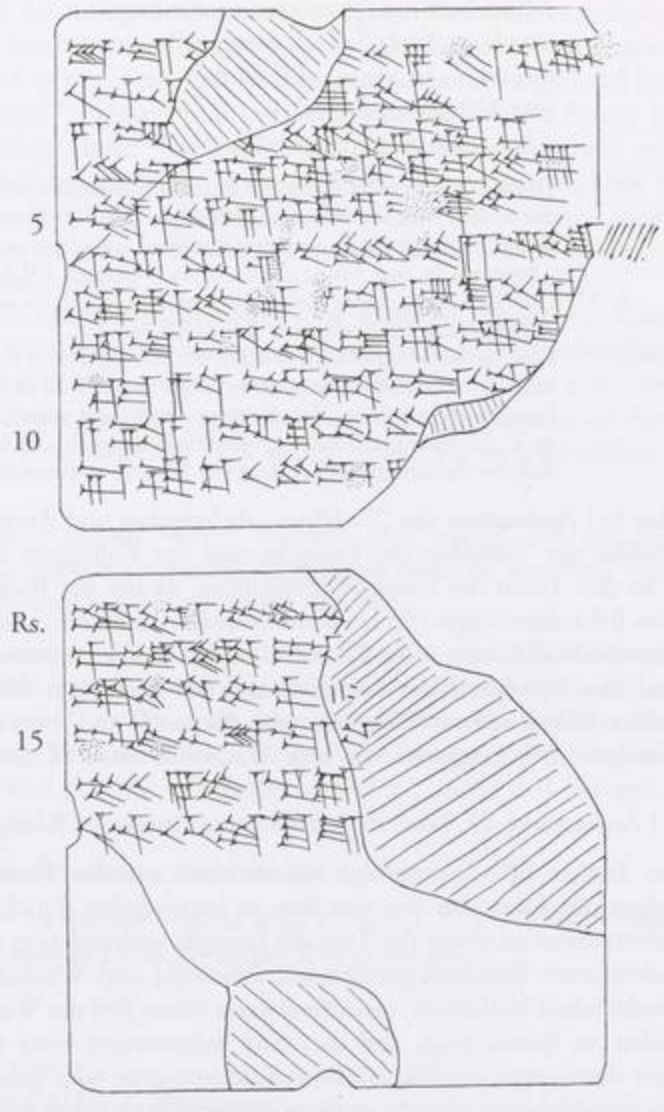
(Rückseite und Ränder unbeschrieben und ungesiegelt)

1 Das Zeichen nach lú könnte allenfalls auch BAD gelesen werden, aber Tote (úš) bekommen keine Rationen, und *labiru*(sumun) „alt" wird nicht für Menschen verwendet.
6 Einige Zeichen sind über eine Rasur geschrieben.

Dies ist die erste Rationenliste für Opferschauer, *bārû*, aus dem Esangila-Archiv.

C. Eine Inspektion der Opfer an den Toren des Esangila

Nr. 5: BM 79028



1 iti.apin ud.[x.kam m]u.27.kam ^{l}*si-lu-k*[*u*]
u ^{l}*an-t*[*i-uk-ku-s*]*u* lugal^{meš}
šá ^{ld}en-[*ku-ṣu*]*r-šú* ^{lú}šà.tam é.sag.gil
u ^{lú}ukkin *šá* é.sag.gil *nin-da-bu-ú*
5 *ina* ká^{meš} *šá* é.sag.gil ^{r}*i*^{1}*-mur-*$^{'}$
u ^{ld}en-*tat-tan-nu*-ùru ^{lú}mu a ^{ld}en-tin-*su*[-e$^{?}$]
nin-da-bu-ú šá iš-kun zì.mad.gá
al-la šim.li *at-ri al-la*
si-ma-a-tú il-ta-kan ana mu[*ḫ-ḫi*]
10 *a-ga-a* ^{ld}en-*ku-ṣur-šú* ^{lú}[šà.tam]
é.sag.gil *u* ^{lú}ukkin *š*[*á* é.sag.gil]

Rs. šim.li mu$^{ti.me}$[$^{\check{s}}$ *šá ina* igi-*šú i-mur-*']
2 bán šim.li *i-s*[*i*$^{?}$*-ru-šú ina* ud.x.kam]
šim.li *a*' 2 bán ^{r}*a*^{1}*-n*[*a* é.sag.gil]
15 *i-nam-din* iti.apin ud.[x.kam]
mu.27.kam ^{1}*si-lu-*[*ku*]
u ^{1}*an-ti-uk-ku-su* [lugal^{mes}]

3 Der *šatammu* des Esangila Bēl-kuṣuršu war nicht nur bisher unbekannt, er ist auch der bisher früheste namentlich belegte Inhaber dieser Funktion in der hellenistischen Zeit: vgl. die prosopographischen Listen bei van der Spek, AOAT 252, 438ff.

5 Allgemein zu den Toren des Esangila s. George, OLA 40, 83ff.

6 Das Patronym kann sowohl Bēl-balāssu-[iqbi] als auch Bēl-bullissu sein. *u* am Zeilenanfang leitet offenbar den Hauptsatz ein.

11–13 Eine zweite Möglichkeit, aus den erhaltenen Resten einen Sinn zu gewinnen, wäre, in Z. 11 am Ende *i-na* und in Z. 12 nur ^{me}[$^{\check{s}}$ *šá ina* igi-*šú*] zu ergänzen: „[vom] besagten Wacholder, [der zu seiner Verfügung steht], haben der *šatammu* und ...". In Z. 13 wäre *i-na*[*m-din* epigraphisch möglich; die Lesung würde aber bedeuten, daß die Zahlungsverpflichtung des Bäckers zweimal angegeben worden wäre.

„Am [x.] Arahsamnu des 27. Jahres, als Seleukos und Antiochos Könige (waren), als Bēl-kuṣuršu, der Verwalter des Esangila, und das Kollegium des Esangila die *nindabû*-Opfer an den Toren des Esangila überprüften, da hat der Bäcker Bēl-tattannu-uṣur, der Sohn des Bēl-balāssu-[iqbi (?),] bei den *nindabû*-Opfern, die er vorgenommen hat, über das angemessene Maß hinaus mehr Röstmehl als Wacholder verwendet. Deswegen haben Bēl-kuṣuršu, [der Verwalter] des Esangila, und das Kollegium des [Esangila] den besagten Wacholder, [der zu seiner Verfügung steht, überprüft und] zwei *sūtu* Wacholder [von ihm] ein[gefordert]. Die besagten zwei *sūtu* Wacholder wird er dem [Esangila] [am x. Tag] geben.

[x.] Arahsamnu, 27. Jahr, als Seleukos und Antiochos Könige (waren)."

Der Bäcker Bēl-tattannu-uṣur wurde einer subtilen Form der Veruntreuung von Tempelgut überführt: Bei den von ihm zu betreuenden Räucherungen im Rahmen von Opferzeremonien an einem der Tore des Esangila verwendete er die für das *nindabû*-Opfer vorgeschriebenen Räucheringredienzien, Röstmehl und Wacholderharz oder -holz, nicht im erforderlichen Verhältnis, sondern ersetzte einen Teil des Wacholders durch Röstmehl. Ein Gebet an Šamaš zeigt, daß dies eine Substitution einer teuren (und prestigiösen) Substanz durch eine vergleichsweise minderwertigere oder jedenfalls billigere bedeutete: *našâkka mār bārî erēna almattu maṣḫata / lapuntu šamna šarû ina šarûtīšu naši puḫāda* „Der Opferschauer bringt dir Zedernharz (oder -holz), die Witwe Röstmehl; eine arme Frau Öl, der Reiche in seinem Reichtum bringt ein Lamm" (K. 3333 und //; Polonsky, CRAI 44/3, 98). In diesen zwei chiastischen Gegensatzpaaren verhält sich das Röstmehl der Witwe zum Koniferenharz oder -holz[8] des Opferschauers so wie die bescheidene Ölspende der armen Frau zum Lamm des Reichen. Bēl-tattannu-uṣur hat sich also auf Kosten des Tempels be-

8 Der Gegensatz ist hier noch deutlicher als in BM 79028, da Zedernharz oder -holz (beides ist belegt) noch seltener ist als Wacholderharz bzw. -holz. Das im ersten Jahrtausend am häufigsten für Räucherungen verwendete *burāšu* ist nicht exzeptionell teuer (neubabylonische Kurse: 1 Schekel Silber kauft 3 *sūtu* [BIN 1 162] bzw. 1 *pānu*, 4 *sūtu* [YOS 6 168] *burāšu*, aber z.B. nur $^{1}/_{3}$ *qa* [CT 55 382] *jaruttu*-Aroma; Angaben für *erennu* sind nicht überliefert), aber dennoch ohne Zweifel wertvoller als Mehl.

reichert. Bei der Inspektion durch die Tempelbehörden wurden seine Malversationen aufgedeckt, und er wurde zur Rückgabe des unterschlagenen Wacholders angehalten.

Quellen, die präzise Informationen über das Wesen des *nindabû*-Opfers geben, sind selten.[9] Daß das *nindabû*-Opfer mit einer Räucherung verbunden ist, ergibt sich aus einem Kommentar zu Aa = *nâqu*.[10] Unser Text präzisiert, daß hierbei die häufig belegte[11] Kombination Wacholderharz oder Wacholderholz und *maṣḫatu*-Röstmehl verbrannt wurde. Die Räucherung hat das eigentliche Speiseopfer jedoch nur begleitet; LKA 114 und andere literarische Texte berichten, daß ein *nindabû*-Opfer auf einem Tragaltärchen (*paṭīru*) präsentiert wurde, auf dem man nicht räuchert[12] (dafür dienen Räucherständer, *nignakku*, oder Kohlebecken, *kinūnu*[13]).

Nicht gesichert ist, ob das Speiseopfer selbst in irgendeiner Periode ein reines Brot- oder Cerealienopfer war, wie die Wörterbücher annehmen.[14] In hellenistischer Zeit ist das *nindabû*-Opfer jedenfalls ein blutiges Opfer, wie mehrere Stellen in den astronomischen Tagebüchern zeigen, in denen von den gegenständlichen *nindabû*-Opfern an den Toren des Esangila die Rede ist. Man vergleiche z. B. stellvertretend für mehrere andere die folgende Stelle:

ud.18.kam ^{lú}šà.tam é.sag.gíl $^{lú.meš}$eki ^{lú}ukkin *šá* é.sag.gíl 1^{en} gu$_4$.ḫi.a *ù* 5 sisk[ur^{meš}] nidba *ina* ká.dumu.nun.na *šá* é.sag.gíl gub-*zu-niš-šú*, [*ana* ^{d}en] $^{f d}$gašan-*iá*$^{?}$ dingir^{meš} gal^{meš} *u ana bul-ṭu šá* lugal lugal^{meš} dù *uš-kin-nu*.

„Am 18. (Addāru) stellten der Verwalter des Esangila und die Babylonier, das Kollegium des Esangila, ihm (einem auswärtigen Funktionär, der in Babylon zu Gast war) einen Stier und fünf (Schafe)[15] als Opfer für das *nindabû*-Opfer am Kadumununa[16] zur Verfügung. Er opferte (sie) [Bēl] und Bēltia, den großen Göttern, und für das Leben des Königs der Könige, und warf sich (vor den Göttern) nieder." (Sachs und Hunger, *Diaries* 3, p. 370; 108 v. Chr.).

Kurios ist der folgende Bericht aus dem Jahr 106 v. Chr.:

iti.bi ud.12.kam 1^{en} ^{lú}a *bar-sip*^{ki} ^{lú}gír.lá *a-na* 1^{en} ^{l}[^{ú} ...], [...] ^{f}x-*si*$^{*?}$-*šú*$^{*?}$] [*i*]*p**-^{f}*tar**-*su**-*ú*$^{]}$ gaz-*šú um-ma ana muḫ-ḫi* 1^{en} ki.ne nidba *it-ti-ni* nu gar-*u*$^{'}$

9 Vgl. Lambert, OLA 55, 196.

10 MSL 14, 495: 14, zitiert CAD N/2, 236a unten.

11 S. einfach die Stellen in CAD M/1, 330b. Auch gewöhnliches Mehl (*qēmu*) kommt neben Wacholder vor: Maul, *Zukunftsbewältigung*, 52^{78}.

12 Zumal ein *paṭīru* (ganz oder großteils) aus Rohr bestand. S. dazu Maul, *Zukunftsbewältigung*, 48^{+8}. *Ibid.* 58f. 120 werden (idealtypische) Opferarrangements mit Tragaltärchen und Räucherständern gezeigt.

13 Holzkohle ist also das dritte wichtige Material für Räucherungen. Vgl. BRM 1 99 (Raḫīm-Esu-Archiv, 218 SÄ), Zeile 25: 5$^{1}/_{2}$ gín *ana pe-en-tu*$_4^{meš}$ *šá* ká.gal^{l} ká ku$_4$ ^{d}gašan-*iá* ... „fünfeinhalb Schekel (Silber) für Holzkohle (für Räucherungen) bei dem großen Tor, dem Eintrittstor Bēltias, ..." (es folgen einige weitere Tempeltore).

14 Lambert, OLA 55, 196, auch zur Etymologie des Wortes.

15 In Sachs und Hunger, *Diaries* 3, p. 270 -124 A Rev. 20′ handelt es sich, wenn die Lesung richtig ist, offenbar explizit um „fette" Tiere: ... *kab*$^{!}$]-*ru-ú-tú* (cf. Nr. 7 unten).

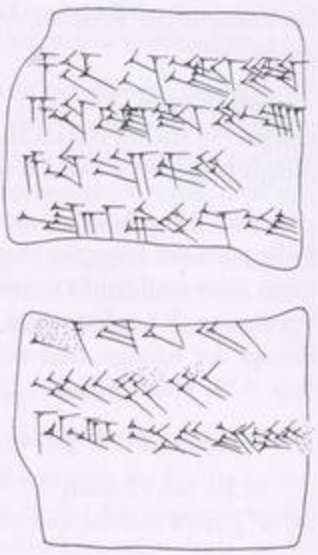
16 Das „äußere Tor der Ištar" im Esangila-Komplex nach BM 35046, George, OLA 40, 92ff. Nr. 6: 19.

„Am 12. desselben Monats [...] ein Borsippäischer Schlächter zu einem [...] und trennten sein … Sie töteten ihn mit folgenden Worten: ‚Niemand darf mit uns ein *nindabû*-Opfer auf demselben Kohlebecken vornehmen!'" (Sachs und Hunger, *Diaries* 3, p. 380 –105 B 14′f.).

Die genaue Bedeutung von *parāsu* an dieser Stelle ist unklar. Eine ausführlichere Schilderung dieses Ereignisses in Text -105 A 15′f. ist leider sehr schlecht erhalten; der Vorfall scheint danach am Eintrittstor Madānus stattgefunden zu haben; die andere Partei waren Schlächter des Esangila, die in eine Schlägerei (*ṣāltu*) mit ihrem Kollegen aus dem Ezida verwickelt waren.

Abschließend noch ein weiterer administrativer Beleg für die Verwendung von Wacholder für das *nindabû*-Opfer.

Nr. 6: BM 82588



1 2 pi giššim.li
a-na nin-da-bu-ú
a-na uru pa.še<ki>
ina šuII ⌜*ni-ḫi-is-tu*$_4$
5 [*šu-bu-ul* (?)]
Rs. ⌜iti.šu ud.21(+)⌝.<kam>
mu.2⌜8⌝.kam
⌜*ar-tak-šat-su* lugal ku[r.kur]

3 Die Schreibung ohne das Determinativ ki ist ungewöhnlich. Ausweislich der Belege in Zadok, RGTC 8, 182 ist unser Beleg neben Joannès, TÉBR, Nr. 1: 17 eine der spätesten Bezeugungen der Stadt Isin.
5 Diese Zeile müßte zum Teil über den (verlorenen) unteren Rand geschrieben worden sein. Auch die Ergänzung [*na-šá-*'] wäre denkbar.

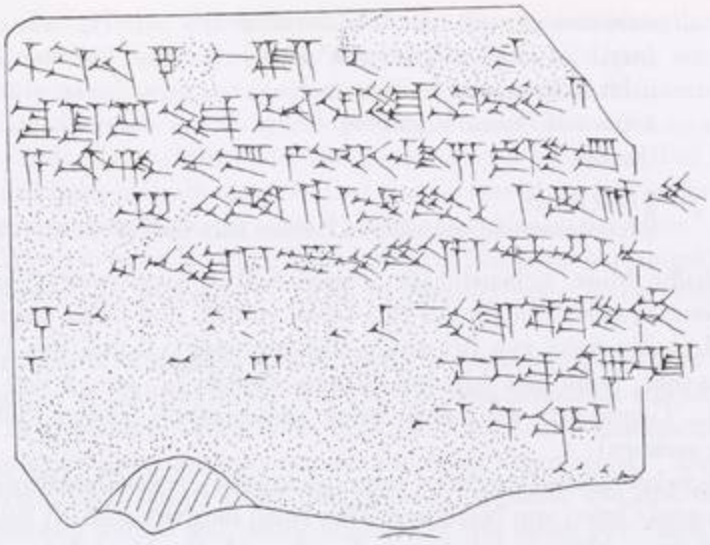
„Zwei *pānu* Wacholderholz [wurden] für das *nindabû*-Opfer durch Niḫistu nach Isin [geschickt]. 21(+). Du'ūzu, Jahr 28 von Artaxerxes, König aller L[änder]."

D. Kauf von Opfertieren

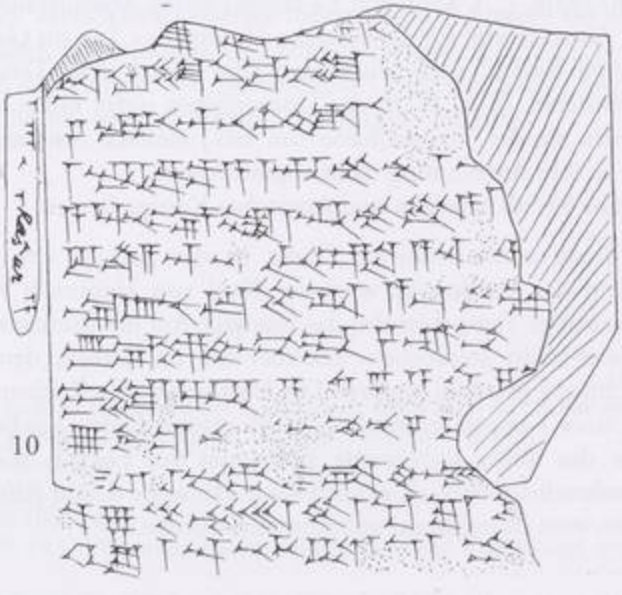
Nr. 7: BM 79034

1 $^1/_2$ ma.na 7$^1/_2$ gín k[ù.babbar *ši-mi* x] ⌜udu⌝.[níta^{meš}]
šu-ku-lu-tu kab-ru-tu bab-ba-nu-tu ⌜*šá*⌝
a-na gi-nu-ú šá den *u* dgašan-*iá ṭa-bu-ú*
[*ina* šuII id]en-tin^{it} a iden-ùru-*šú* iden-eduru-mu
5 [a i]dbad-tin-*su* idag-mu-ùru a idšú-en-*šú-nu*
šá ⌜x⌝ [x x *a-na*] ⌜x⌝ [x] ⌜x *u* idx⌝-tin-*su*-e *šu-bu-ul*
⌜x⌝ [x x] ⌜x x⌝ [x x šá]m $^1/_2$ ma.na 7$^1/_2$ gín

Vs.



Rs.



[kù.babbar] ˹x x x˺
[ ] ˹x x˺
(Rest der Vorderseite verloren)

Rs. 1 [14+ g]ín ˹kù.babbar *ši-mi* 10˺ [udu.níta^{meš} *šu-ku-lu-tu*]
kab-ru-tu bab-ba-nu-tu š[*á a-na gi-nu-ú*]
šá ^{d}ag *u* ^{d}*be-let*-tin *ṭa-b*[*u-ú* x x]
^{ld}en-a^{zt}-giš a ^{ld}šú-mu-mu ^{lf}x˺ [x x]
5 a ^{ld}bad-*tab-tan*-tin^{it} ^{ld}šú-mu-ùru a ^{l}[x x níg.ka$_9$]
udu.níta a_4 ˹x˺ *ši-mi* kù.babbar a_4 14[+^{2} gín]
ina é.sa.bad *ip-pu-uš a-*˹*na*˺ ^{ld}ukk[in *šá* é.sag.íl (?)]
ú-kal-lam-$^{?}$ *bi-i-šú šá ina lìb-bi* [0^{2}]
i-tu-ur 1^{en} *a-*˹*di* 4 *a-na*˺ n[íg.ga ^{d}en$^{?}$]

10 *ú-šal-lam-m*[*u-u*]' uzu *šá* u[du.níta^{meš}]
[níg.k]a$_9$-*šú-nu ul* '*qàt*'-*ta-a*' iti.[x]
ud.8.kam mu.31.kam '*si-lu-k*[*u*]
ù '*an-ti-ik-*'*ku-su*' lugal[^{meš}]
l. Rd. (Rasur)

Rs. 4 a über Rasur?
6 Ein unklares und beschädigtes Zeichen nach dem ersten a_4, vielleicht 'NA'.

„Eine halbe Mine, siebeneinhalb Schekel Sil[ber, Gegenwert x] gemästeter, fetter Hammel bester Qualität, die für das *ginû*-Opfer von Bēl und Bēltia tauglich sind, wurden [durch] Bēl-uballiṭ, Sohn von Bēl-uṣuršu, Bēl-aplu-iddin, [Sohn] von Ea-bullissu, (und) Nabû-šumu-uṣur, Sohn von Marduk-bēlšunu, der/die [... an ...] und [...]-balāssu-iqbi geschickt. [... Gegen]wert? der halben Mine, siebeneinhalb Schekel [Silber ...] (Rest der Vorderseite verloren)

[14+] Schekel Silber, Gegenwert zehn [gemästeter], fetter [Hammel] bester Qualität, [die für das *ginû*-Opfer] von Nabû und Bēlet-balāṭi taug[lich sind ...] Bēl-aplu?-lišir, Sohn von Marduk-šumu-iddin, [...], Sohn von Ea-tabtani-bulliṭ, Marduk-šumu-uṣur, Sohn von [...], werden! [die Abrechnung] für die besagten Hammel <<...>> im Gegenwert von 14[+? Schekel (Silber)] im Esabad vornehmen und (die Tiere) dem Tempelkollegium [des Esangila (?)] präsentieren. (Den Wert) der Untauglichen unter ihnen, die abgelehnt werden werden, werden sie der Tempel[kasse von Bēl?] vierfach ersetzen. Hinsichtlich des Hammelfleisches ist ihre Abrechnung nicht abgeschlossen.

Achter [...], Jahr 31, als Seleukos und Antiochos Könige (waren)."

Gegenstand dieses administrativen Textes ist der Ankauf von Opferschafen mit Tempelgeldern. Auf der Vorderseite wird der Kauf von Hammeln für Bēl und Bēltia behandelt; der zuständige Tempel ist also das Esangila. Auf der Rückseite wird von Opfern für Nabû und Bēlet-balāṭi gesprochen. Darüber soll im Esabad, dem Gula-Tempel in Babylon,[17] Abrechnung gehalten werden. Die Institution, der Rechenschaft zu legen ist, ist das Kollegium eines Tempels, entweder, wie wir ergänzt haben, das bekannte Kollegium des Esangila oder das bisher unbezeugte Kollegium des Esabad. Wir halten die erste Möglichkeit für wahrscheinlicher, da es auch sonst Hinweise darauf gibt, daß die kleineren Tempel in Babylon vom Esangila aus administriert wurden.[18]

17 George, *House Most High*, No. 944.

18 So können der *šatammu* und das Kollegium von Esangila z.B. über die Einkünfte des é.ud.1.kam verfügen: CT 49 160 (van der Spek, *Raḫimesu*, 235ff.). Übrigens scheint uns die natürlich naheliegende Identifikation des „Tempels des ersten Tages" mit dem *akītu*-Tempel, die zuletzt van der Spek, *Raḫimesu* 225 auf der Basis einer Stelle in einem astronomischen Tagebuch (Sachs und Hunger, *Diaries* 2, p. 202 -204 C Rs. 14–18) vorgenommen hat, noch immer nicht zwingend bewiesen zu sein. Einerseits ist der Prozessionsverlauf des achten Tages des Neujahrsfestes nicht im Detail bekannt (vgl. Maul, *Fs. Borger*, 176f.), und andererseits ist bisher in der Diskussion übersehen worden, daß George, Sumer 44, 22 Anm. 38 schon vor längerem auf einen Nabonidbeleg für den „Tempel des ersten Tages" hingewiesen hat, der in einem Text erscheint, der auch vom *bīt akīti* spricht: é.ud.1.kam in 5 R 65: I 31 (Langdon, VAB 4, 254: 31); é *á-ki-it ibid.* II 50 (VAB 4, 260: 50). Die von Pinches gegebene Lesung in I 31 ist korrekt [dagegen Beaulieu, *Nabonidus*, 7]: Schaudig, AOAT 256, 386^{+466} [er übersetzt „Akītu-Festhaus"]. George, *Fs. Lambert*, 280 schlägt für é ud.1.kam jetzt die Lesung *bīt arḫi* „Neumondtag-Tempel" vor.

Bēlet-balāṭi, die „Herrin des Lebens", ist aus dem seleukidenzeitlichen Vertrag BRM 2 36 als eine im Egalmaḫ, einem Tempel der Gula in Uruk, verehrte Göttin bezeugt.[19] Es wäre naheliegend, sie in unserem Text aufgrund der Assoziation mit dem Gula-Tempel Esabad einfach nur als eine Manifestation der Gula selbst zu sehen, so wie von A. George für das Tempelritual BM 78076 vermutet.[20] In diesem Fall ist allerdings problematisch, daß Bēlet-balāṭi in unserem Text (zum ersten Mal?) als Partnerin von Nabû erscheint, also in einer Funktion, die sonst Tašmētu oder Nanaja ausfüllen.[21] Damit läßt sich einer der Texte verbinden, in denen Bēlet-balāṭi ein Name der Manungal/Nungal ist:[22] BM 38630 assoziiert sie zugleich (in nicht zu präzisierender Weise) mit Nabû und Borsippa.[23]

Eine genaue inhaltliche Parallele zu BM 79034 aus dem Esangila-Archiv ist uns nicht bekannt. Am ehesten ist HSM 8406 aus dem 19. Jahr eines Artaxerxes vergleichbar.[24] Vier Männer haben zu ungleichen Teilen Silber im Haus eines Erībāja deponiert, das für den Kauf von Hammeln für das *ginû*-Opfer von Bēl und Bēltia bestimmt ist.[25] Der Vertrag bestimmt, daß dieses Silber bis zu einem bestimmten Zeitpunkt von den vier Männern gemeinsam abgehoben werden soll, widrigenfalls einer von ihnen den Anteil der anderen aus seinem eigenen Vermögen zu ersetzen haben werde.[26] Sowohl aus den älteren Tempelarchiven des sechsten Jahrhunderts als auch aus anderen hellenistischen Archiven gibt es Belege dafür, daß die Tempel die notwendigen Opfertiere häufig nicht aus den eigenen Herden stellen konnten, sondern von außen zukaufen mußten.[27]

19 *bēlet balāṭi* ist auch als Epitheton der Gula belegt: AMT 81,3 Rs. 9. Für andere „Herrinnen des Lebens" vgl. Tallqvist, *Götterepitheta*, 57f. bzw. *An=Anum* II 179.

20 George, *Fs. Lambert*, 281.

21 Pomponio, RlA 9, 21.

22 Grayson, JAOS 103, 143f.

23 Grayson, JAOS 103, 143 unten (nicht kommentiert von Cavigneaux und Krebernik, RlA 9, 615f.).

24 Solper, AION *Suppl.* 77, No. A1–1 (446, 398 oder 340 v. Chr.).

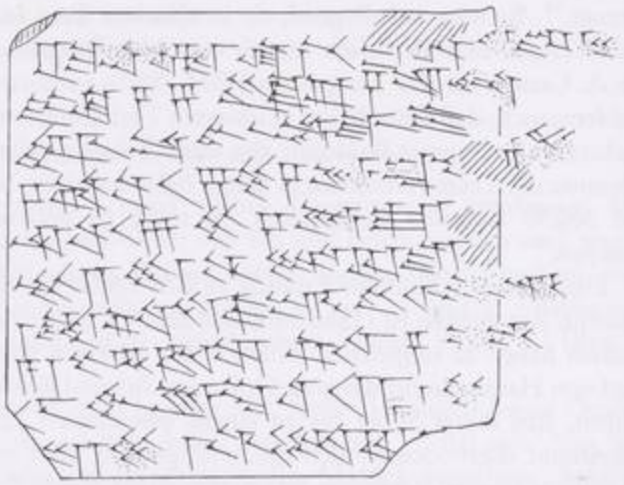
25 Der Wortlaut läßt strenggenommen keine Entscheidung darüber zu, ob das Silber vom Verkauf von Opferschafen des Esangila stammt oder für den Kauf von solchen Tieren bestimmt ist: kù.babbar *šá* udu.níta *gi-né-e šá* ^{d}en *u* $^{d\text{r}}$gašan$^{\text{r}}$-*iá*. Im Lichte von BM 79034 wird man *kaspu ša immerī* als sicherlich als „Silber für die Hammel" verstehen dürfen.

26 Die Zeilen 7–9 möchten wir wie folgt lesen: ... *ina* mu.19.k[am *ù a-di-i*], [*qí-î*]*t* iti.du$_6$ mu.20.kam $^{\text{r}}$kù.babbar mu$^{\text{r}}$[$^{\text{meš}}$], [*is-s*]*i-ru-nim-ma e-du* $^{\text{r}}$*ina lìb*$^{\text{r}}$-[*b*]*i-*$^{\text{r}}$*šu*$^{\text{r}}$*-n*[*u ul is-si-ir*]. Die Lesung des Endes der Z. 9 ist natürlich eine Konjektur, ergibt aber einen guten Sinn. In Z. 11 ist das Verb sicherlich, wie von Stolper im Kommentar erwogen, aber dann verworfen, $^{\text{r}}$*i*(oder epigraphisch besser $^{\text{r}}$*it*)*-te-si-ru-nim-ma*$^{\text{r}}$ zu lesen. Die Zeilen 7–11 lauten also in Übersetzung: „Im 19. Jahr oder bis zum Ende des Tašrītu des 20. Jahres werden sie dieses Silber abheben. Ein einzelner von ih[nen darf (es allein) nicht abheben. Fa]lls sie dieses Silber im 19. Jahr oder bis zum Ende des Tašrītu des 20. Jahres nicht abgehoben haben sollten und ..."

27 Z. B. aus dem Ebabbar-Archiv BM 63803, Nbk 388. 396, CT 56 348, CT 55 623 u.v.a.m. Aus dem Raḫīm-Esu-Archiv s. z. B. BRM 1 99: 33f. und CT 49 151.

E. Entlohnung von Arbeitern

Nr. 8: BM 87261



1 $^{1}/_{3}$ ma.na kù.babbar ki.lá 10 ⌜*is-ta-ter*⌝-*ra*⌜meš⌝
i-di šá 5 ^{lú}ḫun.gá *šá* saḫar-⌜ ⌝-*tú* (?)
*im-me-du-u*ʾ *ina* ká gal^{i}
šá ta ud.15.kam *šá* iti.ab m[u].⌜2.kam⌝
5 en ud.16.kam *šá* iti.zíz <<x>>
mu.2.kam ^{l}*pi-li-ip-su*
^{l}*it-ta-na-áš*-^{d}en ^{lú}*ši-*⌜*rik*⌝ ^{d}en
a ^{ld}en-gùb-gur ta níg.[ga] ^{d}en
igi-*a*ʾ iti.ab ud.12$^{?}$.kam
10 mu.2.kam ^{l}*pi-li-ip-*⌜*su*⌝
(Rückseite unbeschrieben)

2 Wenn richtig gelesen, liegt ein femininer Plural von *eperu* vor.
3f. Die Syntax des Satzes ist nicht ganz klar. Ist das Große Tor der Ort der Auszahlung des Silbers oder vielmehr der Ort der Bauarbeiten, ist also hier (wie in noch jüngeren Texten gelegentlich zu beobachten) die obligatorische Endstellung des Verbs auch im Nebensatz nicht mehr beachtet worden?

„Eine Drittelmine Silber, Gewicht von zehn Stateren, den Lohn für fünf Mietarbeiter, die Erde verladen, hat Ittannaš-Bēl, der Oblate des Bēl, Sohn von Bēl-...-terri bei dem Großen Tor für die Zeit vom 15. Ṭebētu des zweiten Jahres bis zum 16. Šabāṭu des zweiten Jahres von Philippos von der Tempelkasse von Bēl erhalten.

Zwölfter Ṭebētu, zweites Jahr von Philippos."

20 Schekel für fünf Mann und einen Monat bedeuten einen Lohn von vier Schekel pro Mann und Monat. Das ist ein relativ hoher Lohn, im Vergleich etwa zu den entsprechenden Angaben des (jüngeren) Raḫīm-Esu-Archivs (van der Spek, *Raḫimesu*, 252).

U. W. anderweitig nicht bezeugt ist die Angabe der Anzahl der Statere (d.h. Tetradrachmen) zusätzlich zu der ihres Silbergewichtes. 1 Stater wiegt demnach 2 Schekel (1 Drachme = $^{1}/_{2}$ Schekel). Das ist dasselbe Verhältnis, das sich aus etwas älteren aramäi-

schen Papyri aus Ägypten ergibt.[28] Man kann fragen, ob Münzen in dieser Zeit wirklich immer gewogen und etwa nicht einfach generell nach diesem Schlüssel umgerechnet wurden, die babylonischen Gewichtsmaße also nur konventionell verwendetes „Buchgeld" waren. Golenko gibt für zu Alexanders Lebzeiten bzw. posthum in Babylon geprägte Statere ein Durchschnittsgewicht von 17,12 bzw. 17,04 g; Statere von Philippos wiegen durchschnittlich 16,91 g.[29] Setzt man den Schekel mit 8,3 g an,[30] so ergibt unser Text ein Statergewicht von 16,6 g, also 97,0%, 97,4% bzw. 98,2% von Golenkos Durchschnittswerten: eine geringe Abweichung. Etwas spätere Texte sprechen explizit von einem Umrechnungskurs (*manûtu ša Bābili*), der dazu diente, den Nominalwert der Münzen in babylonische Gewichtsmaße zu konvertieren. Man hat sicherlich zu Recht vermutet, daß dieser Umrechnungskurs sich explizit auf die östlichen Prägungen aus Babylon, Seleukia am Tigris, Susa usf. bezog, die etwas leichter als der attische Standard waren.[31] Zumindest bei diesen leichteren Münzen würde nach den von Golenko gegebenen Durchschnittsgewichten[32] die Umrechnung 1 Stater = 2 Schekel, 1 Drachme = $^1/_2$ Schekel für alle praktischen Zwecke ausreichend genau gewesen sein.[33]

F. Zwei neue Depositumverträge

Diese Verträge erweitern das von Stolper in AION *Suppl.* 77 zusammengestellte Korpus von Verwahrungsverträgen und davon abgeleiteten Urkunden der Spätzeit.[34] Es handelt sich bei beiden Verträgen um „einfache Depositumverträge" nach Stolpers Terminologie. Bei BM 114709 fehlen zwar die letzten Zeilen der operativen Sektion der Urkunde, aber uns scheint nicht ausreichend viel Platz vorhanden zu sein, um hier die Schlußklauseln der „Depositumverträge mit zusätzlichen Klauseln" ergänzen zu können. Zudem ist diese Urkundengruppe jünger als BM 114709. Die Urkunde ist der erste Vertrag dieser Art aus Kiš/Ḫursangkalama.

28 Cowley, *Aramaic Papyri*, xxxif. und 129ff. No. 35: 3f.: *ksp š* 2, *hw* [*ks*]$^{r}p^{1}$ *sttry* 1; s. Powell, RlA 7, 511f. Vgl. auch van der Spek, *Raḫimesu*, 246f.

29 Golenko, Mesopotamia 28, 155.

30 Powell, RlA 7, 510.

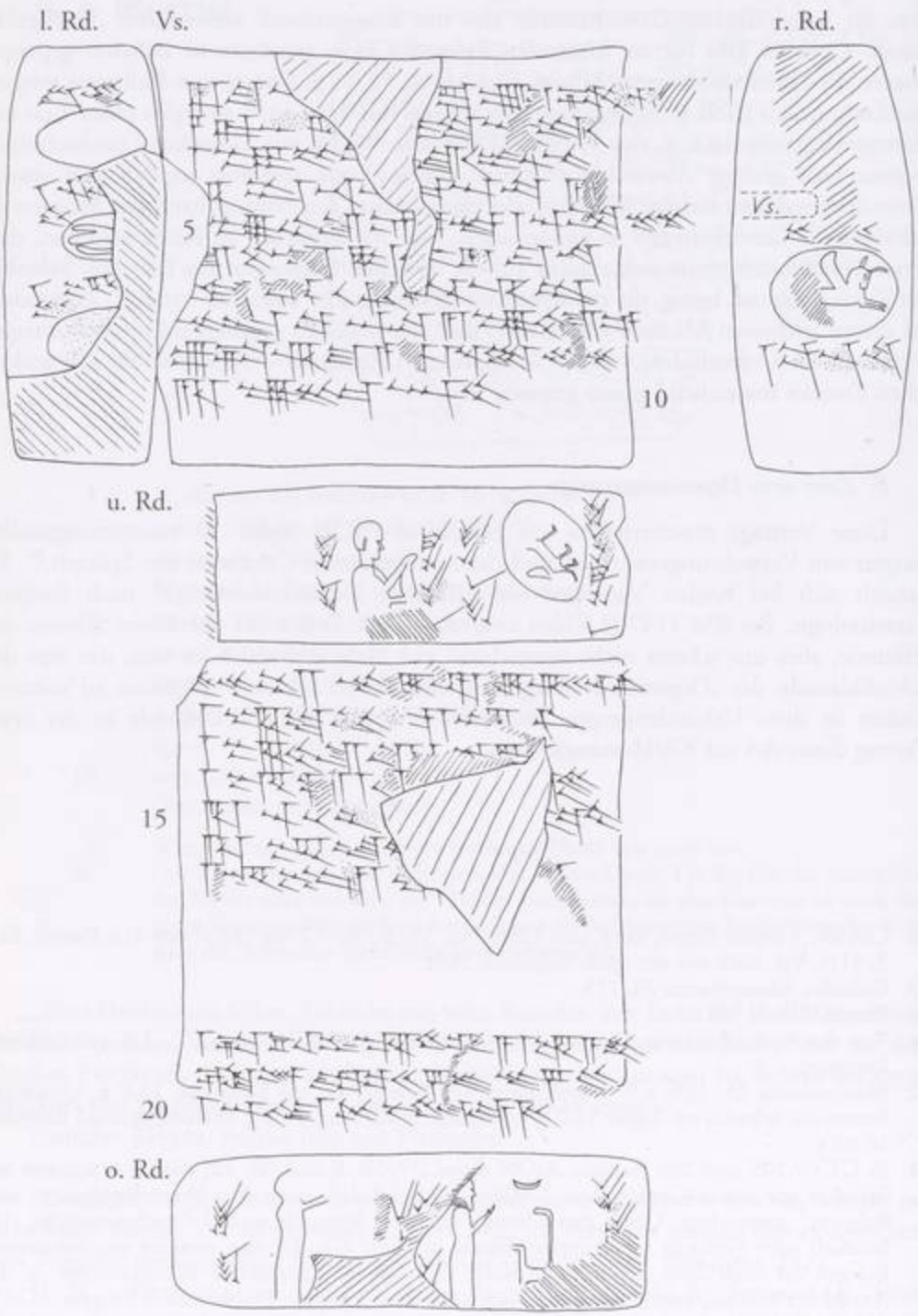
31 Van der Spek, *Raḫimesu*, 214 zu 4:1. 4 und Stolper, AION *Suppl.* 77, 22f. mit weiterer Literatur.

32 Mesopotamia 28, 155: z.B. Löwenstatere von Seleukos I. aus Ekbatana: 16,6 g, Quadriga-Statere aus Seleukia am Tigris: 16,7 g, Löwenstatere aus Susa: 16,5 g, Löwenstatere aus Babylon: 16,03 g.

33 In CT 49 105 und 106 (Stolper, AION *Suppl.* 77, Nr. 6 und Nr. 12) wird von Stateren des Seleukos mit einem Gewicht von 2 Minen, 38,5 Schekel „nach dem Umrechnungskurs von Babylon" gesprochen. Unter den Münzen müßten demnach auch 1-Drachmenstücke ($^1/_2$ Schekel) oder vielleicht zerschnittene Statere gewesen sein. In allen anderen uns bekannten Belegen für nach dem „Umrechnungskurs von Babylon" bestimmte Münzgewichte ist die Anzahl der Schekel, soweit angegeben, durch 2 teilbar. Vgl. zum Problem auch Vargyas, AOAT 252, 516f.$^{+15-17}$.

34 Wir werden an anderer Stelle eine Neuinterpretation dieser Texte vorlegen.

Nr. 9: BM 114713



1 $^{5}/_{6}$ ma.n[a kù.babbar *qa*]-*lu-ú is-ta-ter*-[*ra-nu*]
šá ur.$^{\lceil}$maḫ$^{\rceil}$ [*šá* $^{\mathrm{ld}}$am]ar.utu-m[u]-mu a *šú*
$^{\mathrm{ld}}$ag-numun-gi[š *ra*]*k-su u kan-gu*
[*p*]*aq-du ina* igi [$^{\mathrm{l}}$]zálag-*an-na* a $^{\lceil}$*šú*$^{\rceil}$
5 [$^{\mathrm{l}}$]$^{\mathrm{d}}$ag-tin-*su*-e [*u*]$_{4}$-*mu šá* $^{\mathrm{ld}}$amar.utu-mu-mu
[*s*]*e-bu-*$^{\lceil}$*ú*$^{\rceil}$ kù.babbar $^{\lceil}$*a*$^{\rceil}$ $^{5}/_{6}$ ma.na
[*ina r*]*ik-*$^{\lceil}$*si-šú u kin-gu*$^{\rceil}$*-šú paq-du*
mu$^{\mathrm{hi}}$ $^{\mathrm{l}}$zálag-*an-na* a $^{\mathrm{ld}}$ag-tin-*su*-e
ú-ta-ri-ma a-[*n*]*a* $^{\mathrm{ld}}$amar.utu.mu-mu
10 a *šú* $^{\mathrm{ld}}$ag-numun-giš *ina-an-din*
Rs. $^{\mathrm{lú}}$*mu-kin*$_{7}$ $^{\mathrm{l}}$mu-$^{\lceil\mathrm{d}}$en$^{\rceil}$ a$^{\rceil}$ $^{\mathrm{ld}}$en$^{\rceil}$*-re-man*^{an}*-ni*
$^{\mathrm{ld}}$en-ad-ùru [du]mu *šá* $^{\mathrm{ld}}$en-dù
$^{\mathrm{ld}}$en-tin-*su-*$^{\lceil}$e a $^{\mathrm{l}}$x x$^{\rceil}$
$^{\mathrm{ld}}$en-kad a $^{\mathrm{lf}}$ki$^{\rceil}$-[$^{\mathrm{d}}$x-tin $^{\mathrm{ld}}$e]n-kam
15 a *šá* $^{\mathrm{ld}}$bad-$^{\lceil}$tin$^{\rceil}$-[*su*-e $^{\mathrm{l}}$ki-$^{\mathrm{d}}$ama]r.utu-tin
a *šú* $^{\mathrm{ld}}$en-ad-ù[ru 0]
$^{\mathrm{ld}}$en-mu-giš $^{\lceil}$a$^{\rceil}$ $^{\mathrm{ldf}}$en$^{\rceil}$-[x] $^{\lceil}$x$^{\rceil}$
$^{\mathrm{l}}$*ta-nit-tu*$_{4}$-$^{\mathrm{d}}$en $^{\mathrm{lú}}$umbisag a $^{\mathrm{ld}}$en-a-ùru
e$^{\mathrm{ki}}$ iti.bára ud.24.kam mu.4.kam
20 $^{\mathrm{l}}$*an-tu-gu-nu* $^{\mathrm{lú}}$gal-éren$^{\mathrm{meš}}$
(Siegelbeischriften)

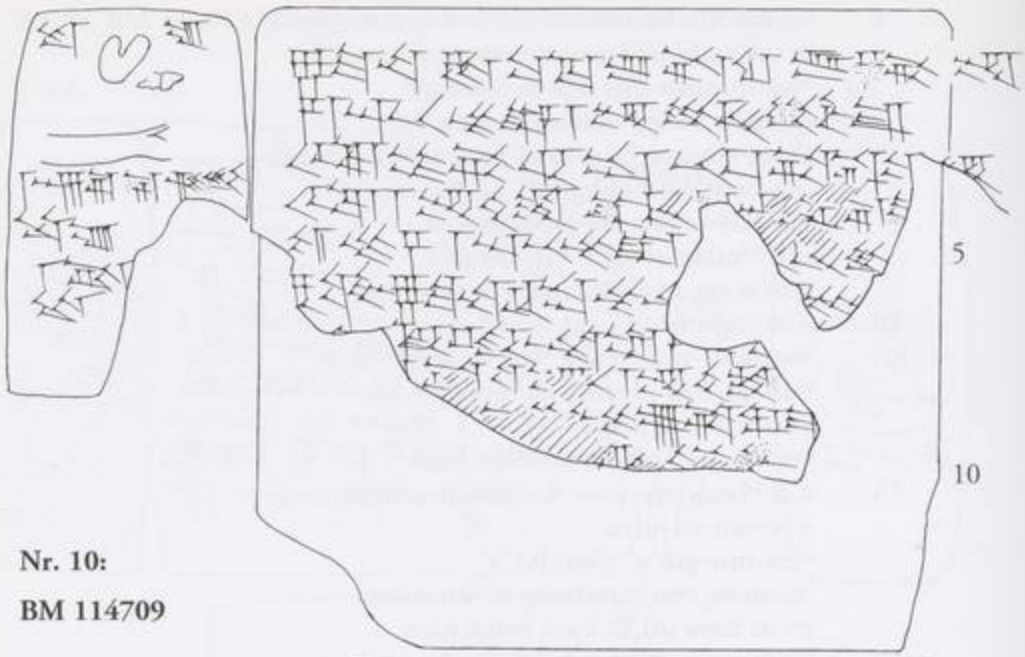
(linker Rand) $^{\mathrm{na4}}$kišib (rechter Rand) $^{\mathrm{n}}$[$^{\mathrm{a4}}$ki]šib (oberer Rand) $^{\mathrm{na4}}$kišib
(Siegel) (Siegel) (Siegel)
$^{\mathrm{ldf}}$x$^{\rceil}$[x x x] $^{\mathrm{l}}$zálag-*an-na* [$^{\mathrm{md}}$en-k]ad
$^{\mathrm{na4}}$[kišib] (unterer Rand) $^{\mathrm{na4}}$kišib [$^{\mathrm{n}}$]$^{\mathrm{a4}}$[kiš]ib
(Siegel) (Siegel) (Siegel)
$^{\mathrm{ldf}}$en$^{\rceil}$[x x x] $^{\mathrm{l}}$mu-$^{\mathrm{d}}$en [$^{\mathrm{md}}$e]n-kam
$^{\mathrm{na4}}$[kišib] $^{\mathrm{na4}}$kišib
(Siegel) (Siegel)
[PN] $^{\mathrm{ld}}$en-$^{\lceil}$ad$^{\rceil}$-ùru

„$^{5}/_{6}$ Minen geläuterten [Silbers], Löwenstatere, Eigentum von Marduk-šumu-iddin, Sohn des Nabû-zēru-līšir, verpackt und gesiegelt, sind als Depositum Nūrānu(?), Sohn des Nabû-balāssu-iqbi, anvertraut.

Wann immer Marduk-šumu-iddin es wünscht, wird Nūrānu, Sohn des Nabû-balāssu-iqbi, das besagte Depositum, also $^{5}/_{6}$ Minen Silber, in ihrer Verpackung und mit ihrer Siegelung (intakt), Marduk-šumu-iddin, dem Sohn des Nabû-zēru-līšir, zurückgeben.
Zeugen: Iddin-Bēl, Sohn des Bēl-rēmanni, Bēl-abu-uṣur, Sohn des Bēl-ibni, Bēl-balāssu-iqbi, Sohn des [...], Bēl-kāṣir, Sohn des Itti-[GN-balāṭu], Bēl-ēreš, Sohn des Ea-balās[su-iqbi, Itti-M]arduk-balāṭu, Sohn des Bēl-abu-uṣur, Bēl-šumu-līšir, Sohn des Bēl-[...], Tanittu-Bēl, der Schreiber, Sohn des Bēl-abu-uṣur.

Babylon, 24. Nisānu, viertes Jahr des Generals Antigonos.

(Siegelbeischriften)
(linker Rand:) Siegel des [...]; Siegel des Bēl-[...]; Siegel [des ...];
(rechter Rand:) Siegel des Nūrānu;
(unterer Rand:) Siegel des Iddin-Bēl; Siegel des Bēl-abu-uṣur;
(oberer Rand:) Siegel des [Bēl-k]āṣir; Siegel des Bēl-ēreš."



Nr. 10:

BM 114709

Rs.

1 8 ma.na kù.babbar *qa-lu-ú uš-ru-ú* níg.ga ^{d}en
šá ^{ld}bad-mu dumu *šá* ^{ld}en-šeš^{meš}-ùru *rak-su*
ù kan-ga paq-du ina igi ^{l}*ta-nit-tú-*^{d}en
ù ^{ld}en-tin^{it} dumu^{meš} ^{r}*šá* ^{ld}dumu.é^{1}-š[eš-mu]
5 *u*$_4$*-mu šá* ^{ld}bad-mu dumu ^{l}[^{d}en-šeš]^{meš}-ùru [*ṣe-bu-ú*]
kù.babbar *a*$^{?}$ 8 ma.na *paq-du* mu^{r}[$^{?}$ *šá* ^{ld}bad]-mu^{1} *i*[*na rik-si-šú*]
[*ù*] *kin-gi-šú ina* ^{na4}kišib ^{r}*šá* ^{ld1}ba[d-mu (x x x)]
[^{l}*t*]*a-*^{r}*nit*^{1}*-tú-*rden^{1} *u* ^{ld}en-tin^{it} [dumu^{meš} *šá*]
[^{ld}dumu].^{r}é-šeš-mu^{1} *ú-ta-ru-ma* [*a-na* ^{ld}bad-mu dumu *šá*]
10 [^{ld}en-šeš^{meš}-ùru *i*]-^{r}*nam-din-nu-u*$^{'1}$ [x x (x)]
(Rest der Vorderseite verloren)
Rs. [^{l}]^{ú}*mu-kin-nu* ^{ld}en-numun-giš dumu *šá* ^{ld}en-[x x (x)]
^{l}*ta-nit-tú-*^{d}en dumu *šá* ^{ld}en-tin-*s*[*u*-e]
^{ld}*za-b*[*a*$_4$*-b*]*a*$_4$-zi-ùru dumu *šá* ^{l}tin-*s*[*u*]
^{l}en-*šú-nu* dumu *šá* ^{ld}en-ad-ùru ^{l}mu-[x x]
5′ dumu *šá* ^{l}*ta-nit-tu*$_4$ ^{ld}en-*ku-ṣur-šú* dumu ^{r}*šá*^{1}
^{l}*e-tel-lu* ^{ld}ag-mu^{nu} dumu *šá* ^{l}*tat-tan-nu*
^{l}*ta-nit-tú-*^{d}en dumu *šá* ^{ld}amar.utu-mu-mu
(eine Zeile frei)
^{ld}en-šeš^{meš}-mu ^{ld}dub.sar dumu *šá* ^{ld}en-^{r}x x^{1} [x]
ḫur-sag-kalam-ma^{ki} iti.sig$_4$ ud.10.kam mu.[x.kam]
^{l}*ár-tak-šat-su* ^{r}lugal^{1} kur.[kur^{meš}]
(Siegelbeischriften)

(linker Rand)	^{na4}kišib	(oberer Rand)	^{na4}kišib
	(Siegel)		^{ld}en-*ku-ṣur-šú*
	^{ld}*za-ba*$_4$*-ba*$_4$-zi-ùru		(Siegel)
	^{na4}kišib		^{na4}kišib
	^{l}*ta-*[*nit-tu*$_4$]		<PN>
	^{na4}[kišib]		^{na4}kišib
	[PN]		(Siegel)
			^{ld}en-tin^{it}
			^{na4}kišib
			^{ld}ag-mu^{nu} <<^{r}^{d}en^{1}>>
			^{na4}kišib
			(Siegel)
			^{l}*ta-*[*nit-tú-*^{d}e]n

„Acht Minen geläuterten Silbers, Zehnt, Eigentum von Bēl, von Ea-iddin, Sohn des Bēl-aḫḫē-uṣur, verpackt und gesiegelt, (sind) als Depositum Tanittu-Bēl und Bēl-uballiṭ, den Söhnen des Mār-bīti-aḫu-[iddin], anvertraut.

Wann immer Ea-iddin, Sohn des [Bēl-aḫḫ]ē-uṣur, [wünscht], werden Tanittu-Bēl und Bēl-uballiṭ, [die Söhne des Mār]-bīti-aḫu-iddin, diese acht Minen Silber, das besagte Depositum [des Ea]-iddin, in [seiner Verpackung und mit] seiner Siegelung, mit dem Siegel des Ea-[iddin (intakt) (...)$^{?}$,] [Ea-iddin, dem Sohn des Bēl-aḫḫē-uṣur,] zurückgeben.
(Rest der Vorderseite verloren)

Zeugen: Bēl-zēru-līšir, Sohn des Bēl-[...], Tanittu-Bēl, Sohn des Bēl-balāssu-[iqbi], Zababa-napišti-uṣur, Sohn des Balāssu, Bēlšunu, Sohn des Bēl-abu-uṣur, Šumu-[...], Sohn des Tanittu, Bēl-kuṣuršu, Sohn des Etellu, Nabû-ittannu, Sohn des Tattannu, Tanittu-Bēl, Sohn des Marduk-šumu-iddin, Bēl-aḫḫē-iddin, der Schreiber, Sohn des Bēl-...

Ḫursangkalama, zehnter Simānu, [x. Jahr] von Artaxerxes, König aller Länder.

(Siegelbeischriften:)

(linker Rand:) Siegel von Zababa-napišti-uṣur, Siegel von Tanittu, Siegel [von PN];

(oberer Rand:) Siegel von Bēl-kuṣuršu, Siegel <von PN>, Siegel von Bēl-uballiṭ, Siegel von Nabû-ittannu, Siegel von Tanittu-Bēl."

INDEX DER PERSONENNAMEN

LITERATUR

An=Anum R.L. Litke, *A Reconstruction of the Assyro-Babylonian God-Lists, AN: ^{d}A-NU-UM and AN: Anu šá amēli*. New Haven 1998.

Beaulieu, P.A.
Nabonidus *The Reign of Nabonidus, King of Babylon 556–539 B.C.* New Haven und London 1989.

Çağirgan, G. und W.G. Lambert
JCS 43–45 „The Late Babylonian Kislīmu Ritual for Esagil", JCS 43–45 (1991–93), 89–106.

Cavigneaux, A. und M. Krebernik
RlA 9 Lemma „Nungal", RlA 9 (1998–2001), 615–618.

Cowley, A.
Aramaic Papyri *Aramaic Papyri of the Fifth Century B.C.* Oxford 1923.

Da Riva, R. und E. Frahm
AfO 46/47 „Šamaš-šumu-ukīn, die Herrin von Ninive und das babylonische Königssiegel", AfO 46/47 (1999/2000), 156–182.

Doty, L.T.
Fs. Hallo „Akkadian *bīt pirišti*", in M.E. Cohen, D.C. Snell und D.B. Weisberg (Hrsg.), *The Tablet and the Scroll. Near Eastern Studies in Honor of William W. Hallo*. Bethesda 1993, 87–89.

George, A.R.
Fs. Lambert „Four Temple Rituals from Babylon", in A.R. George und I.L. Finkel (Hrsg.), *Wisdom, Gods and Literature. Studies in Assyriology in Honour of W. G. Lambert*. Winona Lake 2000, 259–299.
House Most High *House Most High. The Temples of Ancient Mesopotamia*. Winona Lake 1993.
OLA 40 *Babylonian Topographical Texts*. Leuven 1992 (OLA 40).
Sumer 44 „The Topography of Babylon Reconsidered", Sumer 44 (1985–1986), 7–24.

Golenko, V.K.
Mesopotamia 28 „Notes on the Coinage and Currency of the Early Seleucid State", Mesopotamia 28 (1993), 71–167.

Grayson, A.K.
JAOS 103 „Literary Letters from Deities and Diviners: More Fragments", JAOS 103 (1983), 143–148.

Joannès, F.
TÉBR *Textes économiques de la Babylonie récente*. Paris 1982.

Jursa, M.
Bēl-rēmanni *Das Archiv des Bēl-rēmanni*. Istanbul 1999.
Iraq 59 „Neu- und spätbabylonische Texte aus den Sammlungen der Birmingham Museums and Art Gallery", Iraq 59 (1997), 97–174.

Kümmel, H.M.
Familie *Familie, Beruf und Amt im spätbabylonischen Uruk*. Berlin 1979.

Lambert, W.G.

OLA 55 „Donations of Food and Drink to the Gods in Ancient Mesopotamia", in J. Quaegebeur (Hrsg.), *Ritual and Sacrifice in the Ancient Near East* (OLA 55). Leuven 1993, 191–201.

Langdon, St.

VAB 4 *Die neubabylonischen Königsinschriften*. Leipzig 1912.

Maul, St.M.

Fs. Borger „Marduk, Nabû und der assyrische Enlil. Die Geschichte eines sumerischen Šu'ilas", in St. M. Maul (Hrsg.), *Festschrift für Rykle Borger zu seinem 65. Geburtstag am 24. Mai 1994*. tikip santakki mala bašmu ... . Groningen 1998, 159–197.

Zukunftsbewältigung *Zukunftsbewältigung. Eine Untersuchung altorientalischen Denkens anhand der babylonisch-assyrischen Löserituale (Namburbî)* (BaFo 18). Mainz 1994.

Polonsky, J.

CRAI 44/3 „ki-^{d}utu-è-a: Where Destiny is Determined", in L. Milano u.a. (Hrsg.), *Landscapes, Territories, Frontiers and Horizons in the Ancient Near East. Part III. Landscape in Ideology, Religion, Literature and Art*. Padua 2000, 89–100.

Pomponio, F.

RlA 9 Lemma „Nabû", RlA 9 (1998–2001), 16–24.

Powell, M.A.

RlA 7 Lemma „Maße und Gewichte", RlA 7 (1987–1990), 457–517.

Sachs, A.J. und H. Hunger

Diaries 2 *Astronomical Diaries and Related Texts from Babylonia. II: Diaries from 261 B.C. to 165 B.C.* Wien 1989.

Diaries 3 *Astronomical Diaries and Related Texts from Babylonia. III: Diaries from 164 B.C. to 61 B.C.* Wien 1996.

Schaudig, H.

AOAT 256 *Die Inschriften Nabonids von Babylon und Kyros' des Großen samt den in ihrem Umfeld entstandenen Tendenzschriften. Textausgabe und Grammatik*. Münster 2001.

van der Spek, R.J.

AOAT 252 „The *Šatammus* of Esagila in the Seleucid and Arsacid Periods", in J. Marzahn und H. Neumann (Hrsg.), *Assyriologica et Semitica. Festschrift für Joachim Oelsner anläßlich seines 65. Geburtstages am 18. Februar 1997*. (AOAT 252). Münster 2000, 437–446.

Raḥimesu „Cuneiform Documents on Parthian History: The Raḥimesu Archive. Materials for the Study of the Standard of Living", in J. Wiesehöfer (Hrsg.), *Das Partherreich und seine Zeugnisse*. Stuttgart 1998, 205–258.

Stolper, M.W.

AION *Suppl.* 77 *Late Achaemenid, Early Macedonian, and Early Seleucid Records of Deposit and Related Texts*. Napoli 1993.

Tallqvist, K.
Götterepitheta *Akkadische Götterepitheta* (StOr 7). Helsingfors 1938.

Vargyas, P.
AOAT 252 „Silver and Money in Achaemenid and Hellenistic Babylonia", in J. Marzahn und H. Neumann (Hrsg.), *Assyriologica et Semitica. Festschrift für Joachim Oelsner anläßlich seines 65. Geburtstages am 18. Februar 1997.* (AOAT 252). Münster 2000, 513–521.

Zadok, R.
AfO 44/45 Rezension von M. Sigrist, H.H. Figulla und C.B.F. Walker, *Catalogue of the Babylonian Tablets in the British Museum* 2, AfO 44/45 (1997/98), 293–306.
RGTC 8 *Geographical Names According to New- and Late-Babylonian Texts.* Wiesbaden 1985.

Old Babylonian Extispicy Reports

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During my work at the British Museum on the first-millennium extispicy series, I have over and again benefitted from Christopher Walker's diligence, kindness and readiness to share his immense knowledge. Recently, with his usual thoughtful concern for keeping us all usefully occupied, he brought to my attention two unpublished Old Babylonian extispicy reports. I will take this occasion to publish them, and in the light of the new texts — and especially of other more wellworn material — once more review the question of the people and purposes of this ancient fact-finding tool.

Since A. Goetze in 1957 summed up the known Old Babylonian and Kassite extispicy reports,[1] at the same time substantially adding to their number, there has been a steady trickle of new texts of this genre. They have been published by among others J. Nougayrol,[2] F.R. Kraus[3] and I. Starr.[4] However, the most substantial addition of relevant Old Babylonian texts are the 190 letters and reports from diviners published and edited by Jean-Marie Durand in 1988 in *Archives Royales de Mari* vol. 26, *Archives Épistolaires de Mari* I/1. But many of these texts are not directly concerned with extispicy at all. Of those which are, some refer only to the question put before the gods and/or the result of the extispicy. Only a small minority are actual reports listing the parts of the intestines inspected. The texts containing detailed reports, or at least abbreviated forms thereof, are:[5] nos. 87, 88, 92, 94, 95, 96 (= JCS 21, 228), 98, 100 bis (= JCS 21, 230), 109, 113 (= JCS 21, 226), 116, 117, 136, 142, 154, 155, 161, 164, 167, 185. Still, the corpus cannot be said to have swelled to impressive proportions. Apart from the Mari material, only 37 Old Babylonian reports have been published, including the two new texts. To this should perhaps be added the reports preserved as liver models[6] rather than in written form, but for the present purposes

1 "Reports on Acts of Extispicy from Old Babylonian and Kassite Times," JCS 11 (1957), 89–105.
2 "Rapports paléo-babyloniens d'haruspices," JCS 21 (1967), 219–235, offered as a supplement to Goetze's article in JCS 11.
3 "Mittelbabylonische Opferschauprotokolle," JCS 37 (1985), 127–218.
4 "Extispicy Reports from the Old Babylonian and Sargonid Periods," in M. de J. Ellis (ed.), *Essays on the Ancient Near East in Memory of Jacob Joel Finkelstein*, 1977, 201–208.
5 In ARM 26, 53 there is a list of these texts. I have added some texts that I find relevant to the list and included the texts published by Nougayrol in JCS 21.
6 See J.-W. Meyer in *Untersuchungen zu den Tonlebermodellen aus dem Alten Orient* (AOAT 39), Neukirchen-Vluyn 1987. Two more models were published by F.N.H. Al-Rawi, "Texts from Tell Haddad and Elsewhere," Iraq 56 (1994), 35–43, one of which (text no. 5) cites an extispicy performed in the accession year of Dadûša of Ešnunna, that has all the characteristics of a report. One side models the markings on the Liver, on the other side are described the other significant organs: belly, heart, coils of the colon and breast-bone. The only thing missing is the lung.

I will leave those clay models aside. Also relevant are the three possible reports included in the compendium YOS 10 11, as suggested recently by Thomas Richter.[7]

For the convenience of the reader I include a comprehensive list of the texts mentioned by Goetze and Nougayrol with the addition of the recently published reports. Nos. 1–15 below are quoted straight from Goetze's list in JCS 11; no. 16 appears as no. 23 on his list and was originally classified as Kassite;[8] nos. 17–27 correspond to Nougayrol's texts A–K.

1.	Text from Prof. B. Meissner's private collection:	Ungnad, *Babyloniaca* 2, pl. 6 and p. 257–74. Ammi-ṣaduqa 10.
2.	MLC 294	unpublished, quoted by Goetze in JCS 11 (1957), 89. Ammi-ṣaduqa 11.
3.	CBS 1462b	Goetze, JCS 11, 90 and 96 f. From Sippar. Ammi-ṣaduqa 11.
4.	CBS 1734	Goetze, JCS 11, 93 and 98. Ammi-ṣaduqa 14.
5.	VAT 6678	Ungnad, *Babyloniaca* 3, pl. 9, and p. 141–144. Ammi-ṣaduqa 15.
6.	CBS 1462a	Goetze, JCS 11, 92 and 98. From Sippar. Ammi-ṣaduqa 17+b.
7.	MLC 291	Goetze, JCS 11, 91 and 99. Ammi-ṣaduqa.
8.	YBC 11056	Goetze, JCS 11, 91 and 99. From Babylon. Samsu-ditana.[9]
9.	MLC 2255	Goetze, JCS 11, 93 and 100. Samsu-ditana.
10.	Istanbul Tello 1486	Virolleaud and Nougayrol, RA 41, 49–53. No date.
11.	MLC 86	Goetze, YOS 10 8. No date.
12.	YBC 5018	Goetze, YOS 10 7. No date.
13.	Strassbourg 370	C. Frank, *Strassburger Keilschrifttexte in sumerischer and babylonischer Sprache* (Berlin—Leipzig, 1928) pl. IV no. 5 and p. 17–19, new copy published by Charpin and Durand, *Documents cunéiformes de Strassbourg, Tome 1* (Paris 1981). No date.
14.	NBC 7842	YOS 10 10. No date.
15.	BM 78680	CT 4 34b (Bu 88–5–12,591).[10] No date.
16.	CUA 101	Goetze, JCS 11, 93 and 104. No date.
17.	YBC 5105	YOS 10 19; ed. by Nougayrol, JCS 21 (1967), 219. No date.
18.	UMM G 15	Szlechter, *Tablettes Juridiques et Administrative de la III^e Dynastie d'Ur et de la 1^ère Dynastie de Babylone* (Paris 1963), pl. 24 and p. 157. Ammi-ṣaduqa 15.
19.	UMM G 33	Szlechter, TJA pl. 28 and p. 155–157. Ammi-ṣaduqa 13.
20.	AO 7607	Nougayrol, JCS 21, 221. Ammi-ṣaduqa.
21.	AO 7615	Nougayrol, JCS 21, 221. Ammi-ṣaduqa.
22.	BM 12287	Nougayrol, JCS 21, 222. Ammi-ṣaduqa 2.
23.	BM 78564	Nougayrol, JCS 21, 223. No date.
24.	BM 78655	Nougayrol, JCS 21, 223. Ammi-ṣaduqa 17+b.
25.	BM 81364	Nougayrol, JCS 21, 224. Ammi-ṣaduqa 10.
26.	LB 1835	Nougayrol, JCS 21, 225. No date.
27.	MAH 16274	Nougayrol, JCS 21, 226. Date missing.
28.	YBC 16148	I. Starr, *Fs Finkelstein*, 201–203 and 207. Ammi-ṣaduqa 16.

7 "Untersuchungen zum Opferschauwesen. III. Drei übersehene Opferschauprotokolle aus altbabylonischer Zeit," in B. Böck, E. Cancik-Kirschbaum and T. Richter (eds.), *Munuscula Mesopotamica, Festschrift für Johannes Renger* (AOAT 267), Münster 1999, 399–414.

8 Identified as Old Babylonian rather than Kassite by Kraus, JCS 37 (1985), 128 and 155. The text is unusual in some respects, *e.g.*, l. 5, which is certainly to be read *me-ḫi-iṣ pa-an* lú.kúr (Defeat of the Enemy) — a name for the Path to the left of the Gall Bladder that is otherwise only known from Mari texts — and only crops up again in the SB compendia.

9 This report and VS 22 81 (no. 29) belonged to the archive of the merchant Kurû in Babylon, see Wilcke, ZA 80 (1990), 302 f.

10 Not 43b as listed by Goetze.

29.	VAT 13451	Klengel, VS 22 81; edited by C. Wilcke, ZA 80 (1990), 302–304. From Babylon. Samsu-ditana 22 or 24–25.
30.	VAT 13158	Klengel, AoF 11, 100f. Samsu-ditana.
31.	VAT 17542	van Dijk, VS 24 (1987) no. 116; edited by W.R. Mayer, "Ein altbabylonischer Opferschaubericht aus Babylon," Or 56 (1987), 245–262. From Babylon. No date.
32.	BM 85217	published below. No date.
33.	BM 85214	published below. No date.
34.	BM 97919	S. Richardson, "Ewe should Be So Lucky," text 1 below p. 236, Ammi-ṣaduqa (?).
35.	BM 97433	S. Richardson, *ibid.*, p. 237, text 2, from Babylon, Ammi-ṣaduqa 17.
36.	BM 26594	S. Richardson, *ibid.*, p. 239, text 3, Ammi-ṣaduqa 11.
37.	BM 130838	S. Richardson, *ibid.*, p. 241, text 4, neighbourhood of Babylon, Samsu-ditana 26/27.

The three reports that were published first may merit a new look since our knowledge of the terminology of extispicy has progressed considerably since their publication.

1. Ungnad, *Babyloniaca* 2, pl. 6, and 257–74.

1	diš udu *li-pí-it qá-ti a-na* ^{d}amar.utu	One sheep for the performance of extispicy for Marduk, performed concerning an undertaking in Addaru.
2	*a-na e-pé-eš ṣi-bu-tim i-na* iti.še.kin.kud	
3	*in-né-ep-šu*	
4	*te-er-tum* ki.gub *i-šu* gír *i-šu* kal *i-šu*	The extispicy: it has a Presence, it has a Path, it has a Strength, it has a Well-being. On the right side of the Gall Bladder there is a migrated Weapon, the Gall Bladder is firm on the right side, the Thin Part of the Gall Bladder is thick. The Lung's Cap is split, the Middle Finger of the Lung has two splits on the right.
5	silim *i-šu i-na* zag zé giš.tukul *na-aḫ-bu-tum*[11] gar	
6	zé zag *ki-na-at qú-tu-un* zé *ik-bi-ir*	
7	*ku-bu-uš* mur du_8 mur zag *ta-li-il*	
8	šu.si mur $murub_4$-*tum* zag *a-na* 2 du_8-*at*	
9	*tal* šà *re-sà i-šu*	The Lintel of the entrails (the diaphragm) has its top,
10	14 *ti-ra-nu za-aq-ru*	there are 14 Coils of the Colon; they are protuberant.
11	1 udu *li-pí-it qá-ti a-na* alan [*ḫa*]-*mu-ra-bi*	A Sheep for the performance of extispicy concerning a statue of Hammurabi.
12	*ta-*[*m*]*i-tum* ˹x x x˺	The query was [x x x]
13	*te-er-tum* ki.gub *a-*˹*ri-ik*˺	The extispicy: The Presence is long,

11 From *ḫabātu* III N "to wander," as suggested by the dictionaries. Alternatively, *na-a'-bu-tu* "destroyed" from *abātu* is also possible. The same phrase is found in no. 5 (VAT 6678: 5), see below, where it is qualified as a "Weapon of Assistence." Such a Weapon is placed on the right side of the Gall Bladder (as here) and in later texts can be said to "slide" (*neḫelṣû*) or "turn" (*nabalkutu*), *e.g.*, CT 20 15: ii 23, CT 20 14: i 17.

14	*i-na* zag ki.gub 2 *šī-ʾlu-úʾ*[12] *na-du-ú*	on the right side of the Presence there are two holes(?),
15	gír *i-šu* [g]ùb gír du_8	it has a Path, the left side of the Path is split,
16	*šu-bat* gùb gír gar [k]al *na-ba-al-ku-ut*	the left Seat of the Path is there. The Strength is turned,
17	*i-na* šà ká é.gal *zi-ḫu na-*[*dí*]*-ma nu-ru-ub*	in the center of the Palace Gate there is a pustule and it is very soft.
18	silim *i-šu i-na* tu ri ʾxʾ zu giš.tukul *ma-ʾagʾ-*[*ša-rí*][13]	It has a Well-being, in the … a Weapon of Strength
19	*re-eš* zé *i-ṭul* zé gùb ki.ta ʾdaʾ*-ak-ʾša-atʾ*	points to the top of the Gall Bladder, the left side of the Gall Bladder has a swelling downwards.
20	*i-na* gùb zé gìr *i-na* šà gìr gùb zé *a-na* 2 du_8	On the right side of the Gall Bladder there is a Foot in the center of a(nother) Foot. The left side of the Gall Bladder is split twice.
21	*i-na* gùb šu.si giš.tukul *iš-tu* zag *a-na* gùb *te-bi*	On the left side of the Finger a Weapon rises from right to left.
22	*i-na ṣe-er* šu.si $murub_4$ giš.tukul gar-*ma* ki.ta *i-ṭul*	There is a Weapon in the Middle Plain of the Finger and it points downwards.
23	*ku-bu-uš* mur du_8 mur zag *ta-li-il*	The Cap of the Lung is split, the right side of the Lung is stretched out,
24	*re-eš* mur gùb du_8 *tal* šà *re-za i-šu*	the top of the left side of the Lung is split. The Lintel of the Entrails has its top.
25	14 *ti-ra-nu na-aḫ-sú*	There are 14 Coils of the Colon, they are recessed.
26	*a-na ta-wi-it ep-ša ta-az-bi-il-tam i-ša-a*	Concerning the query which was made, the extispicies indicate delay.
27	iti.še.kin.kud ud.21.kam	Month 12, Day 21.
28	mu *am-mi-ṣa-du-qá* lugal.e	Year of king Ammiṣaduqa, the rightful shepherd, attentive to Šamaš and Marduk, (who released his country from debt).
29	sipa zi še.ga ^{d}utu ^{d}amar.utu.bi.da.ke_4	

5. VAT 6678 (Ungnad, *Babyloniaca* 3, pl. 9, 141–144).
Collated, the admittedly vague ruled lines were left out in the copy.

1	1 udu *li-pí-it qá-ti*	One sheep for the performance of the ritual of extispicy, concerning the well-being of Bēltani for her family god.
2	*a-na* ʾsilimʾ *ʾbe-el-ta-niʾ*	
3	*a-na i-li a-bi-ša*	
4	uzu.*te-er-tum re-eš* ki.gub *zu-qú-úr*	The extispicy: The top of the Presence is protuberant, it has a Path, the left Seat of the Path is there.
5	gír tuk *šu-bat* gùb gír gar	

12 Copy: na ʾšīʾ ʾkuʾ.
13 Such a weapon is known from *Multābiltu* Table 1: 19 (CT 20 39f.: 20): *magšaru danānu šumma ina imitti marti kakku šakinma šapliš iṭṭul kakki magšari kakki Šamaš.*

6	kal tuk silim ra-*iṣ*	it has a Strength, the Well-being is destroyed,
7	giš.tukul *ri-ṣi*[14] gar giš.tukul *na-aḫ-bu-tum*	a Weapon of Assistance is there, a moved Weapon,
8	zé zag gi.na	the Gall Bladder is stable on the right side,
9	*i-na* gùb zé gìr zag šu.si du_8	in the left side of the Gall Bladder there is a Foot, the right side of the Finger is split,
10	gùb šu.si *ša-ti-iq*	the left side of the Finger is cleft.
11	⌜anše⌝ mur zag *ku-ri* x[15] mur zag RI	The Donkey of the right Lung is short, the … of the right lung sticks out,
12	*i-na* zag mur *ù* gùb mur gìr	there is a Foot on the right and left Lung,
13	⌜šu⌝.si mur $murub_4$ gùb du_8	the Middle Finger of the Lung is split on the right,
14	12 *ti-ra-nu*	12 are the Coils of the Colon.
15	*a-na* ⌜silim⌝ *ša-al-ma-at*	It is favourable but has ad[verse signs and a check]-
16	*a-[ḫi-tam pí-q]i-tam* ⌜*i-šu*⌝	up is necessary.
17	[iti x x x] ud.19.kam	The month [of x x x] the 19th day,
18	[m]u *am-mi-ṣa-du-qá* lugal.e	the year king Ammi-ṣaduqa (brought into the
19	alam.a.an.ni šu.silim.ma.a	Emeteḫursag for Zababa and Inanna) his statue uttering a greeting.

15. CT 4 34b (BM 78680 = Bu 88–5–12, 591)

1	*ma-az-za-za-am i-šu*	It has a Presence,
2	*pa-da-na-am i-šu*	it has a Path,
3	ká é.gal *ša-lim*	the Palace Gate is all right,
4	*šu-ul-mu pa-ar-ku*	the Well-being lies crosswise,
5	*ša-ki-in*	
6	*ma-ar-tum ša-al-ma-a-at*	the Gall Bladder is all right,
7	*ú-ba-nu-um ša-al-ma-at*	the Finger is all right,
8	*ha-šu-ú ù li-ib-bu ša-al-mu*	the Lung and the Heart are all right,
rev. 1	12 *ti-ra-nu*	there are 12 Coils of the Colon.
2	*te-er-tum im-me-er*	The extispicy, a sheep
3	*ez-zi-im*	for an angry (god),[16]
4	*ša-al-ma-a-at*	was favourable,
5	*mi-im-ma la ta-na-ku-ud*	do not worry.

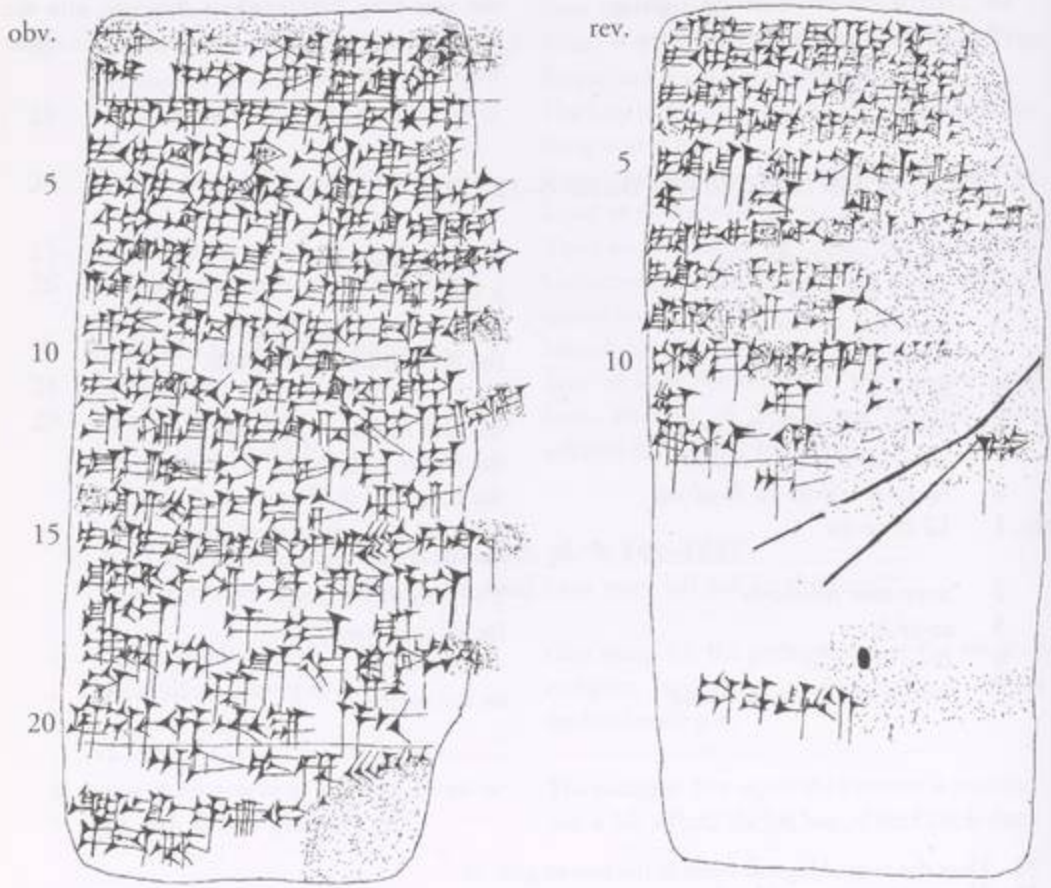
14 Thus the copy, Ungnad emends the text to gùb zé.
15 The sign looks most like si.
16 The meaning of this phrase is not certain, but cf. the Middle Babylonian report, Kraus, "Mittelbabylonische Opferschauprotokolle" no. 16: 2 "Should the ritual for an angry god (dingir šà díb.ba) be performed?" with Goetze, JCS 11, 95, contra Nougayrol RA 38, 73 f.

The vast majority of the extispicy reports published to date are late Old Babylonian, 19 of them dating to the reign of Ammi-ṣaduqa, and are of Northern origin. The new texts are probably older, considering their large proportion of syllabical writings, mimation and in part their terminology (*naplaštu* rather than *manzāzu*). They are also unusual because they follow Southern orthography:

PI for *pi* (Northern orthography: BI)
DU and DI for *ṭù* and *ṭi*
AZ for *as* (Northern orthography: ÁŠ)
ŠI for ŠE (characteristic of Larsa texts)

Roughly speaking, the southern tradition is mainly documented by the compendia published by Goetze in YOS 10, whereas the northern tradition is represented by the Sippar texts published by Ulla Jeyes in *Old Babylonian Extispicy*. As pointed out by Jeyes (OBE p.12–14), the northern tradition was the one to survive in the canonical versions.[17]

32. BM 85217 (99–4–15,24; 11 cm×4.8 cm)



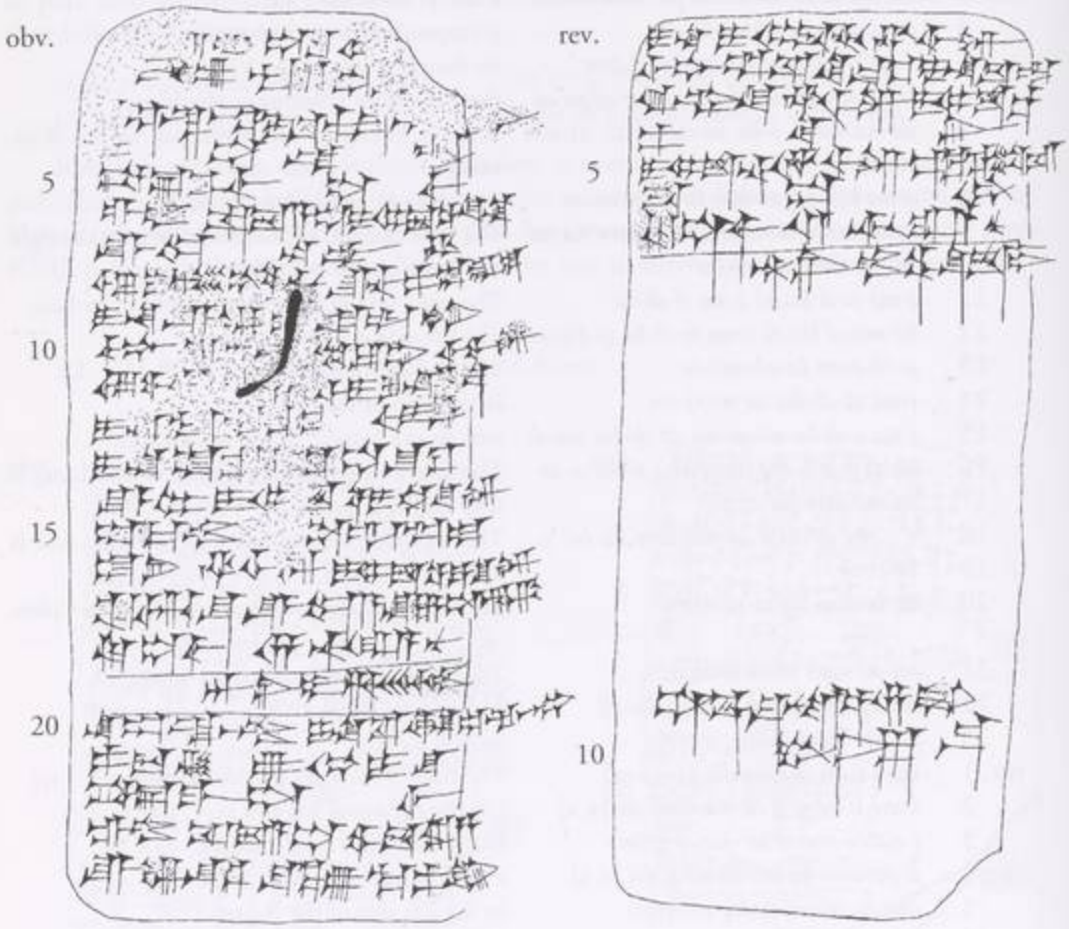
17 Cf. also U. Koch-Westenholz, *Babylonian Liver Omens*, p. 17 f.

1	*an-ni-a-tum ša šu-lu-um* ˹*ši-pi-šu*˺	This extispicy is performed concerning the well-
2	*a-na a-ta-al-lu-ki-im*	being of his "foot," for going around.
3	*na-ap-la-aš-tam i-šu pa-da-nu-um*	It has a View, the Path
4	*i-mi-it-tam uḫ-ta-la-al*	is suspended on the right side,
5	*i-na i-mi-it-ti na-ap-la-aš-tim*	on the right side of the View
6	*ši-pu na-ap-la-aš-tam i-na-aṭ-ṭa-al*	there is a Foot pointing to the View.
7	*da-na-nam i-šu šu-lu*²(text: ú)*-um im-mi-it-tim*	It has a Strength. The right side of the Well-being
8	*a-na* ká é.gal*-lim šu-ú-šu-ra-at*	goes straight to the Palace Gate.
9	*mar-tum iš-da-a-ša i-mi-it-tam* ˹*ki-na*˺	The base of the Gall Bladder is firm on the right
10	*šu-me-lam na-as-ḫa*	and loose on the left side.
11	*i-mi-it-ti* šu.si *i-na iš-di-ša*	The right side of the Finger is split in its base,
12	*šu-me-el* šu.si *i-na re-ši-ša ip-ṭù-ur*	the left side is split in its top.
13	*ṣi-ib-tum ša-al-ma-at*	The Increment is all right.
14	*i-na zi-ib-ba-at ni-ri-im*	In the Tail of the Yoke,
15	*i-na i-di šu-ut-qí-im zi-iḫ-ḫu na-di*	next to the *šutqu*,[18] there is a pustule.
16	šu.si *ḫa-ši-im* murub$_4$ *iš-da-a-ša*	The base of the Middle Finger of the Lung is
17	*šu-me-lam pa-aṭ-ra*	split on the left side.
18	*ka-ar-šum šu-me-lam* šà ni² x	The Stomach on the left … the Heart and is
19	*ta-ri-ik*	dark.
20	šà *ša-lim* 14 *ti-ra-a-nu*	The Heart is all right, there are 14 Coils of the Colon.
21	*an-ni-tum re-eš-ti-tum*	This was the first inspection.
22	*na-ap-la-aš-tam ú-ul* [*i-šu-ú*]	It does not [have] a View,
23	*pa-da-nam* [*i-šu*]	[it has] a Path.
rev. 1	*mar-tum iš-da-a-ša pi-i*[*ṭ-ra*]	The base of the Gall Bladder is split.
2	*i-mi-it-tam ù šu-me-lam tu-*[x x]	On the right and left [x x x].
3	*i-na šu-me-el ta*²*-ka-al-*[*tim*]	In the left side of the Pouch
4	*ši-pu-um na-aḫ-sà-at ù na* [x x]	a Foot is recessed and [x x x].
5	*ina šu-me-el ta-ka-a*[*l-tim*]	In the left side of the Pouch
6	*pi-iṭ-ru-*[*um*]	there is a split.
7	*i-na i-mi-it-ti-šu* [x x x]*-bu-um*	In the right side [x x x x x].
8	*i-na* ˹x x x˺ [x x x x]	In [x x x x x x]
9	šu.si *ḫa-ši-im* murub$_4$ [x x x x x]	The middle Finger of the Lung [x x x]
10	*ša-am-ma-aḫ-*˹*ḫu*˺*-um*[19] *šu-me-* [*lam* x x]	The Large Intestine on the left [x x x] is dark.
11	*tu-ur-r*[*u-uk*]	
12	šà *ša-lim* 14 [*ti-ra-a-n*]*u*	The Heart is all right, there are 14 [Coils of the Colon].
13	*an-ni-*[*tum pi-qí-it*]*-tum*	This was the check-up.
14	*ša* iti šu.numun.a [x x x x]	Performed on the [x x] of Dumuzi

18 The *šutqu* is a very rarely mentioned feature and this is its first appearance in a report. See Starr, *Rituals of the Diviner*, 76 ff.

19 The *šammāḫu* is not otherwise attested in extispicy.

33. BM 85214 (99–4–15,21; 11.5 cm×5.2 cm)



1	[x x] *ša šu-u*[*l-mi-im*]	[One sheep] for well-[being]
2	[x x] *i-nu-ú-ma* ⌜*a-ta*⌝-[x x x]	when [x x x x].
3	[*na*]*-ap-la-aš-tam i-šu pa-da-n*[*um* x x]	It has a View, the Path is suspended [to the
4	*ú-ta-la-*⌜*al*⌝[120]	…],
5	ká é.gal-*lim ša-lim*	the Palace Gate is all right,
6	*mar-tum iš-da-a-ša i-mi-it-tam ki-na*	the base of the Gall Bladder on the right is
7	*šu-me-lam na-as-ḫa*	firm, the left side is loose,
8	*ù i-sí-il-ti šu-me-lim pa-aṭ-ra-at*	and the left Sphinctex is split,
9	*i-na šu-me-el* [*ta*]*-ka-al-tim*	on the left side of the Pouch there is
10	*ši-pu-*[*um i-na*] *li-ib-bi ši-pi-im*	a Foot [in] a Foot,
11	*ù wa-*[x x x] *ši-i-lu na-a-di*	and … there is a Hole.[21]
12	*i-na* ⌜*ma-at* šu.si⌝ *ši-i-ru*	There is Flesh in the area of the Finger.
13	*i-na ṣe-*⌜x x⌝ *ša* šu.si[22]	In the … the Finger:
14	*šu-me-lum i-mi-it-tam i-te-ki-im*	the left side has absorbed the right side,
15	*ṣi-ib-tum ša-al-ma-at*	the Increment is all right.
16	*ṣi-ir ha-ši-im i-mi-it-tam e-ki-im*	The plain of the Lung is atrophied on the right,
17	*ka-ar-šu šu-me-lam a-na* 6 *ta-ri-ik*	the Stomach has 6 dark spots on the left,
18	šà *ša-lim* 14 *ti-ra-a-nu*	the Heart is all right and there are 14 Coils of the Colon.
19	*an-ni-tum re-eš-ti-tum*	This was the first inspection.
20	*na-ap-la-aš-tum i-na iš-di na-ap-la-aš-tim*	There is a View in the base of the View,
21	*pa-da-nam ú-ul i-šu*	it does not have a Path,
22	ká é.gal *ša-lim*	the Palace Gate is all right,
23	*mar-tum iš-da-a-ša pi-it-ru-sà*	the base of the Gall Bladder is split,
24	*šu-me-el* šu.si *šu-qú-ú-ma pa-ṭe-er*	the left side of the Finger lies high and is split,
rev. 1	*i-na i-mi-it-ti ha-ši-im*	there is a Foot in the right side of the Lung
2	*ši-pu-um iš-di* šu.si *i-na-ṭa-al*	pointing to the base of the Finger,
3	*ru-uq-qí ha-ši-im i-mi-it-tam*	the Narrow Place of the Lung is split on the
4	*pa-ṭe-er*	right,
5	*i-mi-it-ti ha-ši-im* giš.tukul *e-li-iš*	a Weapon points upwards on the right
6	*iṭ-ṭù-ul*	Lung,
7	šà *ša-lim* 12 *ti-ra-a-nu*	the Heart is all right, there are 12 Coils of the Colon.
8	*an-ni-tum pi-qí-it-tum*	This was the check-up.
9	*ša* iti.šu.numun.a ud.14.kam	It was performed on the 14th day of the
10	*in-né-ep-šu*	month of Dumuzi

20 Cf. no. 32 (BM 85217): 3 and YOS 10 20: 7 ff. [*šumma padā*]*nu imitta uḫ-ta-la-al.*

21 Cf. KAR 448: 5.

22 One would expect a form of *ṣēru*, perhaps *ṣēr qablî* (cf. RA 38, 86: rev. 15) but the traces do not seem to fit.

Purpose and Persons[23]

The Old Babylonian reports listed above and the Middle Babylonian reports edited by Kraus all refer to the queries of private persons, whereas the texts from the Mari Palace archives by nature reflect the needs and concerns of the ruler and his administration. Beside the reports, there are scattered references to extispicy and the diviner in administrative texts and letters both regarding king and commoner. The Old Babylonian extispicy reports often contain an introduction that mentions the purpose, the client and the god to whom the sacrifice was made. The purpose of the extispicy can also be gleaned from the summing-up, which was occasionally appended after the description of the inspection, but the contents of extispicy reports were not strictly standardized and sometimes the information both about the nature of the query and its result were simply left out altogether.

As is well established, the diviner was a free agent. He could serve the temple or be affiliated with it — in other capacities as well. He would of course receive payment for his services but he was not attached to the cult as such.[24] Another important and sometimes major client was the king. Most of the letters in ARM 26 are from diviners in Mari itself, most of them more or less closely connected with the royal court. Though they were clearly not part of the palace staff, they were sworn to loyalty and given a fief as payment.[25] This is the same situation that we find with the diviners and scholars attached to the Neo-Assyrian court.[26] Diviners could take advantage of their close connection to temple and palace to further their own economic interests — and it would seem at times they would get involved in shady business as money lenders (see S. Richardson's article below).

The king did not demand exclusive rights to the expertise of the diviners he employed. In the "Diviner's Protocol," or oath (ARM 26 1), we hear that the diviners were pledged also to report ill-portending signs they observed in extispicies performed for private clients and elsewhere (colleagues' extispicies[27] or other sacrifices apart from those performed explicitly for extispicy). That they actually did this is attested in, *e.g.*, ARM 26 no. 109 (Ibbi-Amurrum to Šamaš-īn-mātim) and no. 85, where Asqudum reports on an extispicy performed for a private person (*muškēnum*). The omen itself is broken away. The only

23 For other summaries see *e.g.*, Goetze, JCS 11, 94 f., Kraus, "Mittelbabylonische Opferschauprotokolle", p. 154 f. and Ulla Jeyes, OBE, p. 38–41. Some of the examples listed by U. Jeyes do not seem to refer to extispicy at all.

24 See *e.g.*, J.-M. Durand, ARM 26, 61 f. and most recently F.H. Cryer, *Divination in Ancient Israel and Its Near Eastern Environment*, Sheffield 1994, p.194 ff. with previous literature. Cryer argues that the diviner was "a cultic functionary" because he performed rituals such as purification, invoked the gods and received payment from temples. While I fully agree that the diviner "mediated between the gods and man," I do not agree that the religious aspects of his expertise makes him a "cultic functionary." In YOS 5 155: 3 the diviner receives four lambs as payment.

25 ARM 26, p. 59. In ARM 26 no. 145 a diviner complains: "I've been told to take omens, can I get a field so I will not die from starvation?"

26 Cf. *e.g.*, Parpola, *Letters from Assyrian Scholars to the Kings Esarhaddon and Assurbanipal II*, (1983) and U. Koch-Westenholz, *Mesopotamian Astrology* (1995), p. 56 ff.

27 ARM 26 no. 96 concerns the well-being of the army for one month. The diviner states that since he was not called upon to participate with Hammurabi's diviners, he has nothing to report on their extispicy. Nos. 102 and 103 report on collaboration. No. 103 is particularly interesting: the diviner relates how he and the Babylonian diviners discussed a difference in their ritual procedures.

restriction on the diviner concerning the use of his craft was that he was not to perform extispicy for enemies of the state and, of course, he was not to divulge any sensitive information he became privy to in the course of his service to the king — but otherwise he was free to ply his trade.

We will examine first the most important client, the king and the administration. Unsurprisingly, the recurrent topics are the safety and prosperity (*šulmu*) of the land, security for troops and emissaries,[28] and the vagaries of war. Often mentioned in the Mari letters are routine queries about the well-being of particular districts and cities. Such queries appear to have been regularly performed for longer periods (6 months, *e.g.*, ARM 26 no. 88) or for shorter periods (1 month, *e.g.*, nos. 86 and 110), down to 5 days (no. 99) presumably in special cases. Apparently extispicy should ideally be performed monthly for the army as well (no. 101). No wonder that perhaps as many as 5500 lambs were needed a year for divination in the capital. According to one list[29] no less than 4143 sheep were used for divination in 9 months. It is not stated if they were also used for other purposes, but it is not likely since the diviner Asqudum distinguishes meticulously between animals used for extispicy, sacrifice and the "royal table." One administrative text from Larsa (TCL 10 66) that details sheep used in the month of Abu for, among other things, rituals in connection with the phases of the moon also mentions "109 lambs for the diviner."[30] For a single query the diviner needed at least one and often two or more lambs in perfect condition. With all the regular extispicies to perform and special queries and occasions[31] taking their toll, it must have been a permanent occupation to find suitable lambs for the diviners to investigate. We are not surprised to find one letter-writer complaining that there are too few ewes in the village, they are "hardly sufficient to provide lambs for the diviner" (TCL 18 125: 18–19).

As we see in the Neo-Assyrian queries (edited by Starr in SAA 4), the questions pertaining to strategic or political matters could be quite detailed, for instance: seizing a city (ARM 26 no. 117), the movements of the enemy (*e.g.*, nos. 142, 170, or 155: concerning the behaviour of Babylonian troops toward Mari), what to do with exiles (no. 144: the omens predict rebellion, what to do with the people from Rapiqum living in Terqa?).

28 *E.g.*, 87, 137, 174, 183 despatching of messengers, *mār šipri*, or nos. 98 for a contingent of 200 men, and 100bis for the army (*sābum*), concerning people sent to Hammurabi: will they return unharmed?

29 M.11293, quoted in ARM 26, p. 37. As Durand cautions we do not know if the large amount was due to the activities of the king that year (Zimrilim 9), which was particularly tumultous. The first 3 months are missing from the list, and one would expect that many extispicies for the new year had to be performed during Nisan.

30 Cf. also *e.g.*, BE IV/2 2: 1–3: 13 u_8 14 udu.níta 8 $sila_4$ máš.šu.gíd.gíd 35 udu zi.ga ri.ri.ga *ù* máš.šu.gíd.gíd "13 ewes, 14 rams, 8 lambs for the diviner, total of 35 sheep, fallen or for the diviner"; BE VI/1 80: 1–7: "12 lambs for the ritual of the diviner, impost of Ipiq-Aja, the *šakkanakku* of Sippar-Amnānu" and JCS 2, 74 no. 2 : "4 lambs for the ritual of the diviner. Herdsman Sîn-lîdiš, it will be booked on his account." From the year Ammiditana 3.

31 JCS 2, 104 no. 6: 5: "8 lambs in all for the ritual of the diviner when the princess was sprinkled. Herdsman Nûr-Šamaš who belongs to Iltāni, the *nadītu* of Šamaš, the princess." Perhaps the sprinkling was done directly in connection with the extispicy (as supposed by Goetze, JCS 2, 78) or maybe, as I believe, the extispicy was performed in connection with another purification or initiation rite.

Šamši-Adad[32] once writes that he wants a series of extispicies performed and the results brought to him: one concerning the well-being of the land with regard to pillaging by the enemy, one concerning whether the land will rebel and one concerning the well-being of the city Kaḫat. A very meticulous procedure is attested in ARM 26 no. 160: With the first lamb the diviner asked "should Zimrilim return Hit to the king of Babylon, will Zimrilim be well, his land be well and expanding?" The answer is not favourable. Then, for full measure, he asks the opposite question with a second lamb, "Should he not return it? etc." and here, lo and behold, the answer was favourable.

The king would instruct his officials to abide by the result of a query[33] or themselves consult a diviner when necessary. For instance, Ammi-ditana tells his officials to get their diviner to find out whether it is safe to transport corn for rations for a fortress before they actually send it (LIH I 56). On the other hand, extispicies were also performed at the discretion of the king's officials themselves, not on his direct order. They then reported the result to him as part of the description of their decision-making process. For instance in ARM 26 no. 182, where Sumû-ḫadû apologizes that he cannot come to the king, because the omens keep warning against travelling; so he sends the usual stand-ins: a tuft of hair and the hem of his garment instead. In no. 190 the writer says that he will go on a campaign in spite of not obtaining any answer to his repeated queries. This is quite headstrong behaviour. Baḫdi-lim advises the king (no. 176) that he should not engage in combat before Dagan, Šamaš and Addu have given the say-so.[34]

Apart from political relations, relations with the divine could also prompt questions. For instance: Should the gods come to the king or vice versa (ARM 26 no. 162)? Should the new *ugbabtum* of Dagan take residence in the house of her predecessor (no. 178)? Or, on consideration, maybe another house is better suited, the god says ok; but what does the king think (no. 179)? How should the making of a statue of the goddess Bēlet-biri proceed (nos. 132–134)? No. 84 concerns the well-being of Yasmaḫ-Addu; the omen mentions a promise to Sîn that supposedly either Yasmaḫ-Addu himself, or his father Šamši-Adad, had made but not kept. In connection with royal participation in rituals extispicy could also be necessary, as illustrated by VS 7 84 "3 rams for Marduk's temple, 4 lambs for the temple of Ištar of Babylon for the *lipit qāti* ("handiwork" of the diviner) for the temple of Ištar of Babylon when Ilu-nabu the king's daughter went to Ishtar's temple and made the food offering for him (the king? or a mistake for "her"). Delivered by the herdsman Rīšatum, received by Ilu-nabu, the king's daughter."

Naturally the well-being of the king himself and his family[35] was important, as is demonstrated for instance in ARM 26 no. 81, the famous letter from Asqudum prompted by a lunar eclipse. Though the diviner's own extispicy for the king was favourable, he still exhorts the king to have omens taken where he actually is. Also more mundane affairs

32 RA 66, 122 (A 315+).

33 In AbB 6 165 Samsu-iluna says that he has had divination performed and that he will send the result to his officers, including the army scribe, and tells them to show the omen to a certain soldier.

34 As indeed Adad himself commands Zimrilim in a letter edited by Durand in MARI 7 p. 43 ff.

35 For instance, Sîn-išmeanni reports to Kuwari, the ruler of Šemšara, that he has taken omens concerning the health of Kuwari's wife and has "lifted the hand of Ishtar" (J. Eidem, *The Shemshara Archives* 1, Copenhagen 2001, no. 34).

might have to be investigated: dispatching of a caravan (no. 85), moving grain (no. 175) and safe pasture for the cattle (no. 180).

Let us consider the diviner's other clients. When known, we see that the persons concerned were of some status or means: a *galamaḫḫu*,[36] a foreman of the merchants (nos. 18 and 19), a prosperous merchant (nos. 8 and 29), a (very concerned) owner of cattle (TCL 17 27), a *nadītu* (Dalley, *Old Babylonian Texts from Rimah* no. 65). One letter-writer remarks that she has to go to the nearest larger city to have extispicy performed, since there are no diviners in the village. This indicates that the diviner needed a clientele of a certain standard to make a living (VS 16 22: 29). Just as extispicy reports and related texts formed a part of the royal archives, the reports and sometimes also the corresponding *ikribus*[37] were kept in the archive of the person who had the extispicy performed. The diviner probably kept records like the Middle Babylonian collections of reports[38] and the Old Babylonian text no. 12 (YOS 10 7).

The most frequent topic in the Old Babylonian reports is simply "well-being." The two *ikribus* performed for the *galamaḫḫu* of Annunītum, Ur-Utu, asked about his well-being and health for the coming year, taking into consideration everybody who could affect his life: "god, goddess, king, powerful person, ordinary person, slave and maidservant, fate and plan, known and unknown."[39] And of course the relationship with the king could call for special concern. The question of one Middle Babylonian report is whether "the messenger he sent to the king will receive a positive answer."[40]

A single report (no. 31) concerns marriage (*aḫuzzatu*) and sometimes the matter under investigation is not specified, but must have been specific (*e.g.*, no. 1: performed concerning "an undertaking in Addaru" for Marduk, no name; a second extispicy is performed concerning "a statue of Ḫammurabi"). Extispicies that simply concern the well-being of named or anonymous persons form the majority: nos. 3, 5, 6, 7, 9, (17), 18, 19, 21, 22, 24, (27), 28, 30 (for a year) and 32. Some of these queries might have been caused by worry about illness, a natural topic for the diviner and of course amply reflected in the apodoses of the omen compendia. The diviner could investigate the cause of the illness. Aqba-ḫammu writes to Iltāni: "I have performed an extispicy concerning the hair and fringe of the young man you sent to me; the omen was favourable. The young man inflicted with the Hand of God is very ill (*itarraṣ*)? There is no question of guilt" (OBT Rimah 65). Interest in his general well-being and health was probably what prompted the Old Assyrian merchant's wife to write to her busy husband, telling him that she has had extispicy performed and that he should pay heed to the words of the gods, as she scolds him: "You value your money more than your life" (TC 1 5). Not that the gods could not be asked about

36 L. de Meyer, "Deux prières *ikribu* du temps d'Ammī-ṣaduqa," *Fs Kraus* (1982), 271–278. Both were performed for the *galamaḫḫu* of Annunītum Ur-Utu.

37 L. de Meyer *ibid.* The texts were found in his family archive together with four extispicy reports. No. 29 (VS 22 81), a report for the merchant Kurû, stems from the German excavation of Babylon and was found in a private house "225P2."

38 Kraus, "Mittelbabylonische Opferschauprotokolle". Only his text no. 5 contains just one report, nos. 1, 15 and 19, which contain two reports, each may refer to a single case.

39 The phrase used is *ina amāt*, which I understand as "in what concerns" rather than "by the order of."

40 Kraus, "Mittelbabylonische Opferschauprotokolle" no. 4 (10), also no. 18 (3): will he who had this dream have success on the king's command?

money matters. The merchant Kurû (nos. 8 and 29) had extispicy performed to check if he had made a good investment: Could the merchandise he had bought be sold at a profit? One report (S. Richardson, p. 239 below, text 3) concerns *epēš ṣibûtim* "undertaking an enterprise," which was one of the standard topics of investigation for the diviner according to the first millennium compendia, and should be understood in the broadest sense.

Cattle was a valuable but also a vulnerable asset, and the gods had better be consulted before risking its safety. Qurduša writes: "Take a lamb from the herd and bring it to the diviner, find out about my cattle and sheep, if they should come to me, if the enemy will attack. If there are no robbers bring them to me if (the diviner says) 'bring them to Kish, the enemy will not seize you' – and corn as much as there is, bring it to Kish, send me a full report" (TCL 17 27).[41] Movement of cattle is also the subject of YOS 2 83 (AbB 7 83), where the diviner seems to have referred the matter to another expert. Why he does not perform the extispicy himself is unclear: Lu-Nanna to Ubarrum: "I wrote to Ilšu-ibbišu, the diviner, and he said: "I have written to Ningizzida-gamil and he answered, 'I have inspected the exta (*šīru*), and the exta was pierced.'"" As the editor notes a line may be missing because the connection with the following instructions how to move the cattle is not clear. Piercing is generally an unfavourable sign, and the writer is duly concerned. The open land could be dangerous and travelling was a risky business, cf. *e.g.*, no. 16 (concerning the well-being of the boat of Warad-Ištar going to Emar), not least if one had forgotten one's dues to the gods: Can the doctor's daughter travel safely even though she has omitted to bring a present for Ištar before leaving?[42]

Only one (or two) Old Babylonian reports refer to the relationship with gods: no. 15 (angry god?), and no. 23, which was taken in connection with funerary rites (ki.sè.ga). In contrast, a very large proportion of the Middle Babylonian extispicy reports[43] dealt specifically with questions of that nature. Quite often the diviner sought to determine what ritual action should be taken or which god should be invoked: Enlil, Ninlil, Nusku or even "Should he send to Gula to speak for him to Nusku?" (4 (8)). Interestingly ominous dreams play a large role, favourable as well as ill-portending. The meaning of worrying dreams was frequently tested by divination, once the query even describes the dream in some detail, and, strangely, a part of the dream was bad extispicy omens: 20 Coils of the Colon, 2 Palace Gates and 2 Increments (18 (1))! The close connection of the diviner and the dream-interpreter (male or female)[44] is well known from literary texts. In the Cuthean Legend the king in his hybris asks: "What lion ever observed oracles (*bīru*), what wolf ever asked the female dream-interpreter?" (Gurney, AnSt 5 102: 8). In *Ludlul* (BWL 38: 6–7) the suffering nobleman laments: "The diviner with his inspection has not got to the root of the matter, nor has the dream-interpreter with his libation elucidated my case." Their association is

41 Perhaps because he is preoccupied with the safety of his cattle Qurduša had first written (l. 23) "the enemy will not seize *them* (*i.e.*, his cattle)," then, remembering his men, emended it to "seize you!"

42 Kraus, "Mittelbabylonische Opferschauprotokolle" no. 17 (1), cf. also no. 5 (9) "should he go on a journey?" S. Richardson, p. 241 below, text 4, is also connected to movements of goods across uncertain land.

43 Cf. the summary of the reports' introductions and summing-ups in Kraus, "Mittelbabylonische Opferschauprotokolle," 154 ff.

44 Cf. CAD Š/1, 111.

also reflected in a letter from Ḫuzalatum to Bēltāni: (quoting Bēltāni) "For your sake I go to the diviner and the dream-interpretress" (VS 16, 22 (AbB 6 22): 7). Seemingly, one expert in divination could refer you on to the next: "The diviner told him to go to the dream-interpreter" (PBS 1/1 2: 31).

We have as yet no extispicy reports for private persons from the first millennium. In the scholarly literature of the period, what concerns the king and state naturally occupies the centre of the diviners' attention, but the ordinary man is not forgotten. With the usual Babylonian caution everything — and all the rest — is included:

"The right middle pertains to me, the left to the enemy, when you perform an extispicy for the well-being of the king, for warfare, for the campaign, for taking a city, for healing the sick, for rain, for undertaking an enterprise and whatever else" (*Multābiltu* Tablet 2 CT 20 43–48: i 59–61).[45]

45 The same list is found in *niṣirti bārûti* texts (*e.g.*, DT 118: 6 and AfO 16 pl. XIII: rev. 5′ f.).

Redeeming a Father's Seal

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The cylinder seal ranks among the most familiar hallmarks of ancient Mesopotamian culture. The possession of a seal, what it looked, what its legend said and the presence of its impressions on tablets and other inscribed or uninscribed clay objects were important issues for the inhabitants of ancient Mesopotamia and have received much attention in modern scholarship. Ownership and application of seals can be studied on the basis of the rich archaeological documentation that was created by the act of sealing tablets, containers or room entrances, and much work has been done on the correlation between the persons and their roles mentioned in cuneiform texts and the seal impressions that appear on the tablet.[1] Since the analysis of the remnants of ancient sealing practice alone is insufficient to study the social significance of ownership and use of cylinder seals in Mesopotamian society, textual information concerning cylinder seals can offer valuable additional information. Unfortunately the number of explicit passages in the cuneiform record about application, manipulation or transfer of cylinder seals has remained limited. Besides occasional references in letters and contracts to various aspects of seal use,[2] the implications of the loss of cylinder seals are certainly the best-documented facet of seal handling in the textual record (Hallo 1977).

In the collection of the British Museum another text about the transfer of cylinder seals is preserved. R. Harris was the first to draw attention to this text and interpreted it as a lawsuit following the sale of an inherited seal after the death of its second owner (Harris 1975:

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1 See the important conference volume edited by McG. Gibson and R.D. Biggs (1977) and the astute review by J.D. Muhly (1981). From the enormous literature on seals and sealing in the Old Babylonian period I found the exemplary study of sealing practise in a well-delineated Old Babylonian archive by D. Charpin (1980: 279–298), the study of the legal implications of sealing by W.F. Leemans (1982) and the analysis of sealing practise based on a large number of tablets from Sippir from the reign of Hammurabi in the British Museum by B. Teissier (1998) especially helpful.

2 In this context the informative letters of Bābu-aḫa-iddina from Middle Assyrian Aššur with instructions about application and shipment of his own seals and those of his subordinates are important, see Röllig 1980.

67, 358). This outline already indicates its significance for the study of seals and sealing and has been taken up by seal specialists.[3] A description of this text was included in the eighth volume of the *Catalogue of the Babylonian Tablets in the British Museum*, where it is characterised as a "legal proceeding concerning death of a principal to a contract; mentions year of Abiešuh and year 35 of Ammiditana" (Leichty *et al.* 1988: 150). The correct understanding of the text was hampered by the poor state of preservation of certain passages (Harris 1975: 67 note 67) and traces of cleaning efforts of the damaged signs at the end of lines 12 and 15 testify to previous decipherment endeavours.

In fact, the text deals with the restitution of the paternal cylinder seals to the second son of a high-ranking military commander after the death of the eldest son and previous user of the seals. The text contains arrangements required by the transfer of these seals that stipulate liabilities for the old and the new users, and thus offers valuable new information about liability arising from possession of seals. The text also helps to understand a crucial moment in the history of an important family of Sippir-Amnānum, that of the general and subsequent chairman of the assembly Ilum-damiq and his son, the captain Ilšu-ibnišu. This family has received some attention in the literature, mainly on account of the tablet BE 6/1 119, a large register of fields owned by Ilum-damiq, members of his family and other landowners (Harris 1975: 67, 97; Yoffee 1977: 129). In recent years a duplicate of his text has been published (MHET 2/5 656) and more documents about the family's landed property have come to light. It will become clear that these texts were brought together as a result of the troubled conclusion of the career of Ilšu-ibni, the previous user of the seals.

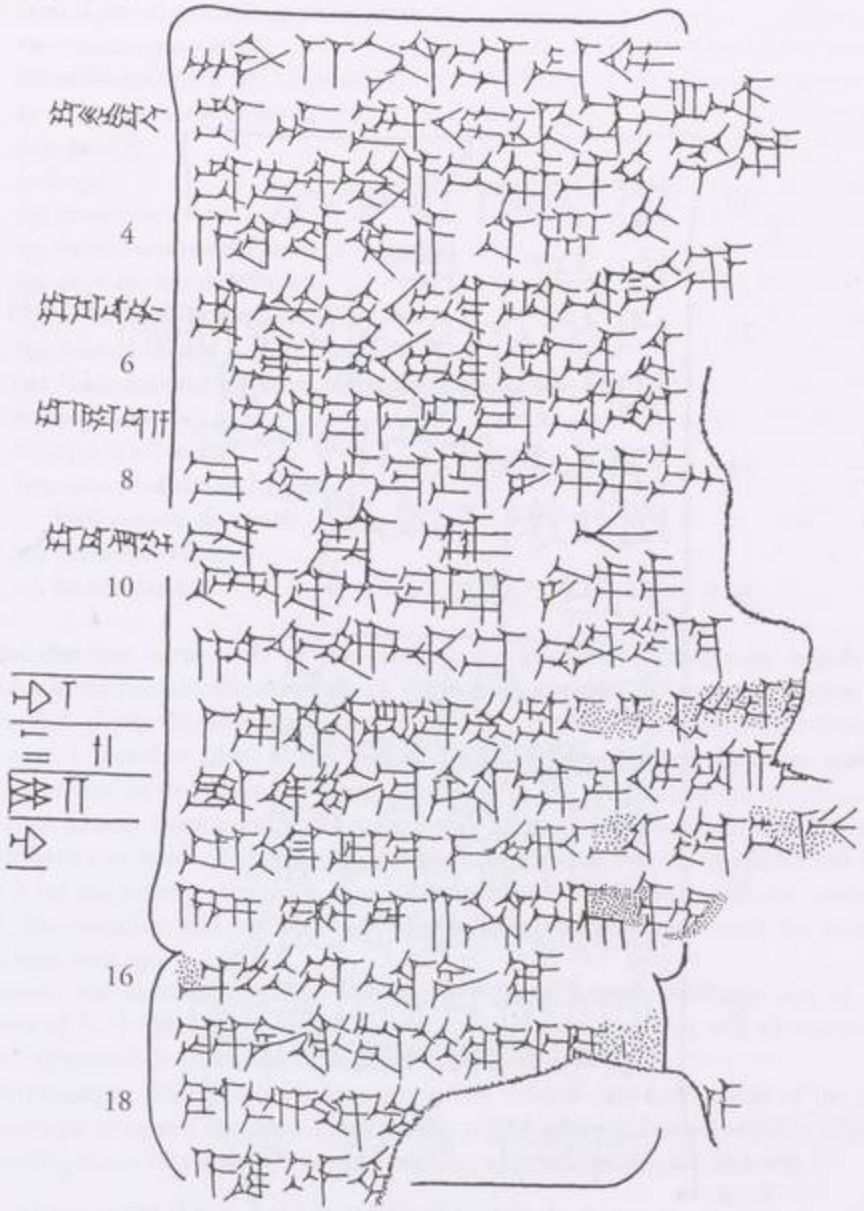
This study is offered in gratitude to Christopher Walker, whom we owe much for his work on seals and archives alike and whom I would like to thank in particular for creating the excellent working conditions in the Students' Room of the Department of Western Asiatic Antiquities of the British Museum.

BM 78356 (Bu 88–5–12,242; 8.3×4.9×2.7 cm)

aš-šum 2 na_4-kišib *šu-mi*
ša dingir-*da-mi-iq* gal-ukkin-na
ša i-na mu *a-bi-e-šu-uḫ* lugal-e
a-di $^{iti}sig_4$-a u_4-7-kam
ša mu *am-mi-di-ta-na* lugal-e
    bàd *am-mi-di-ta-na*^{ki}
    gú ^{id}me-^{d}en-líl-ta bí-i[n-dù-a]
ma-ḫar dingir-*šu-ib-ni* PA.PA dumu dingir-[*da-mi-iq*]
iš-ša-ak-nu
ar-ki dingir-*šu-ib-ni* PA.PA
a-na ši-im-ti-šu i-il-li-ku
1 gín kù-babbar ^{d}suen-*mu-ša-lim a-na* dam$^{?}$-g[àr]
id-di-in-ma na_4-kišib *šu-mi ša a-b*[*i-šu*]
ip-ṭú-ur-ma me-eḫ-re-$^{\lceil}$*et*$^{\rceil}$ dam-gàr-meš
a-lik i-di-šu 2 na_4-kišib $^{\lceil}$*ib-ru*$^{?}$*-um*$^{?\rceil}$

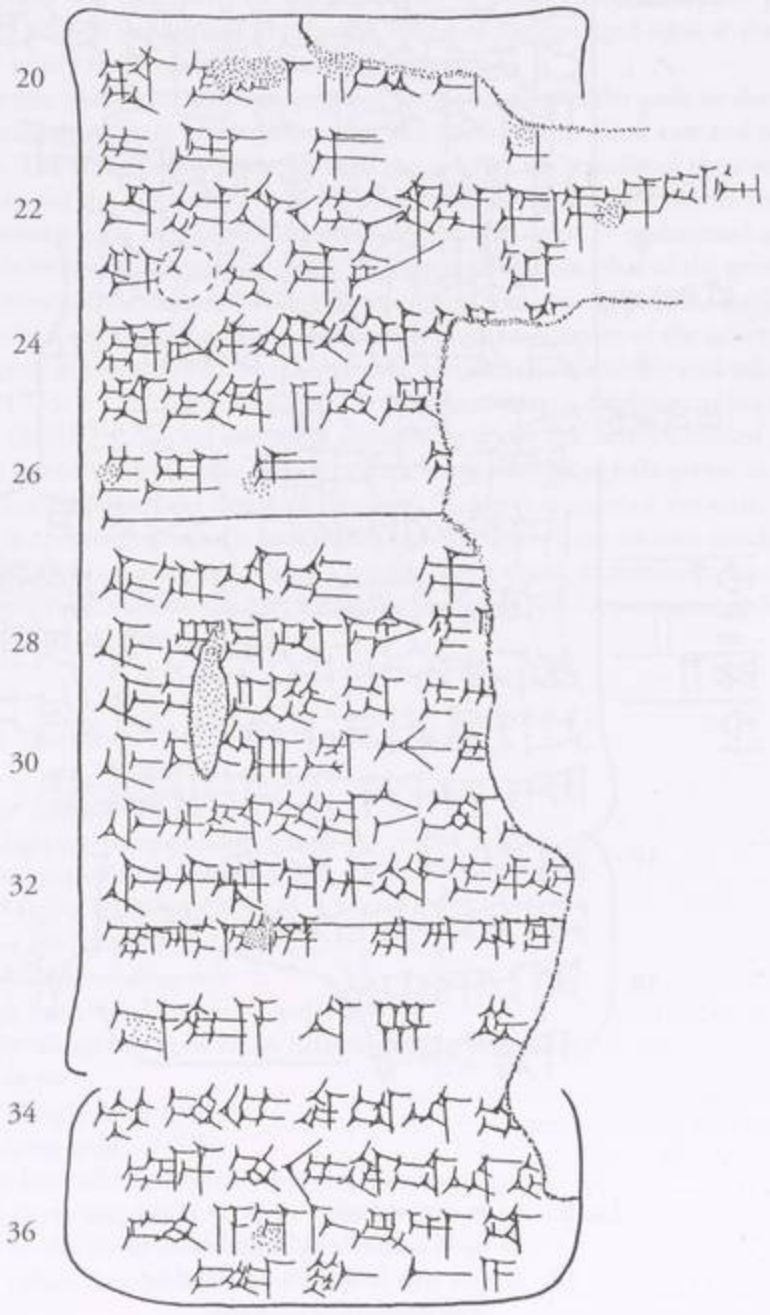
3 *E.g.*, Teissier 1998: 117 adduced this summary to support the notion that seals could be sold.

BM 78356 Obv.
(1½ original size)



Lo. E. *ru-gu-um-maʾ-né-e*
ka-ni-ki ša še-*e* ⌜*ù*⌝ k[ù-babbar]
18 *ša iš-tu* mu [*a-bi-e-šu-uḫ* lugal]-e
a-di iiisig_4-[a u_4-7-kam]

BM 78356 Rev.
($1^1/_2$ original size)



Rev. *ša i-li-a-am-ma*
i-ip-pa-lu
22 *iš-tu* u_4-*mi* na_4-kišib *ip-pa-aṭ-ṭa-ru*
ru-<<GU>>*-gu-ma-né-e*
24 *ka-ni-ki-im* še-*e ù* ᶠkù¹-[babbar]
ša i-li-a-am ᵈEN.[ZU-*mu-ša-lim*]
26 *i-ip-pa-a*[*l*]
(ruling)
igi *si-na-tum* PA.[PA]
28 igi ᵈsuen-*re-me-ni* dumu ᶠ*a*¹-[*at-ta-a*]
igi *ta-ri-bu-um* dumu AN-[…]
30 igi *bé-el-šu-nu* dumu […]
igi ᵈmarduk-*mu-ba-lí-iṭ* du[mu …]
32 igi ᵈinanna-ma-an-sum dumu ᵈEN.[ZU-*re-me-ni*]
(ruling)
ⁱᵗⁱsig_4-a u_4-7-kam
U. E. mu *am-mi-di-ta-na* lu[gal-e]
bàd *am-mi-di-ta-na*ᵏⁱ
36 gú ⁱᵈme-ᵈen-líl-ta
bí-in-dù-a

"As for the two name seals of the head of the assembly Ilum-damiq, which were deposited with the captain Ilšu-ibni son of Ilum-damiq in the first year of Abiešuh until day 7, month 3 of year 35 of Ammiditana — after the death of the captain Ilšu-ibni, Sîn-mušallim gave 1 shekel of silver to the merchant and (thus) redeemed the name seal(s) of his father and made an impression of (these) two seals in the presence of the merchants, his (*i.e.*, the merchant's) companions. They will pay claims (resulting from) sealed document(s) for barley or silver (dated to the period) from the first year of Abiešuh until day 7 of month 3 (of the present year) that may turn up. From the moment that the seal(s) are redeemed, Sîn-mušallim will pay claims (resulting from) sealed document(s) for barley or silver that may turn up.

Witnesses: the captain Sinatum; Sîn-rēmēnī son of Attaya; Tarībum son of […]; Bēlšunu son of […]; Marduk-muballiṭ son of […]; Inanna-mansum son of Sîn-*rēmēnī*. Date: day 7 of month 3 of year 35 of Ammiditana."

Seal impressions: Sealing annotations appear on the left side and reverse of the tablet and the accompanying seal impressions are faintly preserved and almost invisible. Only for the fifth sealing traces of a four-line legend without annotation can be observed.

1. kišib 30-*mu-ša-lim* (Le. E.): the contracting party.
2. kišib *si-na-tum* (Le. E.): the first witness.
3. kišib *a-at-ta-a* (Le. E.): the father of the second witness.
4. kišib *ta-ri-bu-um* (Le. E.): the third witness.
5. ìr-[…] / x x […] / dumu *a*-[…] / ìr […] (Le. E.): seal used by Bēlšunu, the fourth witness.
6. kišib ᵈmarduk-*mu-ba-lí-iṭ* (Rev.): the fifth witness.
7. kišib ᵈinanna-ma-[an-sum] (Rev.): the sixth witness.

Commentary

15: The identification of the signs following IB is uncertain, but the context suggests a form of the verb *barāmum* (suggestion K.R. Veenhof). Although it is usually constructed with the sealed object as the object of the verb (*i.e.*, *tuppam ina kunukkim barāmum*), attestations for *kunukkam barāmum*, "to apply a seal", can be found in CAD B, 102. Reading *ib-ta-ra-*[*am*] seems excluded (collation C. Wunsch).

22: For the use of the present tense in a subordinate clause with *ištu* see GAG § 171 h 6.

27: The PA.PA Sinatum / Sîn-nādin-šumi son of Sîn-išmeanni is never attested as "general" (ugula mar-tu), contra Harris 1975: 94 with note 45 and 96 with notes 56–57. Sinatum precedes Ilšu-ibni PA.PA in lists (CT 33 36 and 45 51) and although this implies that the first was more prominent than the second, it does not automatically mean that he also had another title.

28 and seal 3: The patronym of Sîn-rēmēnī can be restored with the help of MHET 1 47: 9′. One notes that the seal impression of Sîn-rēmēnī is identified with the name of his father.

32: The restoration of the patronym of Inanna-mansum is not certain. Inanna-mansum son of Sîn-rēmēnī is a well attested gala-priest during the reign of Ammiṣaduqa, see the references collected by Pientka 1998: 199 no. 40. Note that, atypically for a late Old Babylonian document, no scribe appears as last witness.

Interpretation of the text

The main characters appearing in this text are known from other sources: the captain Ilšu-ibni(šu) and his brother Sîn-mušallim were presumably the eldest and second son of Ilum-damiq, for their landholdings appear in this sequence in BE 6/1 119 ¶ 7–8 (see below). The present document is written on the occasion of the formal acquisition of cylinder seals inscribed with the name of Ilum-damiq by his son Sîn-mušallim after the death of the latter's brother Ilšu-ibni, who had previously controlled their father's seals. Following his death (at the end of the 34th year of Ammiditana or the beginning of the next, see below), an anonymous merchant took control of these seals, and Sîn-mušallim paid him a sum of silver to recover his father's seals. The main purpose of the present document is to set down a formal agreement concerning liability for obligations incurred by the former seals' user Ilšu-ibni, which are strictly distinguished from future obligations that Sîn-mušallim might contract. This agreement was made in the presence of a group of witnesses that included high-ranking officials. It consisted of the following arrangements:

1. The merchant and his companions assume responsibility for obligations recorded in sealed documents (*i.e.*, sealed with these seals) dating to the period when Ilšu-ibni was accountable until the moment when Sîn-mušallim obtained the seals.
2. Sîn-mušallim assumes responsibility for all obligations recorded in sealed documents (*i.e.*, sealed with these seals) that will be drawn up beginning with the day that he took possession of them. The tablet bears Sîn-mušallim's seal impression in the first position (at the top of the left edge), the place reserved for the sealing of the party liable to do the obligation the tablet records. Therefore, it is clear that the primary purpose of this document was to lay down Sîn-mušallim's duties.

The text states that the paternal seals "were deposited with Ilšu-ibni" in the first year of Abiešuh, but it seems unlikely that this remark was intended to describe exactly when Ilšu-ibni acquired his father's seals. This is suggested by the chronological spread of the attestations of the persons involved, who are not at all attested in the early years of Abiešuh's reign: Ilum-damiq is attested in the second half of the reign of Abiešuh until the

third year of Ammiditana,[4] and Ilšu-ibni first appears in a text from the eighth year of Ammiditana (see below). Since the purpose of the text was not to give an accurate description of the history of these seals, but rather to demarcate a division of liabilities for past and future usage, it seems plausible that the first year of Abiešuh was chosen as an arbitrary date to indicate the start of the period of seal use for which the merchant accepts liability. He assumes responsibility for unfulfilled obligations of Ilšu-ibni, both those contracted by Ilšu-ibni himself as well as those that Ilšu-ibni might have inherited from his father. The precise moment when Ilšu-ibni acquired his father's seals is therefore not important and one cannot conclude on the basis of this text alone that Ilšu-ibni already had his father's seals at his disposal when his father was still alive.

The objects of the transaction are the "name seals" (*kunuk šumi*) of Ilum-damiq. This designation and its Sumerian equivalent kišib-mu-sar occur frequently in the cuneiform record.[5] It denotes a cylinder seal containing the name of the owner, in the present case doubtlessly the well-known Old Babylonian seal legend type consisting of the owner's name, possibly his title, followed by his patronym and an expression of loyality to the king or devotion to the owner's family god.[6]

Since the merchant handed these seals over to Sîn-mušallim, he and his companions were provided with impressions of these seals necessary for future authentication of documents issued by the late Ilum-damiq and Ilšu-ibni. The present text offers a meaningful context to explain one of the purposes of flat pieces of clay with seal impressions but without writing. These objects are found in the archaeological record in different areas and periods of the Ancient Near East and their function remains obscure. They do not bear marks to show that they were originally attached to another object. Use as visiting cards, test impressions and identification marks have been proposed to explain their purpose (Collon 1987: 119; Stein 1997: 111). These objects can roughly be divided in two types, tongue-shaped clay strips ("languettes") and small rectangles (Collon 1987: 119). The purpose of the first type has been elucidated by A. Otto, who has shown that in Samsī-Addu's palace in Tuttul sealed tongue-shaped strips of purified clay were affixed to spherical stoppers of

4 There are only three dated attestations for Ilum-damiq, two from the reign of Abiešuh, BE 6/1 119 ¶1′ // MHET 2/5 656 ¶C (oath by Abiešuh) and BE 6/1 79 (unidentified year of Abiešuh), and one dates to the third year of Ammiditana, CBS 420 (Ad 03–12–06; copied by M. Stol). Ilum-damiq bears the title "general" in the first attestation and "head of the assembly" in the other ones, which shows that he was promoted sometimes during the reign of Abiešuh (this answers N. Yoffee's question in Yoffee 1977: 129).

5 For *kunuk šumi* and kišib-mu-sar see CAD K 545a; CAD Š/3 290; Steinkeller 1977: 53 note 58; Hallo 1977: 59 note 23; Stol 1980: 187 note 6; Hallo 1983: 11. The section devoted to dreams about cylinder seals in the dream omina compendium first discusses various types of seals (of different materials, with inscription or with figures, with or without perforation etc.) and then continues with "name seals" (na_4-kišib mu), both with the name of the dreamer and, presumably, with the names of other persons (Oppenheim 1956: 276f. and 322). Note that the Old Babylonian attestations of kišib-mu-sar cited in CAD *s.v. šaṭru* (CAD Š/2 241) do not belong to this entry but should be interpreted as *kunuk šumi*. An attestation for *kunukku šaṭru*, "inscribed seal" can be found in the dream omina, where an "inscribed seal" (na_4-kišib sar) appears in opposition to a "seal with figures" (na_4-kišib alan-meš), see Oppenheim 1956: 322, lines 17–18.

6 D. Charpin has shown that in Isin-Larsa and early Old Babylonian texts from southern Mesopotamia kišib-mu-sar designates a seal type referred to by scholars as "burgul-seal," see Charpin 1980: 14–15.

unprocessed clay that covered the mouth of storage jars (Otto 1995).[7] An illustrative Old Babylonian example of the second type is published by Buchanan 1981 no. 753, a "flat clay strip" (thus B. Buchanan's description) with several complete impressions of the seal of a servant of Sumu-El. The manner of sealing in both impressions published in photograph implies that the main purpose of these impressions was to record the seal's legend, which forms the centre of each impression and thus divides the seal's scene in two parts. Another example is Delaporte 1923 no. 584, a "tablette sans texte" that was probably acquired with other Old Babylonian tablets from Abu Habbah and Tell ed-Der (on account of its inventory number AO 1692) with three complete impressions of the same seal without legend in three rows on one side of a roughly formed tablet. One of the purposes of such objects may have been to facilitate identification of sealed documents by others than the owner of the seal without access to the seal itself, such as in the event of the intercession of a surety or other procedures of transfer of obligations.[8]

The text stipulates that the merchants and Sîn-mušallim were responsible for meeting claims made on the basis of a "sealed document for barley or silver," two basic commodities that were current as monies throughout Mesopotamian history (see conveniently Powell 1996). In the late Old Babylonian period, they appear as the exclusive denominators for value, and the appearance of this combined expression in this context should be interpreted as denoting any type of sealed document for financial obligations.

The general purpose of the text implies that the transfer of these seals from the merchant to Sîn-mušallim entailed the risk of future claims for both parties, which they tried to counter by the dual arrangement formulated in the second half of the text. Sîn-mušallim was to be liable for legal obligations that he would contract with the aid of his newly acquired seals and the merchants for their part accepted responsibility for old obligations of the deceased seal owners. If one tries to understand the legal principles on which these claims might have been based, a number of questions raise themselves. For what reason could the merchants be held accountable for the consequences of Sîn-mušallim's future business dealings, and how could Sîn-mušallim be held responsible for old obligations of his deceased brother? Furthermore, why did the merchants accept liability for the obligations of the deceased Ilšu-ibni?

Sîn-mušallim's act to obtain these seals is designated with the verb *paṭārum*, "to loosen, release," which indicates that his brother's assets have been seized by outsiders of the household. This condition is not explained by the text, but the fact that a *tamkārum*, "merchant" or "creditor," controls Ilšu-ibni's goods suggests that his property had been seized on account of insolvency. It is remarkable that this merchant and his colleagues promise to satisfy the posthumous obligations of the deceased toward other creditors, since in doing so they fulfill an obligation that should have been the duty of his heir as the succeeding head of his household. But the text does not mention any son of Ilšu-ibni, nor is one known from other sources. This seems to imply that Ilšu-ibni died without sons and with debts, on account of which his creditor seized all his possessions. By acquiring ownership of the

7 The use of sealed tongue-shaped strips of clay as "test strips" is still maintained by Matthews 1997: 182–183.

8 Use of such objects in legal cases is suggested by the order to bring "impressions of their seals" or "impressions of the gentlemen's seals" (*ḫi-si ku-nu-ka-ti-šu-nu*; *ḫi-si ku-nu-ka-tim ša a-wi-li-i*) for legal proceedings to the Šamaš temple in the related letters AbB 12 39: 21–23 and 12 41: 14–16.

complete estate, the merchant was obliged to honor the deceased's obligations toward third parties.

The designation "his companions" (*ālik idīšu*) in reference to the merchants' collective (lines 14–15) strongly suggests that in line 12 a single merchant was mentioned who shared his liability to fulfill the deceased's obligations to third parties with his colleagues (cf. the plural *ippalū* in line 21). If this restoration is accepted,[9] it implies that the merchants were accustomed to employing strategies of corporate responsibility for unanticipated mercantile risks.

Sîn-mušallim took action to redeem his father's seals from the estate after his brother's death. Since no reference to Ilum-damiq postdates Ammiditana's third regnal year, it seems likely that a period of many years separated the moment when the father died and the paternal estate was dissolved from the moment of Ilšu-ibni's death. Sîn-mušallim was by then an adult who probably headed his own independent household. It is to be expected that in this position he could not be held responsible for unfulfilled obligations of his brother, but his immunity was weakened when he acquired the seals. Although the text explicitly designates these seals as the "name seals" of their father Ilum-damiq, the fact that they had been used by Ilšu-ibni before and formed part of his estate implied that, by redeeming these seals, Sîn-mušallim could be considered the heir of his brother and be held responsible for his brother's debts. He therefore tried to disclaim responsibility, which implies that he ceded all claims to be heir of Ilšu-ibni. He managed to negotiate this demand with the merchants and the resulting agreement is found in the first part of the dual arrangement.

The merchant and his colleagues for their part took steps to protect themselves against additional claims at the expense of the former seal owner they now represented, and stipulated the second part of the contractual arrangement. Since the tablet bears an impression of the seal of Sîn-mušallim, it served as written proof of the arrangement for the merchant or his colleagues only. One notes that the merchants are not identified by name, and one can only speculate whether a duplicate of the contract was drafted for the benefit of Sîn-mušallim that also contained the names and seals of the other party.

Some implications for seal ownership

No impressions of Ilum-damiq's seals seem to have been identified thus far, but it seems likely that the cylinder seals of this high-ranking official were high-quality products of a court workshop. The text shows that Sîn-mušallim took pains to recover them. His motive was not only to get hold of these prestigious objects for daily use to substitute his own seal (the one used to seal the present tablet), but also to retain the paternal seals within the family. It was common practice in the Old Babylonian period that cylinder seals were either buried with the deceased owners or bequeathed to their heirs.[10] The use of heirloom seals

9 This interpretation was suggested by K. Radner. As an alternative interpretation, one might argue that the genitive suffix in "his companions" refers to Sîn-mušallim or perhaps even to Ilšu-ibni and that the merchants' collective was already mentioned in line 12 (dam-g[àr-meš]), but this interpretation does not easily explain the significance of the words "his companions."

10 Cylinder seals rarely appear in records of inheritance division, see Kalla 1998: 41b. The principal purpose of these records was the correct division of valuables between heirs, in which the

is well documented and there are indications that high officials preferred to use their father's seal as a way of asserting family tradition and status (Teissier 1998: 116f.). For example, a well-studied case shows that the successive heads of a high-ranking family in Sippir used the same seal made during the reign of Hammurabi at least until the second half of the reign of Ammiṣaduqa (Voet and Van Lerberghe 1989). D. Charpin (1990: 73–74) argued that hereditary transfer of cylinder seals to the eldest son was connected with the expression of devotion to the family god appearing in many Old Babylonian seal legends. Cylinder seals were for these reasons closely associated with the concept of progeny and especially with sons "whose function is to extend the personal existence of the father beyond the natural limitations" (Oppenheim 1956: 277).

Cylinder seals were normally transferred along hereditary lines, whereby the son took over the paternal seal in the context of the assumption of all rights and obligations of the deceased father. In the present case, the distraint of the estate of the deceased effectively severed the usual chain of hereditary transmission. There was no alternative for Sîn-mušallim than paying a sum of silver to release his father's seals while ensuring that he could not be held responsible for obligations contracted by their former user. This deal demanded the drafting of an elaborate contract, our present text, whereas normal hereditary transfer of seals from father to son did not require such formalities.

It has customarily been accepted that the seal was a tool by which a person identified himself and confirmed his consent to or presence at a legal transaction. Seals were owned by one individual only, and their iconography or inscription was an expression of the identity of its owner. Subsequently, the presence of an impression of such a highly individualised seal could be employed to confirm the sealer's attendance at and acceptance of the transaction.

But it has become clear that seal usage was often not as straightforward as this brief summary suggests. Especially in corpora with a high percentage of inscribed seals, incongruity between names appearing in the seal legend and those in the text of the tablet has been frequently observed. This is often explained by the use of recycled and heirloom seals or by the habits of sealing by proxy or borrowing seals between family members and colleagues, but the frequency of variance between ownership and use of seals has led one scholar to conclude that "seal impressions, with or without legends, do not identify the participants in a transaction or the witnesses of that transaction (…) what was important was not the seal or the seal impression but the act of sealing" (Muhly 1981: 400). Thus a person assuming an obligation committed himself to the agreement by leaving behind an identity mark on the tablet. These marks could be made by rolling a cylinder seal as much as by impressing the hem of a garment or a fingernail, and the act of applying marks certainly carried magical connotations (Radner 1997: 33). Cylinder seals had magical properties themselves (manifested in choice of material, iconography, the mention of gods or the presence of prayers on behalf of the owner) and have been described as "carriers" of the individuality of their owners (Oppenheim 1956: 277; Cassin 1987). The purpose of these marks was more to establish a permanent relation between the contracting party or witness and the tablet than to facilitate future identification of the person. As a recent survey of sealing practise concluded, "the only sure way of attributing a seal in Old Babylonian

paternal cylinder seal(s), of little monetary value and customarily bequeathed to the eldest son, are unlikely to appear.

Sippar was for its user/owner to identify it personally, unless it was a seal of a person of high status" (Teissier 1998: 116). One is tempted to conclude from this observation that it was only of secondary importance whether the sealing party used his own seal or somebody else's, since "so far there is no evidence to what extent a borrowed seal might have implicated its actual owner" (Teissier 1998: 116). For all legal and administrative purposes, the fact that somebody had expressed his commitment to an agreement or transaction by impressing his seal (or another mark) and, consequently, the presence of this sealing on the tablet were essential, while the information that the design or legend of the seal might convey about the identity of the owner was incidental. "Thus a seal impression was not like a signature today, nor was a seal anything like a modern credit card, to which it has often been compared" (Muhly 1981: 400).

However, J.D. Muhly also noticed that this situation is seemingly contradicted by textual evidence showing that unauthorised access to one's seal was a hazardous situation (Muhly 1981: 400). Two famous certificates about the loss of a cylinder seal have long been known (Hallo 1977; 1981) and another example will be published by M. Sigrist.[11] The main elements of these texts are the identification of the lost seal's owner and the statement of the date of its disappearance. In one Old Babylonian example (Klengel 1968; photo in Stein 1997: 118 Abb. 122), the statement of the loss of the somebody's "name seal" (na_4-kišib *šu-mi ša* PN) was vouched for by a number of high-ranking officials from the owner's town as witnesses (see the references collected by Pientka 1998: 412). The purpose of these documents must have been to absolve the owner of the seal from any legal or financial responsibility over the misuse of his seal after the date recorded in the text. The topic of lost cylinder seals also features in the Old Babylonian scholastic tradition, where a model composition concerning the loss of a merchant's seal and the following public announcement (Ali 1964; Hallo 1977: 56f.)[12] and a legal compendium with a section about lost seals (Roth 1979: 15, 54) formed part of the scribal curriculum, whereas the ominous significance of dreams of losing one's seal as well as rituals to remedy the portents of damage or loss of seals can be found in later canonical compositions (Hallo 1977: 58).

The present text contains a clause that parallels the arrangement for lost seals. By stipulating that Sîn-mušallim was responsible for all obligations contracted by means of the seals from the day of their transfer onwards, the merchant sought to protect himself from liability for obligations that could be undertaken by using the seals he had given up. The date of handing over features prominently in the text (including the date formula, it is mentioned four times) as it does in the statements about the loss of cylinder seals men-

11 The wording of AUAM 73.2261 (to be published as AUCT 5 47) is almost identical to that of the text published by H. Klengel (1968): 1 *iš-tu* ^{iti}zíz.a u_4-30-kam 2 na_4-kišib *šu-mi* 3 *ša* PN ugula mar-tu 4 *i-na* GN 5 *iḫ-li-iq*, "The name seal of the general PN got lost in GN from day 30 of month 11 onward." The text on the reverse of the tablet, containing the date and perhaps the names of the witnesses, is lost.

12 Scholars disagree whether this composition is based on an older legal document from daily practice or whether it is a didactic school composition. Some persons mentioned in this composition (the énsi Lugal-melam, one of the witnesses, and the merchant Ur-DUN, the seal's owner) are attested in texts from Ur III Nippur (Steinkeller 1977: 48f.; Neumann 1992: 87f.). However, Ur-DUN as well as other persons are also attested in other Old Babylonian literary compositions, see Hallo 1977: 57. For the curricular context of the composition see Lieberman 1992, especially p. 134.

tioned before. It implies that legal proof of the precise date of loss or handover allowed the former owner to refute all later claims. In the present case, the new owner was known and could be forced to accept responsibility, whereas in the case of a lost seal the victim could only repudiate future claims.[13]

These arrangements imply that the presence of the impression of one's seal on a tablet could indeed bring about binding obligations for its (former) owner, even if he did not attend the writing and sealing of the tablet in person. Also W.F. Leemans concluded that a sealing on a contract could be used to identify the sealer and, moreover, to prove that the sealer had commited himself to the obligation recorded in the contract. For these reasons, he supported the notion that a sealing functioned like a modern signature (Leemans 1982: 223–224).

These seemingly contradictory qualities attributed to sealing in Mesopotamia are evidently more problematic for modern interpretation than they were in ancient Mesopotamian daily practice. Borrowing seals was certainly common practice among members of the same social or professional group, but B. Teissier observed with reason that particular significance was attributed to seals of persons of high status (Teissier 1998: 113, 116). The high social status of the seal's owner no doubt restricted the possibilities for borrowing and sharing. The use of seals of others was unsuitable, as is indicated by the fact that sending letters without sealing the envelope with one's own "name seal" was considered inappropriate,[14] and the particular authority attributed to sealing by high-ranking officials excluded access to their seals by others. For royal sealing this aspect is well documented by a number of statements in cuneiform texts regarding the power of impressions to legitimate and perpetuate agreements and privileges (Winter 2001: 2–3), and it seems evident that equal importance was attributed to impressions of seals of high-ranking officials.[15] I.J. Winter considers the possibility that seals and seal impressions of high-ranking owners "should be understood not merely as witnesses to the exercise of authority, but rather as imbued with the very animate authority of the owner / sealer himself" (Winter 2001: 3), and this significance of the seal stone surely explains the owner's anxiety when it had disappeared, and the steps he took to counter possible misuse.

13 Only explicitly formulated in the model composition: lú-na-me níg-na-me ugu-na li-bí-in-tuku, "nobody may have any claim against him (*i.e.*, the owner of the lost seal)" (Ali 1964: 66 line 4).

14 "Let my lord 'star' send me a lapis lazuli seal with my name (na_4-kišib za-gìn *ša šu-mi-ia*) so that when I will write again, they will not hold me in contempt saying: 'There is no impression of her seal (*ḫi-iṣ* na_4-kišib-*ki-ša*) (on the envelope)!'" (ARMT 10 95, Šimatum to her father Zimri-Lim; request repeated in ARMT 2 115); "When I set out from GN_1 for GN_2 without taking my name seal (na_4-kišib *šu-mi-ia*) along, a letter from my lord arrived, but without a seal I could not send a reply to my lord's letter" (AbB 6 155, from Sippir, dating to the reign of Ammiditana or later). Losing one's cylinder seal was sufficient excuse to seal letters with a borrowed seal: "My seal got lost in GN, so I have sealed (this letter) with somebody else's seal" (AbB 11 77, from Sippir, late Old Babylonian).

15 The famous letter AbB 11 90 (from Sippir; reign of Ammiṣaduqa) contains instructions for the addressee to stop a plaintiff who has started to harass his brother's heirs, even though a tablet (probably specifying a division of inheritance between the plaintiff and his brother) exists with seal impressions of several sanga's and other high-ranking officials. The plaintiff's efforts are without prospect, as the writer argues: "If the seal of a sanga of Šamaš, a sanga of Aja and your seals are being contested, whose seal will (ever) be acceptable?" (translation M. Stol). For this letter see B. Teissier 1998: 113 with note 34.

Ilšu-ibni and the military establishment of Sippir-Amnānum

The "captain" (PA.PA)[16] Ilšu-ibni(šu) son of Ilum-damiq is often attested in connection with other military officials. He appears in the following sources:

Ad 08–09–05	CT 4 36b	*Našpakūtum*-loan given out by dingir-*šu-ib-ni-šu* dumu dingir-*da-mi-iq*.
Ad 10–09–12	BM 78531	Promissory note about silver, part of the price of a boat, belonging to dingir-*šu-ib-ni* dumu dingir-*da-mi-iq* and due from Sîn-abušu son of Ibni-Amurrum, to be repaid in ten days to the bearer of the tablet.[17]
Ad 19–01–03	BM 78600	Sale of doors by Ipqu-Annunītum son of Nūrātum to dingir-*šu-ib-ni-šu* dumu dingir-*da-mi-iq*.[18]
Ad 25–02–12	TCL 1 154	dingir-*šu-ib-ni-šu* [dumu] dingir-*da-mi-iq* is first witness in field lease.
Ad 29–02–02	BE 6/2 110	dingir-*šu-ib-ni-šu ù aḫ-ḫi-šu* dumu-meš dingir-*da-mi-iq* are owners of field leased out by dingir-*šu-ib-ni-šu* dumu dingir-*da-mi-iq*.
Ad 29–08–01	CT 33 36	dingir-*šu-ib-ni* PA.PA dumu dingir-*da-mi-iq* is second intermediary for field lease.
Ad 31–08–28	MHET 2/4 495	dingir-*šu-ib-ni* PA.PA dumu dingir-*da-*[*m*]*i-iq* is owner and co-lessor in field lease.[19]
Ad 32–02–05	CT 8 7a	dingir-*šu-ib-ni* PA.PA is second intermediary for field lease.
Ad 34–[ ]–05	CT 45 51	dingir-*šu-ib-ni* PA.PA is second supervisor (gìr) of a donation of urban real estate to a smith.
Ad 34–04–13	BBVOT 1 91	dingir-*šu-ib-ni* PA.PA[!] is first witness to receipt of silver (uncertain attestation).[20]
Ad 35–01–14	BM 78557	Receipt of objects from Damqātum the wife of dingir-*šu-ib-ni* PA.PA.
Ad 35–03–07	BM 78356	Agreement about responsibilities for obligations sealed with the seal of dingir-*šu-ib-ni* PA.PA between Sîn-mušallim and a merchant.
not dated	BE 6/1 119	Field *ṣi-bi-it* dingir-*šu-ib-ni* PA.PA dumu dingir-*da-mi-iq*.

16 The PA.PA ranked between a nu-bànda, "sergeant," and an ugula mar-tu, "general." For the Sumerian and Akkadian readings of the signs see Charpin 2000 with reference to previous literature.

17 BM 78531: 1 1 gín kù-babbar 2 šà $4^1/_2$ gín kù-babbar šám má 20.0.0 gur 3 *ša* dingir-*šu-ib-ni* dumu dingir-*da-mi-iq* 4 *i-na qá-ti* ^{d}suen-*a-bu-šu* 5 dumu *ib-ni-*^{d}mar-tu 6 *a-na* 10 u_4-*mi* 7 *a-na na-ši ka-ni-ki-šu* 8 kù-[babbar] ì-lá-e (ruling) (Rev.) 9 igi ^{d}suen-*na-di-in-šu-mi* x [o] x 10 igi ^{d}suen-*i-din-nam* PA x [o] 11 igi *ib-ni-*^{d}utu dumu x x x 12 igi ^{d}suen-*na-ṣi-ir* dub-sar (ruling) 13–15 (date). Faint impressions of seals with legends visible.

18 BM 78600: 1 1 $^{gi\check{s}}$ig *me-eḫ-ṣi* 2 kù-bi 4 gín kù-babbar 3 1 $^{gi\check{s}}$ig mi-rí-za 4 kù-bi 2 gín kù-babbar 5 *ša ip-qú-an-nu-ni-tum* 6 dumu *nu-ra-tum* 7 ki *ip-qú-an-nu-ni-tum* 8 *be-li-ši-na* (Lo. E.) 9 ^{l}dingir-*šu-ib-ni-šu* 10 dumu dingir-*da-mi-iq* 11 in-ši-in-sa_{10} (Rev.) 12 šám-til-la-bi-šè 13 6 gín kù-babbar 14 in-na-an-lá 15 igi *ib-ni-*^{d}iškur di-ku_5 dumu 30-^{r}*i-din-nam*^{1} 16 igi dingir-*šu-na-ṣi-ir* 17 dumu dingir-*šu-ib-ni* 18 igi ^{d}suen-*na-di-in-šu-mi* dub-sar (ruling) 19–23 (date).
Seals: 1. seal of Sîn-idinnam dumu Nūrātum ìr Ḫammurabi (Voet—Van Lerberghe 1989: 537) (seal of seller); 2. dingir-*šu-ib-*[*ni-*(*šu*)] / dumu *ri-iš-*[o (o)] / ìr x x (paternal seal of second witness).

19 See collations in Woestenburg 1999–2000: 355b.

20 Pientka 1998: 410 *sub* 1 tentatively assigns this text to Dilbat on the basis of the personal name appearing in line 3, 6 and 8. Here I read ìr-si-gar and ìr-si-gar dumu *ib-ni*-dingir respec-

Table 1: Texts about the military establishment in Sippir-Amnānum

field leases

	text	lessor	intermediary (*ana qabê*)
1	CT 8 8d Ad 24[2]–03–15	Sinatum PA.PA Ibbi-Ilabrat dumu-é-dub-ba-a	0 ⇒
2	TCL 1 154 Ad 25–02–12	Sinatum PA.PA	0
3	BE 6/2 110 Ad 29–02–02	Ilšu-ibnišu s. Ilum-damiq	0
4	CT 33 36 Ad 29–08–01	Ilūni s. Būr-Adad	Sinatum s. Sîn-išmeanni Ilšu-ibni PA.PA s. Ilum-damiq Ibbi-Ilabrat dumu-é-dub-ba-a
5	MHET 2/4 495 Ad 31–08–28	Ilšu-ibni PA.PA s. Ilum-damiq Gimil-Marduk s. Ṣilli-Šamaš	0
6	CT 8 7a Ad 32–02–05	six members of éren zimbir[ki] under the command of Ibbi-Ilabrat ugula mar-tu	⇒ Ibbi-Ilabrat ugula mar-tu Ilšu-ibni PA.PA Ibbi-Ilabrat dumu-é-dub-ba-a

The first three texts record rights of Ilšu-ibni. These tablets might have been preserved for a long time, either to prove ownership (of doors), or with a view to cashing unpaid credits (the first two texts). But most references date to the final decade of his life and show that he played an important role in the management of military landholdings. These references appear in texts that belong to a larger group of tablets that can be delineated on the basis of prosopographic evidence as well as chronological span and subject matter. The content of this file is summarised in table 1, nos. 1–9. It dates to the third and fourth decades of the reign of Ammiditana and many, if not all, of these texts originate from Sippir-Amnānum. The file consists of lease contracts for military land and some texts about the revision of property rights for fields and houses of soldiers.

The field leases deal with military land holdings that were situated in the irrigation districts (*ugārum*) Baṣi, Burā, Lugal-gudua and Paḫūṣum. These districts were part of the "territory" (*erṣetum*) of Sippir-Amnānum, the area between the Euphrates in the south and the Irnina-canal in the north (Tanret 1998: 71–76). All fields given out on lease belonged to servicemen or persons of military rank. The role of intermediaries seems to be restricted to leases of fields of low-ranking holders (such as the "troops of Sippir" in no. 6 and presumably the individual in no. 4) who evidently could not lease out their fields themselves. Little is known about the tenants, except for their titles, which show that members of the local administration (*rabiānum*), scribes (dub-sar)[21] and craftsmen (lú-šitim) were

tively (coll. Dec. 2000). This text has been acquired at the end of the nineteenth century (BBVOT 1, p. 5) and is likely to come from Abu Habbah or Tell ed-Der. The title of the first witness (in line 10) could also be read as dingir-*šu-ib-ni* ugula é.

21 Awīl-Sîn leases another field in TCL 1 155 (Ad 34). He was also active in Sippir-Yaḫrurum and often appears in texts relating to Utu-šumundib, see Kraus 1958: 108–110 and Pientka 1998: 472 *sub* 43.

		tenant	witnesses	*ugārum*
⇐	1	Šunuma-ilum *rabiānum*	Warad-Gipar dumu x x x Mannum-balum-ilišu Ilšu-ibni dub-sar	Lugal-gudua
	2	Ilī-amtaḫḫar s. Lipit-Ištar Sîn-iddinam s. Sîn-išmeanni	Ilšu-ibni PA.PA Ibbi-Ilabrat dumu-é-dub-ba-a	Lugal-gudua
	3	Sîn-x x s. Ilī-x x	Warad-Sîn s. Sîn-idinnam [a] Sîn-nāṣir s. Ipqu-Annunītum ᶠPN¹	Burā
	4	Elmēšum lú-šitim	Šunuma-ilum s. Ea-nāṣir Mannum-balum-ilišu s. Warad-Ilabrat	Burā šà Lugal-gudua [b]
	5	several ᶠPN¹	Ina-palêšu PA.PA s. Ilšu-nāṣir Ibbi-Ilabrat dumu-é-dub-ba-a	Burā
⇐	6	Awīl-Sîn dub-sar	Ilšu-abušu ugula mar-tu Sîn-nādin-šumi s. Marduk-nāṣir Ilšu-ibni s. Marduk-nāṣir	Paḫuṣum

a For the restoration of the first two witnesses in BE 6/2 110 see TCL 1 155.
b The *ugārum bu-ra-a*^{ki} is sometimes described as a part of the *ugārum* (*ša*) ^{d}lugal-gú-du$_{8}$-a^{ki} (BE 6/1 119: III 25, 29, IV 1–2; CT 33 36 and MHET 2/6 894: II 20), see Harris 1975: 110.

other documents

	text	content
7	CT 45 51 Ad 34–[ ]–05	"[One houseplot] with its wing and including its roof beams, a *šikittum*-plot in the vicinity of the Ninsianna-gate, (formerly) belonging to the deceased Ina-qati-Šamaš, member of the troops of Sippir under the command of the general Ibbi-Ilabrat, is given as his 'soldier's house' to the smith Ibni-Šerum son of Warad-Ulmaššitum" ([é-dù-a] ᶠ*ù*¹ é-da-*šu* [2] [*qá-du-um*] giš-ùr-ra-ḫi-a-*šu* [3] [o é *ši-k*]*i-it-tim ša* ká ^{d}nin-si$_{4}$-an-na [4] *ša* úš *i-na-qá-ti-*^{d}utu šà éren zimbir^{ki} [5] níg-šu *i-bi-*^{d}nin-šubur ugula mar-tu [6] *a-na ib-ni-*^{d}*še-rum* dumu ìr-^{d}*ul-maš-ši-tum* simug [7] *a-na* é aga-uš-*šu na-di-in-šum*). Followed by a long list of approving authorities (gìr), starting with Sinatum PA.PA, Ilšu-ibni PA.PA and Ibbi-Ilabrat dumu-é-dub-ba-a.
8	MHET 2/6 894 Ad 34–06–21	"Tablet of the fields of the district of Sippir-Amnānum, holding of the 'fishermen' of Sippir under the command of the general Ibbi-Ilabrat" (dub-*pí* a-šà *er-še-et* zimbir^{ki}-*am-na-nu ši-bi-it* šu-ḫa-meš zimbir^{ki} níg-šu *i-bi-*^{d}nin-šubur ugula mar-tu), followed by a four-column list of changes of field allotments.
9	MHET 2/5 664 not dated	list of fields, (total) 6.0.1 iku "field in various districts which the general Ibbi-Ilabrat gave to tenants" (a-šà a-gàr-didli^{l} *ša i-bi-*^{d}nin-šubur ugula mar-tu *a-na* lú-meš *er-re-ši id-di-nu*).

recruited for the cultivation of service land. The tenant of no. 1 recurs as witness in no. 4. Apart from military officials, a number of well-attested members of the citizenry of Sippir-Amnānum appear as witnesses.[22]

In the 34th year of Ammiditana, the subsistence field allotments of soldiers were revised. Land of dead soldiers was assigned to others, and these new field holdings, located in the territory of Sippir-Amnānum and elsewhere, are recorded in no. 7. At the same time also the urban houses of dead soldiers were redistributed, for no. 8 sets down that the houseplot of a dead member of the "troops of Sippir" is given over to a smith. These operations took place under supervision of military officials known from the field lease records.

Ilšu-ibni is first attested as PA.PA in the second half of the 29th year of Ammiditana, but as military titles are not always mentioned, he might have held this rank before. In field leases he appears as landlord, as intermediary between land owners and tenant and as witness. He twice rents out his own land located in the Burā-district, once representing his "brothers" (no. 3) and once with the well-known judge Gimil-Marduk son of Ṣilli-Šamaš from Sippir-Amnānum as co-lessor (no. 5). It is not clear for what reason Gimil-Marduk appears as lessor and whether he also partook in the rent. A similar case occurs in no. 1, where the PA.PA Sinatum rents out his land jointly with a secretary, who does not appear again in the rental agreement for the same field concluded in the following year (no. 2). Besides Ilšu-ibni, the following military officials appear in this file:

- The general Ibbi-Ilabrat supervises the leasing of fields of his troops (nos. 6 and 9) and the redistribution of fields and houses (nos. 7–8). Outside this file he appears as witness to a division of inheritance from Sippir-Amnānum in BM 96990 (Ad 32) (Dekiere 1991, Woestenburg and Jagersma 1992).
- The general Ilšu-abušu son of general Sîn-tajjār appears as witness in no. 6, as first witness in BM 96990 (Ad 32) and in a text without date (CT 45 114) (Pientka 1998: 487 *sub* 310).
- The captain Sinatum son of Sîn-išmeanni leases out his field in no. 1 (for one year) and again the next year, but now for a period of two years (no. 2). He is intermediary for a field lease (no. 4) and first supervisor in no. 7. He is first witness to the agreement about Ilšu-ibni's seals published above. The full form of his name is Sîn-nādin-šumi. He and his son Ibni-Šamaš are often attested outside this file (cf. Pientka 1998: 73 note 298, 74 note 301, 477 *sub* 84, 506 *sub* 622).
- The captain Ina-palêšu (witness in no. 5) perhaps recurs as head of a military contingent in no. 8 (line II 24).
- Mannum-balum-ilišu son of Warad-Ilabrat (witness in no. 4) held the rank of PA.PA in other texts. He probably recurs as witness in no. 1 (no patronym or title are given). Outside this file he appears as witness to a division of inheritance from Sippir-Amnānum in BM 96990 (Ad 32), as witness to a field lease in TCL 1 155 (Ad 34) and in texts from the house of Ur-Utu (MHET 1 45: 7, 52: 21).
- The secretary Ibbi-Ilabrat appears as co-lessor of a field of Sinatum (no. 1), as intermediary for field leases (no. 4 and 6), as witness to field leases (no. 2 and 5) and as supervisor in no. 7. Outside this corpus he appears as witness to another field lease (BDHP 7, Ad 35) (cf. Pientka 1998: 72 note 298).

22 Such as the scribe Sîn-nāṣir son of Ipqu-Annunītum (Kraus 1987: 96, Pientka 1998: 497 *sub* 502), Sîn-nādin-šumi son of Marduk-nāṣir (part of the archive of Sîn-nādin-šumi and his brother Ibni-Marduk sons of Marduk-nāṣir was found in Tell ed-Der in 1941, see Edzard 1970: 17, and the first is also amply attested in texts in the British Museum and the CBS collection) and Warad-Sîn son of Sîn-idinnam (Pientka 1998: 507 *sub* 633).

Most military officials are attested only during a short period of time and many of them do not occur often outside this file. Only Sinatum, alias Sîn-nādin-šumi, is amply attested elsewhere. Sinatum and Ilšu-ibni leased out their own fields, but the landholdings of the other officials are not documented. Ilšu-ibni evidently lived in Sippir-Amnānum (his lease contract no. 3 stipulates that the rent is to be paid in the *kārum* of that city), and it seems likely that some of the other officials lived there as well. Only for Sinatum it can be shown that he was also active in Sippir-Yaḫrurum, for he and his son Ibni-Šamaš are well attested in texts of an archive-holder from that city (that of Šumum-libši son of Lipit-Adad grandson of Pirḫi-ilišu).

The file of texts assembled above contains all information available about Ilšu-ibni during the final decade of his life. Here nothing distinguishes him from his fellow military officials. But when he died soon afterward, things were to take a different course, as is suggested by the following document:

BM 78557 (Bu 88–5–12,467)

1 urudu*ḫa-aṣ-ṣí-nu*
2 3 urudušu-KIN-níg-gal
šà *pu-gu-de-e la-bi-*⌜*ri*⌝
4 1 urudušu-KIN-níg-gal
pu-gu-de-e dingir-*šu-ib-ni*
6 1 urudu*ḫa-aṣ-ṣí-nu*
4 urudušu-KIN-⌜níg-gal⌝
Lo. E. šà *ú-nu-ut* é-gal
pu-gu-de-e
Rev. ⌜dingir-*šu-ib-ni* PA.PA
šu-ti-a dsuen-*im-gur-an-ni*
12 dumu *i-na-pa-le-e-šu*
ki munus*dam-qá-tum*
14 dam dingir-*šu-ib-ni* PA.PA
(ruling)
igi *ṭà-ab*-mi-*lí* dumu dingir-*šu-a-*⌜*bu*⌝-⌜⌝*šu*⌝
16 igi *i-la-lum* dumu *ib-ni-*dutu
(ruling)
iti*bára-zag-gar* u_4-14-kam
U. E. mu *am-mi-di-ta-na* lugal-e
bàd *am-mi-di-ta-na*ki
20 dutu-è-[o]-x-a

"One copper axe, three copper sickles, part of the old allocation; one copper sickle allocated to Ilšu-ibni, (in total) one copper axe and three copper sickles, part of the utensils of the palace allocated to the captain Ilšu-ibni, received by Sîn-imguranni son of Ina-palêšu from Damqātum the wife of the captain Ilšu-ibni.

Witnesses: Ṭāb-ṣillī son of Ilšu-abušu; Ilālum son of Ibni-Šamaš. Date: day 14 of the first month of year 35 of Ammiditana."[23]

Seal impressions: illegible impressions of seals with legends can be observed on the left edge.

This small square tablet is a receipt for copper utensils obtained from the wife of the PA.PA Ilšu-ibni. All items are described as palace property assigned for use to Ilšu-ibni (line 8–10).[24] These objects were given out on two different occasions: most tools were part of the "old allocation" but one sickle is explicitly labeled as having been "allocated to Ilšu-ibni." The distinction between these two categories is not clear. Perhaps the first four objects had been issued earlier and were obtained by Ilšu-ibni from a predecessor or colleague, whereas the additional sickle had been given out by a palace administrator to Ilšu-ibni himself.

In this seemingly ordinary document it is remarkable that it is not Ilšu-ibni himself, but his wife who is mentioned as the supplier of the utensils. Less than two months after this transaction the estate of Ilšu-ibni was in the process of being dissolved, so that his absence here must indicate that he was already dead at the beginning of the year. Because Ilšu-ibni's estate was seized by a creditor upon his death, the palace was quick to recover its belongings from the hands of his widow. The title of the recipient is not given and little information about his activities is otherwise available,[25] but the two witnesses were connected with the military establishment of Sippir-Amnānum.[26]

The family fortune

Ilšu-ibni was the heir of wealthy landowners.[27] His father Ilum-damiq and his sister, the *nadītum* Lamassānī, are well documented as buyers of real estate, but so far none of their sale contracts has come to light. Their acquisitions are known exclusively from a number of contract-registers, contract-extracts and a list of tablets about fields. These texts were

23 The last line of the date formula is at variance with the other attestations of the name of the 35th year of Ammiditana, but the prosopographic evidence (see notes 25–26) strongly supports this identification.

24 The appearence of *pu-gu-de-e* in this text seems to be the earliest attestation of the noun *puquddû*, first attested in Old Babylonian texts from Susa (see AHw *s.v.*). The use of the sign GU instead of normal ku might indicate that the second root consonant had a distinct phonemic realisation in this nominal form.

25 The only other attestation seems to be MHET 2/4 550 (Aṣ 17), where he acts as co-tenant in a field cultivation partnership with the field owner Kurû son of Aḫi-aqar.

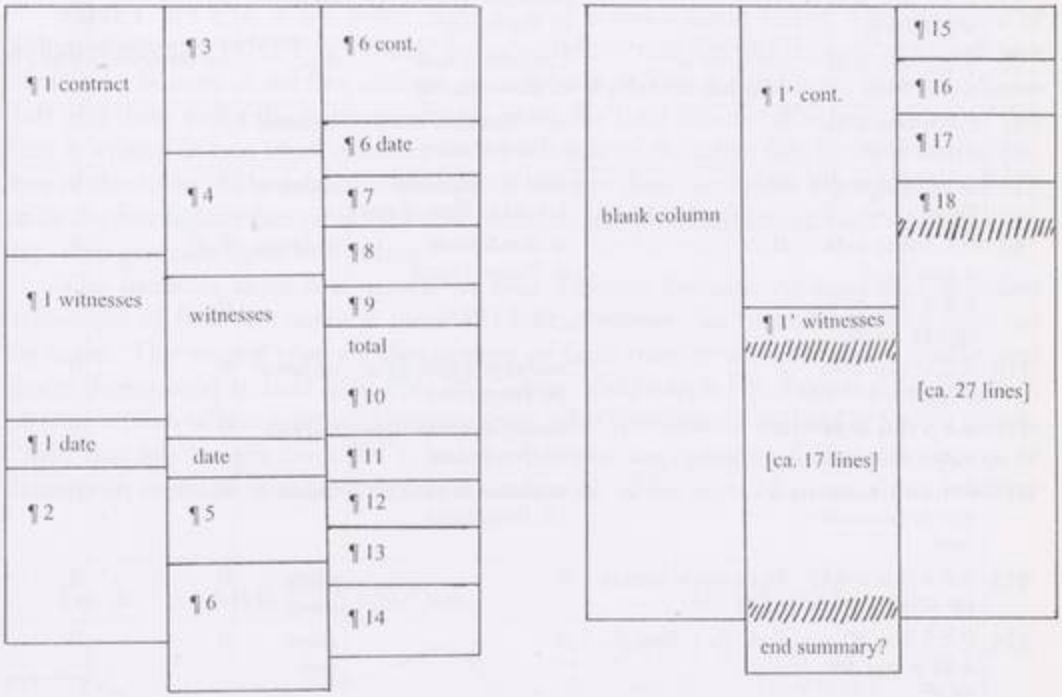
26 Ṭāb-ṣillī son of Ilšu-abušu must be identical with *ṭà-ab*-mi-x-mi dumu dingir-*šu*-[*a-bu-šu*] (+ first seal annotation), the fifth validating official (after the captains Sinatum and Ilšu-ibni, the secretary Ibbi-Ilabrat and Ilšu-nāṣir son of Ilšu-ibni) in the real estate assignment CT 45 51 (Ad 34–[ ]–05). Ilālum son of Ibni-Šamaš appears as holder of a subsistence field in the Buša district in MHET 2/6 894: I 5 (Ad 34–06–21) and can also be found, as M. Stol suggested, as validating official in CT 45 51: 19 (*i-la-l*[*um* dumu ˹*ib*˺-[*ni*-^{d}utu]). Both texts are discussed above with reference to table 1.

27 Little is known about the family's sources of income, except for what can be found in the letter AbB 11 158. Ilum-damiq appears there without title or patronym, but the context strongly suggests that the same military commander is involved (see note a to the text in AbB 11). The text

written after the lands had been acquired, but it is not clear how much later, and it is also not clear who used them and for what purpose. In the following, I will try to answer these questions.

The contract-registers (BE 6/1 119, MHET 2/5 656) are large multi-column tablets containing lists of field descriptions of various types. Both texts partly overlap, but the items are listed in different sequences. BE 6/1 119 is well preserved and consists of five columns, three on the obverse and two on the reverse, with a blank column to the left of the fifth column. In order to leave the left-side column of the reverse empty, the scribe squeezed the final lines of the text on the upper edge below the fifth column (these are the lines labelled as U.E. on plate 70 of BE 6/1).[28] The layout of this tablet is shown in figure 1.

Fig. 1 BE 6/1 119 Obv. BE 6/1 119 Rev.



The internal organisation of this text is not based on the chronological sequence of the incorporated transactions, but follows a geographic pattern in which fields in the same irrigation district (*ugārum*) are listed together (see table 2A for the content of this text).

relates how Ilum-damiq and another military official, the PA.PA Marduk-mušallim, had given out a loan in Naḫur, a city in the area of the Habur headwaters, brought down a slave of the debtor to Mesopotamia and sold him there. The sender of the letter, an associate of the aforementioned debtor, now fears that they might sell the girls he pledged as well and makes an appeal to the addressee of this letter. It shows that Ilum-damiq was involved in slave trade which he presumably undertook during (military) missions in northern regions.

28 Information provided by E. Leichty (letter April 2002).

Table 2A: BE 6/1 119

	object	seller	buyer / owner	type [a]	date	parallels
¶1	[0.2.2 iku 40 sar] a-šà kankal a-gàr *ba-ṣí*	[…]	Lamassānī *nad.* d. Ilum-damiq gal-ukkin-na	cont.	Ae 25–03–10	CT 4 34c
¶2	1.2.0 iku a-šà a-gàr *ba-ṣí*	Pî-Aja lukur-^{d}utu d. Šamaš-tajjār	Lamassānī *nad.* d. Ilum-damiq gal-ukkin-na	desc.	0	0
¶3	1.0.0 iku a-šà a-gàr *ba-ṣí*	Amat-Šamaš lukur-^{d}utu d. Ipqu-Ištar	Lamassānī *nad.* d. Ilum-damiq	desc.	0	0
¶4	0.1.1 iku a-šà a-gàr *ba-ṣí*	Ilī-idinnam di-ku$_5$ s. Rīš-Šamaš	Lamassānī *nad.* d. Ilum-damiq	desc.	0	MHET 2/5 656 ¶B
	list of witnesses and		date: refers to ¶2–4?		Ae 27–05–27	0
¶5	0.2.1 iku a-šà a-gàr *ba-ṣí*	0	*nudunnê* Erišti-Erra d. Buttatum	cadastre	0	0
¶6	0.0.3 iku a-šà a-gàr *ba-ṣí*	children of Marduk-muballiṭ [b]	Lamassānī *nad.* d. Ilum-damiq	desc.	Ad 04–04–02	BM 78672
¶7	0.1.4 iku a-šà a-gàr *ba-ṣí*	0	*ṣibit* Ilšu-ibni PA.PA s. Ilum-damiq	cadastre	0	0
¶8	0.1.1 iku a-gàr *ba-ṣí*	0	*ṣibit* Sîn-mušallim šeš-ni s. Ilum-damiq	cadastre	0	0
¶9	0.1.3 iku a-šà a-gàr *ba-ṣí*	0	*ša* Šamúḫtum d. Puzur-Nintu	cadastre	0	0
	6.0.0 iku 40 sar [a-gàr *ba-ṣí*]	summary of ¶ 1–9 [c]			0	0
¶10	0.2.5^{2} iku a-šà a-[gàr …]	0	*nudunnê* Erišti-Erra (d. Buttatum)	cadastre	0	0
¶11	0.1.5 iku a-šà a-gàr *bu-ra-a*^{ki}	0	*nudunnê* Erišti-Erra (d. Buttatum)	cadastre	0	0
¶12	0.0.5^{1}/$_{2}$ iku a-gàr *ša ka-ra-na-tum*	0	*nudunnê* Erišti-Erra (d. Buttatum)	cadastre	0	0
¶13	0.0.4 iku a-gàr *bu-ra-a*^{ki}	Nidnuša s. Šamaš-nāṣir	0	short desc.	0	0
¶14	0.0.3 iku 80 sar a-šà a-gàr *bu-ra-a*^{ki}	Ibni-Ea s. Ibni-[…]	0	short desc.	0	0
¶15	0.0.5^{2} iku a-šà a-gàr *bu-ra-a*^{ki}	Ilī-idinnam di-ku$_5$ (s. Rīš-Šamaš)	0	short desc.	0	0
¶16	[o iku a-š]à a-gàr *bu-ra-a*^{ki}	Nergal-ibbi	0	short desc.	0	0
¶17	[o] iku a-gàr *pa-ḫu-*[*ṣum*]	Nergal-ibbi	0	short desc.	0	0
¶18	[o] iku a-gàr mar-t[u]	[Nergal-ibbi?]	[…]	[…]	[…]	0
			break			
¶1′	0.0.2 iku a-gàr *bu-ra-a*^{ki} [d]	judges and *kārum* of Sippir-Amnānum	Ilum-damiq ugula mar-tu s. Zimri-Šamaš	contract	Ae (oath)	MHET 2/5 656 ¶C OLA 21 63 C
	break followed by end summary (?)					

Comments on table 2A

a Four types: Contract = full sale contract with clauses, witnesses and date. Description of field transfer = *ša* ki PN_1 PN_2 *išāmu*. Short description of field transfer = *ša* ki PN *iššāmu*. Cadastre = description of plot with name of owner and right of title (*nudunnê* / *ṣibit* / *ša* PN).

b With prehistory of the plot (acquired by Marduk-muballiṭ in Si 16).

c The total number of iku's for the Baṣu-section is three iku short. This miscalculation was probably caused by an oversight of the scribe who only took the first number ¶ 5 into account while disregarding its second number (of 3 iku) and its subtotal.

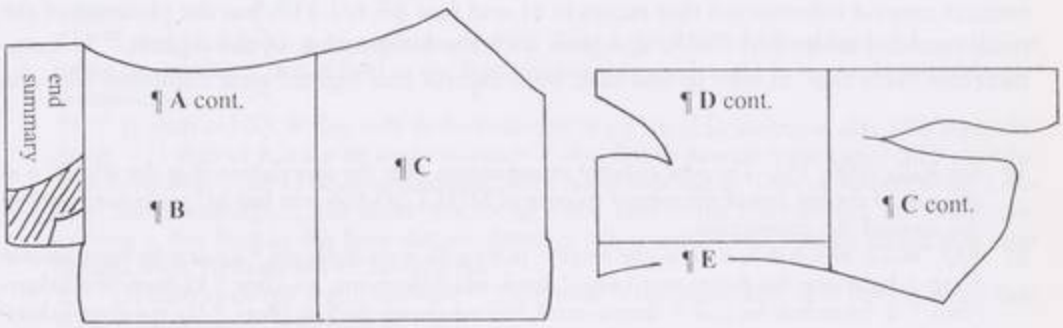
d With prehistory of the plot (estate of merchant Mannašu).

Thus the first nine items in this text are fields located in the Baṣi district, and this section is followed by a statement of the total surface described in the text. The remainder of the tablet is devoted to fields located in the Burā irrigation district. This geographic order is twice disturbed by digressions about fields in different districts, but held by the same owner (¶ 10–12 and ¶ 16–18).

MHET 2/5 656 is the lower third part of a two-column tablet. The sequence of columns given in MHET 2/5 should be corrected, so that the text consists of a small section at the bottom of the first column, a continuous text on the preserved parts of column two and three and a discontinuous fragment in the final column. The conclusion of this text is written in two small columns on the left side of the tablet (see figure 2 for the layout of this tablet). The sequence of items in this text does not follow a geographic pattern as in the first register (see table 2B for its content), but where the text of both registers overlap, they generally agree in wording.[28]

The items in these lists appear in four different formats. At least two complete transcripts of field sale contacts (with all contract clauses, list of witnesses and date) are included. The second type are descriptions of land transfer with mention of seller and buyer (formulated as: field *ša* ki PN_1 PN_2 *išāmu*, "field which PN_2 bought from PN_1"). A shorter version of this type only mentions the seller (formulated as: field *ša* ki PN *iššāmu*, "field that was bought from PN"), and the last type are cadastre-phrased descriptions of fields with mention of the owner and an indication of his right of access, either *nudunnê*

Fig. 2: MHET 2/5 656 Obv. MHET 2/5 656 Rev.



28 Minor variation appears for example between the end of ¶ 4 of BE 6/1 119 and ¶ B of MHET 2/5 656.

Table 2B: MHET 2/5 656

	object	seller	buyer / owner	type	date	parallels
¶A	[...]	[...]	[...]	[contract]	Ae 25 or 26	?
¶B	0.1.1 iku a-šà a-gàr *ba-ṣí*	Ilī-idinnam di-ku$_5$ s. Rīš-Šamaš	Lamassānī d. Ilum-damiq	desc.	0	BE 6/1 119 ¶4
¶C	0.0.2 iku a-gàr *bu-ra-a*^{ki}	judges and *kārum* of Sippir-Amnānum	Ilum-damiq ugula mar-tu s. Zimri-Šamaš	contract	Ae (oath)	BE 6/1 119 ¶1′ OLA 21 63 C
¶D	0.1.0 iku 30 sar a-šà a-gàr 0.1.3 iku-e	Šamaš-bani s. Šamaš-nāṣir	0	short desc.	0	0
¶E	[o iku] a-šà a-gàr *bu-ra-a*^{ki}	[...]	[...]	[...]	[...]	?

Minor remarks on MHET 2/5 656:
"Col.3 (l)" = column IV; "Col.4 (r)" = column III. The following remarks follow this column sequence.
II 9′: *bi-li-ma* written on the same line. II 14′ ki* ^{d}suen-*i*-BA$^{?}$*-*nam*; BA$^{?}$ is mistake for DIN since the patronym (attestations Pienka 1998: 201) clearly supports this reading. III 6: $^{f[1]}$sig-*an-nu-ni-tum* dumu *šar-*^{r}*rum-*^{d1}iškur ^{lr}*be*^{1}*-e[l*-šu-nu ù ib-ni-*^{d}marduk]; the insertion of line 7 is not necessary. III 8 (Dekiere Col.4 (r) 9): dumu-meš ^{d}utu-*n*[*a**-*ṣi-ir*]. III 17 (Dekiere Col.4 (r) 18): the price of the field is [one sign] + $^{2}/_{3}$ gín. III 18 (Dekiere Col.4 (r) 19): I don't know the reading of ^{r}*iš-ša*^{1}*-ka-*x [...], but sign x looks like AM (or BI?). IV 3 (Dekiere Col.3 (l) 3): ^{r}*i-ta*^{1} [o o ma]r*-tu* *ù i-ta* ...

PN, "dowry of (female) PN," *ṣibit* PN, (field) holding of (male) PN," or simply *ša* PN, "belonging to (female) PN." Some items contain explanations about the prehistory of the plot, such as in the land transfer description ¶ 6, where the original acquisition by the seller in year 16 of the reign of Samsuiluna is mentioned, or notably in ¶ 1′ (¶ C in MHET 2/5 656), a forced liquidation of the field of a deceased merchant sold by a number of judges, other prominent citizens and the *kārum* of Sippir-Amnānum to Ilum-damiq in order to remedy the deceased's tax arrears.[30]

The contract-extracts are recorded on small tablets with rounded corners. They contain an excerpt of a field sale contract, either only the cadastral description (CT 4 34c) or the cadastral description in combination with the sale clause (BM 78672).[31] These two extracts contain information that recurs in ¶1 and 6 of BE 6/1 119, but the phrasing of the small rounded tablet BM 78672 disagrees with the information in the register.[32] It seems therefore likely that, at least in this case, both excerpt and register were compiled with the

30 See Kalla 2000: 151. The new column arrangement, plus the observation that the alleged *ù* at the start of the last line of the second column of MHET 2/5 656 is in fact ki* (collation) clarifies the sense of this transaction.

31 BM 78672: [0.0.3 ik]u a-šà a-gàr *ba-ṣí*$^{?}$ 2 [*i-t*]*a* a-šà *a-wi-il*-dingir 3 *ù i-ta* a-šà ^{d}utu-*na-ṣi-ir* 4 sag-1-kam-ma *ḫar-ḫar-ri-tum* 5 sag-2-kam-ma ^{d}iškur-ma-an-sum 6 ki *ša-at-*^{d}*a-a* lukur-^{d}utu 7 *ù* ^{d}marduk-*na-ṣi-ir* 8 dumu-meš ^{d}marduk-*mu-ba-lí-iṭ* (Rev) 9 ^{l}*la-ma-sà-ni* lukur-^{d}utu 10 dumu-munus dingir-*da-*[*mi-i*]*q* 11 in-ši-[in-sa$_{10}$] 12 šám-til-la-bi-šè 13 10 gín kù-babbar in-na-an-lá (ruling) (rest of reverse uninscribed).

32 BM 78672 leaves out all information about the previous transfer of the plot and hence does not supply the name of the grandfather of the sellers but does, by contrast, contain the sale clause that is summarised in the description in the register as *ša* ki PN$_1$ PN$_2$ *išāmu*.

help of the original documents (or a full duplicate) and that excerpts were not used to compile registers or vice versa.

MHET 2/5 660 is a fragment of a tablet with a summary of various real estate transactions. The items in the text are again formulated as short descriptions of land transfer without mention of the buyer (*i.e.*, field *ša* ki PN *iššāmu*, "field that was bought from PN") and deal with fields in the Nine-iku *ugārum* sold by Nidnuša son of Šamaš-nāṣir. Lamassānī daughter of Ilum-[damiq] appears as neighbour. Another field in the Nine-iku district was sold by a brother of Nidnuša, Šamaš-bani son of Šamaš-nāṣir (MHET 2/5 656 ¶D), and the "sons of Ilum-damiq" owned land there (MHET 2/6 894: II 22). It seems therefore likely that this text also describes fields sold to Ilum-damiq or his daughter Lamassānī.

The tablet OLA 21 63 is dated in year 28 of Abiešuh and contains an inventory of tablets about fields (Woestenburg 1993: 430). These fields have all been sold, but the name of the buyer is never stated. For every tablet the text states the location and size of the field (all in the Burā-district, with one exception in obv. 19) and the name of the seller, and specifies the number of accompanying *šurdû*-tablets.[33] This suggests that the first tablet is not the contract of the most recent sale transaction, but rather the original title deed about the plot (the type of document otherwise referred to as *tuppi ummātim*, "mother tablet") handed over by the seller together with later deeds about the same plot (*tuppāt šurdê*) (Janssen 1996: 242–243). Most sellers recur in the contract-register of acquisitions in the Burā-district: Nidnuša son of Šamaš-nāṣir (in A, D and X) in BE 6/1 119 ¶13, Ilī-idinnam son of Rīš-Šamaš (in B) in BE 6/1 119 ¶15 (also in ¶4 in Baṣi-district), and the *kārum* of Sippir-Amnānum (in C) in BE 6/1 119 ¶1′. Only this last plot exactly fits the description given in the register, but it seems obvious that all tablets described in this text were given over to Ilum-damiq or his daughter Lamassānī when they bought these fields.

33 OLA 21 63 consists of the following sections:
A: [1] 1 dub <<x>> 0.0.5 iku 70 sar a-šà a-gàr *bu-ra-a*[ki] [2] *ša* <ki> *ni-id-nu-ša* dumu [d]utu-*na-ṣir iš-ša-mu* [3] *ù* 1 dub *šu-ur-de-šu*, "One tablet concerning 5 iku 70 sar of field in the Burā-district that was bought from Nidnuša son of Šamaš-nāṣir and its *šurdû*-tablet.";
B: [4] 1 dub 0.0.1 iku TÚL-ME-ZU *ša* a-gàr *bu-ra-a*[ki] [5] *ša* ki *ì-lí-i-din-nam* [Id]*bu-né-né-na-ṣir* [6] <<x>> [I]mi-*lí*-[d]utu [I]dingir-*šu-na-ṣir ù* dingir-*šu-ba-ni* [7] dumu-meš *ri-iš*-[d]utu *iš-ša-a-mu* [8] *ù* 1 dub *šu-ur-de-šu*, "One tablet concering 1 iku … of the Burā-district that was bought from Ilī-idinnam, Bunene-nāṣir, Ṣilli-Šamaš, Ilšu-nāṣir and Ilšu-bani sons of Rīš-Šamaš, and its *šurdû*-tablet.";
C: [9] [f]1 dub[1] 0.0.2 iku a-šà a-gàr *bu-ra-a*[ki] [10] [*ša* ki k]ar zimbir[ki]-*am-na-nim iš-ša-mu*, "One tablet concerning 2 iku of field in the Burā-district that was bought from the *kārum* of Sippir-Amnānum.";
D: [11] [1 dub x+] 0.1.0[2] iku a-šà *ša bu-ut-ta-tum ša* x x x x [12] [1 dub o o] iku a-šà a-gàr *bu-ra-a*[ki] [13] [1 dub o] x iku a-šà a-gàr *bu-ra-a*[ki] [14] [1+] 2 dub-*pa-a-at ši-ma-tim* [15] [*ù*] 9 dub-*pa-a-at šu-ur-de-e* [16] [*ša*] ki *ni-id-nu-ša* dumu [d]utu-*na-ṣir iš-ša-ma-a*, "One tablet concening x iku field that Buttatum …, one tablet concerning x iku field in the Burā-district, one tablet concerning x iku field in the Burā-district, (total) 3 sale contracts and 9 *šurdû*-tablets that were bought from Nidnuša son of Šamaš-nāṣir.";
E: [17] [1] dub *ap-lu-tim* a-gàr *bu-ra-a*[ki] [18] [*š*]*a il-ti-ia*, "One inheritance deed (concerning a field in) the Burā-district belonging to PN (?).";
F: [19] [1 du]b[2] *ša* 0.0.3 iku a-[šà] a-gàr *na-g*[*û*[2]*-ú*] [break of several lines], "One tablet concerning 3 iku field in the Nagû-district" [followed by break in the text];
X: [1′] [1 dub o iku] a-šà a-gàr *b*[*u*[2]*-ra-a*[ki]] [2′] [*ù* 1] dub *šu-ur-de-šu* [3′] [*ša* ki *ni-id-n*]*u-ša* dumu [d]utu-*na-ṣir iš-ša-mu*, "One tablet concerning x iku field in the Burā-district and its *šurdû*-tablet that was bought from Nidnuša son of Šamaš-nāṣir." Here follows an open space and the date of the text.

These texts then all refer to field acquisitions by Ilum-damiq and especially by his daughter Lamassānī.[34] Most fields were located in the same area, the irrigation districts of Baṣi and Burā, the same territory where Ilšu-ibni was later active in agricultural matters. Here Lamassānī bought fields that were located in close proximity to one another (*e.g.*, the neighbouring fields of the field in BE 6/1 119 ¶1 were also acquired, see ¶2 and 3). The family also bought fields in other areas, for example in the Nine-iku district, but these possessions are not so well documented. The circle of sellers is small: Nidnuša and other sons of Šamaš-nāṣir sold fields in Burā and Nine-iku, Ilī-idinnam and other sons of Rīš-Šamaš sold fields in Baṣi and Burā, Nergal-ibbi sold three fields in different areas (for him see Yoffee 1977: 129). It seems likely that all fields enumerated in the contract-registers were actually owned by Ilum-damiq, his family members or perhaps his associates, even when the texts fail to mention him explicitly as buyer or describe the fields as property of individuals whose relation to the family remains unknown (notably Erišti-Erra[35]).

So what was the purpose of these texts? Most real estate documents from ancient Sippir were originally preserved in the archives of the last owners of the plots in question, since it is a well-known fact that possession of the appropriate documents was necessary to prove property rights in case of litigation. The seller of a plot of real estate therefore handed his old title deeds over to the buyer, and legal strategies were available to remedy the situation when one or more vital documents were missing. However, real estate owners not only preserved sale contracts and other title deeds, but also other types of documents, such as copies of old sale contracts, summary registers of such contracts and different types of excerpts. The purpose of such documents cannot be understood by studying the text alone, but should by examined by means of a study of the text as part of a larger file of texts assembled in the interest of the property owner. This kind of research focussing on files of documents found in the house of Ur-Utu has yielded important results (Janssen 1996), but it is obvious that the loss of archival coherence for most of the written findings from Sippir poses a serious obstacle for similar inquiries.

In the present case, it is certainly significant that so far not a single original sale contract for the transactions summarised in these contract-registers has been identified. This implies that the registers and related texts were stored away from the locality where the title deeds pertaining to the same plots were kept, and that these title deeds have not been found. This situation can be explained by what we now know about the seizure of Ilšu-ibni's estate. A large part of Ilum-damiq's land holdings, and the relevant title deeds, had passed as inheritance share to Ilšu-ibni and, much later, to the new master of his estate. When this new master subsequently sold or transferred these lands to new owners, he also handed over the title deeds to them, but it was probably not necessary to pass on the registers and other lists as well. These tablets could therefore have stayed in his possession.

Some of these tablets may have come from Ilšu-ibni's archive (for example OLA 21 63, which was already written at the end of the reign of Abiešuh), while others may have been written in the interest of the new master of this estate. It is possible that the large contract-

34 Land purchase by a *nadītum* was presumably a common strategy for wealthy families to circumvent certain restrictions on land alienation.

35 Land of Erišti-Erra daughter of Buttatum appears in BE 6/1 119 ¶5 and ¶10–12. Is Buttatum in OLA 21 63: 11 and MHET 2/5 656 ¶ C (line II 2′) her father?

registers were compiled for this purpose. This is suggested by the fact that they include, in addition to the family's acquisitions, a description of subsistence field allotments of Ilšu-ibni and his brother Sîn-mušallim. It is unlikely that these fields could be sold, so that this information is irrelevant for later owners of the family's lands. If, however, these lists were compiled during an assessment of the field property of the family by the new master, the inclusion of this information would make sense. This would imply that BE 6/1 119 was a survey of all fields in the described areas that belonged to Ilšu-ibni or his family.
It is unknown whether the seizure of Ilšu-ibni's lands also affected Ilšu-ibni's brothers, since it is clear that the sons of Ilum-damiq shared ownership of at least part of their lands.[36] Both Sîn-mušallim[37] and Bēlšunu[38] outlived Ilšu-ibni, and although it seems likely that their shares were left untouched, there is simply no information available to verify this idea.

The registers and related texts are preserved in two museum acquisition collections: the Bu 88–5–12 collection of the British Museum (London) and the second Khabaza collection of the University Museum (Philadelphia). Since these collections share much material from the same find deposits (Kalla 1999: 207–209), it is likely that these real estate documents were stored and found together. Furthermore, the records for which the captain Ilšu-ibni can be identified as the original owner or user are also part of the Bu 88–5–12 collection.[39] These tablets must likewise have been taken by the new master of the estate. It seems then likely that both the real estate records as well as the sample of tablets originally owned by Ilšu-ibni have been found in an assemblage of documents that was brought together by the person who controlled Ilšu-ibni's estate.[40] This assemblage also included the tablet BM 78356 (published above), kept to repudiate future claims about usage of the paternal seals handed over to Ilšu-ibni's brother Sîn-mušallim, and presumably the impressions of the paternal seals as stipulated in that text.

36 See BE 6/2 110 (Ad 29) and MHET 2/6 894: II 22 (Ad 34), both discussed above.

37 Sîn-mušallim is thus far only attested as holder of a subsistence plot and new owner of the paternal seals (see above). He probably also held some military office (Harris 1975: 97).

38 Bēlšunu son of Ilum-damiq leases out houses in ARN 168 (Aṣ 13–02–99) and BM 81359 (unidentified year of Aṣ–02–04), appears as witness to field leases in MHET 2/6 907 (Aṣ 14–03–04) and CT 4 23b (Aṣ 15–01–10) and as neighbour of a field in MHET 2/6 913 (Aṣ 16–05–02). Although he is only mentioned during the second half of the reign of Ammiṣaduqa, the fact that he did business with military officials (AbB 12 5) and had a field bordering on military land holdings in the Sippir-Amnānum area (MHET 2/6 913) makes it very likely that he was a younger brother of Ilšu-ibni and Sîn-mušallim.

39 CT 4 36b (loan), BM 78531 (promissory note), BM 78600 (sale of doors), BM 78557 (objects received from his wife Damqātum), see descriptions given above.

40 It is not possible to determine whether some of the texts about military land holdings, discussed above with reference to table 1, come from this assemblage as well. The tablets where Ilšu-ibni appears as lessor, no. 3 (BE 6/2 110) and no. 5 (MHET 2/4 495) and one of two documents where he represents low-ranking field owners as intermediary (no. 6, CT 8 7a) belong to the same museum collections as the real estate documents. Other tablets of this file can be found in other museum acquisition collections. This file is strongly interconnected in prosopography, subject matter and date. It is therefore not possible to determine whether these texts were found in different deposits but by coincidence deal with similar transactions and the same persons, or whether they represent part of a single find that was scattered over a number of museum collections.

The identity of the new master of Ilšu-ibni's estate unfortunately remains obscure. He is only mentioned once, as "creditor" (*tamkārum*) in BM 78356, and the sources are silent about the reasons behind his taking control of the estate. It is certainly possible that other grounds than insolvency alone brought it in his hands. To find this out, more information about this person and his activities is needed.[41] If one assumes that this anonymous master is identical with the archive-holder who kept the real estate file and the texts taken from Ilšu-ibni's archive, then it might be possible to identify him with one of the other archive-holders of texts preserved in the Bu 88–5–12 and the second Khabaza collection. But this challenge is left aside for future mining of the archives.

41 The letter AbB 7 136, also part of the Bu 88–5–12 collection, should be mentioned here. This text seems to be a fragment of a letter of some high official or even the king to several addressees (based on the appearance of *kīam ulammidanni* in line 4′ and the plural imperative *amrāma* in line 5′; for the significance of *lummudum* see Sallaberger 1999: 145 note 201) about a problem with a field. It refers to an event that took place thirty or more years ago (line 2′) and mentions Ilum-damiq the head of the assembly (line 7′). Was this a letter sent to those who controlled Ilšu-ibni's estate, and does it refer to one of the fields that was bought by Ilum-damiq in the past?

Bibliography

Ali, F.A.
1964 "Blowing the Horn for Official Announcement," *Sumer* 20, 66–68.

Buchanan, B.
1981 *Early Near Eastern Seals in the Yale Babylonian Collection*. New Haven and London.

Cassin, E.
1987 "Le sceau: Un fait de civilisation dans la Mésopotamie ancienne," in E. Cassin (ed.), *Le semblable et le différent. Symbolismes du pouvoir dans le Proche-Orient ancien*. Paris, 267–279 [original date of publication of this article was 1960].

Charpin, D.
1980 *Archives familiales et propriété privée en Babylonie ancienne: Étude des documents de «Tell Sifr»* (Centre de Recherches d'Histoire et de Philologie de la IV^e^ Section de l'École pratique des Hautes Études II. Hautes Études Orientales 12). Genève—Paris.
1990 "Les divinités familiales des Babyloniens d'après les légendes de leurs sceaux-cylindres," in Ö. Tünca (ed.), *De la Babylonie à la Syrie, en passant par Mari. Mélanges offerts à Monsieur J.-R. Kupper à l'occasion de son 70^e^ anniversaire*. Liège, 59–78.
2000 "La hiérarchie de l'armée babylonienne (suite)," NABU 2000/18.

Collon, D.
1987 *First Impressions. Cylinder Seals in the Ancient Near East*. London.

Dekiere, L.
1991 "Some Remarks on Sippar-Amnānum = Sippar rabûm," NABU 1991/110.

Delaporte, L.
1923 *Catalogue des cylindres orientaux, cachets et pierres gravées du Musée du Louvre. II. Acquisitions*. Paris.

Gibson, McG. and R.D. Biggs (eds.)
1977 *Seals and Sealing in the Ancient Near East* (Bibliotheca Mesopotamia 6). Malibu.

Edzard, D.O.
1970 *Altbabylonische Rechts- und Wirtschaftsurkunden aus Tell ed-Dēr im Iraq Museum, Baghdad* (Bayerische Akademie der Wissenschaften, Phil.-Hist. Kl. N.F. 72). München.

Hallo, W.W.
1977 "Seals Lost and Found," in Gibson and Biggs (eds.) 1977, 55–60.
1981 "Correction to *Seals Lost and Found*, BM 6 (1977), p. 55f.," RA 75, 95.
1983 ""As the Seal upon Thine Arm": Glyptic Metaphors in the Biblical World," in L. Gorelick and E. Williams-Forte (eds.), *Ancient Seals and the Bible* (Occasional Papers on the Near East 2/1). Malibu, 7–17 and plate XII.

Harris, R.
1975 *Ancient Sippar. A Demographic Study of an Old-Babylonian City (1894-1595 B.C.)* (PIHANS 36). Istanbul.

Janssen, C.
1996 "When the House Is on Fire and the Children Are Gone," in K.R. Veenhof (ed.), *Houses and Households in Ancient Mesopotamia. Papers read at the 40e Rencontre Assyriologique Internationale. Leiden, July 5-8, 1993* (PIHANS 78). Istanbul, 237–246.

Kalla, G.
1998 "Nachlaß. B. Altbabylonisch," RlA 9/1–2, 36–42.
1999 "Die Geschichte der Entdeckung der altbabylonischen Sippar-Archive," ZA 89, 201–226.
2000 Review of MHET 2/1–5. ZA 90, 139–152.

Klengel, H.
1968 "Eine altbabylonische Verlustanzeige," Or 37, 216–219.

Kraus, F.R.
1958 *Ein Edikt des Königs Ammi-ṣaduqa von Babylon* (Studia et documenta ad iura orientis antiqui pertinetia 5). Leiden.
1987 "Ein altbabylonisches Totenopfer," ZA 77, 96–97.

Leemans, W.F.
1982 "La fonction des sceaux apposés à des contracts vieux-babyloniens," in G. van Driel, Th.J.H. Krispijn, M. Stol and K.R. Veenhof (eds.), *Zikir Šumim. Assyriological Studies Presented to F.R. Kraus on the Occasion of his Seventieth Birthday*. Leiden, 219–244.

Leichty, E., J.J. Finkelstein and C.B.F. Walker
1988 *Catalogue of the Babylonian Tablets in the British Museum* VIII: *Tablets from Sippar* 3. London.

Lieberman, S.J.
1992 "Nippur: City of Decisions," in M. deJong 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, 127–136.

Matthews, D.M.
1997 *The Early Glyptic of Tell Brak. Cylinder Seals of Third Millennium Syria.* (Orbis biblicus et orientalis; Series archaeologica 15). Fribourg.

Muhly, J.D.
1981 Review of Gibson and Biggs (eds.) 1977. JAOS 101, 399–401.

Powell, M.A.
1996 "Money in Mesopotamia," JESHO 39, 224–242.

Neumann, H.
1992 "Nochmals zum Kaufmann in neusumerischer Zeit: Die Geschäfte des Ur-DUN und anderere Kaufleute aus Nippur," in D. Charpin and F. Joannès (eds.), *La circulation des biens, des personnes et des idées dans le Proche-Orient ancien. Actes de la XXXVIIIe Rencontre Assyriologique Internationale (Paris, 8-10 juillet 1991)*. Paris, 83–94.

Oppenheim, A.L.
1956 *The Interpretation of Dreams in the Ancient Near East* (Transactions of the American Philosophical Society New Series 46, 3). Philadelphia.

Otto, A.
1995 "Ein neuentdecktes Glied in der Kette altorientalischer Administration — Zur Deutung gesiegelter Langetten," Damaszener Mitteilungen 8, 85–93 and plate 6.

Pientka, R.
1998 *Die spätaltbabylonische Zeit. Abiešuh bis Ammiditana. Quellen, Jahresdaten, Geschichte* (Imgula 2). Münster.

Röllig, W.
1980 "Notizen zur Praxis der Sieglung in mittelassyrischer Zeit," WdO 11, 111–116.

Radner, K.
1997 *Die neuassyrischen Privatrechtsurkunden als Quelle für Mensch und Umwelt* (SAAS 6). Helsinki.

Roth, M.T.
1979 *Scholastic Tradition and Mesopotamian Law: A Study of FLP 1287, a Prism in the Collection of the Free Library of Philadelphia*. PhD Thesis. University of Pennsylvania.

Sallaberger, W.
1999 *„Wenn Du mein Bruder bist, ..." Interaktion und Textgestaltung in altbabylonischen Alltagsbriefen* (CM 16). Groningen.

Stein, D.
1997 "Siegelverwendung in Wirtschaft und Verwaltung," in E. Klengel-Brandt (ed.), *Mit Sieben Siegeln versehen: Das Siegel in Wirtschaft und Kunst des Alten Orients*. Mainz, 104–123.

Steinkeller, P.
1977 "Seal Practise in the Ur III Period," in Gibson and Biggs (eds.) 1977, 41–53.

Stol, M.
1980 Review of Charpin 1980. RA 74, 185–188.

Tanret, M.
1998 "Le *namkarum*. Une étude de case dans les texts et sur la carte," in H. Gasche and M. Tanret (eds.), *Changing watercourses in Babylonia. Towards a reconstruction of the ancient environment in lower Mesopotamia, volume* 1 (Mesopotamian History and Environment Series II, Memoirs V). Ghent, 1–64.

Teissier, B.
1998 "Sealings and Seals: Seal-Impressions from the Reign of Hammurabi on Tablets from Sippar in the British Museum," Iraq 60, 109–186.

Voet, G. and K. van Lerberghe
1989 "A Long Lasting Life," in H. Behrens, D. Loding and M.T. Roth (eds.), *Dumu-e_2-dub-ba-a. Studies in Honor of Åke W. Sjöberg* (Occasional Publications of the Samuel Noah Kramer Fund 11). Philadelphia, 525–538.

Winter, I.J.
2001 "Introduction: Glyptic, History, and Historiography," in W.W. Hallo and I.J. Winter (eds.), *Proceedings of the XLV^e Rencontre Assyriologique Internationale. Part II, Yale University. Seals and Seal Impressions.* Bethesda, Maryland, 1–13.

Woestenburg, E.
1993 Review of OLA 21. BiOr 50, 425–433.
1999–2000 Review of MHET 2/1–4. AfO 46–47, 349–356.

Woestenburg, E. and B. Jagersma
1992 "The Continuing Story of Sippar-Amnānum = Sippar-rabûm," NABU 1992/28.

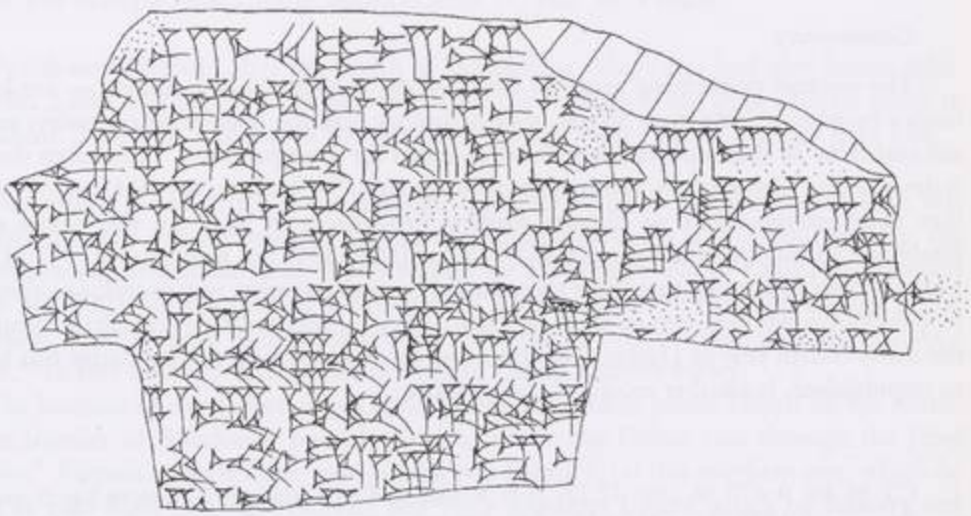
Yoffee, N.
1977 *The Economic Role of the Crown in the Old Babylonian Period* (Bibliotheca Mesopotamica 5). Malibu.

Working in Elam

John MacGinnis — Cambridge

It is a great pleasure to have this opportunity to share in the Assyriological community's thank offering to Christopher Walker. Working in the the Students Room, no day goes by without being in some way indebted to his assistance and generosity, whether it be access to unpublished copies or being alerted to new texts as they surface in the process of cataloguing. Along with every other Assyriologist who has come to work in the British Museum, I have been the happy beneficiary of his tireless and selfless assistance. In this spirit I offer these small thoughts on working, if not necessarily retiring, in Elam.

No. 1: BM 61766 (82–9–18,1735) 11.2+×6.4+cm Darius –/12/29



1 [x GUR Š]E.BAR 226 GUR ZÚ.[LUM.MA …]
2 [… MUN].ḪI.A *saḫ-le-e* 2 (PI) 2-BÁN 7$^{1}/_{2}$ ⌜NINDA^{2}.ḪI$^{?}$⌝.[A(?) …]
3 [… x G]UN 7 *ma-na* SÍG.ḪI.A 53 ^{kuš}*me-še-*⌜*e*⌝*-nu-iá* ⌜2-*ú*⌝ […]
4 […] ⌜A⌝ BAR ^{lú}ERIM.MEŠ *e-piš dul-*⌜*lu*⌝ *šá* ^{uru}*Šu-šá-an*^{ki} *ù* UN.MEŠ […]
5 […] ⌜x⌝ *ze-bi-il ṣi-da-a-ta* ŠUK.ḪI.A-*su-nu* ŠE.BAR *u* ZÚ.[LUM.MA]
6 […] MUN.ḪI.A *saḫ-le-e* KÙ.BABBAR *ri-kis* ⌜MURUB$_{4}$ ^{kuš}⌝*še-e-nu ù nu-*⌜*ú*$^{?}$⌝-[*ṭu*(?)]
7 […] ⌜^{iti}⌝ŠE MU 29 KÁM ^{m}*Da-ri-ia-*⌜*muš* LUGAL *šá ina* ŠU.II ^{m}x (x)⌝[…]
8 [… A-*šú*] *šá* ^{md}EN-*ik-ṣur u* ^{md}UTU-ŠEŠ-*it-*[*tan-nu* A-*šú šá* ^{m}*Nidintu* ^{lú}*šanû šá*]
9 [^{md}UTU-*a-a*] ^{lú}TIL.GÍD.DA *šá* É.BABBAR.RA ⌜*ina*⌝ […]
10 […]⌜x x x x⌝ […] ((large gap))

Rs 1′ [^{m}...-*b*]*u-tú* DUB.[SAR ...]
2′ [...] ^{iii}DU$_6$ UD [...]

Notes

l. 3 Note the Aramaic plural of *me-še-e-nu-iá* (if correctly understood). Alternatively, the traces could be read as 5 GÍN ˹KÙ˺.[BABBAR ...].

l. 4 Instead of A.BAR, possibly read ˹7^{1}/$_{2}$˺ which could match the 7^{1}/$_{2}$ in line 2. Obviously we do not expect workmen to do things by halves, but it could be an administrative measure.

l. 8f. Šamaš-aḫ-ittannu's presence in Elam with the *corvée* workers is already attested, cf. MacGinnis 1995, no. 72 (Darius 31) and BM 74977 (to be published by Caroline Waerzeggers).

Translation

"[x kur] of barley, 226 kur of dates [... *l.* of sa]lt (and) cress, 90 *l.* <...>, 7^{1}/$_{2}$ [... x] talents 7 mina of wool, 53 second-rate sandals [...] *corvée* labourers of Susa and the men [...] ... transport of travel provisions (and) rations. The barley, dates, [...], salt, cress, silver (paid as) *rikis qabli*, sandals, leather bags(?), [...] Addaru of year 29 of Darius ... [...] son of Bēl-ikṣur and Šamaš-aḫa-it[tannu, the deputy of Šamšaja,] the *qīpu* of the Ebabbara in [...]" (rest broken off).

Commentary

The workers performing *corvée* in Elam — the *ṣābē ēpiš dulli ša Elamti* — are known from a number of texts from Sippar, mostly dealing with the issue of dates, barley, sesame, salt and cress for their upkeep, or with silver issued for these purposes.[1] Less often the gang is described as "the workers performing *corvée* in Susa."[2] Dandamayev 1991, 17–19 argues that these references are to Elamite workers brought in to work on the estates of the Ebabbara, an interpretation picked up by Potts (1999, 339) but Bongenaar (1997, 37–38) is surely right in arguing that these texts should be read the other way round, *i.e.*, they refer to Babylonian workers sent to work in Elam. They are attested from the sixth through to the thirty-fourth year of Darius. The following text, copied long ago by Bertin but hitherto unpublished, is another record of these rations:

1 CT 55 46: 9; CT 56 193: 12.17, 762: 3; Dar 6: 4 (the reading of Elam in line 5 made by Bongenaar, 1997: 37, n. 63); Dar 230. For other remarks on Susa, including the reading of EREN.KI = Susa, see Stolper, RA 86 (1992), Durand, NABU 1988/34 and Joannès, NABU 1988/1 and NABU 1989/78.

2 MacGinnis 1995, No. 72: A shepherd (l. 2: ^{m}*ši-rik-tu$_4$* ^{lú*}SIPA*) is ordered to deliver wool to Šamaš-aḫ-ittannu from the sheering quota of the 34th year (l. 3: ˹1$^{?}$ GUN* ˹SÍG*.ḪI*.A*˺; l. 4: *i*-na* gi-iz*-zi iš*-kar*-ri* ... [collation C. Wunsch]) for the workmen of the *qīpu* who do service in Šušan (for the reading of ll. 6–8 see Bongenaar 1997, 38[63]). Texts from Babylon and Šaḫrīnu dealing with men sent to do service in Elam include: Dar 154, in which an individual receives silver for going to Elam with the charioteers of the *šākin ṭēmi* of Babylon (Babylon, Darius 5); Dar 308: 14, in which silver is issued for *rikis qabli* for going to Elam (Šaḫrīnu, Darius 11); Dar 572 which records pay and rations for three months in Elam (Babylon (?), Darius 23); and Dar 577 which deals with the silver for a year's service in Elam, paid by order of the *šākin ṭēmi* of Babylon, partly in advance and partly on return (Babylon, Darius 23).

No. 2: BM 64088 (82–9–18,4057; Bertin 2242) 5.0×3.9 cm Darius 6/8/12

1 30 GUR ZÚ.LUM.MA
2 *ul-tu* É NÍG.GA *ina* ŠU.II
3 ^{m}MU-*a* A-*šú šá* ^{md}ḪAR-*ši-man-ni*
4 *a-na* $^{uru.kur}$*E*-NIM-*mat a-na*
5 ^{m}GIŠ.MI-LUGAL ^{lú}TIL.LA.GÍD.DA
6 *šá* ^{r}*ina*$^{?}$ É.BABBAR.RA *šu-bul-lu*$_4$
7 ^{iti}APIN UD 6 KÁM MU 12 KÁM
8 ^{m}*Da-*[*ri-ia*]*-muš* LUGAL TIN.TIR^{ki}
9 LUGAL [KUR.KUR]

Translation

"30 *kur* of dates have been sent from the *bīt makkūri* to Elam to Ṣilli-šarri the *qīpu* who is in the Ebabbara in the hands of Šumāya son of Bunene-šimanni. Araḫsamnu, day 6, year 12, Darius king of Babylon, king of countries."

In addition to the operations in Elam and Susa, and apart from their activities around Sippar, there is one other place where the *corvée* gang is found, and that is in the locality of Laḫiru. For example, MacGinnis, Mesopotamia 31, No. 30: 5 reads:

> "Nabû-šum-līšir asks after the health of Šamaš-kaṣir. May (my) lord give Šamaš-aḫḫē-erība 2,880 *l.* of barley — let him give it for the workers of the *qīpu* who are going to Laḫiru. This is in addition to the previous 360 *l.* of barley which my lord gave him."

The author of this letter Nabû-šum-līšir was a scribe of the temple. Šamaš-kaṣir was probably the *sūtu* concessionary of this name. Šamaš-aḫḫē-erība will undoubtedly be the well known *rab širkē* of the time. Barley rations for 12 workers sent to Laḫiru are recorded in CT 56 772, from the time of Cambyses. In another letter Bēl-aḫḫē-iqīša (*qīpu* of the Ebabbara) asks the *šangû* to send baskets for the work in Laḫiru where they are making a terrace.[3] In BM 64904 a certain Šamaš-ittiya of Laḫiru receives barley.[4]

The location of this Laḫiru is not entirely resolved. Frame places Laḫiru on the north-eastern frontier of Babylonia, possibly situated where the Diyala cuts through the Jebel Hamrin.[5] Parpola believes there were at least two Laḫiru's, (a) this northern one, which he places at Eski Kifri (34.37N 44.51E) and (b) a southern Laḫiru which he believes was certainly Yadburu, perhaps somewhere near the modern town of Kuwait (32.27N 47.10E). Of these (a) is the closer to Sippar, approximately 180 km to the northeast; (b) is much

3 Cyr 371 = CT 22 140. The copy of Cyr 371 gives the name in the first line as Nabû-aḫḫē-iqīša, whereas the copy of CT 22 140 has Bēl-aḫḫē-iqīša: collation of the tablet (BM 74741) proves that the latter is correct. Laḫiru may also occur in BM 82695 line 6′ (from Borsippa).
4 Dated to the reign of Cyrus by the presence of the *qīpu* Bēl-aḫḫē-iqīša.
5 Frame 1992, 220[37] and 224.

further away, approximately 280 km to the southeast, but would appear to be directly on the route from Sippar to Susa.[6]

Separate from the *corvée* labourers there were also individuals from Sippar performing service in Elam in the reign of Darius as a result of *ilku* obligations. This service did not have to be military as such, or rather we might say there was a crossover between military and civilian state service and individuals subject to *ilku* in Sippar might be required to perform this obligation in Elam. Thus BM 42352, published by Jursa, records a payment of silver as a share of bow service for earthworks on the canal in Elam for year 17[7] — demonstrating that personnel doing military service might be employed in civil engineering projects. BM 42302, also published by Jursa, records the payment of silver for the *ilku* of Elam in Darius 19.[8] Incidentally, the term *pasa'du* appears to have been a synonym for *ilku*, in fact derived from an Old Iranian word for "armour." Thus a payment of silver for the *pasa'du* of Elam is recorded in VS 4 126 (Darius 9)[9] and a settling of accounts of the *pasa'du* of the *ṣābē ēpiš dulli* of Elam is found in Dar 293: 10–11 (Darius year 10).[10] The barley taken to Elam by boat in Darius year 17 was very likely for rations for *corvée* labourers or soldiers.[11] Another document in this context is Camb 13 (Cambyses accession), a silver account in which, if I understand it correctly, two individuals are going to Laḫiru, taking with them silver in lieu of bow service to pay for substitutes: "when they go to Laḫiru they will meet the expenditure due on their bow-service and allocate their royal workers" (*e-ma a-na* ^{uru}*La-ḫi-i-ri il-la-ku-u' te-lit ina muh-hi* ^{giš}BAN-*šú-nu ú-še-li-'u ù* ^{lú}ERIM.MEŠ-*šú-nu ú-zi-zu-ma*). The troops in question appear to have been led by a certain Nabû-bēlšunu. Quite how those performing *ilku* were organised is not presently known. Were they considered part of the army? We await more texts.

Outside of these labourers, there are a few other references to Elam in the Sippar texts. On one occasion, in the reign of Nabonidus, barley was imported from Elam.[12] A few Elamite individuals are specifically identified as such, two with Babylonian names (Šamaš-šum-līšir, Basuru), another the more Elamite sounding Ummanšipir.[13] Barley tithes from royal land cultivated by the Herold of Elam are metioned in Nabonidus year 12.[14] Similarly, other references to Laḫiru in the Sippar texts deal with barley imported from the

6 Frame personal communication. Brinkman (PKB: 178, n. 1093) tends towards there being one Laḫiru, though accepts the possibility of two.
7 Jursa 1999: 151.
8 Jursa 1999: 133.
9 Jursa 1999: 262.
10 Following the reading of Bongenaar 1997: 38, n. 65.
11 Dar 442; in Dar 516: 26.28 (cf. Bongenaar 1997: 37, n. 63) silver is paid out to meet the expenses for three journeys of the men of Elam.
12 Nbn 458: 3: 5 kur barley from the barley of Elam paid to the *sepīru* (Nabonidus 17).
13 Šamaš-šum-līšir: CT 56 776: 12–13 ^{lú}*e-la-mu-ú* (Nebuchadnezzar 4, receiving wool); Basuru ^{lú}*I-la-mu-ú*, BM 74491 (Cambyses 1); Ummanšipir: CT 57 212 (Nabopolassar 9, receiving barley); note also [...]-*ú*-TAR ^{lú}NIM.MA, BM 52893: 10 (no date); and cf. Stolper, NABU 1998/112.
14 Jursa 1999: 102, No.2: 12.

district[15] while in BM 62139 (time of Cambyses) one or two individuals from Laḫiru receive dates and oil.[16]

As for *rikis qabli*, the texts detailing payments so designated have been most recently surveyed by MacGinnis 1998. Essentially, the term was used for the provisioning and equipping of men sent out from Sippar to perform military service on behalf of the temple.[17] The term is also found occasionally in contexts which are not obviously military, *e.g.*, the *rikis qabli* of "carpenters of Lebanon" who were probably sent to fetch cedars from the Lebanon mountains.[18] Our present attestation may belong in this class, though it is probable that both carpenters sent to the Lebanon and workers sent to Elam were accompanied by a military escort.

Lastly, a few remarks on the *corvée* gang itself. An inspection (*amirtu*) of the *corvée* labourers from the time of Cyrus makes it clear that they were drawn from the ranks of the temple slaves (*širku*), whose basic professions were primarily agricultural (shepherds, farmers, gardeners) but also included boatmen, bird catchers, men working in the storerooms and in the ox stalls, and artisans such as carpenters, weavers and reed and leather workers.[19] Its standard complement was 50 men, to which 1 or 2 carpenters and up to 3 smiths might be seconded.[20] The issue of 53 pairs of sandals in BM 61766 tells us that in this case there were three supernumeraries. However, the 226 kur of dates would cover rations for 56 men for four months for (56×4=224) with 2 kur left over. The surplus 2 kur is a mystery but the difference between 56 and 53 is probably to be accounted for by rations for the *qīpu* (who directed the gang and received double rations, possibly to include his deputy the *sepīru*) and the *rab širkē*. In Sippar ten *kizû* were normally also attached to the gang but this does not seem to be the case here. The calculation of four months does not take account of the fact that BM 61766 also mentions barley. The quantity is missing, but when dates and barley are issued together in these texts it is normally in equal quantities, so perhaps the whole issue is for an eight month deployment. The logistics behind such an operation are lost to us but must have been impressive.

15 ZA 4, 146, No. 19: 28 (Nabopolassar 21). Note that *šir'am la ḫīri*, TÚG.KUR.RA *la ḫīri* and *iltapu la ḫīri* are nothing to do with Laḫiru, cf. CAD *ḫīru*. The references known to me are: Nbn 703: 5–6: 6 ^{túg}*il-ta-pi la ḫi-ri* 6 TÚG.KUR.RA *la ḫi-ri*; BM 63947 (Bertin 1227): TÚG.KUR.RA.MEŠ *la ḫi-i-ri* and *šir'am la ḫi-iš-tu*$_4$; BM 63956 (Bertin 1441): TÚG.KUR.RA.MEŠ *la ḫi-ri*.

16 ^{m}DÙG.GA-*ia u* ^{md}NÀ-KAR-ZI.MEŠ ^{lú}*La-ḫi-ra-a-a*, BM 62139: 4. Laḫiru is also mentioned in the fragment BM 51635: rev. 1 (no date) and in BM 52674: 5.9 (Nabopolassar 17), which may have been written in Laḫiru.

17 Bongenaar 1997, 131 and n. 143.

18 Bongenaar 1997, 393, 401.

19 MacGinnis in press.

20 MacGinnis 1995, 161.

BIBLIOGRAPHY

Biggs, R.D.
1994 "Šušan in Babylonia," in H. Gasche *et al.* (eds.), *Cinqante-deux réflections sur le Proche-Orient ancien en hommage à L. de Meyer*. Leuven.

Bongenaar, A.C.V.M.
1997 *The Neo-Babylonian Ebabbar Temple* (PIHANS 80). Istanbul.

Dandamayev, M.A.
1975 "Forced Labour in the Palace Economy of Achaemenid Iran," AoF 2, 71–78.
1983 "Aliens and the Community in Babylonia in the Sixth Century BC," Receuils Société Jean Bodin 41, 133–145.
1991 "Elamite Workers in Achaemenid Babylonia," in M. Mori, H. Ogawa and M. Yoshikawa (eds.), *Near Eastern Studies dedicated to Prince Takahito Mikasa* (Bulletin of the Middle East Culture Centre in Japan 5). Wiesbaden, 17–19.
1993 "Achaemenid Estates in Laḫiru," Iranica Antiqua 27, 117–123.

Frame, G.
1992 *Babylonia 689–627 B.C: A Political History* (PIHANS 69). Istanbul.

MacGinnis, J.D.A.
1995 *Letter Orders from Sippar and the Administration of the Ebabbara in the Late-Babylonian Period*. Poznań.
1996 "Letters from the Neo-Babylonian Ebabbara," Mesopotamia 31, 99–151.
1998 "BM 64707 and *rikis qabli* in the Ebabbara," WZKM 88, 177–183.
n/d "A *corvée* Gang from the Time of Cyrus" [in press with ZA].

Potts, D.
1999 *The Archaeology of Elam*. Cambridge.

Tavernier, J.
2000 "On Some Iranian Names in Late Babylonian Sources," NABU 2000/47.
2001 "More Iranian Names in Late Babylonian Sources," NABU 2001/25.

Zadok, R.
1976 "On the Contact between Iran and Babylonia in the Sixth Century B.C.," Iran 14, 61–78.
2001 "On the Location of Parsua," NABU 2001/28.

Zawadzki, St.
2000 "Zazannu and Šušan," in R. Dittmann *et al.* (eds.), *Variatio Delectat — Iran und der Westen: Gedenkschrift für Peter Calmeyer* (AOAT 272), 723–744.

A Charm Against Demons of Time*

Christa Müller-Kessler — Jena

Der Mensch besitzt nichts wertvolleres als seine Zeit
Ludwig van Beethoven

The Mandaic charm against demons of time has been awaiting publication since 1924. It belongs to a set of lead, silver and gold amulets attributed to the family archive of Mah-Adur-Gušnasp, who is also called Bewazig bar Mama, and other family members: Mama pat Adurdukht and Šabur bar Narsaydukht.[1] The archive was discovered by Lt. Col. H.S. Alexander in a lead jar under the foundations of a private house in a mound near el-Qurnah situated at the confluence of the Tigris and the Euphrates in southern Iraq during a private dig between 1910 and 1920. A few years later in 1924 the lead pot and its contents passed into the possession of the British Library, and is housed today in the Department of the Ancient Near East in the British Museum.[2] In previous articles I have presented a few examples of incantations and excerpts from the archive of Mah-Adur-Gušnasp and shall continue in this fashion before publishing the final and complete edition.[3]

The selected charm on BM 135794 II has an unusual content that aimed to protect the client against the harms of demons of time, that means terms like season, month, day, hour, minute and other terms of time that were considered threatening evil elements. The

* The work on the lead roll archive was made possible by a fellowship from the Alexander von Humboldt-Foundation's Feodor-Lynen program and several research visits were supported by the Deutsche Forschungsgemeinschaft. I am indebted to the Trustees of the British Museum for permission to publish the lead amulet BM 135794 II.

1 The clients appear here under their alias names, which are zodiacal names. The real client names were not employed in such magical texts.

2 Former Department of Western Asiatic Antiquities.

3 Ch. Müller-Kessler, "A Mandaic Gold Amulet in the British Museum," BASOR 311 (1998), 83–88; *idem*, "Aramäische Beschwörungen und astronomische Omina in nachbabylonischer Zeit. Das Fortleben mesopotamischer Kultur im Vorderen Orient," in J. Renger (ed.), *Babylon: Focus Mesopotamischer Geschichte, Wiege früher Gelehrsamkeit, Mythos in der Moderne*. 2. Internationales Colloquium der Deutschen Orient-Gesellschaft 1998, Berlin 1999, 427–443; *idem*, "*Dan(ḫ)iš* – Gott und Dämon," in J. Marzahn and H. Neumann (eds.), *Assyriologica et Semitica. Festschrift für Joachim Oelsner anläßlich seines 65. Geburtstages*, Münster 2000, 311–318; *idem*, "Phraseology in Mandaic Incantations and Its Rendering in Various Eastern Aramaic Dialects. A Collection of Magic Terminology," Aram 11/12 (2000), 293–310; *idem* and K. Kessler, "Spätbabylonische Gottheiten in spätantiken mandäischen Texten," ZA 89 (1999), 65–87.

incantation content is appropriate for the occasion of Christopher B.F. Walker's 60th birthday. He has been one of the staff members who has always taken very seriously the endless Museum duties, to the neglect of his own personal scholarly interests. I still recall — then a beginner in Assyriology — the energy Christopher B.F. Walker put into the arrangements for the successful XX. Rencontre Assyriologique in London in the summer of 1982.

The charm against demons of time is the third incantation within the older version of the incantation series *šapta ḏ-pišra ḏ-ainia* "incantation of solving the eyes" and follows directly after incantation 1Aa[4], 1Ab[5], (= BM 135793 I, BM 135794 II, ll. 1–9), but is incised on the second lead sheet (BM 135794 II, ll. 10–100). It was customary to combine several charms within an incantation series, and to divide the text over several lead rolls. This can be proven by another incantation series on three lead strips, 1Ca–f (= BM 134699 = 1965–10–13,4), where the continuation of the text from one lead sheet to another is indicated by a catch-line, *i.e.*, the last line of the text on the first lead strip is repeated as the first line on a new lead strip. This kind of text distribution appeared already in the (two) lead roll(s) published by M. Lidzbarski in 1909, although Lidzbarski considered the catch line a scribal mistake and did not indicate the extra line in his transliteration.[6] For the present incantation it could be deduced by the parallel text passages of the later version of *šapta ḏ-pišra ḏ-ainia*.[7]

The first two thirds (ll. 1–74) of the text of the charm against demons of time are very repetitive, employing the same banning formula "bound, subdued and destroyed is …, the cruel and evil one of war" with each of the various terms for time units. Then follows a demon story (ll. 74–90) that is told by an anonymous speaker (usually a higher demon) from whom one learns about the Mandaic gnostic tree that consists of three demon groups Dews (= trunk), Laṭabas (= foliage) and Lilits (= branches), but the root of the tree is not mentioned here. One Dew of this tree is singled out by the speaker. With this act of ritual power the Dew's strength is destroyed. Finally, all evil elements are driven out by the help of the archangel Gabriel and the Mandaic highest being "Life." The incantation is enclosed within a line corresponding to the magic circle appearing on magic bowls.

4 A parallel of 1Aa, but a shorter and modified version written by the same scribe, was auctioned by Christie's, London, in April 1998 and is published as an appendix in Müller-Kessler, "Aramäische Beschwörungen und astronomische Omina" (n. 3), 440–443.

5 The text passage of incantation 1Ab is identical with the late version from the nineteenth century of *šapta ḏ-pišra ḏ-ainia* ll. 376–379, 406–410 which hardly deviates from the older one, see E.S. Drower, "Shafta ḏ Pishra ḏ Ainia," JRAS 1937, 589–611; 1938, 1–20, esp. 596/7.

6 M. Lidzbarski, "Ein mandäisches Amulett," in *Florilegium ou recueil de travaux d'érudition dédiés à Monsieur le Marquis Melchior de Vogüé*, Paris 1909, 349–373. By neglecting the catchline *wʿtbrʾt* (l. 97) the counting differs now by one line. The lead roll formerly owned by a Mr. H.T. Lyon, but today in the possession of the Royal Asiatic Society, consists of two separate incantations divided by a line after l. 115, now l. 116 for the coming republication in Ch. Müller-Kessler, *Incantations for the House of Pir Nukraya. Mandaic Lead Rolls from the British Museum*, Part I [in preparation]. This division into two separate documents was already mentioned by Lidzbarski in his introduction to the publication of the text.

7 Drower, "Shafta ḏ Pishra ḏ Ainia" (n. 5), 596, ll. 376–379, 406–410.

1Ac[8] (= BM 135794 II, ll. 10–109)

	Transliteration	*Translation*
obverse		
1.	*'swt' thwylḫ lm'dwr gwšn'*	Let there be healing for Mah-Adur-Gušnasp,
2.	*sp byw'zyg br mm' 'syr*	Bewazig bar Mama. Bound,
3.	*kbyš wmbṭ'l 'd'n'*	subdued and destroyed is the dark
4.	*h'šk' qšy' wbyš' ḏ-*	season, the cruel and evil one
5.	*qr'b' 'syr kbyš*	of war; bound, subdued
6.	*wmbṭ'l pyg' 'pyk' qšy⌃⌃*	and destroyed is the minute, the perverted, cruel
7.	*wbyš' ḏ-qr'b' 'syr kbyš*	and evil one of war; bound, subdued
8.	*wmbṭ'l p'lg' 'pyk' qšy'*	and destroyed is the half minute, the perverted, cruel
9.	*wbyš' ḏ-qr'b' 'syr*	and evil one of war; bound,
10.	*kbyš wmbṭ'l n'g' 'pyk'*	subdued and destroyed is Naga, the perverted,
11.	*qšy' wbyš' ḏ-qr'b'*	cruel and evil one of war;
12.	*'syr kbyš wmbṭ'l rps'*	bound, subdued and destroyed is Ripsa,
13.	*'pyk' qšy' wbyš' ḏ-qr'*	the perverted, cruel and evil one of war;
14.	*b' 'syr kbyš wmbṭ'l*	bound, subdued and destroyed
15.	*šwš' 'pyk' qšy' wbyš⌃⌃*	is Šuša, the perverted, cruel and evil one
16.	*ḏ-qr'b' 'syry' kbyšy'*	of war; bound, subdued
17.	*wmbṭly' shry' dywy'*	and destroyed are Sahras, Dews,
18.	*rwhy' hwmry' wlyly't'*	Ruhas, Humartas and Lilits,
19.	*ptykry' wml'ky' 'pyky'*	Patikars and Mlakas, the perverted,
20.	*qšy' wbyšy' ḏ-s'gybwn*	cruel and evil ones who move
21.	*wm'sgybwn wm'byšybwn*	and walk about and harm
22.	*bbnḫ ḏ-'d'm wbkwlhyn*	the children of Adam and all
23.	*zry't' ḏ-'hw' 'syr'*	offspring of Hawa (= Eve); bound,
24.	*kbyš' wmbṭl' š'yy't'*	subdued and destroyed is the hour,
25.	*'pyk't' qšy't' wbyš['t']*	the perverted, cruel and evil one;
26.	*'pyky' kbyšy' wmbṭly'*	overturned, subdued and destroyed
27.	*shry' dywy' wlyly't'*	are Sahras, Dews und Lilits,
28.	*rwhy' hwmry' ptykry'*	Ruhas, Humartas, Patikars
29.	*wml'ky' 'pyky' qšyḫ*	and Mlakas, the perverted, cruel
30.	*wbyšyḫ ḏ-s'gybwn wm'sgy*	and evil ones who move and walk about
31.	*bwn wm'byšybwn bbnḫ ḏ-*	in them and harm the children of
32.	*'d'm bzry't' ḏ-'hw' 'syry'*	Adam (and) the offspring of Eve; bound
33.	*kbyšy' wmbṭly' ywmy'*	subdued and destroyed are the days
34.	*wym'my' 'pyky' qšyḫ*	and daytimes, the perverted, cruel
35.	*wbyšy' ḏ-qr'b' 'syry'*	and evil ones of war; bound,
36.	*kbyšy' wmbṭly' lyly<w>'t'*	subdued and destroyed are the nights[!],
37.	*'pyky' qšyḫ wbyšyḫ ḏ-*	the perverted, cruel and evil ones of
38.	*qr'b' 'syry' kbyšy'*	war; bound, subdued
39.	*wmbṭly' ryš yhry'*	and destroyed is[!] the first day of the months,

8 { … } superfluous letters, […] missing letters, ⌜ … ⌝ partly legible letters, ⌃ … ⌃ supralinear letters, <…> editorial addition.

40.	*'pyky' qšy' wbyšy' d-*	the perverted, cruel and evil ones of
41.	*qr'b' 'syry' kbyšy'*	the war; bound, subdued
42.	*wmbṭly' yhry'*	and destroyed are the months,
reverse		
43.	*'pyky' qšyḥ wbyšy' d-*	the perverted, cruel and evil ones of
44.	*qr'b' 'syry' kbyšy'*	war; bound, subdued
45.	*wmbṭly' shry' dywy'*	and destroyed are Sahras, Dews,
46.	*rwhy' hwmry' wlyly't'*	Ruhas, Humartas and Lilits,
47.	*ptykry' ml'ky' 'pyky'*	Patikars, Mlakas, the perverted,
48.	*qšyḥ wbyšy' d-s'gybwn*	cruel and evil ones who walk
49.	*wm'sgybwn wm'byšybwn*	and move about and harm
50.	*bbnḥ d-'d'm wbzry't' d-*	the children of Adam and the offspring
51.	*'hw' 'syr' kbyš' wmbṭl'*	of Hawa (= Eve); bound, subdued and destroyed
52.	*šnyḥ 'pyk't' qšy't'*	are the years, the perverted, cruel
53.	*wbyš't' d-qr'b' 'syry'*	and evil ones of war; bound,
54.	*kbyšy' w'mb'ṭly' shry'*	subdued and destroyed are Sahras
55.	*dywy' rw[hy'] 'hw'mry' wlyly't'*	Dews, Ru[has], Humartas and Lilits,
56.	*ptykry' ml'ky' 'pyky'*	Patikars, Mlakas, the perverted,
57.	*qšyḥ wbyšyḥ d-s'gybwn*	cruel and evil ones who walk
58.	*wm'sgybwn wm'byšybwn*	and move about and harm
59.	*bkwlwn bnḥ d-'d'm wtwlt'*	all children of Adam and embryos
60.	*d-'hw' 'syry' kbyšy'*	of Hawa (= Eve); bound, subdued
61.	*wmbṭly' kwkby' 'pyky'*	and destroyed are the stars, the perverted
62.	*qšyḥ wbyšy' d-qr'b'*	cruel and evil ones of war;
63.	*'syry' kbyšy' wmbṭly'*	bound, subdued and destroyed
64.	*pqd'twn wpwgd'nhwn*	are their commands and words,
65.	*'pyky' qšyḥ byšyḥ*	the perverted, cruel and evil ones
66.	*d-s'gybwn wm'sgybwn bbnḥ*	who walk and roam around in the children
67.	*d-'d'm wbkwl twlt' d-'hw'*	of Adam and in all embryos of Hawa (= Eve);
68.	*'syryn wm'nyhyn kwlhwn*	bound and calmed down are all
69.	*bnḥ d-'d'm wtwlt' d-'hw'*	children of Adam and embryos of Hawa (= Eve).
70.	*lqwd'm'k d-yl'k mnd' d-*	Before yourself is Manda d-
71.	*hyy' lsygdt' wlšbt'*	Hiyya for worship and praise.
72.	*w'gr' wzdq' w'swt' thwylḥ*	And let there be merit and righteousness and healing for
73.	*lm'dwr gwšn'sp br*	Mah-Adur-Gušnasp bar
74.	*mm' {bṭwr} ptyḥ wl' mthzyḥ*	Mama. It was opened, but not seen:
75.	*msgyn' wskyn' 'l'n' h'd*	I walk about and perceive one tree
76.	*d-q'yym bṭwr' d-'wpḥ*	that is standing on a mountain, whose trunk
77.	*dywy' w'lw'tḥ lṭ'by' slw'tḥ*	are Dews, and whose foliage are Laṭabas,
		whose branches are
78.	*lyly't' 'tbḥ b'l'n' hn'tḥ*	Lilits. There was one Dew in that tree.
79.	*dyw' h'd nysbyt pkrtḥ*	I took (and) bound
80.	*ldyw' hn'tḥ wtwm mhythḥ rm'*	that Dew and smote him again. And he (= the speaker) raised
81.	*q'l' twm w'm'r bg'n h'g*	the voice again and said: "by the help of Hag-

82.	*t'gy' br l'buš mhz' d-hzyth*	Tagya bar Labuš I saw with one glimpse
83.	*'l'dyw' hn'th 'l gysh np'l*	that Dew (as) he fell on his side
84.	*wl' hw' lh hyl' lmq'm dhk't*	and had no strength to stand up. The spirit
85.	*rwhyh d-dyw' kd gwmrt' d-nwr'*	of Dew was quenched like a coal of fire
86.	*d-dhk' w'my' hkw't rwhyh*	that is quenched and becomes dim like the spirits
87.	*d-h'zyn shr' wdyw' whwmrt'*	of this Sahra and Dew and Humarta
88.	*wrwh hršy' d-šry' bpgrh*	and the spirit of sorcerers that dwells in the body
89.	*d-m'dwr gwšn'sp br mm'*	of Mah-Adur-Gušnasp bar Mama,
90.	*kd gwmrt' d-nwr' d-dhk' w'my[']	like a coal of fire that is quenched and becomes dim."
91.	*bšwmh d-g'br'yl ml'k'*	By the name of the angel Gabriel,
92.	*bšwm' d-hyy' htym h'tm' d-*	by the name of Life
93.	*m'dwr gwšn'sp br mm' mn dyw'*	Mah-Adur-Gušnasp bar Mama is sealed with a seal against
94.	*zkr' wmn dyw' nwqbt' <l>mhyt'm*	any male Dew or female Dew. <For> sealing
95.	*pgrh wlmhyt'm npšh d-*	the body and for sealing the soul
96.	*m'dwr gwšn'sp b'yn rb' w'myn*	of Mah-Adur-Gušnasp by a great eye and by a first
97.	*q'dm'yyh b'wtry' wbm'ny' rwrbyʃ'*[1]	Amin?, by Utras and by the great Manas
98.	*d-'stndrbwn šwmy' w'rq' bzh'*	who were shaken by heaven and earth by expelling,
99.	*zh' bzh' bz' z' z' z' z' z' z' z' z' z' z' z' z'*	expelling, by expelling, by Za, Za, Za, Za, Za, Za, Za, Za, Za
100.	*z' z' z' z' z' z' z' z' z' z' z'*	Za, Za, Za, Za, Za, Za, Za, Za, Za, Za, Za

Notes

1 The Middle Iranian personal name *m'dwr gwšn'sp* occurs frequently as a client name in incantations of Late Antiquity. The complete name reads here *m'dwr gwšn'sp d-qrylh byw'zyg* "Mah-Adur-Gušnasp who is called Bewazig."[9]

6 The spelling *pyg'* is the Mandaic variant for *pg' '* with the total loss of the guttural. It denotes here 'minute' and not the homonymous 'mute' as in *wqmr' mn qdmw 'nph d-zkr' pyg'* "and wool from the forehead of a mute ram" in the preceding incantation within this older incantation series of *šapta d-pišra d-ainia* 1Aa68–69.[10]

8 The spelling *p'lg'* is ambiguous as well, since it is also homonymous and can be taken on the one hand as a time unit, 'half minute,' and on the other hand can mean, 'paralysis (demon)'.[11] The first interpretation fits the context, but both terms *p'lg'* and *pyg'* also occur often in lists of demons where their meaning is difficult to determine.[12] Therefore they should be left untranslated in contrast to the current habit in work on the magic genre to translate such unsolved demon names.

10 For the first time *n'g'* is attested in the singular form. Nöldeke connected *n'g'* with *ngh'* 'dawn, daybreak', but according to other passages *n'g'* is always employed as a small unit of time.[13]

9 Müller-Kessler, "A Mandaic Gold Amulet" (n. 3), 84.

10 See for a parallel text Müller-Kessler, "Aramäische Beschwörungen und astronomische Omina" (n. 3), 442, ll. 68–69.

11 See Th. Kwasman, "The Demon of the Roof," in I.L. Finkel, M.J. Geller (ed.), *The Concept of Disease in Ancient Babylonia*, [in press].

12 See J.B. Segal, *Catalogue of the Aramaic and Mandaic Incantation Bowls in the British Museum*, London 2000, 64, no. 23: 8; Ch. Isbell, *Corpus of the Aramaic Incantation Bowls* (Society of Biblical Literature, Diss. Series 17), Missoula, Montana 1975.

13 See E.S. Drower and R. Macuch, *A Mandaic Dictionary*, Oxford 1963, 281b.

15 Thanks to Nöldeke *šwš'* is understood in Mandaic as one-twelfth of an hour, but in Akkadian of the Seleucid period *šūšu'u* denotes 1/60 (of a day), see CAD sub voce. This should be assumed for Mandaic as well.[14]

24 As expected *š'yy't'* 'the hour' follows *šwš'* as a higher unit and shows an unusual plene spelling in contrast to the variant *šyt'* in another lead roll from Khuzistan.[15]

25 In the feminine ending of the emphatic state Mandaic hardly ever distinguishes between the singular and the plural '*pyk't' qšy't' whyš*['t']. Here we have clearly a singular referring to *š'yy't'*, but in l. 27 the number of *lyly't'* is plural.

36 Scribal confusion with Lilits.

72 *'gr'* occurs very rarely in such lists.

76 *'wpḫ* belongs to a series of homonyms in Mandaic, but from the contents it is conceivable that it should be connected with '*wp'*, *'wpy* 'branch'.[16]

81 *bg'n* can be taken in the Mandaic context only in a positive sense, although it is generally understood by R. Degen and predecessors as 'curse' and by K. Beyer as 'invocation' in Aramaic (Hatrian).[17] Sh. Shaked suggested in his contribution on Iranian loan verbs in Middle Aramaic to derive *bg'n* from the Iranian verb *bgn, pgn* 'to cry for help,' which is supported by the Mandaic evidence,[18] where in some formulas the incantation is opened by *bg'n šwm' rb' bg'n m' mr' qdm'yḫ 'l* "by the help of the great Name, by the help of the first Word against" 13Aa1–3 (= BM 135791; unpublished) instead of the usual Mandaic doxological introduction *bšwm' ḏ-hyy'* … 'in the name of Life …'[19]
Of the name of a higher being *h'g t'gy' br l'bwš* only the name part *h'g* occurs as one demiurge of the underworld pair *h'g* and *m'g*.[20]

83 *gyšḫ* is an Akkadian loanword from *gišīu* 'hip, side,' which is attested in Mandaic for the first time in this spelling.[21]

86 The passive participle feminine *'my'* is derived form *'MY*, which occurs for the first time in Mandaic, but is attested in the original root '*MY* 'to be blind, become dim' in Syriac and in the Targums.[22]

95 *mhyt'm* is a misspelling for *lmyht'm*.

97/8 '*stndrbwn* is an *itpalpal* of the dissimilated root *SNDR*. This is a metathesis of *SRD,* which is also employed in Mandaic. A similar expression *m'ny' rwrby'* [?] *ḏ-'stndrbwn šwmy' w'rq'* occurs in an unpublished incantation bowl the whereabouts of which are today unknown: *šwmy' n'd't w'rq' 'zdr'mby't* (London Private Collection bowl 1, 13).

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14 Th. Nöldecke, Mandäische Grammatik, Halle 1875, XXVII. CAD Š/3, 388.

15 See J.C. Greenfield and J. Naveh, "A Mandaic Lead Amulet with Four Incantations [Hebr.]," Eretz Israel 18 (1985), 98, a25.

16 Drower — Macuch, *A Mandaic Dictionary* (n. 13), 10b.

17 R. Degen, "Zur Bedeutung von *bgn* in den Hatra Inschriften," in R. Degen, W.W. Müller, W. Röllig (eds.), *Neue Ephemeris für semitische Epigraphik*, Bd. II, Wiesbaden 1974; K. Beyer, *Die aramäischen Inschriften aus Assur, Hatra und dem übrigen Ostmesopotamien*, Göttingen 1997, 170 'Anrufung'.

18 S. Shaked, I. "III. Iranian Loanwords in Middle Aramaic," in *Encyclopaedia Iranica*, Vol. I. London 1985, 261.

19 Drower, "Shafta ḏ Pishra ḏ Ainia" (n. 5), 596, l. 376–379, 406–410.

20 See Drower and Macuch, *A Mandaic Dictionary* (n. 13), 115b.

21 See Kaufman, *The Akkadian Influences on Aramaic* (Assyriological Studies 19), Chicago 1974, 52.

22 See C. Brockelmann, *Lexicon Syriacum*, Halle 1928, 529a; M. Jastrow, *A Dictionary of the Targumim, the Talmud Babli and Jerushalmi, and the Midrashic Literature*, London 1886–1903, 1087b.

Appendix

Units of Time as Cosmic Powers in Sumero-Babylonian Texts

W.G. Lambert — Birmingham

The Mandaic demons of time have at least one parallel in Sumerian zi-pà ("be exorcised by …") texts. These texts were essentially texts of primarily gods invoked to drive away evil demons and other black magic forces, but in addition to the gods geographical features such as mountains and rivers were also invoked, and one such text in addition also invokes the main divisions of time:

zi ud sakar-ud(sic! collated) mu-a ḫé
niš u_4-mu ár-ḫu u šat-ti
PBS I/2 115 obv. I 13–14
Be (exorcised) by day, month and year!

(ud-sakar = *arḫu*, see CAD *sub voce*).

A second parallel occurs in BM 68593 (82–9–18, 8592) obv. 8 and 10. The text is a hymn to Marduk in which various gods are invited to bless Marduk, *e.g.*, obv. 5:

^{d}*šamaš ana* ^{d}*marduk ku-ru-ub* ^{d}*en-líl ana bēl é-sag-íl* [*l kurub*]
Šamaš, bless Marduk. Enlil, [bless] the lord of Esagil.

Obv. 10 reads:
u_4*-mu arḫu*(iti) *u šattu*(mu-an-na) *ana bēli-iá ku-ru-ub* x[…]
Day, month and year, bless Bēl .[…]

Obv. 8 has the same three nouns sign for sign, but what follows is broken off.

Thus these calendrical elements were considered to be cosmic powers capable of driving away forces of evil and bringing about blessings. This is the opposite of the Mandaic demons of time, but evidence for the antiquity and wide spread of the basic notion. The cuneiform passages are written on Late Babylonian tablets, but no doubt go back to an earlier origin.

A Note on the *Akītu*-House at Ḫarrān*

Jamie R. Novotny — Toronto

For Christopher
ūmē arkūte ṭūb šīri u ḫūd libbi šîn
nikkal u nusku ana kâša lišrukū[**]

Not only did Assurbanipal (668–631) assume responsibility for completing building projects that were still unfinished at the death of his father Esarhaddon (680–669), but he also initiated a number of building enterprises himself. Assyria's last great monarch built in no less than fifteen cities, but it was only Babylon, Ḫarrān, and Nineveh that received extra special attention. The second of these, a large garrison and important trading centre situated on the route between the Mediterranean Sea and the plains of the middle Tigris, appears to have had especial political, military, and religious significance during the Sargonid period (721–612).[1] Moreover, Ḫarrān's principal temples Eḫulḫul ("House Which Gives Joy"), Egipar ("*Giparu*-House"), Emelamana ("House of the Radiance of Heaven"), and Sîn's *akītu*-house received a great deal of attention since they were all rebuilt by Assurbanipal.[2] The importance of building at Ḫarrān is attested by the fact that reports of, or at least references to, building and decorating these temples appear in no less than

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** Based on the greeting formulae of Mār-Ištar, Esarhaddon's agent in Babylonia; see for example, SAA 10, 304 no. 369: 4–6.

1 For example, this prestige is illustrated not only by the facts that Sargon II reinstated the *kidinnu* of Ḫarrān, that Sîn regularly occurred as a theophoric element in names of members of the royal family, and that Aššur-etel-šamê-erṣetim-muballissu was appointed by his father Esarhaddon as *šešgallu*-priest of Sîn-of-Ḫarrān, but also by the fact that Assurbanipal claims to have completely rebuilt the entire Eḫulḫul complex bigger and better than before. For Ḫarrān in the Neo-Assyrian period, see Postgate, RlA 4, 122–125; Menzel, *Assyrische Tempel* 1, 88–89; and Pongratz-Leisten, *Fs Boehmer*, 549–550 and nn. 3–4, 6. In addition, Ḫarrān's importance is presently being studied by K. Åkerman, *The City of Ḫarrān in the Neo-Assyrian Period*.

2 For these temples, see Ebeling, RlA 2, 279, 304, and 360; and George, *House Most High*, 93, 99, and 123 nos. 380, 470, and 764.

twenty-three inscriptions, including eight annal and summary inscription editions from Nineveh and Kalḫu,[3] and tablet copies of two summary inscriptions and eight display texts intended for Ḫarrān.[4] However, despite the number of texts in which Assurbanipal boasts about building in this city, there are only four different reports, not including those found in the various display inscriptions, commemorating construction at Ḫarrān:

1. the Large Egyptian Tablet (= LET) report;[5]
2. the canonical first summary report (Prisms I [= Borger's TVar],[6] C, CND [= CKalach], G, and T, as well as K 3065 and Rm 589);
3. the commemorative report (K 2664+ = Edition L); and
4. the second summary report (Inscription from the Ištar Temple = IIT).

Until recently, the rebuilding of the *akītu*-house at Ḫarrān was known only from the last of these four reports. A further, closer examination of K 2664+, however, reveals that this tablet contains a building report which commemorates the completion of this festival-temple, and not Eḫulḫul as previously thought. Thus, our study will focus on the presenting the evidence for this new interpretation.

Like other important Assyrian cities such as Arba'il, Assur, Kalḫu, Kilizi, Kurba'il, and Nineveh, Ḫarrān also had an *akītu*-house.[7] Although the earliest extant reference to this

3 IIT (= Inscription from the Ištar Temple) and Prisms I, C, G, and T originate from Nineveh, whereas Prism CND (= CKalach) comes from Nimrud. For brief studies of these editions, see Gerardi, *Assurbanipal's Elamite Campaigns*, 61–65, 70, and 75; and BIWA 122–137 and 258–264 (Fuchs).

4 For the summary inscriptions, see n. 5 and the discussion of K 2664+ below. The relatively short display texts intended for Eḫulḫul, Egipar, Emelamana, and the *akītu*-house are: K 2803 + K 3256, K 2813 + K 8394 + K 18744 + 79-7-8,134, K 2822 + DT 133 (+) K 2826 + K 8931 + K 8597, K 8759 + Rm 133 + Rm 288, K 9143, Sm 530 + Rm 2, 235 (+) Sm 1977, Sm 671, and 89–4–26,209. All of these tablets come from the libraries of Assurbanipal at Nineveh, and are either archival copies or *Vorlage*-texts. For details on these archives and libraries, see Pedersén, *Archives*, 160–163 and plans 75–76; Parpola, CRRA 30, 223–236; and Reade, CRRA 30, 213–222. The other inscriptions mentioning building at Ḫarrān are: Prisms B/D, K 7596, 81–1–27,280, and possibly Rm 2, 320.

5 The LET report = rev. 43–69. The LET are large, broad, single-column tablets. At present, five exemplars have been assigned to this inscription: K 228 + K 3081 + K 3084 (+) K 4535 (Onasch, ÄAT 27/1 pls. 2–3 [figs. 5–6] and 7–8 [fig. 10]), K 2675 (*ibid.* pls. 4–5 [figs. 7–8] and 9–10 [fig. 13]), K 4451 (IWA pls. 39–40), K 5564 (BIWA LoBl 30), and K 6368 (Onasch, ÄAT 27/1 pl. 1 [figs. 2–3]). The *terminus post quem* for these so-called annals tablets, despite the occurrence of *rēš šarrūti* ("accession year") in the building inscription, is 664 since the death of Taharka is the latest chronologically dated event recorded in this inscription; see Gerardi, *Assurbanipal's Elamite Campaigns*, 54–55; and Tadmor, in ARINH 22–24 and n. 37.

6 After a careful examination of the fragments designated by Borger as T Variant (= TVar; BIWA 134–136), it is clear that this group of texts is a definable edition, not a sub-edition or variant of another prism class, including Prism T. Since the classification of BM 134462 etc. as TVar is misleading and inaccurate, it is recommended that Borger's designation be discontinued. Prism I is suggested as a suitable replacement.

7 Pongratz-Leisten, *Ina Šulmi Īrub*, 79–84; in *Assyria 1995*, 245–252; and RlA 9 3/4, 296 §3. Pongratz-Leisten suggests that the *akītu*-festival in Assyria was often closely associated with a paramount military role, which in the case of Ḫarrān may have symbolized the constant presence and control of the Assyrian king in the northwestern region of the empire. This festival, however, will not be discussed here since these topics will be addressed in a more detailed study of the cults at Ḫarrān.

structure and its associated festival dates to the reign of Sargon II (721–705),[8] both the temple and its celebratory procession probably existed long before the Sargonid period despite the complete lack of textual and archaeological evidence. Although Ḫarrān and its cult of the moon-god Sîn have a long history, with the former dating back to the mid-third millennium and the latter at least to the reign of Zimrī-Līm (1774–1762), very little is known about temple building in this city. Construction on the *akītu*-house is, at present, only referred to in two inscriptions of Assurbanipal.

Although this temple is mentioned by Assurbanipal in Egipar display text 89–4–26,209[9] and ᶠÉ *a*⌝*-ki-ti* ᵈ30 *ša* URU.KASKAL appears in the subscript of Sm 671 (rev. 5′),[10] nothing of importance can be learned from these two inscriptions, apart from Ḫarrān having a festival-temple; this information is also known from two Neo-Assyrian letters (K 1234 and 81–7–27,30).[11] However, a vague boast about completely rebuilding this structure is known from the second summary report of Assurbanipal's activities at Ḫarrān found in the prologue of the IIT.[12] The revelant passage reads:

> IIT: 64b) É *á-kî*-tu* mu-š*[*ab*(?) *be-lu-ti-šú*(?) *a*]*r-ṣip ú-šak-lil* KÙ.BABBAR KÙ.[GI *ú-šal-biš* …]
>
> I completely (re)built the *akītu*-house, [*his lordly*] resi[dence, (and) *adorned* (*its walls*)] with silver (and) go[ld …].

With regard to appurtenances of gold and silver, it is not clear which room or rooms of the temple were adorned since we have no information about its layout. Undoubtedly, the text inscribed on Sm 671 would have provided some pertinent information about the interior decoration of this temple, but the relevant passages are no longer preserved.

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8 SAA 1, 149 no. 188: 7–rev. 7. Nabû-pāšir, an individual who appears to have been the governor of Ḫarrān at this time, reports on a successful *akītu*-festival to Sargon: "On the seventeenth of [*Aiiāru*(?), the god Sîn ex]ited (his temple) and [en]tered (his) *akītu*-house. The *nīqu*-offerings (offered) on behalf of the king, my lord, were performed successfully. The god Sîn retur[ned], entered his temple, peacefully sat upon his seat, and blessed the king, my lord."

9 Craig, ABRT 2 pls. 1–2; and Meek, JAOS 38 (1918) 168–169. The relevant passage (lines 23–24) reads: *a-na i-tab-bul* DINGIR-*ti-šá* GAL-*tú šá a-ṣe-*ᵀ*e* É⌝ *a-ki-ti e-peš* x[x x x] */ a-na da-rat* MU.AN.NA.MEŠ *la-bar u*$_4$*-me* SUD.MEŠ *a-na* DINGIR-*ti-šá* ᵀ*ú*$^{(?)}$⌝-[*kin*], "for her divinity, I ma[de (these *gištallû*) *endure*] for many years to come, far into the distant future, to carry (the statue) of her great divinity every time it goes out to the *akītu*-house, *to perform* […]."

10 Sm 671 (IWA pl. 49) is the upper right portion of a broad, single-column tablet containing a display inscription commemorating the fashioning of some decorative object/architectural feature for the *akītu*-house. The extant text contains part of the dedication to Sîn (1–16), the list of Assurbanipal's titles and epithets (17–24), advice to a future prince (rev. 1′–2′) with applicable maledictions (rev. 3′–4′), and part of the subscript (rev. 5′).

11 For K 1234 (= SAA 1, 149 no. 188), see n. 8. 81–7–27,30 = SAA 10, 274 no. 338: 9–rev. 2. The lamentation-priest Urad-Ea describes the procedures of the *akītu*-festival to Esarhaddon (ca. 670–II–10): "On the seventeenth day, the god Sîn sets off (and) takes up residence in the *akītu*-house. Let the king, my lord, give the order to hand over the *kuzippu*-garments; I [will bring (them) with] me. [The] *eršaḫungû*-psalm will be [per]formed ov[er (them)], he (the god Sîn) will bl[ess] the king, [my lord], and provide the king, [my] lord, with a very long [life]." Although it is not entirely certain, K 1024 (= SAA 10, 277 no. 343), another letter from this lamentation-priest of Sîn, may also report on this same *akītu*-festival at Ḫarrān (after 670–II–22).

12 The second summary report = IIT: 60–69a (Fuchs, in BIWA 273–274).

Until recently, this fragmentarily preserved passage in the IIT was the only reference to Assurbanipal completely rebuilding Sîn's *akītu*-house. However, closer examination of K 2664+ reveals that the building report of this fragmentarily preserved tablet also commemorates this event. But before we examine this passage, let us introduce our source.

K 2664 + K 3090 + K 4544A + K 5903 + K 6632 + K 8371 + DT 177 is the lower part of a fragmentarily preserved three-column tablet (14×16×2.3 cm) containing either an archival copy or *Vorlage*-text of a summary inscription which commemorates Assurbanipal's fifth Elamite campaign, several of his wars against the Arabs, and the rebuilding of the *akītu*-house at Ḫarrān.[13] Although the tablet is not dated, the approximate date of composition (ca. 645–643) can be deduced from the historical references appearing in the text. The prologue (i 1′–iii 1′), which promotes the king's image as a temple builder, is similar to that of Prism T, but with at least one major omission, the canonical first summary report of Assurbanipal's building activities at Ḫarrān.[14] The account of the second campaign against Ummanaldasu of Elam (iii 2′–iv [36]) and the concluding formulae (v 21–vi 9) are virtually identical to Prism T (with minor variants),[15] but the episodes concerning the wars against the Arabs ([iv 37(?)]–v 13)[16] and the report commemorating the completion of Sîn's *akītu*-house (v 14-20) are unique to this edition.

Now that K 2664+ (Edition L) has been properly introduced, we can focus on the main building report. Assurbanipal proudly boasts:

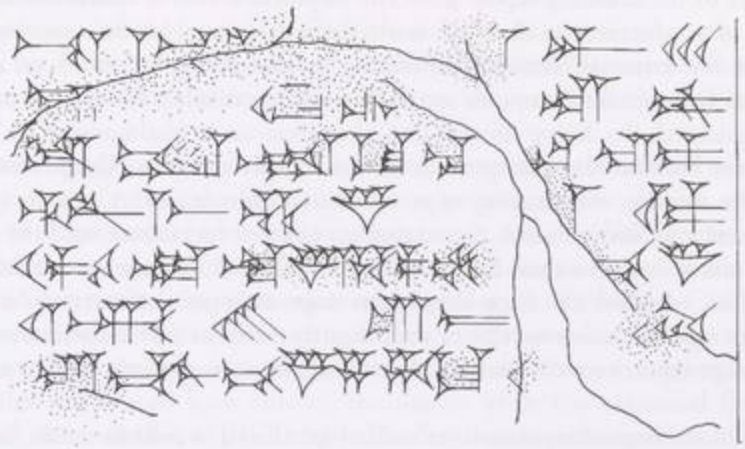
> v 14–20) *ina* u_4*-me-*⌜*šú-ma*⌝ [É *a-ki-i*]*t*(?) ^{d}30 / ⌜*ša qé-reb*⌝ URU.KASKAL / ⌜*ša il*⌝*-li-ku* ⌜*la*⌝*-*[*b*]*a-riš* / *tem-me-en-šá* [*a*]*d-di* / *ul-tu* $UŠ_8$*-šá a-di* GABA.[DIB-*b*]*é-šá* / *ar-ṣip ú-*[*šak*]-⌜*lil*⌝ / ⌜*ú*⌝*-šal-bi-šá za-ḫa-lu-*⌜*u*⌝ [*eb-bu*]
>
> At that time, (with regard to) [the *akīt*]*u*-[*house* of] the god Sîn, which is (situated) inside the city Ḫarrān (and) which had become old, [I] (re)laid its foundations, com[ple]tely (re)built (it) from its foundations to its crenel[latio]ns, (and) decorated (it) with [shiny] *zaḫalû*-metal.

13 Streck, VAB 7, XXXVIII–XXXIX and 218–221 no. 16; Bauer, IWA pls. 26–27 and 53, 34–35 and 54; and Borger, BIWA 168–169 and 8[e] Heft 494–501. Borger (BIWA 137) designated K 2664+ as TTaf 1, but a closer examination reveals that this inscription is a distinct edition, not a duplicate, sub-edition, or variant of Prism T. Therefore it is recommended that Borger's designation be discontinued. Edition L is suggested as a suitable replacement.

14 The canonical first summary report = C i 71–98, T ii 29–iii 14, K 3065 i, and Rm 589 ii (BIWA 141–143). If it is assumed that no passages were omitted from the prologue of Prism T between ii 13 and iii 33, then there would be a lacuna of seventy-one lines between i 37′ and ii 1′. However, note that there are not more than twenty-nine lines missing at the beginning of col. i and that there is a gap of not more than forty lines between ii 15′ and iii 1′. Based on these two lacunae, it is conjectured that Edition L omitted at least one major passage from the prologue of Prism T. The thirty-eight line canonical first summary report is the most logical choice since the beginning of column ii would have continued the narrative of work undertaken on Šarrat-Kidmuri's behalf begun at the end of col. i (i 30′–37′) and since the very end of the report commemorating the completion of the Sîn-Šamaš temple at Nineveh is found in ii 1′–3′. Therefore, this lacuna is estimated at about thirty-three lines.

15 Compare T iv 36–v 32 and vi 17–51 (BIWA 57–58, 167–168, and 170–172).

16 With regard to the Arab campaigns, v 1–5 describe the punishment of Uaite' and v 6–13 report on the capture, deportation, and flaying of Abī-Iate' and Aia-ammu, the sons of Te'ri; compare Prism A ix 107–111 and x 4–5 (BIWA 68–69).



For the most part, this passage is very straightforward, except for the first line. The gap between *ūmēšuma* and *sîn* has traditionally been restored as *é-ḫúl-ḫúl* É, but, as we will argue presently, this proposal is incorrect since the temple whose restoration is being commemorated is actually the *akītu*-house. Evidence for this is fivefold:

1. Bauer tentatively proposed that the beginning of v 14 could be restored as "[*É-ḫul-ḫul, der Tempel*]," and Borger restored this same passage as [*é-ḫúl-ḫúl* É ?]DIŠ.[17] This logical interpretation is presumably based on *ša qereb ḫarrāna* in the following line. Bauer's and Borger's proposals were initially rejected as there is insufficient space to restore both *é-ḫúl-ḫúl* and É; the gap in question is 1.5 cm. Based on measurements of these same signs in other tablets intended for Ḫarrān, the minimum space required for this proposed restoration is 2.4 cm. The space required for the restoration É *a-ki-it*, however, is far less; this proposal is further validated by the fact that ⌜É *a*⌝*-ki-ti* in Sm 671 rev. 5′ is exactly 1.5 cm. The tight fit in v 14 could accommodate *bīt akīt* only if *akītu* is written with A, as it is in Sm 671 and 89–4–26,209: 23, and not with Á.
2. Further evidence *contra é-ḫúl-ḫúl* É is that ceremonial temple names do not appear to have been mentioned in the opening line of main building reports of Assurbanipal's Assyrian inscriptions. Evidence stems from Prisms I and CND. In the former, the Sîn-Šamaš temple at Nineveh is referred to as *bīt sîn nikkal šamaš u aia*, "the temple of the gods Sîn, Nikkal, Šamaš, and Aia;" and in the latter, Ezida at Kalḫu is simply called *bīt nabû*, "the temple of the god Nabû."[18] This phenomenon occurs also in Assurbanipal subscripts beginning with *musarû ša*, "inscription of."[19]

17 IWA 35, and BIWA 169 respectively.

18 I2 (A 8112) i′ 9 (= T iii 18) and CND x 88 (BIWA 144 and 164) respectively. This is in contrast to the building reports of his Babylonian inscriptions, where the ceremonial temple name is specifically mentioned; the everyday name is often used in apposition to the proper name. For example, see BIWA 85 the Nergal-Laṣ-Inschrift: 78.

19 For example, IWA pl. 33 K 3079 iv 1′–2′, where Emeslam is called *bīt nergal ša kutî* "the temple of the god Nergal-of-Cutha."

3. The style of the building report gives the impression that it commemorates the completion of a structure smaller and less significant than Ḫarrān's principal temple as many of the essential elements describing its rebuilding known from the LET and canonical first summary reports are absent: Sîn permitting his temple to become old and dilapidated, the divine commission, the reference to Shalmaneser III (858–824) as a previous builder, the enlargement of the temple complex, the providing of cedar beams for roofing, the hanging of monumental door leaves in its principal gateways, the reference to Sîn's *atmanu*, the setting up of *rīmū* and *laḫmū*, and the reinstallation of Sîn's statue upon its dais. Furthermore, if Edition L commemorated the rebuilding of Eḫulḫul, why did its editor simply not copy or repeat information in the existing summary reports known to him, or only slightly modify it? The obvious solution is that this passage reports on the construction of another temple, one smaller and less significant.
4. In v 17–18, the feminine pronominal suffix (*-ša*) affixed to *temmēn-*, *išdē-*, and *gabadibbē-* is a further indication that this building report commemorates the rebuilding of the *akītu*-house. In the canonical first summary report and in the second summary report, where Assurbanipal claims to have rebuilt Sîn's principal temple from top to bottom, the masculine pronominal suffix (*-šu*) is used;[20] in addition, all suffixes referring to Eḫulḫul in the LET, canonical first summary, and second summary reports are masculine.[21] Elsewhere in the Assurbanipal corpus, where this Assyrian king boasts about rebuilding Mullissu's *akītu*-house at Nineveh, *-ša* is employed when a pronominal suffix is used.[22]
5. The date of K 2664+'s composition (ca. 645–643) is approximately twenty years too late to commemorate the completion of Eḫulḫul in its main building report since that temple was completed ca. 663 or earlier. Since it is well known that Ḫarrān's principal temple was completed early in Assurbanipal's reign and since the rebuilding of this festival-temple is only otherwise attested in the prologue of the IIT, an inscription composed ca. 639, it is very plausible that the date of this tablet's composition corresponds more or less with the conjectured date for the completion the rebuilding of this *akītu*-house.

The evidence presented above suggests that the building report of Edition L commemorates the rebuilding of the *akītu*-house. Therefore, there is little reason to doubt that this tablet contains a copy of an inscription which was inscribed upon prisms or cylinders deposited in the structure of this temple. If this proves true, then the subscript (vi 10–11)

20 C i 84, T ii 47, and Rm 589 ii 5; and IIT: 61 (BIWA 143 and 273).

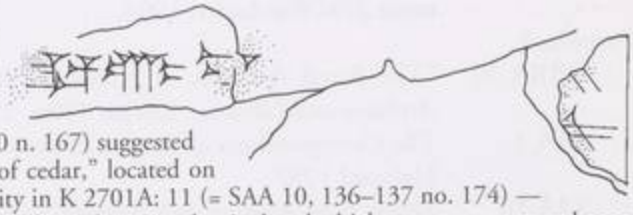
21 LET rev. 45–47, 50, 56–57, 66–68 (Onasch, ÄAT 27/1, 112–113); C i 76, 82, 83, 87–88, 90, T ii 34, 44, 46, 51, iii 1, 4, K 3065 i 6, 14–15, and Rm 589 ii 4; and IIT: 61–62 (BIWA 142–143 and 273–274).

22 T v 43 (*miqit[ta]ša adke*), 45 (*attaddi temmēnša*), and 48-49 (*ana siḫirtīša arṣip ušaklil*; BIWA 169–167). Compare also several inscriptions of Sennacherib commemorating Aššur's *akītu*-house at Assur; see Luckenbill, OIP 2, 142 no. c (13): 4–5; and Frahm, AfO Beih. 26, 176 T 144.

should be read as: [MU.SA]R-*ú š*[*a* É *a-ki-it* ^{d}3]0[!] / [*ša qé-reb* URU.KA]SKAL[!], "[inscrip]tion o[f the *akītu*-house of the god S]în, [which is (situated) inside the city Ḫar]rān."[23] Furthermore, if v 14 and vi 10 are restored correctly, then K 2664+ reveals that Sîn's *akītu*-house was situated inside Ḫarrān, rather than on the outskirts the city as previously thought.[24]

Lastly, with regard to the date of this project, if we accept the boast of *arṣip ušaklil*, "I completely (re)built (it)," as fact, then the approximate date for its completion is ca. 645–643. It is less certain when construction began, but it could have been as early as 647, that is, after the composition of the canonical first summary report. Since we know from a study of Assyrian editing techniques of the prologues of Prisms I, C, CND, G, and T that the general trend was to omit or to add complete episodes and not to alter them, except for very minor changes, it is highly unlikely that an alternative report of this king's activities in this city would have entered circulation while the canonical first summary report was still in use (648–645[?]). Despite the fact that Assurbanipal could have initiated construction on the *akītu*-house very soon after the issuing of Prism I, it was not until an entirely new prologue promoting the king's image as a temple builder was composed that he could boast about rebuilding this structure (ca. 639). Since the building report of K 2664+ gives the impression that the *akītu*-house was a relatively small structure, it probably did not take more than a couple of years to complete. If so, then construction may have begun as early as 647 and as late as 645, 644 at the very latest.

An examination of K 2664+ from the original provides new information not only about Assurbanipal's building activities at Ḫarrān, but also about the location of Sîn's *akītu*-house. Although this seven-line passage provides very few details about the physical structure of temple, it is, at present, the most comprehensive report of this phase of building. Apart from Assurbanipal completely rebuilding its superstructure, the only things that we know about this temple are that it was lavishly decorated with appurtenances of gold, silver, and *zaḫalû*-metal, and that it was situated inside the city. The completion of this temple (ca. 645–643), at least according to extant contemporary sources, marks the end of known Assyrian building activities at Ḫarrān, which was captured and looted by a Babylonian-Median coalition in 610.



23 Compare Borger's (BIWA 172) reading of vi 10: [MU.S]AR-*ú š*[*a* ….]x.

24 Lewy (HUCA 19 [1945–46], 440 n. 167) suggested that the *bīt-ili ša erēni*, "temple of cedar," located on the outskirts (*ina qanni*) of this city in K 2701A: 11 (= SAA 10, 136–137 no. 174) — a letter from Marduk-šumu-uṣur addressed to Assurbanipal and which reports on a staged coronation ceremony that took place near Ḫarrān in early 671 (Nisannu or Aiāru) — was Sîn's *akītu*-house, principally since he was under the impression that all temples of this type were situated outside the city walls. Compare Mullissu's *akītu*-house at Nineveh which was also inside the city; Reade (RlA 9, 419 §15.1) suggests that this temple was situated in the outer town and not in the citadel (Kuyunjik) since Assurbanipal states that it was *qereb Ninūa*, rather than *ina qabāl āli* (T v 34; BIWA 169).

BIBLIOGRAPHY

Bauer, T.
IWA *Das Inschriftenwerk Assurbanipals*, 2 vols. Leipzig 1933.

Borger, R.
BIWA *Beiträge zum Inschriftenwerk Assurbanipals: die Prismenklassen A, B, C = K, D, E, F, G, H, J und T sowie andere Inschriften*. Wiesbaden 1996.

Craig, J.A.
ABRT *Assyrian and Babylonian Religious Texts, Being Prayers, Oracles, Hymns etc.*, 2 vols. Leipzig 1895–97.

Ebeling, E.
RlA 2 "Egipar," RlA 2 (1938), 279–280.
"Eḫulḫul," RlA 2 (1938), 304.
"Emelamanna," RlA 2 (1938), 360.

Frahm, E.
AfO Beih. 26 *Einleitung in die Sanherib-Inschriften* (AfO Beiheft 26). Vienna, 1997.

George, A.R.
House Most High: The Temples of Ancient Mesopotamia. Winona Lake 1993.

Gerardi, P.
Assurbanipal's Elamite Campaigns: A Literary and Political Study. Ph.D. Dissertation, University of Pennsylvania. Ann Arbor 1987.

Lewy, J.
HUCA 19 "The Late Assyro-Babylonian Cult of the Moon and Its Culmination at the time of Nabonidus," HUCA 19 (1945–46), 405–489.

Luckenbill, D.D.
OIP 2 *The Annals of Sennacherib* (OIP 2). Chicago, 1924.

Meek, T.J.
JAOS 38 "A Votive Inscription of Ashurbanipal," JAOS 38 (1918), 167–175.

Menzel, B.
Assyrische Tempel *Assyrische Tempel*, 2 vols. Rome 1981.

Onasch, H.U.
ÄAT 27 *Die assyrischen Eroberungen Ägyptens*, 2 vols. (Ägypten und Altes Testament 27). Wiesbaden 1994.

Parpola, S.
CRRA 30 "The Royal Archives of Nineveh," in K.R. Veenhof (ed.), *Cuneiform Archives and Libraries*. Leiden 1986, 223–236.
SAA 1 *The Correspondence of Sargon II, Part 1. Letters from Assyria and the West*. Helsinki 1987.
SAA 10 *Letters from Assyrian and Babylonian Scholars*. Helsinki 1993.

Pedersén, O.
Archives *Archives and Libraries in the Ancient Near East 1500–300 B.C.* Bethesda 1998.

Pongratz-Leisten, B.
Ina Šulmi Īrub *Ina Šulmi Īrub: Die kulttopographische und ideologische Programmatik der akītu-Prozession in Babylonien und Assyrien im I. Jahrtausend v. Chr.* Mainz 1994.
Fs Boehmer "*Anzû*-Vögel für das É.ḪÚL.ḪÚL in Ḫarrān," in U. Finkbeiner, R. Dittmann, and H. Hauptmann (eds.), *Beiträge zur Kulturgeschichte Vorderasiens: Festschrift für Michael Boehmer.* Mainz 1995, 549–558.
Assyria 1995 "The Interplay of Military Strategy and Cultic Practice in Assyrian Politics," in S. Parpola and R.M. Whiting (eds.), *Assyria 1995.* Helsinki 1997, 245–252.
RlA 9 "Neujahr(sfest). B. Nach akkadischen Quellen," RlA 9 (1999), 294–298.
Postgate, J.N.
RlA 4 "Ḫarrān," RlA 4 (1972–75), 122–125.
Reade, J.E.
CRRA 30 "Archaeology and the Kuyunjik archives," in K.R. Veenhof (ed.), *Cuneiform Archives and Libraries.* Leiden 1986, 213–222.
RlA 9 "Ninive (Nineveh)," RlA 9, 388-433.
Streck, M.
VAB 7 *Assurbanipal und die letzten assyrischen Könige bis zum Untergang Nineveh's* (VAB 7, 3 vols.). Leipzig 1916.
Tadmor, H.
ARINH "History and Ideology in the Assyrian Royal Inscriptions," in F.M. Fales (ed.), *Assyrian Royal Inscriptions: New Horizons in Literary, Ideological, and Historical Analysis.* Rome 1981, 13–33.

Ein spätaltbabylonischer Kaufvertrag aus Babylon

Rosel Pientka-Hinz — Marburg

Schon einmal waren spätaltbabylonische Kaufverträge Gegenstand einer berühmten Festschrift, und daran anknüpfend möchte ich mit der Publikation der folgenden Kaufurkunde dem Jubilar meinen herzlichen Dank ausdrücken. Christopher Walker hat mir nicht nur die Tür in die wunderbare Welt des British Museum geöffnet, sondern mir auch Einblicke gewährt hinter die Kulissen einer faszinierenden Stadt.

Im Laufe einer Durchsicht der in den Museumskatalogen verzeichneten spätaltbabylonischen Urkunden[1] sind mir zwei zusammengehörige Textfragmente besonders aufgefallen, denn sie waren verhältnismäßig groß,[2] auffällig gesiegelt und ihrem Inhalt nach sofort der Stadt Babylon zuzuordnen.[3] Ausgestellt während der Regentschaft des letzten altbabylonischen Königs Samsuditana, dokumentiert die fast vollständig erhaltene Urkunde — der Form nach eine sogenannte „Quasi-Hüllentafel"[4] — Immobilienkaufgeschäfte, die sich über die Regierungszeit fünf altbabylonischer Herrscher erstrecken. Abgesehen von ihrem großen Format und ihrer Herkunft[5] zeigt sich die Bedeutung dieser Kaufurkunde darin, daß sie vom „Schreiber des Königs" ausgestellt und mit einer besonders ausführlichen Jahresdatenformel[6] versehen wurde.

Neben interessanten Angaben zur Topographie des altbabylonischen Babylon bietet diese Urkunde Details zu Grundstücksübertragung und Siegelpraxis in spätaltbabylonischer Zeit.[7]

1 Ein Forschungsstipendium der Deutschen Forschungsgemeinschaft zur Erstellung einer „Typologie der spätaltbabylonischen Urkunden" ermöglichte mir einen einjährigen Aufenthalt (1997–98) am British Museum, während dessen ich auch Kopien der hier behandelten Urkunde anfertigen konnte. Ich danke der Deutschen Forschungsgemeinschaft für die großzügige Unterstützung sowie den Trustees des British Museum für die Publikationserlaubnis. Zudem möchte ich Cornelia Wunsch sowie Walter Sommerfeld herzlich danken; erstere hat das schwer lesbare Siegel A für mich noch einmal am Original überprüft, letzterer konnte mir nach gründlicher Durchsicht des Manuskripts einige wertvolle Hinweise geben.

2 BM 79643: 9,7+ cm hoch, 8,7 cm breit, 4,4 cm dick; BM 67323: 6,3+ cm hoch, 8,5 cm breit, 4 cm dick.

3 Zur Fundlage altbabylonischer Texte aus Babylon s. Pientka 1998, 279ff.

4 S. Wilcke 1982; Charpin 1986 und dazu wieder Wilcke 1990, 304f.; Van Lerberghe—Voet 1991.

5 Obwohl die Tafelfragmente laut der Museumskataloge aus dem Kunsthandel stammen (zu BM 79643 s. Leichty—Finkelstein—Walker 1988, xix) bzw. im Register mit Herkunftsangabe aus Abu Habbah (zu BM 67323 s. Leichty—Grayson 1987, ix) verzeichnet sind, läßt sich die Urkunde aufgrund inhaltlicher Kriterien eindeutig nach Babylon verweisen.

6 Zur Verwendung ausführlicher Datenformelvarianten in besonders wichtigen Privaturkunden s. Pientka 1998, 24f.

7 Es wird bewußt versucht, die spätaltbabylonische Kursive in der Kopie festzuhalten. Insbesondere die Rückseite von BM 67323 ist wegen einiger verdrückter Zeichen sehr schwer zu lesen.

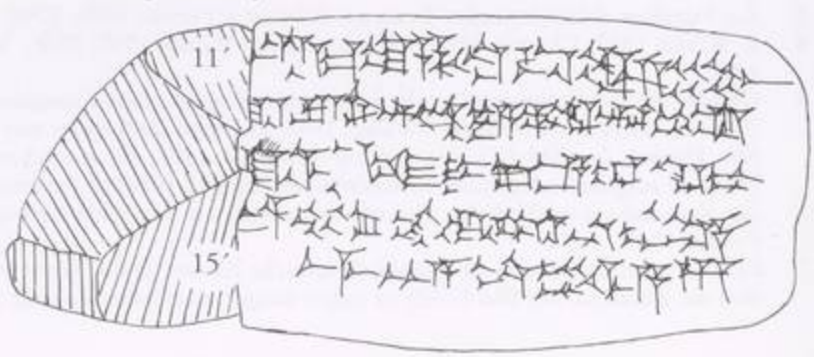
BM 79643 + 67323 (16+ cm hoch, 8,7 cm breit, 4,4 cm dick)

Vs. 1 $^{2}/_{3}$ SAR 5 GÍN É.KISLAḪ
ÍB.TAK$_{4}$ 1$^{1}/_{2}$ SAR É ŠÀ 4 SAR É
[š]a i-na ka-ni-ki-šu la-bi-ri É ZÚ ^{giš}AL
[š]a-aṭ-ru
5 ⌜*i*⌝*-na* KÁ.GAL *Iš$_{8}$-tár* ŠÀ URU^{ki} GIBIL ^{d}UTU È.A
[D]A É ^{f}*La-ma-as-súm* LUKUR ^{d}AMAR.UTU
DUMU.MUNUS *I-túr-aš-du*
DA.BI.2.KAM.MA DINGIR-*šu-ib-ni-šu* NIMGIR?
SAG.BI SILA ^{giš}KIRI$_{6}$ ^{d}AMAR.UTU
10 EGIR.BI É.UŠ.GÍD.DA$^{bi.a}$ *ša Ḫa-da-an-šu-li-ik-šu-ud*
i-tu-ú la-bi-ru-tum
ši-ma-at Gi-mil-^{d}AMAR.UTU DUMU *Ḫa-da-an-šu-li-ik-šu-ud*
ša KI ^{f}*Mu-na-wi*!*-ir-tum* LUKUR ^{d}AMAR.UTU
DUMU.MUNUS *G[i]-mil-*^{d}*Ìr-ra*
15 <<*ša*>> *i-na* mu *Sa-am-su-i-lu-na* lugal-e
^{giš}gu-za bára kù-si$_{22}$ min-a-bi
i-ša-⌜*mu*⌝ *ša* 1 *ka-ni-ki*
ša ⌜x⌝ [x x] ⌜x x x DUMU? *Gi-mil-lum*? x⌝

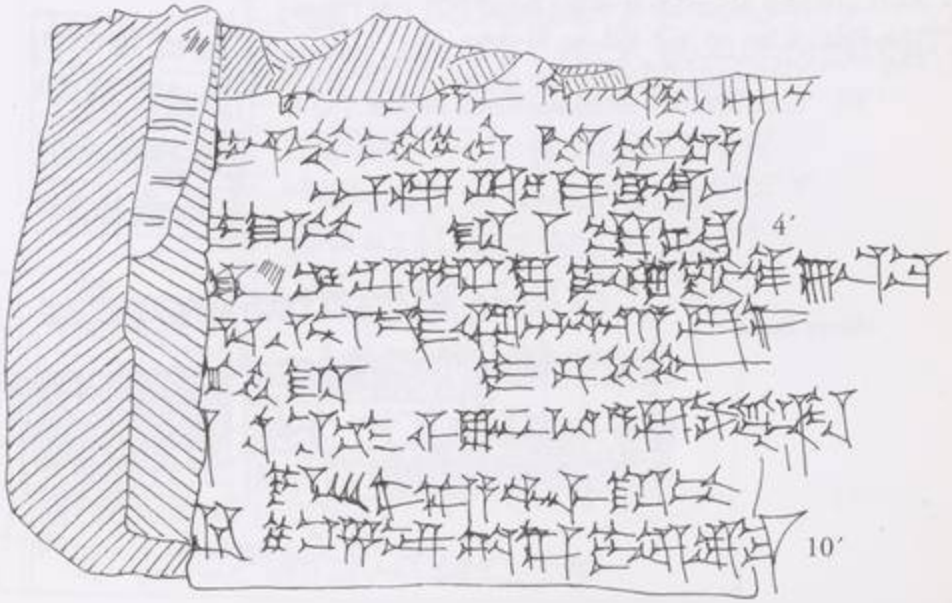
ca. 3 Zeilen abgebrochen

1′ [KI?] ⌜f?⌝[*La*]-⌜*ma-sà-ni* (?) LUKUR ^{d}AMAR.UTU DUMU.MUNUS *Ì-lí-*x⌝
i-na mu *Am-mi-di-*[*t*]*a*!*-na* lugal-e
^{d}Uraš ur-saĝ gal-la-aš
i-ša-mu ša 1 *ka-ni-ki*
5′ *ki-*⌜*ma*?⌝ x-*gur-za-al-lu* DUMU *ù* DUMU.MUNUS *la ir-šu-ma*
a-na! *Ut-la-tum ù* ^{d}*Na-na-a-ib-ni*
aḫ-ḫi-ša i-zi-bu
^{m}*Ut-la-tum ù* ^{d}*Na-na-a-ib-ni aḫ-ḫu-ša*
DUMU^{meš} *Ì-lí-a-wi-lim-ra-bi*
10′ $^{2}/_{3}$ SAR 5 GÍN-TA É *i-zu-zu-ma*
u. Rd. *ṭup-pa*!*-at* ḪA.LA *uš-te*!*-zi-bu*
ša Ib-ni-^{d}AMAR.UTU DUMU *A-wi-il-*^{d}*Na-bi-um*
KI *Ut-la-tum* DUMU *Ì-lí*!*-a-wi-lim-ra-bi*
⌜*i*⌝*-na*! mu *Sa-am-su-di-ta-na* lugal-e
15′ aš-me-didli-a $^{na_{4}}$du$_{8}$-ši-a-ke$_{4}$

unterer Rand



BM 79643 + 67323: Vs

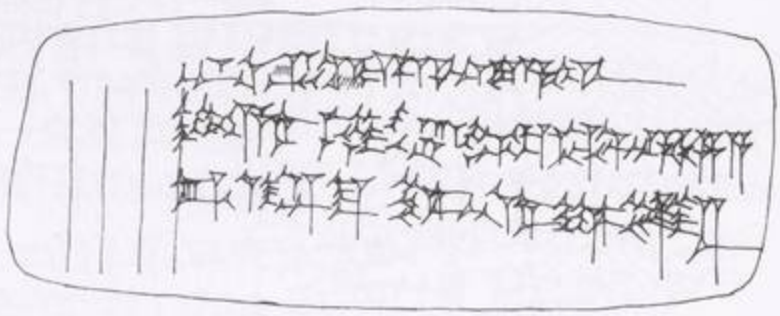


Rs. $^{2}/_{3}$ SAR 5 GÍN É *ša i-zu-zu*
a-na KÙ.BABBAR *i-ša-mu*
ša 1 *ka-ni-ki*
DA É *Šu!-ba-ru!-ú* (?) Á? x x
20′ DUMU *I-bi-*^{d}*Ša-ḫa-an*
DA.BI.2.KAM.MA DINGIR-*šu-ba-ni* KUŠ$_{7}$?
SAG.BI SILA ^{giš}KIRI$_{6}$ ^{d}AMAR.UTU
EGIR.BI É.UŠ.GÍD.DA$^{ḫi.a}$
ša ^{d}EN.ZU-*i-qí-ša-am* DUB.SAR?
25′ ^{r}*i-tu*^{1}-*ú eš-šu-tum*
É *Ib-ni-*^{d}AMAR.UTU DUMU *A-wi-*^{r}*il*^{1}-^{d}*Na-bi-um*
[K]I *Ib-ni-*^{d}AMAR.UTU DUMU *A-w*[*i-il-*^{d}*Na-bi-um*]

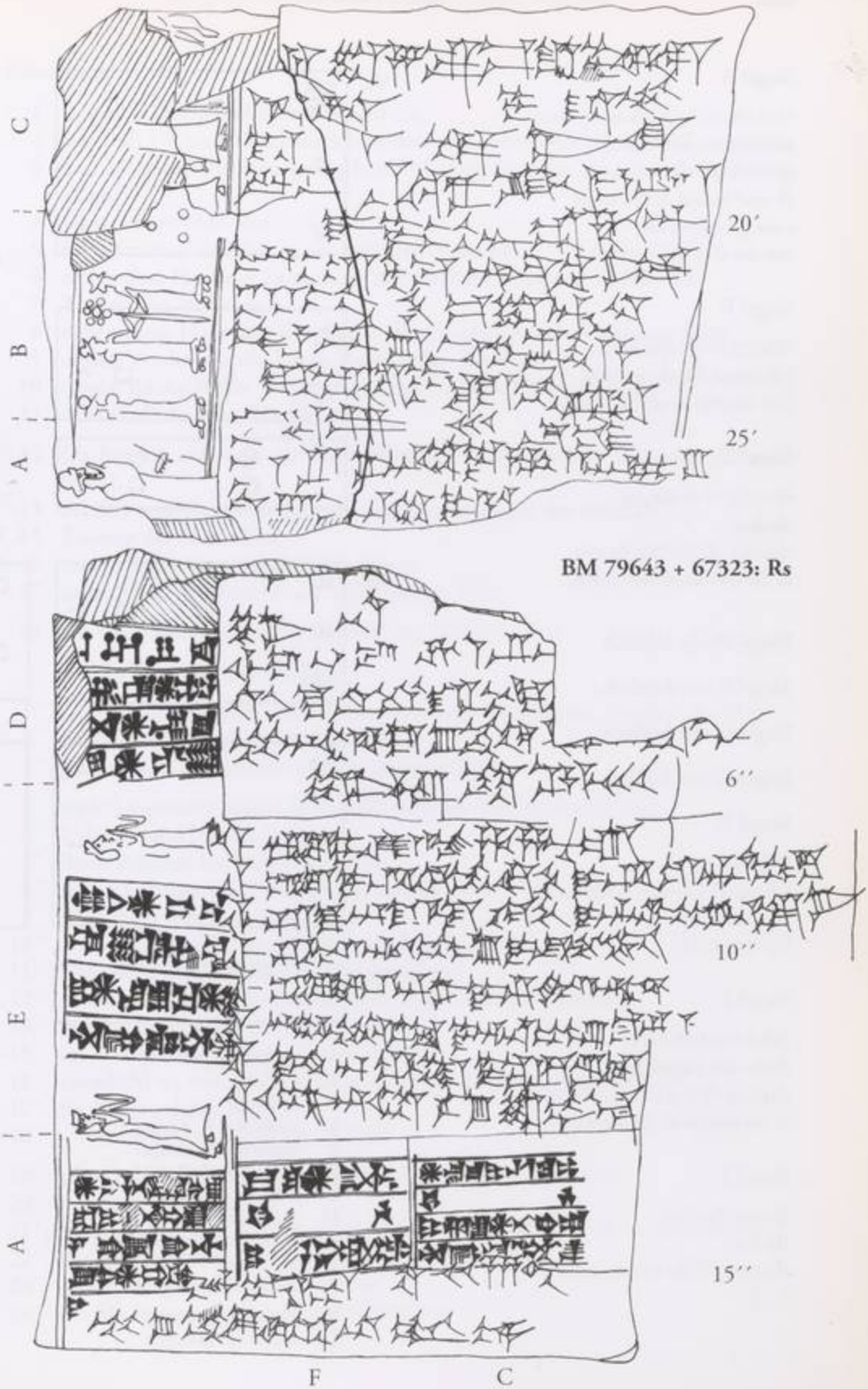
ca. 3 Zeilen abgebrochen

1′′ [x] ^{r}x x x^{1} […]
IN.NA.A[N.LÁ]
ù $^{1}/_{2}$ GÍN KÙ.BABBAR SI.B[I *iš-ku-un*]
UD.KÚR.ŠÈ LÚ LÚ.RA INIM N[U.UM.GÁ.GÁ.A]
5′′ MU ^{d}AMAR.UTU *ù Sa-am-su-*^{r}*di-ta-na* LUGAL^{1}
IN.PÀ.DÈ.E.MEŠ
IGI ^{d}EN.ZU-*i-qí-ša-am ḫa-za-nu-um*
IGI ^{d}EN.ZU-*i-ri-ba-am* DI.KU$_{5}$ DUMU *Ri-iš-*^{d}*Na-bi-um*
IGI *Ip-qú-*^{d}*Ša-la* DI.KU$_{5}$ DUMU ^{d}*Na-bi-um-na-ṣi-ir*
10′′ IGI *Ri-iš-*^{d}*Na-bi-um* DUMU *Šu-mu-lib-ši*!
IGI ^{d}EN.ZU-*im-gur-an-ni* DUMU *Gi-mil-*^{d}AMAR.UTU
IGI ^{d}AMAR.UTU-*mu-ba-lí-iṭ* DUMU ^{d}*Na-bi-um-ma*?-*lik*?
IGI *I-din-*^{d}MAR.TU DUMU *Ku-ur-ru-ṣú*
IGI *Ṣíl-lí-*^{d}AMAR.UTU DUB.SAR.LUGAL.LA
15′′ ITU.AB.È UD.26.KAM
mu *Sa-am-su-di-ta-na* lugal-e
o. Rd. ^{d}Utu en sag-kal an ki-a-ba-aš
alan-a-ni zubi kù-si$_{22}$-ga-ke$_{4}$ šu! ba-an-ḫa-za-a
É-babbar-ra-šè in-na-ni-in-ku$_{4}$-ra

oberer Rand



18′′



BM 79643 + 67323: Rs

Siegel A

^{d}AMAR.UTU *be-lum ra-bu-ú*
ra-i-im na-pí-iš-t[*im*]
ṣa-bi-it qá-ti
Ib-ni-^{d}AMAR.UTU ìr-*šu*
i-na qá-ab!*-li-im*
mu-ba-lí-iṭ mi!?*-tim*!?

Siegel B

^{d}EN.ZU-*i-qí-š*[*a-am*]
[du]mu *Na-bi-ì-lí-*[*šu*]
[ì]r *Sa-am-su-di-*^{r}*ta*^{1}-[*na*]

Siegel C

^{d}EN.ZU-*i-ri-ba-am*
di-ku$_5$
dumu *Ri-iš-*^{d}*Na-bi-um*
ìr *Sa-am-su-di-ta-na-*ke$_4$

Siegel D nur bildlich

Siegel E nur bildlich

Siegel F nur bildlich

Siegel G nur bildlich

Siegel H

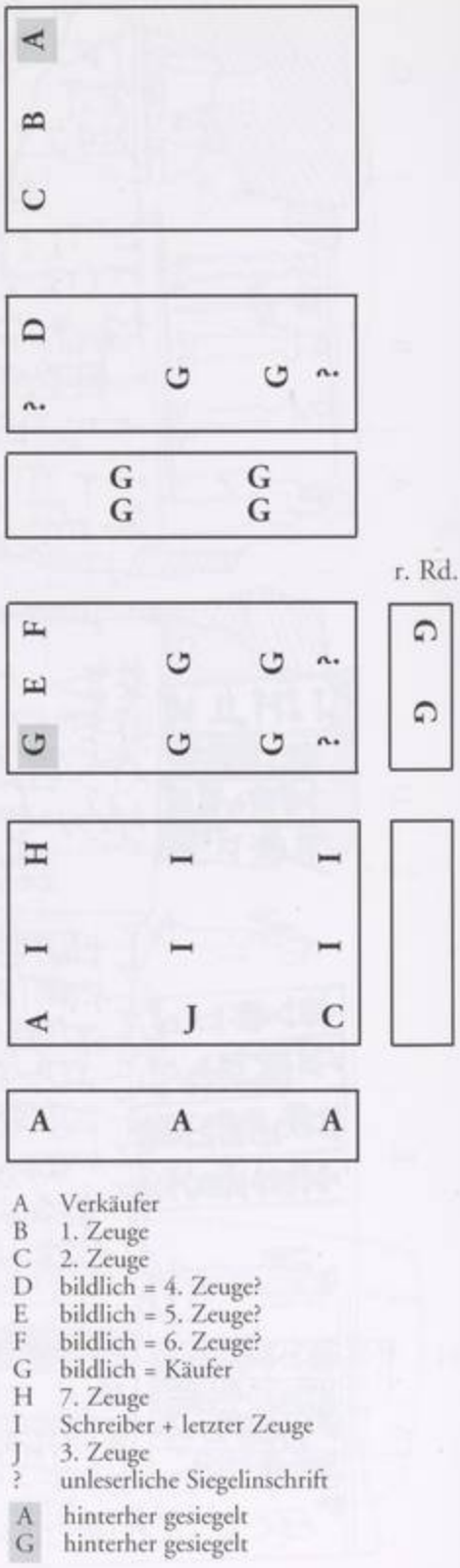
[*K*]*u-ur-ru-ṣú*
[dumu] *Gi-mil-*^{d}AMAR.UTU
[ì]r ^{d}EN.ZU
^{r}*ù*^{1} ^{d}MAR.TU

Siegel I

Ṣíl-lí-^{d}AMAR.UTU
dub-sar lugal-la
dumu ^{d}EN.ZU-MA.AN.SUM
ìr *Sa-am-su-di-ta-na-*k[e$_4$]

Siegel J

Ip-qú-^{d}*Ša-l*[*a*]
di-ku$_5$
dumu [^{d}*N*]*a-bi-um-na-ṣi-ir*
[…]



A Verkäufer
B 1. Zeuge
C 2. Zeuge
D bildlich = 4. Zeuge?
E bildlich = 5. Zeuge?
F bildlich = 6. Zeuge?
G bildlich = Käufer
H 7. Zeuge
I Schreiber + letzter Zeuge
J 3. Zeuge
? unleserliche Siegelinschrift

A hinterher gesiegelt
G hinterher gesiegelt

Übersetzung

1 $^{2}/_{3}$ SAR 5 GÍN unbebautes Grundstück,
2 Rest von $1^{1}/_{2}$ SAR Grundstück inmitten von einem 4 SAR (großen) Grundstück,
3 das auf seiner früheren gesiegelten Urkunde über das Grundstück "Zahn der Hacke"
4 registriert worden war;
5 beim Stadttor der Ištar in der östlichen Neustadt,
6 neben dem Haus der Lamassum, der *nadītum*-Priesterin des Marduk,
7 Tochter des Itūr-ašdu,
8 neben (dem Haus des) Ilšu-ibnīšu, des Herolds(?), auf der zweiten Seite,
9 dessen Vorderseite die Straße des Marduk-Gartens,
10 dessen Rückseite die Vorratsräume des Ḫadanšu-likšud (bilden),
11 (dies sind) die alten Nachbarn.

12 (Es handelt sich um) das Kaufobjekt des Gimil-Marduk, Sohn des Ḫadanšu-likšud,
13 der (es) von Munawwirtum, der *nadītum*-Priesterin des Marduk,
14 Tochter des Gimil-Irra,
15–16 im 19. Regierungsjahr des Samsuiluna
17 gekauft hat – (vermerkt) auf 1 gesiegelten Tafel;

18 das Grundstück,) das PN_1, Sohn(?) des Gimillum(?) x

(ca. 3 Zeilen abgebrochen)

1′ [von(?)] Lamassani(?), der *nadītum*-Priesterin des Marduk, Tochter des Ilī-x,
2′–3′ im 27. Regierungsjahr des Ammiditana
4′ gekauft hat – (vermerkt) auf 1 gesiegelten Tafel;

5′ weil(?) x-gurzallu weder Sohn noch Tochter bekommen hat und
6′ Utlatum und Nanāja-ibni,
7′ ihren Brüdern (es) hinterlassen hat,
8′ haben Utlatum und Nanāja-ibni, ihre Brüder,
9′ die Kinder von Ili-awīlim-rabi,
10′ $^{2}/_{3}$ SAR 5 GÍN Hausgrundstück jeweils aufgeteilt und
11′ Urkunden über die Anteile ausstellen lassen;
12′ (das Grundstück,) das Ibni-Marduk, Sohn des Awīl-Nabīum,
13′ von Utlatum, Sohn des Ili-awīlim-rabi,
14′–15′ im 7. Regierungsjahr des Samsuditana –
16′ (nämlich) $^{2}/_{3}$ SAR 5 GÍN Hausgrundstück, das man geteilt hatte, –
17′ für Silber gekauft hat,
18′ – (vermerkt) auf 1 gesiegelten Tafel;

19′ (das Grundstück) neben dem Haus des Šubarû(?), des Á? x x,
20′ Sohn des Ibbi-Šaḫan,
21′ neben (dem Haus des) Ilšu-bāni, des *kizû*-Dieners(?), auf der zweiten Seite,
22′ dessen Vorderseite die Straße des Marduk-Gartens,
23′ dessen Rückseite die Vorratsräume
24′ des Sîn-iqīšam, des Schreibers(?), (bilden),

25′ – (dies sind) die neuen Nachbarn.

26′ Das Haus des Ibni-Marduk, Sohn des Awīl-Nabīum, (hat)
27′ von Ibni-Marduk, Sohn des Aw[īl-Nabīum],

(ca. 3 Zeilen abgebrochen)

[PN_3 … gekauft. Als dessen vollständigen Kaufpreis hat er/sie ihm]
1′′ [n Mine(n) n Sekel Silber]
2′′ beza[hlt]
3′′ und $^1/_2$ Sekel Silber als SI.B[I gesetzt].
4′′ Zukünftig gegeneinander ni[cht] Klage [zu erheben],
5′′ haben sie bei Marduk und dem König Samsuditana
6′′ geschworen.

7′′ Vor Sîn-iqīšam, dem Bürgermeister,
8′′ vor Sîn-irībam, dem Richter, Sohn des Rīš-Nabīum,
9′′ vor Ipqu-Šala, dem Richter, Sohn des Nabīum-nāṣir,
10′′ vor Rīš-Nabīum, Sohn des Šumum-libši,
11′′ vor Sîn-imguranni, Sohn des Gimil-Marduk,
12′′ vor Marduk-muballiṭ, Sohn des Nabīum-mālik(?),
13′′ vor Iddin-Amurru, Sohn des Kurruṣu,
14′′ vor Ṣillī-Marduk, dem Schreiber des Königs.

15′′ 10. Monat, 26. Tag,
16′′-19′′ 11. Regierungsjahr des Samsuditana.

Siegel A (2,6×3,2 cm)
1 Marduk, großer Herr,
2 der das Leben liebt,
3 der die Hand ergreift von
4 Ibni-Marduk, seinem Diener,
5 der im Kampf(?)
6 den Toten(?) zum Leben erweckt.

Siegel B (2,8×2,4 cm)
1 Sîn-iqīš[am],
2 Sohn des Nabi-ilī[šu],
3 Diener des Samsudita[na].

Siegel C (2,2×1,7+ cm)
1 Sîn-irībam,
2 der Richter,
3 Sohn des Rīš-Nabīum,
4 Diener des Samsuditana.

Siegel H (2,2×2+ cm)
1 Kurruṣu,
2 [Sohn] des Gimil-Marduk,
3 Diener von Sîn
4 und Amurru.

Siegel I (2,4×3,1 cm)
1 Ṣillī-Marduk,
2 Schreiber des Königs,
3 Sohn des Sîn-iddinam,
4 Diener des Samsuditana.

Siegel J (2,7×1,7+)
1 Ipqu-Šala,
2 der Richter,
3 Sohn des Nabīum-nāṣir
4 […].

Kommentar

1 Kaufgegenstand ist demnach ein 27 qm großes Grundstück.

3 Die Grundstücksbezeichnung *šinni allim* „Zahn der Hacke“[8] findet sich sowohl in Texten aus Sippar als auch aus Babylon: S. BE 6/1 95: 1 (Aṣ 13, Sippar): 2 SAR É *ši-in-ni* ^{giš}AL; MHET 2 561: 1 (Sd 14, Sippar): $^{1}/_{6}$ SAR É *ši-in-ni* ^{giš}AL *la ru-ug-*[*bu-um*]; VS 22 16: 1 (Ad 23, Babylon): $^{2}/_{3}$ SAR É ZÚ ^{giš}AL [*ru-ug-gu-bu*] (Var.: [É *š*]*i-in-n*[*i*] ^{g}[^{iš}AL] / [*r*]*u-ug-gu-bu*).

3f. Ähnliche Formulierungen finden sich in weiteren spätaltbabylonischen Urkunden über Immobilienkäufe: BE 6/1 105: 3f. (Aṣ 17+b, Sippar): *ša i-na ṭup-pí-šu la-bi-ri-im* / É.KI.GÁL *ša-aṭ-ru* „(bebautes Grundstück,) das auf seiner früheren Urkunde über ein Brachlandgrundstück registriert worden war.“[9]

MHET 2 561: 8f. (Sd 14, Sippar): *ša i-na ṭup-pí la-bi-ri-im ša* mu *Sa-am-*^{r}*su-i-lu-na*^{1} lugal-e (…) „(Grundstück,) das auf einer früheren Urkunde aus dem 31. Regierungsjahr des Samsuiluna […].“

Van Lerberghe—Voet, NAPR 6 8: 20f. (Ad -, Tell ed-Dēr): *ù* 1 *ṭup-pí um-ma-tim la-bi-ra-am* / *ša* 6 IKU A.ŠÀ „und 1 frühere Besitzstandsurkunde über 6 IKU Feldgrundstück.“

MHET 2,492,23f. (undat., ab Ad 27, Sippar): *ù* 2 *ṭup-pí* x […] / *la-bi-ru-*^{r}*um*^{1} “und 2 frühere Tafeln … (?)”.

YOS 13 90: Vs. 22 (D.a., nach Sd 5, Kiš): *a-na pí-i* ^{r}*ka*^{1}*-ni-ik nu-du-un-ne-e la-bi-ri* „gemäß dem Wortlaut der alten Mitgiftsurkunde.“[10]

5 Das „Stadttor der Ištar“ wird in den spätaltbabylonischen Urkunden nur noch einmal erwähnt; s. Pientka 1998, 303 und 372.

Zur Lokalisation des Stadtviertels *ālum eššum ṣīt Šamšim* „östliche Neustadt“ s. Pientka 1998, 293 und 302. Aus unserem Text erfahren wir erstmalig, daß sich in diesem Gebiet das Ištar-Tor und die Straße des Marduk-Gartens befinden.

9 Der „Marduk-Garten“ ist in den Urkunden der spätaltbabylonischen Zeit bisher nicht belegt. Zum Marduk-Tempel Esagil s. George 1993, 139f.: 967.

10 *ašlukkatum*-Gebäude[11] sind in den spätaltbabylonischen Urkunden nur noch einmal belegt. Die eventuell aus Sippar stammende Auflistung von Immobilienkäufen YOS 13 190: 4.10.12.17 (undat.)[12] nennt neben bebauten Grundstücken (É.DÙ.A) solche Vorratsräume (É.UŠ.GÍD.DA), die ungefähr ein Drittel des Kaufwerts bebauter Grundstücke haben.

11 Grenzveränderungen werden auch in der Gerichtsurkunde um Grundstücksbesitz YOS 13 96: 5.29 (D.a., ca. Sd 10, Kiš) behandelt:[13] *i-*^{r}*tu*^{1}*-ú la-bi-ru-tu*[*m* …] (…) *i-tu-ú eš-šu-tum* „(dies sind) die alten Nachbarn (…) (dies sind) die neuen Nachbarn.“

5′ Die Lesung des Personennamens ist schwierig; vgl. CDA 169 *kursallum*, *kuršullum* „(a basket); also, as an ornament“.

10′ Zu distributiven Maßangaben in den spätaltbabylonischen Urkunden s. Pientka 1998, 153ff.

19′ Die Lesung des Personennamens samt Berufsbezeichnung fällt aufgrund der zerdrückten Zeichen schwer. Ein Šubarû ist zudem belegt in: MHET 1 43: 25 (undat., Aṣ, Tell ed-Dēr); OLA 21 29: 15 (Aṣ 17+b, Sippar; Sohn des Warad-Marduk); 30: 7 (Aṣ 3, Sippar; Sohn des Ibni-Šamaš); VS 7 184: III 3 (undat., ca. Aṣ 17+a, Dilbat).[14]

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8 S. Wilcke 1987, 81^{+24}: „… it describes a house sold and could refer to its physical appearance, its location, its state of preservation or something else.“

9 S. Charpin 1986, 126f.

10 S. Wilcke 1982, 436, und Charpin 1986, 126ff.

11 S. AHw. 82 *ašlukkatum* II, *ašrukkatu* etwa „Werkzeug-, Geräteraum“; CAD A/2 450 *ašlukkatu* „storage chamber“. Danach konnte es sich in altbabylonischer Zeit um ein privates oder öffentliches Gebäude bzw. Teil des Tempelkomplexes handeln.

12 S. Pientka 1998, 507: 630.

13 S. Charpin 1986, 136ff.; ders. 1986^{2}, 407f.; Finkelstein 1972, 14; Wilcke 1982, 475f.$^{+60}$.

14 Charpin 1977, 63, sieht *šubarû* hier als ethnische Bezeichnung für „Subaräer“ an.

21′ Die Identifikation als *kizû*-Diener ist nicht ganz gesichert. Zum in spätaltbabylonischer Zeit bisher nur in Kiš belegten *kizû* des Marduk s. Pientka 1998, 380. Eventuell wird eine solche Person (^{lú}kuš$_7$?) auch in der aus Sippar stammenden Abrechnung OLA 21,4,40 (Ae 28) genannt.
Nach Bongenaar 1997, 45f., ist der *kizû* in neubabylonischer Zeit mit dem *tašlīšu* gleichzustellen, wobei es sich um Hauspersonal handelt, das Bongenaar als „the guards(?) of the resident" umschreibt. Vgl. auch CDA 163 *kizû(m)* „animal-trainer", „groom".

24′ Zum Schreiber Sîn-iqīšam s. Pientka 1998, 356: 192.

26′ Ein Ibni-Marduk, Sohn des Awīl-Nabīum, wird als zweiter Zeuge in dem Pachtvertrag TIM 5 47: 16f. (Ae u) genannt. Aufgrund der zeitlichen Differenz der beiden Urkunden handelt es sich allerdings um zwei verschiedene Personen.

1″–3″ Zum Formular der spätaltbabylonischen Kaufverträge s. Wilcke 1975–76. Zur Problematik der sogenannten SI.BI-Klausel, die eine zum vereinbarten Kaufpreis relativ kleine Zusatzzahlung vermerkt, s. zudem ders. 1977–78. Danach handelt es sich „mit größter Wahrscheinlichkeit (um) das vom Käufer dem Verkäufer zu leistende Entgelt für dessen Siegelung der Kaufurkunde" (S. 210). S. ergänzend ders. 1996, 14 und 20f.

7″ Nach dem Siegel B handelt es sich um den Sohn des Nabi-ilīšu. Ein Bürgermeister dieses Namens ist bisher nicht belegt. Das Amt des *ḫazannum* wird innerhalb der spätaltbabylonischen Urkunden überhaupt nur sehr selten erwähnt:
In der Gerichtsurkunde um Grundstücksbesitz TCL 1 157: 68 (D.a., ab Ad 24, Kiš) wird Sînišmeanni *ḫa-za-an-nu* nach zwei Richtern und vor sechs weiteren Richtern als dritter Zeuge genannt.
Die Abrechnung verschiedenster Silberbeträge BBVOT 1 109 (Ad 31, Sippar) erwähnt einen *ḫa-za-nu* zweimal im Zusammenhang mit einem Silberbetrag, der als *riksum* (ŠER) oder *kiṣrum* (KÉŠ) konkretisiert wird: $^{5}/_{6}$ GÍN ⌜x⌝ $^{2}/_{3}$ GÍN ŠER/KÉŠ? *ḫa-za-*[*nu*] (Z. 8);[15] 5⌜$^{5}/_{6}$⌝ GÍN *ga*? KÁ? ŠER/KÉŠ? *ḫa-za-nu* (Z. 17). Zudem werden Geldbeträge erwähnt, die u.a. zum Kauf von Immobilien bestimmt sind.
Der Pachtvertrag BE 6/1 77: 2 (Ae r, Sippar) nennt ein Feld in der Nähe des AN.⌜ZA⌝.GÀR *ša ḫa-za-nu-um*.[16]
Es ist auffällig, daß *ḫazannum*, einem Personennamen entsprechend, sowohl in BBVOT 1 109 als auch in BE 6/1 77 nicht dekliniert wird. In beiden Fällen wäre ein Genitiv zu erwarten.
Die in unserem Text sowie in TCL 1 157 überlieferten Siegelinschriften des *ḫazannu* weisen ihn als einen Beamten des Königs (ir KN) aus. Er fungiert gemeinsam mit Richtern als angesehener Zeuge in bedeutenden Geschäftsurkunden. Doch abgesehen von seiner augenscheinlich hohen Stellung wissen wir nur sehr wenig über die Instanz des *ḫazannum*.[17]

10″ Die in der mittelbabylonischen Zeit häufig belegte Schreibung *Šu-mu-lib-ši* ist – gegenüber dem altbabylonisch üblichen *Šu-mu(-um)-li-ib-ši* – in den spätaltbabylonischen Urkunden bisher erst einmal nachzuweisen: S. TCL 1 171: 20 (Aṣ 17+a, Dilbat).

13″ Die ungewöhnliche Filiation Kurruṣu wird durch Siegel H, das Vaterssiegel, bestätigt. Wahrscheinlich handelt es sich um eine phonetische Variante des besser bekannten Namens Ḫurruṣu, der in den spätaltbabylonischen Urkunden nur einmal als *Ḫu-ru-ṣú* belegt ist: TJA 94f. 1.6. Bs. A (Aṣ 10, Dilbat).[18] Das Siegel weist einen im Vergleich mit den anderen Abrollungen auffälligen, in der spätaltbabylonischen Zeit aber nicht unbekannten Stil in Kugelbohrertechnik auf.

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15 Die Lesung ist aufgrund der ungenauen Kopie unsicher; vgl. das ähnliche Zeichen in Z. 3: $^{1}/_{3}$ MA.NA 4 GÍN KÙ.BABBAR ŠÀ ŠER/KÉŠ? *bi* ⌜x⌝ […].

16 Vgl. Harris 1975, S. 58+8: *ša* [IGI(?)] KÁ AN.ZA.QAR *ša ḫa-za-nu-um*.

17 In Obermesopotamien repräsentiert der „commissaire" (*ḫazannum*) in abhängigen Städten den Herrscher; s. Anbar 1991, 155.

18 Nach AHw. 359 sub *ḫurruṣu(m)* ist der Name von *ḫarāṣu* I „ab-, einschneiden, abziehen; klären" abzuleiten; CAD Ḫ 253 *ḫurruṣu* „describing a characteristic bodily trait, occ. only as personal name". Aufgrund des denkbaren *k*/*ḫ*-Wechsels sollte nun eine Herkunft von *kl garāṣu(m)*, *ḫarāṣu* II „abkneifen" in Betracht gezogen werden; CAD K 95 *ḫarāṣu* C „to knead, to mold (clay)"; CAD K 209 *karāṣu s.v.* 3. *kurruṣu* „to pinch off".

14″ Daß ein Schreiber des Königs in den spätaltbabylonischen Urkunden bisher noch nicht nachgewiesen werden konnte, ist aufgrund der Fundlage nicht verwunderlich – stammen die meisten altbabylonischen Babylontexte doch aus Privatarchiven.[19]

16″–19″ Zu dieser bisher ausführlichsten Variante von Samsuditanas 11. Jahresdatenformel s. Pientka 1998, 136.

Siegel A

Das aufwendig gestaltete Siegel des in Z. 12′ und 26′f. genannten Verkäufers kennzeichnet ihn als eine wichtige Persönlichkeit. Zum einen hat die sicherlich wertvolle Siegeleinfassung beim Abrollen des Siegels einen tiefen Abdruck hinterlassen. Zum anderen trägt das Siegel eine Huldigung bzw. ein Gebet an Marduk. Dieses ist in der für diesen Inschriftentyp in altbabylonischer Zeit selten belegten akkadischen Sprache abgefaßt.[20]

Die letzten Zeilen der Inschrift sind schwer verständlich. Man erwartet *muballiṭ mītim* „der den Toten zum Leben erweckt". Eine enge Parallele bietet Mayer 1976, 42: *ᵈMarduk bēlu rabû / ilu rēmēnû / ṣābit qāt naski / pāṭir kasî / muballiṭ mīti* „Marduk, grosser Herr, barmherziger Gott; der die Hand des Gefallenen erfasst, den Gebundenen löst, den Toten zum Leben erweckt!"[21]

Eine Lesung *mu-ba-lí-iṭ mi*!?*-tim*!? möchte ich aber nur unter Vorbehalt annehmen. Die Zeichen scheinen eher *mu-ba-lí-iṭ* [Ú]S? BA-*šum* wiederzugeben, eine Lesung, die sich allerdings nur schwer interpretieren läßt: „Marduk … / im Kampf[22] / schenke ihm (?)[23] einen, der den Toten(?) zum Leben erweckt!"

Bleibt eine solche Aussage innerhalb der religiösen Siegelinschriften bisher singulär, so ist die in Gebeten ausgedrückte Bitte um Leben nichts Ungewöhnliches.[24]

Siegelpraxis

Soweit erhalten, stimmt die Reihenfolge der Siegel — wie für Quasi-Hüllentafeln üblich[25] — mit der der Personen im Text weitgehend überein. Oben links siegelt zuerst der Verkäufer, gefolgt von den ersten beiden Zeugen. Die nachfolgenden bildlichen Siegelabrollungen, z.T. sehr zerstört, sind den übrigen Zeugen zuzuordnen, obgleich erst wieder die letzten beiden Zeugen mit Sicherheit den Siegeln H und I zugewiesen werden können. Am Ende des Siegelbandes, unten links, siegelt noch einmal der Verkäufer sowie auf dem gesamten oberen Rand. Jeweils der zweite und dritte Zeuge, demnach die beiden Richter in der Zeugenreihe, siegeln auf der Rückseite unten, wobei sich nur das Siegel des erstgenannten Richters (C) zusätzlich auf dem linken Band erkennen läßt. Das Schreibersiegel befindet sich zudem mehrmals dem Text unterlegt auf dem unteren Teil der Rückseite.

Der Name des Käufers hat ursprünglich genau in den drei weggebrochenen Zeilen der Tafel gestanden und ist somit nicht erhalten. Obwohl das von mir rekonstruierte Siegel G

19 S. Pientka 1998, S. 279ff., sowie Pedersén 1998. Der vermeintliche von Klengel 1983, 28 angeführte Beleg in VS 22 28: 13 (Ad 8) ist in DUB.SAR.ZAG.GA zu verbessern; s. auch Charpin 1985, 275.

20 Zu spätaltbabylonischen Siegelinschriften religiösen Inhalts s. Pientka 1998, 206ff.

21 Vgl. auch a.a.O., 466ff.: 1: [ᵈAMAR.UTU *r*]*e-mé-nu-u mu-bal-liṭ* LÚ.[ÚS] „Barmherziger [Marduk], der den Toten belebt, (…)".
Zu kassitenzeitlichen Siegellegenden, in denen Marduk eine Vorrangstellung einnimmt, s. Sommerfeld 1982, 156ff.

22 S. CAD Q 12 *qablu* B „1. battle, warfare".

23 *qīšaššum* (BA-*šum*) (?)

24 S. Mayer 1976, 280ff., besonders *balāṭa qīšam*/*qīšāni* „schenke(t) mir Leben/Gesundheit".

25 S. Wilcke 1982, S. 450ff.

nirgends mit einer Beischrift versehen ist, muß es sich um das Käufersiegel handeln. Es wurde im linken Siegelband vor den beiden letzten Zeugen eingefügt und findet sich ansonsten, mehrmals dem Text unterlegt, auf der Vorderseite, der Rückseite sowie dem unteren und rechten Rand.

Das oberste Siegel links auf der Vorderseite — das Siegel des Verkäufers (A) — sowie das dritte Siegel links auf der Rückseite — das Siegel des Käufers (G) — sind erst nach der Beschriftung abgerollt worden. Deshalb ist jeweils das erste Zeichen auf der Vorderseite Z. 3–8 sowie auf der Rückseite Z. 25′–27′ eingedrückt. Alle anderen Siegelabrollungen wurden vor der Beschriftung angebracht. Eine solche Siegelpraxis könnte darauf hindeuten, daß sowohl der Verkäufer als auch der Käufer jeweils an einer bestimmten Stelle absichtlich erst nach Fertigstellung der Tafelbeschriftung siegelten, um so die Authentizität der Urkunde zu bestätigen. Man denkt unweigerlich an die von Claus Wilcke vorgeschlagene Bestimmung des SI.BI-Betrages als „das vom Käufer dem Verkäufer zu leistende Entgelt für dessen Siegelung der Kaufurkunde".[26]

26 S. oben den Kommentar zu Zeile 1″–3″.

Literatur

Die verwendeten Abkürzungen der Titel von Zeitschriften und Monographien richten sich nach R. Borger, *Handbuch der Keilschriftliteratur*, Band II, Berlin—New York, XI–XXXII und W. von Soden, *Akkadisches Handwörterbuch*, Band III, Wiesbaden 1981, IX–XVI.

Zusätzliche Abkürzungen sind:

CDA J. Black—A.R. George—N. Postgate (Hrsg.) *A Concise Dictionary of Akkadian* (SANTAG 5). Wiesbaden 1999.

MHET 1 K. van Lerberghe—G. Voet, *Sippar-Amnānum. The Ur-Utu Archive.* Volume 1 (Mesopotamian History and Environment. Series III. Texts I). Gent 1991.

MHET 2 L. Dekiere, *Old Babylonian Real Estate Documents from Sippar in the British Museum, Part 4: Post-Samsu-iluna Documents* (Mesopotamian History and Environment. Series III, Texts II). Gent 1995.

NAPR Northern Akkad Project Reports (Mesopotamian History and Environment, Series I). Gent.

OLA 21 K. van Lerberghe, *Old Babylonian Legal and Administrative Texts from Philadelphia* (Orientalia Lovaniensia Analecta 21). Leuven 1986.

Anbar, M.
1991 *Les tribus amurrites de Mari* (OBO 108). Göttingen.

Bongenaar, A.C.V.M.
1997 *The Neo-Babylonian Ebabbar Temple at Sippar: Its Administration and Its Prosopography* (PIHANS 80). Istanbul.

Charpin, D.
1977 „L'onomastique hurrite … Dilbat et ses implications historiques", in M.-Th. Barrelet (Hrsg.), *Méthodologie et critiques I: Problèmes concernant les Hurrites*. Paris, 51–70.
1985 „Un quartier de Babylone et ses habitants sous les successeurs d'Hammurabi", BiOr 42, 265–278.
1986 „Transmission des titres de propriété et constitution des archives privées en Babylonie ancienne", in K.R. Veenhof (Hrsg.), *Cuneiform Archives and Libraries* (RAI 30). Leiden, 121–140.
1986² *Le clergé d'Ur au siècle d'Hammurabi (XIX^e–XVIII^e siècles av. J.-C.)* (Hautes Études Orientales 22). Genf—Paris.

Finkelstein, J.J.
1972 *Late Old Babylonian Documents and Letters* (YOS 13). New Haven—London.

George, A.R.
1993 *House Most High. The Temples of Ancient Mesopotamia* (Mesopotamian Civilizations 5). Winona Lake.

Harris, R.
1975 *Ancient Sippar. A Demographic Study of an Old Babylonian City (1894–1595 B.C.)*. Leiden.

Klengel, H.
1983 „Bemerkungen zu den altbabylonischen Rechtsurkunden und Wirtschaftstexten aus Babylon“ (VS 22: 1–82)“, AoF 10, 5–48.

Leichty, E.—A.K. Grayson
1987 *Catalogue of the Babylonian Tablets in the British Museum Volume VII. Tablets from Sippar 2.* London.

Leichty, E.—J.J. Finkelstein—C.B.F. Walker
1988 *Catalogue of the Babylonian Tablets in the British Museum Volume VIII. Tablets from Sippar 3.* London.

Van Lerberghe, K.—G. Voet
1991 „On ‚Quasi-Hüllentafeln‘ “, NAPR 6, 3–8.

Mayer, W.
1976 *Untersuchungen zur Formensprache der babylonischen „Gebetsbeschwörungen“* (Studia Pohl: Series Maior 5). Rom.

Pedersén, O.
1998 „Zu den altbabylonischen Archiven aus Babylon“, AoF 25, 328–338.

Pientka, R.
1998 *Die spätaltbabylonische Zeit: Abiešuḫ bis Samsuditana. Quellen, Jahresdaten, Geschichte* (IMGULA 2). Münster.

Sommerfeld, W.
1982 *Der Aufstieg Marduks: Die Stellung Marduks in der babylonischen Religion des zweiten Jahrtausends v. Chr.* (AOAT 213). Neukirchen-Vluyn.

Wilcke, C.
1975–76 „Zu den spät-altbabylonischen Kaufverträgen aus Nordbabylonien“, WdO 8, 254–285.
1977–78 „Zur Deutung der SI.BI-Klausel in den spätaltbabylonischen Kaufverträgen aus Nordbabylonien“, WdO 9, 206–212.
1982 „Zwei spät-altbabylonische Kaufverträge aus Kiš. Mit zwei Exkursen. A: *nudunnûm* und *nīšītum*; B: Quasi-Hüllentafeln und *kanīkāt*/*ṭuppāt ummatim*“, in *Zikir šumim* (Festschrift F. R. Kraus). Leiden, 426–483.
1987 „A Riding Tooth: Metaphor, Metonymy and Synecdoche, Quick and Frozen in Everyday Language“, in M. Mindlin—M.J. Geller—J.E. Wansbrough (Hrsg.), *Figurative Language in the Ancient Near East.* London, 77–102.
1990 Rezension zu H. Klengel, VS 22, in ZA 80, 297–306.
1996 „Neue Rechtsurkunden der Altsumerischen Zeit“, ZA 86, 1–67.

Describing the Body of a God*

Frances S. Reynolds — London

Introduction

The text published here for the first time is partially preserved in column v on the reverse of BM 55551+, a six-column tablet in the "Sippar Collection" of the British Museum.[1] The find spot of this Babylonian tablet is unknown and it probably dates from the Seleucid or Arsacid period. Columns i and vi are lost and columns ii–iv partially preserve a learned ritual calendar text from Babylon composed in the first millennium.[2] On Nippur in column v and the date of composition see the commentary on 18′. Both columns iv and v break off prematurely, so the total length of the text represented by column v is uncertain. The estimated width of column v is based on other columns of the tablet. The text describes an unknown god by equating parts of his anthropomorphic body with a wide range of items, including animals, plants, minerals and artefacts.

Syntax and Vocabulary

Except for the end of 7′ and possibly the beginning of 8′, the text as preserved follows a regular syntactical pattern from 5′ onwards. This consists of a sequence of short nominal sentences, each with a body part as the subject. One body part in 13′ is described by a relative clause. Usually *ša* links the subject and complement, *e.g.*, *šinnāšu ša imēru*, "his teeth are (the teeth) of a donkey" (9′), but it can be omitted, *e.g.*, *qabalšu šaman u šizbu*, "his waist is oil and milk" (17′). Sometimes the corresponding body part of the complement is understood, as with the donkey, but sometimes the body part is said to be composed of the complement, as with the oil and milk and *pēmšu ša kupru*, "his groin is bitumen" (21′). All known related descriptions of a god's body in other texts have the sentence order reversed and the divine body parts are the complements. This indicates a shift in focus from the god

* Note the following abbreviations in addition to CAD, AHw and HKL: Böck, *Morphoskopie*: B. Böck, *Die Babylonisch-assyrische Morphoskopie* (AfO Beiheft 27). Wien 2000; Gesche, *Schulunterricht*: P.D. Gesche, *Schulunterricht in Babylonien im ersten Jahrtausend v. Chr.* (AOAT 275). Münster 2001; Heeßel, *Diagnostik*: N.P. Heeßel, *Babylonisch-assyrische Diagnostik* (AOAT 43). Münster 2000; Jones Fs.: M.A. Powell and R.H. Sack (eds), *Studies in Honor of Tom B. Jones* (AOAT 203), Neukirchen-Vluyn 1979; Livingstone, MMEW: A. Livingstone, *Mystical and Mythological Explanatory Works of Assyrian and Babylonian Scholars*, Oxford 1986.

1 I would like to thank the Trustees of the British Museum for permission to publish the text and W.G. Lambert for making his cuneiform copy available for publication.

2 On the calendar text see F.S. Reynolds, *Esoteric Babylonian Learning: a First Millennium Calendar Text*, PhD thesis, University of Birmingham, 1994. Publication forthcoming by the author.

to the animals, plants and objects. The context of the other descriptions suggests that they were primarily intended to interpret items used in rituals.[3] BM 55551+: v contains rare vocabulary (*e.g.*, *girītu*, *ṣippû*, *ḫalīṣu*) and belongs firmly in the milieu of scholarly texts.

The God's Body and the Structure of the Text

The organising principle of the text is the detailed and systematic description of the anthropomorphic body of an unknown god. When the subjects of other related descriptions can be identified, they are vanquished gods.[4] In the calendar text in BM 55551+: ii–iv Marduk and Ninurta feature as victorious warrior gods; perhaps the god described in column v was one of their victims.

The overall direction of the description is from head to toe. About half the subjects in 5′–25′ are preserved and are listed in the following order: head (*qaqqadu*(sag.du)), sides of neck(?) (*šūrā*), eyes (*īnā*), eyelids (*agappū*), tip of nose (*qaqqad appi*), teeth (*šinnā*), top(?) of teeth (*rēšu² ša šinnī*), tongue (*lišānu*), lips (*šaptā*), face (*pānū*), stomach (*karšu*), armpit (*suḫātu*), forearms (*ammātu*), fingers (*ubānātu*), chest (*irtu*), breasts (*tulâtu*), waist (*qablu*), navel (*abunnatu*), kidney-stone (*abattu*), groin (*pēmu*), buttocks (*suḫḫā*), lower leg (*kinṣu*) and foot (*šēpu*). The head to toe organising principle is traditional in Mesopotamian texts, *e.g.*, the lexical series Ugu.mu and Sig_7.alan = *nabnītu*, medical texts, omen series, including physiognomic omens and *Šumma izbu*, and descriptions of divine statues.[5] Other related descriptions of a god's body are not organised according to this principle, suggesting that BM 55551+: v is an earlier composition where the god's body was more important (for other descriptions see below).

Complements

The legible items in the complements in BM 55551+: v can be categorised:

Category	Item	Body part		
Mammals	*imēru*(anše)	*šinnā*(zú)^{meš}	donkey	teeth
	atānu(munus.anše)	*šaptā*(nundun)^{meš}	donkey mare	lips
	pagû(ugu.dul.bi)	[...]	monkey	[...]
	ṣabâtu(maš.dà)^{meš}	[...]	gazelles	[...]
Birds	*qadû*	...	owl	...
	ḫāzû	[...]	*ḫāzû*-bird	[...]
	pašānu	*suḫḫā*	*pašānu*-bird	buttocks
Insects	*burbillatu*	*qaqqadu*(sag.du)	*burbillatu*-insect	head
Fish	*girītu*	[...]	eel-like fish	[...]
Reptiles	*ṣēru*(muš)	*lišānu*(eme)	snake	tongue
Humans	*eṭlu*	*tulâtu*(ubur)^{meš}	young man	breasts
Body parts	*eṣindu*	*abattu*	bone	kidney-stone
	ḫandūru ša qadê	[...]	owl's spur	[...]

3 A brief summary of other related descriptions is given below.

4 For other descriptions see below. On vanquished gods see Livingstone, MMEW, 151 ff.

5 MSL 9, 51 ff.; MSL 16, 23 ff.; Heeßel, *Diagnostik*, 109–110; Böck, *Morphoskopie*, 1, 47–54; Leichty, *Izbu*, 3; Köcher, MIO 1, 57–107; cf. von Soden, ZA 43, 1 ff. = Livingstone, SAA 3 32: r. 2–10.

Plants	*uṭṭātu*(še) *peṣâtu*	*ammātu*	white barley	forearms
	ṣippû	*ubānātu*(šu.si)^{meš}	bunch of herbs(?)	fingers
Minerals	*kupru*(esir.ḫi.a)	*pēmu*(úr)	bitumen	groin
	ḫusāru	*kinṣu*	*ḫusāru*-stone	lower leg
Wool/textile	*ḫalīṣu*	*pānū*	combed sheepskin	face
	šipātu(síg)	*irtu*(gaba)	wool	chest
	suḫattu	[…]	*suḫattu*-garment	[…]
Foods	*šamnu u šizbu*(ga)	*qablu*(murub$_4$)	oil and milk	waist
Containers	*ḫaṣbattu*	[…]	pottery bowl	[…]
	ruqqu	[…]	cauldron	[…]
	maškiru	*karšu*	waterskin	stomach
Instruments	*tāpalu*	[…]	cymbals(?)	[…]
Tools	*akkullu*	*qaqqad*(sag.du) *appi*	pickaxe	tip of nose
Toponyms	*nippuru*	*abunnatu*(li.dur)	Nippur	navel

By and large these categories correspond to those preserved in other descriptions of a god's body but plants and their products predominate, while humans, wool/textiles, containers and toponyms are unparalleled.[6] In physiognomic omens the human body is compared to a strikingly similar repertoire of items:[7]

BM 55551+: v	Physiognomic Omens	
Categories	Exact Parallels	Category Parallels
Mammals	donkey, monkey, gazelle	14 other mammals
Birds	*ḫāzû*-bird	12 other birds
Insects		dragonfly (*kulīlu*), *kuzāzu*-insect
Fish		fish (*nūnu*)
Reptiles	snake	chamaeleon (*ḫulamīšu*), lizard (*ṣurāru*)
Humans		ecstatic priest (*ešše bû*), woman (*sinništu*)
Body parts		scorpion's pincers (*qanni zuqaqīpi*), turtle's shell (*kalli šeleppî*)
Plants/foods		cedar (*erēnu*), pea (*ḫallūru*), lentil (*kakkû*)
Minerals		red stone (*sābu*), gold (*ḫurāṣu*)
Instruments		lyre (*sammû*)
Tools		plough (*epinnu*), plough head (*qaqqad epinni*)

In these omens wool/textiles, containers, and toponyms are again unparalleled and the main additional category is divine beings.[8] The omen series *Šumma izbu* likens body parts of malformed new-born creatures to a more limited range of comparitors and these include the donkey, monkey, gazelle, owl, *ḫāzû*-bird and snake.[9] The categories of items in BM 55551+: v also occur in medical and ritual texts.

6 For a summary of other descriptions see below. For a partial summary of the categories see Livingstone, MMEW, 103. Close parallels are quoted in the commentary below.

7 Exact parallels are quoted in the commentary below. For omens yielding broader category parallels see Böck, *Morphoskopie*, 86–89: 153–174, 91: 40–42, 110: 59, 114–117: 127–139, 122: 77–83, 202: 3–6, 210: 103–104, 238–255 *passim*, 266–269: 29–40, 270–291 *passim*, 294: 84–90.

8 *E.g.* Böck, *Morphoskopie*, 250: 4–7.

9 *Šumma izbu* references are given in the commentary below.

Relationship of Body Parts to Complements

Where the rationale for a pairing can be detected, it is similarity. This can be general, *e.g.*, stomach and waterskin (12′), or can relate to shape, *e.g.*, tongue and snake (10′), texture, *e.g.*, chest and wool (16′), or possibly colour, *e.g.*, groin and bitumen (21′). Some body parts are said to be the corresponding parts of various creatures, *e.g.*, donkey's teeth, donkey mare's lips, young man's breasts (9′, 10′, 16′). While the matter cannot be resolved with certainty, it is highly probable that the text is metaphorical, in a similar style to the physiognomic omens.

Related Descriptions of the Anthropomorphic Body of a God in Other Texts

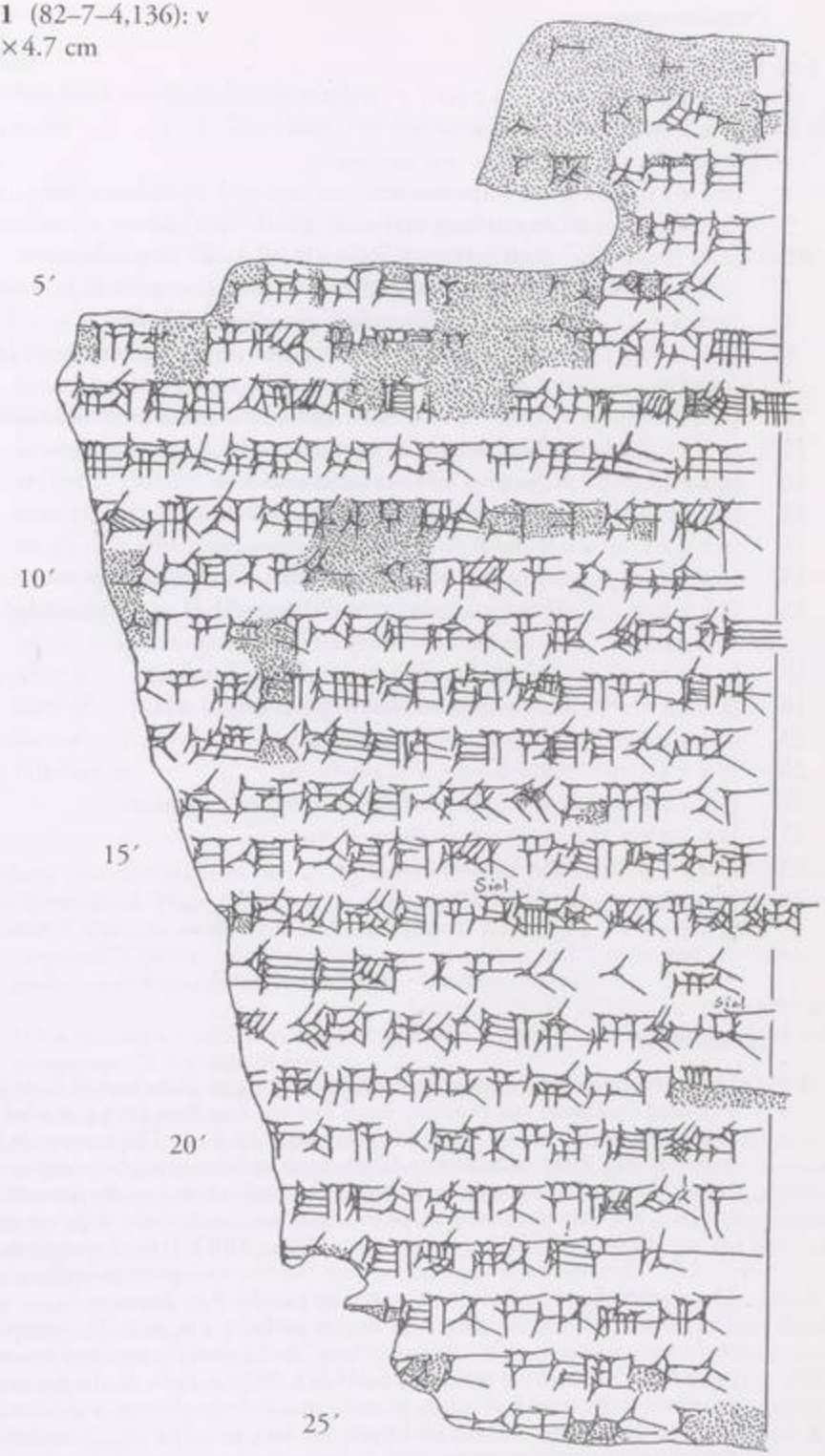
Six related passages are known on Neo-Assyrian and Neo-Babylonian tablets:

1. A copy of a mystical compendium from Kiṣir-Aššur's library in Aššur opens by equating animals, plants, fruit, metals, oil and objects with body parts of an unknown god (KAR 307 = Livingstone, SAA 3 39: 1–18).
2. A related fragmentary ritual interpretation text on a tablet probably from Aššur contains a ruled-off section which includes equations of naphtha, bitumen and salt with body parts of Anzû (Beckman and Foster, *Sachs Mem. Vol.*, 25 no. 22: 9′–10′; cf. Livingstone, NABU 1990/91).
3. One Aššur exemplar of a ritual interpretation text includes a ruled-off section near the end which equates a cat, plants, plant products, gold and honey with body parts of a god called ^{d}kár.kár, possibly Dumuzi (LKA 72 = Livingstone, SAA 3 38: r. 9–17).
4. A cultic commentary on a Nineveh tablet copied from a Nineveh source includes the remnants of a related section near the end (CT 15, 44 = Livingstone, SAA 3 37: r. 1′–5′).
5. Two Babylonian copies of a mystical compendium conclude a list identifying items used in ritual with deities by equating resin and foodstuffs, including fruit, with body parts of Anzû (Livingstone, MMEW, 178: 59–67 (composite edition); Livingstone, MMEW, pl. IV: 59–67; PBS 10/4 12: ii 30–iii 5 (dupl.)). The colophons record that one tablet was copied from sources from Babylon and Borsippa, and that the other, also a copy, belonged to Ešumeša, the temple of Ninurta, Anzû's conqueror, in Nippur.[10]
6. A scholarly compendium largely concerned with ritual contains a ruled-off section which ends by equating first grains with Tiʾāmat's flesh, Enlil, Antu and Anu, and then fruits with body parts of a god, probably Anu (Epping and Strassmaier, ZA 6, 243: 40–43 = Livingstone, MMEW, 163: 39–41, 96: 41–42). The colophon has an Arsacid date and records that the tablet was copied in Borsippa from a Borsippa source.[11]

Passages 1 and 3, and parts of 5 and 6, were classified as 'god description texts' and analysed by A. Livingstone.[12]

10 Livingstone, MMEW, 259–260 and pl. V BM 47463: iv 16–19; PBS 10/4 12: iv 13–17 = Livingstone, MMEW, 260 CBS 6060.
11 Epping and Strassmaier, ZA 6, 244: 55–59 = Livingstone, MMEW, 259 BM 34035.
12 Livingstone, MMEW, 92–111.

BM 55551 (82–7–4,136): v
10.1×5.8×4.7 cm



Transliteration

Col. v One line lost

1′ [x x x x x x x x x x x x] x [(x)] x [(x)] x
2′ [x x x x x x x x x x x] x x x-⸢-⸣*e*²⸣
3′ [x x x x x x x x x x x] x x-⸢*nu*⸣-*um-ma*
4′ [x x x x x x x x x x x x] x-*um-ma*
5′ [x x x x x (x)] x ⸢*qaqqad*(sag.du)-*su šá*¹ [*bur*]-⸢*bi-il*⸣-*lat*
6′ [x-*šú* x] x-*a-t*[u_4] *šūrā*(šur)^{meš}-*šú* ⸢*šá*¹ x x x [x] x-⸢*šú*²⸣ *šá qa-du-ú*
7′ [x x x-*š*]*ú*² *ta-pa-lu īnā*(igi)$^{min.meš}$-*šú* x KI x [*a*²-*g*]*a-ap-pi*^{meš}-*šú pe-tu-ú*
8′ [x-*šú* x x]-⸢*ú*⸣ *dan-nu qaqqad*(sag.du) *ap-pi-šú šá ak-kul-lu*
9′ [x x-*šú šá g*]*i-ri-tú šinnā*(zú)^{me}[^{š}]-⸢*šú šá*¹ [*i*]*mēru*([a]nše) ⸢*rēšu*(sag²) *šá*¹(coll.) *šinnā*(zú)⸣^{meš}-*šú*
10′ [*šá* x x x-*q*]*u*² *lišān*(eme)-*šú šá* ⸢*ṣēru*(muš) *šaptā*(nundun)⸣^{meš}-*šú šá atānu*(munus.anše)
11′ [x x x x-*s*]*u šá* x (x)-*ti pa-ni-šú šá ḫa-li-ṣu*
12′ [x x x x (x)]-*šú šá ḫa-zu-ú ka-ra-as-su šá maš-ki-ri*
13′ [x x-*šú šá ḫ*]*a-aṣ-bat-tu*$_4$ *su-ḫat-su šá ki-ma kur-ri*
14′ [x x x x x]-*né-e am-ma-ti-šú uṭṭātu*(še) *pe-ṣa-a-tú*
15′ [x x x-*šú šá p*]*agû*([ug]u.dul.bi) *ubānātī*(šu.si)^{meš}-*šú šá ṣi-ip-pe-e*
16′ [x x x x-*šú š*]*á*² *ṣabâtu*(maš^{1}.dà^{1})^{meš}(coll.) *irat*(gaba)-*su šá šipātu*(síg) *tulâtī*(ubur)^{meš}-*šú šá eṭ-*⸢*li*⸣
17′ [x x x x x x]-*tu*$_4$ *qabal*(murub$_4$)-*šú šá-man u šizbu*(ga)
18′ [x x x x x x^{m}]^{eš} *abunnat*(li.dur)-*su ni-ip-pu-ri*¹(tab. ḪU)
19′ [x x x x x-*šú š*]*á ḫa-an-du-ri šá qá-du-*⸢*ú*⸣
20′ [x x x x x x]-⸢*e*²⸣-*tú a-bat-ta-šú šá e-ṣi-in-du*
21′ [x x x x x-*šú š*]*á*² *su-ḫat-tú pēm*(úr)-*šú šá kupru*(esir.ḫi.a)
22′ [x x x x x x x] x (x) *su-uḫ-ḫa-šú pa-šá-nu*
23′ [x x x x x x x x *ki*]*n-*[*ṣ*]*i-šú šá ḫu-sa-ri*
24′ [x x x x x x x x x^{m}]^{eš²}-*šú šá ruq-*⸢*qu*⸣
25′ [x x x x x x x x x] x ⸢KA *šēp*(gìr)⸣-*šú*

Commentary

3′–4′ The word *umma* introducing direct speech may occur at the end of 3′ or 4′.

5′ The head (*qaqqadu*) was probably listed first but may have been preceded in 5′ by *muḫḫu*, "top of the head" (cf. *e.g.* Böck, *Morphoskopie*, 212: 1–2). The restoration [*bur*]-⸢*bi-il*⸣-*lat* is suggested by a simile addressed to Aššurbanipal and describing his enemies in a dialogue with Nabû. The identification of *burbillatu* as an insect is based on the context:

> 10 *ki-i bur-bi-il-la-a-te ša pa-an šat-ti un-ta-at-ar*¹(tab. PAD)-*ru-qu ina maḫar*(igi) *šēpē*(gìr)^{min}-*ka* Craig, ABRT 1, 6 = Livingstone, SAA 3 13: r. 10
> 10 They will be crushed before your feet like springtime *burbillatu*-insects.

The absolute form *burbillat* in 5′ would be paralleled by *šaman* in 17′.

6′ The vertical line copied in the sign *t*[u_4] is probably a scratch. The complement ending 5′ could extend into 6′. His *šūrā*(šur)^{meš} are listed before his eyes and two passages suggest a translation "sides of the neck" (cf. CAD Š/3, 367 *s.v. šur'u* A). In the omen series *Šumma kittabru*(še) the overall direction of body parts is from the top of the head down but some are listed in sequence moving backwards and forwards. The phrase *ina šūrī*(šur)-*šú* occurs in the following sequence: upper cheek (*usukku*), back of the neck (*kutal kišādi*), *šūru*(šur), ear

Translation

1′–4′ traces only
5′ […] … His head is a *burbillatu*-insect's.
6′ [His … is/are …] … […]. The sides(?) of his neck(?) are of … His(?) […] … is of an owl.
7′ His(?) [… are] cymbals(?). His eyes are … His eyelids are open.
8′ [His … is/are] a strong […] … The tip of his nose is a pickaxe.
9′ [His … is/are of] an eel-like fish. His teeth are a donkey's. The top(?) of his teeth
10′ [is of …] … His tongue is a snake. His lips are a donkey mare's.
11′ His […] is of … His face is a combed sheepskin.
12′ His […] is/are a *ḫāzû*-bird's . His stomach is a waterskin.
13′ [His … is/are] a pottery bowl. His armpit, which like a fold of the groin
14′ […] … His forearms are white barley.
15′ [His … is/are] a monkey's. His fingers are a bunch(?) of(?) herbs(?).
16′ [His … are] of(?) gazelles. His chest is wool. His breasts are a young man's.
17′ [*His … is/are of* …] … His waist is oil and milk.
18′ [*His … are of* …]s. His navel is Nippur.
19′ [His … is] an owl's spur.
20′ [*His … is/are of* …] … His kidney-stone is bone.
21′ [His … is/are] a *suḫattu*-garment. His groin is bitumen.
22′ [*His … is/are of* …] … His buttocks are a *pašānu*-bird.
23′ [*His … is/are of* …]. His [lower] leg is *ḫusāru*-stone.
24′ [*his … is/are of* …]. His […] are a cauldron.
25′ […] … His foot is

(*uznu*), cheek (*lētu*) and eyebrow (*šūr īnī*(sig$_7$.igi)^{min}) (Böck, *Morphoskopie*, 212–215: 5–22; *šūru*(sur) is translated "Haarbüschel" citing AHw, 1287a *s.v. šu'ru*). In the diagnostic series Sa.gig Tablet X a section on the neck includes:

27 *šumma*(diš) *ištu*(ta) *labânī*(sa.gú)-*šú adi*(en) *eqbī*(sìl.mud)-*šú šer'ānū*(sa)^{me}-*šú šaggu šu-'-ra-šú kaṣ-ra issā*(me.zé)-*šú ḫé-sa*$_5$ *šaššaṭu*(sa.dugud)

Labat, TDP, 82: 27; var.: *šer'ānû*(sa)^{meš}-*šú*

27 If his muscles are stiff from his neck to his heel, his *šu'rā* are knotted, his jaws are compressed: it is *šaššaṭu*-disease.

This diagnosis also occurs in Sa.gig Tablet XXXIII (Heeßel, *Diagnostik*, 357 and 363: 97; *šu-'-ra-šú* is translated "Augenlider").

Traces before *šá qa-du-ú* represent either a body part ([…] x-[*šú*]) or part of the owl (possibly […] K[I]/D[I]). An unknown body part is equated with an owl's spur in 19′. In *Šumma izbu* Tablet VII abnormal characteristics include a head like an owl's (*qaqqad*(sag.du) *iṣṣūr*(mušen) *qadê*(uru.ḫul.a): von Weiher, *Uruk* 4 142: 22′). The owl occurs in protases in *Šumma ālu* (*e.g.*, CAD Q, 51 *s.v. qadû*; CAD I/J, 208–209 *s.v. iṣṣūr qādê*). On the owl and the *ḫāzû*-bird see 12′.

7′ The first trace could also be [-*s*]*u* or [*š*]*á*. The identity of the musical instrument *tāpalu*, literally "pair," is uncertain (cf. AHw, 1320b *s.v. tāpalu* 4). A Neo-Babylonian text from Uruk records the issuing of "three minas of bronze for the *tāpalu*-instrument of the musician" (3 *manû*(ma.na) *siparru*(ud.ka.bar) *a-na ta-pa-al šá* ^{lú}*nâri*(nu.nar): GCCI 2 294: 1–3; the unusual writing ^{lú}nu.nar probably corresponds to ^{lú}nar). The instrument's duality and the bronze suggest a pair of cymbals, possibly associated with a dual body part such as the god's cheeks.

His (*a*)*gappī*^{meš} are listed after his eyes and before his nose. The common term for eyelid is *kappi īni* or (*a*)*gappi īni*, literally "wing of the eye," but in the diagnostic series Sa.gig Tablet XVII *kappīšu* alone probably means "his eyelids":

70 *šumma*(diš) *ina* u_4*-mi šá imraṣu*(gig) *kap-pi-šú u pā*(ka)*-šú iptenette*(bad.bad)^{te} *murussu*(tu.bi) *inaddī*(šub')(coll.))*-šú*

71 *šumma*(diš) *ina* u_4*-mi šá imraṣu*(gig) *kap-pi-šú ittanašši*(íl)$^{me.ši}$ *murussu*(tu.bi) *ippaṭṭar*(du_8)^{ár}

72 *šumma*(diš) *ina* u_4*-mi šá imraṣu*(gig) *kap-pi-šú *u lišān*(eme)*-šú* ittanašši*(íl)$^{me.ši}$ *murussu*(gig.bi) *ippaṭṭar*(du_8)^{ár}

Heeßel, *Diagnostik*, 202: 70–72; var.: 71 *ittanašši*(íl)$^{meš.ši}$; 72 * * *pā*(ka)*-šú* : *lišān*(eme)*-šú*; 72 *ittanašši*(íl)$^{meš.ši}$

70 If on the day he falls ill he keeps opening his eyelids and mouth, his illness will leave him.

71 If on the day he falls ill he keeps raising his eyelids, his illness will disappear.

72 If on the day he falls ill he keeps raising his eyelids and tongue, his illness will disappear.

For an alternative translation of *kappīšu* as "seine Handfläche" see Heeßel, *Diagnostik*, 210: 70–72. In a related description of a god *ka-ap-pa-šú* could refer to his arms or eyelids (KAR 307 = Livingstone, SAA 3 39: 4).

8′ A body part was presumably the subject in an initial sentence in 8′. The word *dan-nu* may define the complement in a nominal sentence, the syntactical norm in the text, or it may be a main verb like *petû* in 7′. The phrase *qaqqad*/*rēš appi*, literally "head of the nose," means the nose's tip. For the contrasting pair *išid*(suḫuš) *appi*(kir_4) and *qaqqad*(sag.du) *appi*(kir_4), "base of the nose" and "tip of the nose," see Leichty, *Izbu*, 217: 191; cf. Böck, *Morphoskopie*, 90: 32–33. The "head" of his nose is paired with a pickaxe, signifying the head of a pickaxe. Entrails are compared to a pickaxe head in extispicy texts (*kīma qaqqad akkullim*: *e.g.*, CAD A/1, 276–277 *s.v. akkullu*). These associations are based on shape.

9′ On the identity of the *girītu*-fish and for lexical evidence see MSL 8/2, 86–89, 102: 26 ff.; MSL 13, 212: ii 9–10; UET 6/2 406: r. 17 ff. Information about its habitat in north Mesopotamia and its status as a delicacy is given by a demand in a Mari letter: "There are *girītu*-fish in the ditch of Kaḫat. Let them catch (them), and send (them) to me!" (^{ŧ}k u6^{1}*gi-re-tu i-na ḫi-ri-tim ša ka-ḫa-at*^{ki} *i-*[*b*]*a-aš-še-e li-ba-ru-nim-ma šu-bi-lam*: ARM 1 139: 5–9). The god is said to have a donkey mare's lips in 10′. Donkey's teeth are ascribed to Lamaštu (*šin-na-*[*at im*]*ēri*([an]še) *šin-na-as-*[*sa*]: PBS 1/2 113: iii 24′; 4 R, 58: iii 38 (dupl.); see CAD Š/3, 50 *s.v. šinnu* A for parallels). A human head like a donkey's is listed in the series *Alamdimmû*:

163 *šumma*(diš) *qaqqad*(sag.du) *imēri*(anše) *šakin*(gar) *ilappin*(úku)[^{in}]

Böck, *Morphoskopie*, 88: 163, cf. 88: 164

163 If he has a donkey's head, he will become poor.

For a commentary text see Böck, *Morphoskopie*, 248: 5. In *Šumma izbu* Tablet VII a head, body and neck like a donkey's are defective birth features (*qaqqad*(sag.du) *imēri*(anše): Leichty, *Izbu*, 92: 19, von Weiher, *Uruk* 4 142: 9′ (dupl.); *pa-gar imēri*(anše): von Weiher, *Uruk* 4 142: 15′; *kišād*(gú) *imēri*(anše): Leichty, *Izbu*, 96: 84′). Tablet V mentions a donkey's face (*pān*(igi) *imēri*(anše): Leichty, *Izbu*, 78: 53, von Weiher, *Uruk* 3 91: 62 (dupl.)). On the proposed *rēšu šá šinnāšú*, "top of his teeth," compare numerous other terms for body parts constructed with *rēšu* (*e.g.* CAD R, 284 *s.v. rēšu*).

10′ His tongue is paired with a snake. By analogy with other Akkadian snake imagery, this signifies a snake as a whole, not just its tongue, and the pairing is based on shape. In a related description of a god a snake (*ṣēru*(muš)) is said to be a god's penis (KAR 307 = Livingstone, SAA 3 39: 3). Toes like a snake's head are mentioned in physiognomic omens:

102 *šumma*(diš) *ubānāt*(šu.si)^{meš} *qaqqad*(sag.du) *ṣēri*(muš) *šakin*(gar) *māḫira*(gaba.ri) *ul*(nu) *iraššī*(tuku)^{ši} *ap-pat ubānātī*(šu.si)^{meš}*-šú ḫu-un-du-da*

Böck, *Morphoskopie*, 244: 102, cf. 271: 81, 272: 88

102 If he has snake's head toes, he will not have a rival: the ends of his toes are cracked.

Šumma izbu Tablets II, V and VII list a head like a snake's as a birth deformity (*qaqqad*

(sag.du) *ṣēri*(muš): Leichty, *Izbu*, 46: 6; von Weiher, *Uruk* 3 91: 11; von Weiher, *Uruk* 4 142: 17′–18′). Tablet XII lists a snake's nose (ᶠ*appi*(kir$_4$)¹ *ṣēri*(muš): Leichty, *Izbu*, 146: 38). Entrails are compared to a snake's head in extispicy (*e.g.* CAD Ṣ, 149 *s.v. ṣēru* B). The god's teeth are said to be a donkey's in 9′.

11′ The body part represented by [...-*s*]*u* could be *suqtu*, "chin." The new translation of *ḫalīṣu* is based on the following evidence. In ḪAR.ra = *ḫubullu* Tablet XI kuš.lú.gú.è.a is equated with *na-aḫ-la-pa-tum*, "cloaks, coats," and with *ba-ab-bi-ru* (MSL 7, 135: 263–64). ḪAR.gud interprets the latter word: kuš.lú.gú.è.a = *ba-an-bir-ru* = *ḫa-li-ṣu* (MSL 7, 152: 182). An administrative text from Uruk dated to Cambyses reads:

3 ᵐ*arad*(arad)-ᵈ*bēl*(en) *mār*(a)-*šú šá* ᵐ*šarru*(lugal)-*ukīn*(gin) ˡᵘ²*rab*(gal) *bu-ul šá ṣe-e-nu*
4 *šá* ᵈ*ištar*(inanna) *uruk*(unug)ᵏⁱ 1 *lim maškû*(kuš) *immerī*(udu.níta)ᵐᵉˡ *šu-kul-lu-tu*
5 *ù* ᵏᵘš*ḫa-li-ṣi-a-nu bab-ba-nu-tu*
6 *ina qāt*(šu)ᵐⁱⁿ ˡᵘ²*nāqidī*(na.gada)ᵐᵉ ˡᵘ²*ṣāb*(érin) *qātī*(šu)ᵐⁱⁿ-*šú*
7 ᶠ*i*¹-*na-áš-šá-am-ma a-na makkūr*(níg.ga)
8 *é-an-na i-nam-din* YOS 7 138: 3–8

3–8 Arad-Bēl, son of Šarru-ukīn, overseer of the herds of sheep and goats of Ištar of Uruk, will bring 1000 tanned sheep hides and good combed sheepskins from the herdsmen, the workers under his command, and he will deliver them to the exchequer of Eanna.

The word *ḫalīṣu* is cognate with the verb *ḫalāṣu*, "to comb," and a formula for dyeing wool includes the instruction *šipāti*(síg)ᵇᵢ.ᵃ *ta-ḫal-la-aṣ*, "you comb wool" (Leichty, *Jones Fs.*, 17 and 20: r. 14′). In 11′ the god's face is said to be a *ḫalīṣu* and this may be based on facial hair.

12′ For the *ḫāzû*-bird in ḪAR.ra = *ḫubullu* Tablet XVIII and ḪAR.gud see MSL 8/2, 124: 168, 167: 250a, 169: 284, 171: 1. The name is derived from *ḫazû*, "to sigh, gasp, pant," presumably due to the noise the bird makes (AHw, 92b *s.v. azû*(*m*)). A face like a *ḫāzû*-bird's is listed in *Alamdimmû* Tablet VIII:

138 *šumma*(diš) *ḫāzî*(šu.lú) *šakin*(gar) x [...] x Böck, *Morphoskopie*, 116: 138
138 If he has (the face = *pān*(igi)) of a *ḫāzû*-bird, ... [...] ...

Birth defects in *Šumma izbu* Tablets III and V include a beak and head like a *ḫāzû*-bird's (*appi*(kir$_4$) *ḫāzî*(šu.lú)ᵐᵘšᵉⁿ): Leichty, *Izbu*, 56: 26; *qaqqad*(sag.du) *ḫāzî*(šu.lú)ᵐᵘšᵉⁿ: Leichty, *Izbu*, 77: 50, von Weiher, *Uruk* 3 91: 59 (dupl.)). The *ḫāzû*-bird occurs in protases in *Šumma ālu* (CT 41, 6: 18; CT 41, 3 Rm 253: 5). The *ḫāzû*-bird and the owl (*qadû*) can be listed consecutively (MSL 8/2, 124: 168–170 and note; CT 41, 6: 18–19, cf. 21). The owl is mentioned here in 6′ and 19′. As preserved, the stomach (*karšu*) is the only internal organ listed in BM 55551+: v. The pairing is based on function: both the stomach and the waterskin are fluid-holding bags of muscle or skin.

13′ In view of the 'head to toe' principle, *suḫātsu* in 13′ means "his armpit," although *suḫātu* can also mean the corresponding fold of the groin (Böck, *Morphoskopie*, 53 n. 251, 304: 35–36). His armpit is said to be *kīma kurri* and this is further evidence for identifying the body part *kurru* as "fold of the groin" (Scurlock, NABU 1993/47; Scurlock, NABU 1997/91). The term occurs on a tablet assigned to Sa.gig Tablet XV:

49′ *šumma*(diš) ki.min-*ma ina kur-ri-šú šá imitti*(15) *maḫiṣ*(sìg)ᵘˢ-*ma ramān*(ní)-*šú ma-ši qāt*(šu) ᵈ*šul-pa-è-a imât*(gam)
50′ *šumma*(diš) ki.min-*ma ina kur-ri-šú šá šumēli*(150) *maḫiṣ*(sìg)ᵘˢ-*ma šēp*(gìr)-*šú lā*(nu) **inassaḫ*(zi)ᵃᵇ* *ina ṣīt šamši*(ᵈutu.è) ᵗ*maḫiṣ*(sìg)ᵘˢ¹ *qāt*(šu) ᵈ*ištar*(15) *imât*(gam)
Heeßel, *Diagnostik*, 153: 49′–50′; var.: 50′ * * ZU x

49′ If ditto and he is struck on the right fold of his groin and forgets himself: hand of Šulpaea, he will die.
50′ If ditto and he is struck on the left fold of his groin and cannot lift his foot: he was struck at sunrise, hand of Ištar, he will die.

The sequence of body parts is hips (*qablā*), *kurru*, buttocks (*qinnātu*), groin(?) (*rebītu*) and thigh/groin (*pēmu*) (Heeßel, *Diagnostik*, 153–154: 48′–56′). In Sa.gig Tablet XII these two diagnoses end a section on the armpit (*šaḫātu*(su.gam)) (Labat, TDP, 108: 23–25; no parallels to *ina kur-ri-šú* are preserved; on su.gam see Scurlock, NABU 1993/47). The phrase

ina kurrim, "in a fold of the groin," is applied to a dog in a Mari letter (Scurlock, NABU 1997/91).

14′ The sign *pe-* is as copied with only three wedges visible. White barley in the singular occurs in Neo-Babylonian texts. An administrative text dated to Darius concerns "good white barley" (*uṭṭatu*(še.bar) *pe-ṣi-tu$_4$ bab-ba-ni-tu$_4$*: Strassmaier, Dar. 387: 1). An undated administrative text refers to *uṭṭatu*(še.bar) *pe-ṣi-tu$_4$* (VS 6 266: 3, 10). References also occur in letters from Uruk (*uṭṭati*(še.bar) *pe-ṣi-ti*(var.: *tu$_4$*), also written *uṭṭati*(še.bar) *peṣīti*(babbar)^{ti}: YOS 3 28: 7, 34: 9, 113: 7, 11). A scholarly compendium including a description of the body of a god, probably Anu, contains this equation:

39 … : *uṭṭatu*(še.bar) *ši-*^{r}*ir*^{1}(coll.)^{1} *šá*^{1}(coll.) *ti-amat*

Epping and Strassmaier, ZA 6, 243: 40 = Livingstone, MMEW, 163: 39

39 … : Barley is the flesh of Ti'āmat.

Collation does not support the proposed reading igi.tab (Livingstone, MMEW, 163: 39). Other grains are then equated with deities (Epping and Strassmaier, ZA 6, 243: 41–42 = Livingstone, MMEW, 163: 40–41). Grain can also be equated with Dumuzi and he may be the god whose body is described in a related passage (Livingstone, MMEW, 160–164; LKA 72 = Livingstone, SAA 3 38: r. 9 and note).

15′ His hand, or hands, may have been paired with a monkey. Physiognomic omens mention toes like a monkey's:

75 *šumma*(diš) *ubānāt*(šu.si)^{meš} *pagî*(ugu.dul.bi) *šakin*(gar) *dib-bu-šu i-dab-bu-ma išarrū*(níg.tuku)*-ma ilappin*(úku)^{in} *ina lalê*(la)*-šú imât*(ug$_7$)

Böck, *Morphoskopie*, 270: 75; var.: *ilappin*(úku); cf. 272: 91

75 If he has a monkey's toes, he will be talked about and he will become rich but he will become poor; he will die in the prime of his life.

In *Šumma izbu* Tablets II and VII a head like a monkey's is an abnormal birth feature (*qaqqad*(sag.du) *pagî*(ugu.dul.bi): Leichty, *Izbu*, 46: 4; Leichty, *Izbu*, 92: 12, von Weiher, *Uruk* 4 142: 2′ (dupl.)). Tablet XVII mentions a monkey's head and face or eye (*pān*/*īn*(igi) *pagî*(ugu.dul.bi): Leichty, *Izbu*, 171: 76′–77′).

The word *ṣi-ip-pe-e* may mean "bunch of herbs." The lexical text ḪAR.ra = *ḫubullu* Tablet XVII ends as follows:

384	maš.gu.la^{sar}	*na-gab-bu*	maš.gu.la	sheaf
385	maš.tur.ra^{sar}	**ṣip-pu**	maš.tur.ra	bunch(?)
386	maš.m[a]š^{sar}	*kiš-šu*	maš.maš	bundle
387	maš.maš^{sar}	min	maš.maš	ditto (= bundle)

Composite edition; MSL 10, 99: 384–387; Gesche, *Schulunterricht*, 235: r. 11–14 (new dupl.); var.: 384 *nag-*[*bu*], *na-gab-bu-*^{r}*u*^{1}; 385 * * *ṣi-i-*[…], min (= *nag-*[*bu*]), […]*-tum*, x*-i-pu*; 386 *kiš-šú*

The commentary ḪAR.gud D interprets as follows:

255	máš.gu.la^{sar}	*na-gab-bu*	*i-si-iḫ-tu šá ki*[*š-ši*]
256	máš.tur.ra^{sar}	*ṣip-pu*	*kiš-šú šá šam-*[*me*$^{?}$]

MSL 10, 106: 255–256

255	maš.gu.la	sheaf	allocation of a bundle
256	maš.tur.ra	bunch(?)	bundle of herbs(?)

If this meaning of *ṣip-pe-e* is correct, the pairing in 15′ would be based on the similar appearance of a bunch of stalks and fingers. Correspondingly reeds and possibly a bundle (of reeds) are said to be a god's fingers in related descriptions (*qanû*(gi)^{meš}: KAR 307 = Livingstone, SAA 3 39: 11; [*kiš*]-^{r}*šu*$^{?1}$: LKA 72: r. 13′ = Livingstone, SAA 3 38: r. 13).

16′ Collation of the beginning of 16′ yields  ^{meš}. In a set of love lyrics Nabû admires Tašmētu's body:

5 ki.min [*ša šá-pu*]*-la-ki ṣabītu*(maš.dà) *ina ṣēri*(edin) [x x x]

TIM 9 54 = Livingstone, SAA 3 14: r. 5

5 Ditto, you whose upper(?) thighs(?) are a gazelle on the plain […]

Ašrat of Ezida and Anu's daughters as outcasts are equated with gazelles as wild animals of the plain (Epping and Strassmaier, ZA 6, 241: 10 = Livingstone, MMEW, 61: 9; KAR 307 = Livingstone, SAA 3 39: r. 12, contra Livingstone, MMEW, 89). A list interpreting ritual

items as deities or parts of Anzû equates a gazelle (*ṣabītu*(maš.dà)) with Ungal-Nibru, Ištar of Nippur (Livingstone, MMEW, 178: 57 (composite edition); Livingstone, MMEW, pl. IV: 57; PBS 10/4 12: ii 28 (dupl.); cf. LKU 45: 4′). A nostril like a gazelle's occurs in *Alamdimmû* Tablet VIII:

90 *šumma*(diš) min-*ma irtu*(gaba) *rapšat*(dagal) *na-ḫi-ir ṣabīti*(maš.dà) *šakin*(gar) *ina lalê*(la)-*šú imât*(ug$_7$) Böck, *Morphoskopie*, 112: 90

90 If ditto and the chest is broad, he has a gazelle's nostril, he will die in the prime of his life.

Birth defects in *Šumma izbu* Tablets V and XII include a head and nose like a gazelle's (*qaqqad*(sag.du) *ṣabīti*(maš.dà): Leichty, *Izbu*, 77: 48, von Weiher, *Uruk* 3 91: 58 (dupl.); *appi*(kir$_4$) *ṣabīti*(maš.dà): Leichty, *Izbu*, 144: 15). Deformed gazelle births are the subject of Tablet XXIV (Leichty, *Izbu*, 194–195).

The small horizontal wedge in the sign síg in the copy could be a scratch. The logogram síg represents both *šārtu*, "hair," and *šipātu*, "wool," but the latter fits this context and the pairing refers to chest hair. In a related description of a god thornbush (^{giš}*baltu*(dìḫ)) is said to be a god's chest hair (KAR 307 = Livingstone, SAA 3 39: 13; cf. LKA 72: r. 17′ = Livingstone, SAA 3 38: r. 17). In a commentary on physiognomic omens a man with lips like a pig's is said to have a beard like wool (*ziqni*(su$_6$) *šipāti*(síg)$^{bi.a}$ *šakin*(gar): Böck, *Morphoskopie*, 244: 85).

17′ His *qablu*, literally "middle," is oil and milk which may refer to internal bodily fluids. Oil and honey (*šamnu*(ì) *dišpu*(làl)) in a ritual are said to represent the blood of Qingu and his sons in an explanatory text based on a cultic calendar (LKA 73 = Livingstone, SAA 3 40: 4). A description of Anzû's body includes:

59 *dam*(úš) ^{giš}*erēni*(eren) *šaman*(ì.giš) *an-zi-i* Cedar resin is Anzû's fat.
60 *dišpu*(làl) *šarak*(lugud) *an-zi-i* Honey is Anzû's pus.
61 ì.ḫul *šaman*(ì.giš)-*šú* "Bad oil" is his fat.

Livingstone, MMEW, 178: 59–61 (composite edition); Livingstone, MMEW, pl. IV: 59–61; PBS 10/4 12: ii 30–32 (dupl.)

Honey and a god's pus are paired in one related description, and oils (*šamnū*(ì)^{meš}) and a god's tears in another (LKA 72: r. 9′= Livingstone, SAA 3 38: r. 9; KAR 307 = Livingstone, SAA 3 39: 15). Appearances of urine in the diagnostic series Sa.gig Tablet XIV include:

50 *šumma*(diš) *šīnātū*(kàš)^{meš}-*šu kīma*(gin$_7$) *šizbi*(ga) [*ib*]*alluṭ*([ṭ]i) Labat, TDP, 136: ii 50

50 If his urine is like milk, he will recover.

In extispicy *šizbu*(ga) means a milky fluid in the gall bladder and the liver (*e.g.*, CAD Š/3, 151 *s.v. šizbu*). Oil, milk and honey are common food offerings (*e.g.*, CAD Š/3, 149–150 *s.v. šizbu*).

18′ The pairing of his navel with Nippur reflects Nippur's traditional role as the centre of the cosmos before being displaced by Babylon. As the centre of the inhabited world, Nippur was the earthly location of a cosmic bond or cable connecting the layers of the universe and this resulted in by-names of the city such as Dur-anki, *markas šamê u erṣeti*, "bond of heaven and underworld" (George, *Topographical Texts*, 146, 244–245, 261–262, 266–267, 442–443). The Sumerian composition known as the Song of the Hoe or the Uzumua Myth describes Enlil's separation of heaven and earth and the following translation of line 7 can be proposed:

7 dur-an-ki-ka bulug nam-mi-in-lá

Electronic Text Corpus of Sumerian Literature 5.5.4 The song of the hoe: 7 (composite text 21.ix.2001); var.: nam-íl-e, nam-íl-la

7 He (= Enlil) suspended (var.: raised) the cosmic linking pin at Dur-anki.

A navel and umbilical cord were perhaps seen as parallel to Nippur and a cosmic bond. In an Old Babylonian extispicy omen *abunnatu* signifies the centre of a land:

14 … ^{r}*tu-ši-ri-ib*^{1}-*ma*
15 [*i-n*]*a a-bu-un-*^{r}*na-at*^{1} *ma-*^{r}*at*^{1} ^{lú}*nakrī*(kúr)-*ka*
16 [*ša-l*]*a-tam* ^{r}*tu*^{1}-*ši-ṣi-a-am* YOS 10 34: 14–16

14–16 … you will invade and bring out booty from the centre of your enemy's land …

The Nippur theology underlying 18′ may indicate that this description was composed before the city's cosmic importance was usurped by Babylon, possibly in Nippur itself (on the two cities see George, *Topographical Texts*, 4–7). A tablet containing a related description of a god's body belonged to Ešumeša in Nippur (on related descriptions see above).

19′ A description of a body part may be completely lost at the beginning of 19′. On the owl see the commentary on 6′. The word *ḫandūru* probably means "spur" of a bird and "projection" of a wall where a gate is built (AHw, 320b *s.v. ḫalindūru, ḫi(d)dāru*). The phrase *ḫindūr iṣṣūri* occurs in a description of the lower part of a statue of a Laḫmu of Gula:

49 *ḫi-in-dur iṣṣūri*(mušen) *šakin*(gar)^{in} He has a bird's spur.

Köcher, MIO 1, 78 and 105: 49; CT 17, 44: 89 (dupl.); cf. CTN 4 141: r. i$^{?}$ 9′ and Biggs, NABU 1996/134

In Šà.zi.ga, a ritual series for successful sex, a bird's spur is an ingredient of an ointment for the penis to induce an erection:

11′ *ḫa-an-dur bal-lu-ṣi-*[*ti* x x x (x)]
12′ *ina šamni*(ì) *tasâk*(súd) *ušār*(gìš)*-šú tapašaš*(eš)^{aš}*-ma* [*nīš*] *libbi*(šà.z[i.ga])

LKA 98 = Biggs, *Šaziga*, 63: 11′–12′

11′–12′ You pulverise the spur of a *balluṣītu*-bird […] in oil, you anoint his penis and he will be aroused.

An ointment for a man's thighs (*rapaštā*(giš.kun)^{meš}*-šú*) with the same aim includes a bird's spur (*ḫa-an-*[…]: STT 280: iv 30–31 = Biggs, *Šaziga*, 49 no. 33: 30–31). A *balluṣītu*-bird's spur is in a broken prescription (*ḫi-in-du-ur pa-al-lu-ṣi-t*[*i*]: AMT, 62/3 = Biggs, *Šaziga*, 51: r. 5). The skin disease bird's spur occurs in two variant prescriptions (*muruṣ*(gig) *ḫi-dúr iṣṣūri*(mušen): KAR 197 = Köcher, BAM 32: 7′–8′; Köcher, BAM 417: 6–7). This disorder is also named in versions of a pharmaceutical plant list (*muruṣ*(gig) *ḫi-dar iṣṣūri*(mušen): CT 14, 36 Rm 2 412: 6′ = Köcher, BAM 421: i 24′; *ḫi-dar iṣṣūri*(mušen): KAR 203: obv. iv–vi 55–57 = Köcher, BAM 1: ii 53–55; STT 92: iii 9′–12′; CT 14, 37 Rm 357: 6–8). Given the Šà.zi.ga references, the owl's spur in 19′ may have been paired with the penis, which would fit the 'head to toe' scheme of the text.

20′ Both a kidney-stone (*a-bat-ta-šú*) and bone are hard substances within the body. Syllabic writings of *abattu*, a feminine form of *abnu*, "stone," have meanings including "pebble, fruit-stone, grinding-stone" (AHw, 4–5 *s.v. abattu*; CAD A/1, 39–40 *s.v. abattu* A). In Akkadian "kidney-stone" is written na_4 in medical texts and with syllabic writings of *abnu* lexically (CAD A/1, 60 *s.v. abnu* A). In this sense na_4 can represent either gender, as is shown by the phrase "a dissolving kidney-stone" (na_4 *š*[*a*]*ḫ-ḫi-ḫu*: AMT, 89/4: 2′; na_4 *šá-ḫi-iḫ-ta*: AMT, 39/6: 7′). The noun *abnu* is usually masculine, occasionally feminine, but 20′ suggests that na_4 as a medical term stands for both *abnu* and *abattu*. Both na_4 *ḫa-ru-pi* and *a-bat-ti ḫa-ru-bi* are writings for "carob stone" in medical texts (AMT, 15/3: 5′; AMT, 97/1: 2).

21′ A description of a body part may be completely lost at the beginning of 21′. The word *suḫat-tú* probably means a garment or possibly a piece of cloth (CAD S, 346 *s.v. suḫattu*; Š/3 205 *s.v. šuḫattu*; Ebeling, ZA 50, 206). In a Murašû document dated to Darius an equipment list for military service arising from a horse fief specifies a horse, weapons, silver and the following:

6 … *ištēn*(1)^{en} ^{túg}*su-ḫat-tu*$_4$
7 *ištēn*(1)^{en} *ši-ir-*$^{?}$*-a-nu parzilli*(an.bar) *ištēn*(1)^{en} *kar-bal-la-tu*$_4$ *šá ši-ir-*$^{?}$*-an-nu*
8 *ištēn*(1)^{en} *ku-ú-ra-pa-nu šá su-ḫat-tu*$_4$ *ištēn*(1)^{en} *kar-bal-la-tu*$_4$ <*šá*> *su-ḫat-tu*$_4$ …

Lutz, UCP 9/3, 275: 6–8

6 … one *suḫattu*-garment,
7 one coat of iron mail, one cap for a coat of mail,
8 one neck guard for a *suḫattu*-garment, one cap for a *suḫattu*-garment, …

Thus, a *suḫattu*-garment, together with a neck guard and cap, was worn by a mounted soldier under his armour. A section listing ritual items of the lamentation priest includes cloaks (^{túg}kur.ra), wool, pegs, tethers, and finally *ištēn*(1)^{en} ^{túg}*su-ḫat-tu*$_4$ *ištēn*(1) *ku-tu-um-mu*, "one *suḫattu*, one 'cover'" (RAcc, 6 and 18: iv 28). These items may be a garment and hood, or a cloth and cover. A less likely reading in 21′ is […] x-*su ḫat-tú*, "his […] … is a *ḫattu*." In

ḪAR.ra = *ḫubullu* Tablet X dug.kaš.ús.sa is equated with *ḫi-it-tum* (var.: [*ḫa*]-*at-t*[*u*]) (MSL 7, 79: 75).

On *pēmu* meaning "upper thigh, groin," see Böck, *Morphoskopie*, 52 n. 243. A description of Anzû's body includes *nap-ṭu kiṣal*(kisal^{ll} (copy SILA$_4$))-*šu iṭ-ṭu-*[*ú* …], "Naphtha is his ankle bone. Crude bitumen [is *his* …]" (Beckman and Foster, *Sachs Mem. Vol.*, 25 no. 22: 9′; cf. Livingstone, NABU 1990/91). The logogram kisal does not normally represent *kiṣallu*, "ankle bone." The pairing with bitumen in 21′ may be based on the blackness of body hair. Types of bitumen occur in similes for blackness of the body, including *šīrī*(uzu)^{meš}-*ku-nu* … ⌜*ki-i qí*⌝*-ru ku-up-ri nap-ṭi lu-ṣal-li-mu*, "May they make your flesh … as black as hot bitumen, bitumen (and) naphtha" (Wiseman, *Treaties*, 73 = Parpola and Watanabe, SAA 2 6: 585–587, cf. notes). The Underworld Vision of an Assyrian Prince observes: *iltēn*(1)^{en} *eṭ-lum zu-mur-šú ki-ma it-te-e ṣa-lim*, "there was a young man whose body was as black as crude bitumen" (von Soden, ZA 43, pl. III and p. 17: 50 = Livingstone, SAA 3 32: r. 10). For other examples see YOS 10 12 = Leichty, *Izbu*, 207: 1–2; RAcc, 3 and 10: 4.

22′ In this context *suḫḫu* is a form of *šuḫḫu*, a body part translated as "buttocks" (CAD Š/3, 206–207 *s.v. šuḫḫu*). The reading of the bird name is established by the entry *pa-ša-nu-um*^{mušen} in an Old Babylonian list of bird names from Sippar (Black and Al-Rawi, ZA 77, 123–124: iii 9). A universal namburbi text includes:

> 5′ *ina lumun*(ḫul) *iṣṣūru*(mušen) *u-bar ina lumun*(ḫul) *pa-šá-nu*⌜mušen⌝ [*ina lumun*(ḫul) x x]
>
> 6′ *ina lumun*(ḫul) *qadû*(uru.ḫul.a)^{mušen} *ina lumun*(ḫul) buru$_5$.a.du$^{?}$.b[a$^{?}$muš]^{en}
>
> CT 41, 24 = Maul, *Namburbi*, 471: iii 5′-6′
>
> 5′ for the evil of a migratory bird, for the evil of a *pašānu*-bird, [for the evil of a …-bird],
>
> 6′ for the evil of an owl, for the evil of a …-bird

The owl is mentioned here in 6′ and 19′. In another univeral namburbi text the head of a *pašānu*-bird is mixed with oil for ritually anointing a house (*qaqqad*(sag.du) *pa-šá-na*^{mušen}; von Weiher, *Uruk* 2 18: 11; ⌜*qaqqad*(sag)^{1} *p*[*a*]-⌜*šá-ni*$^{mušen?}$⌝: LKA 115 = Maul, *Namburbi*, 503: r. 1′ (dupl.)).

23′ Collation supports [*ki*]*n*. The identity of *ḫusāru*-stone is uncertain. It is attested in Old Assyrian Kültepe texts and was the material for a personal seal, a cup and inlay work (AHw, 360b *s.v. ḫusārum*; CAD Ḫ, 257 *s.v. ḫusāru*; Michel, *Innāya*, 169–170). The stone was less valuable if spotted with white or discoloured (von Soden, NABU 1991/54).

Ewe Should Be So Lucky:
Extispicy Reports and Everyday Life*

Seth Richardson — New York

Reading divine communications in the marks on fresh sheep livers seems, to our minds, an undeniably visceral practice — yet studies of Mesopotamian omen compendia, models, and reports have tended to concentrate on the decidedly drier aspects of technical procedure and forensic lexicography. Certainly, without these works little further study would ever have been possible; but the opacity of the secondary literature has invited few to treat with or add to it in other ways, except for a few forays into the realm of experimentalism.[1] This prompted Bottéro some years ago to opine that, while the practice of Mesopotamian divination marked nothing less than the "invention … of the scientific spirit," the few Assyriologists who work on its texts "behave like Talmudists."[2] As scholars have more recently approached extispical texts (especially the compendia) as part of this scientific tradition, I would like to present this short contribution in order to make some points about divination reports as pragmatic documents with social and economic dimensions beyond their primary magico-scientific function. The liver-readings below share a nearly unique feature: they can all be clearly situated within the context of specific agents and events, illustrating the position of ritual in everyday Babylonian affairs.

Text 1 (BM 97919, 1902–10–11,973) is a fragment which has unfortunately lost its introductory and closing statements (including the name of the client),[3] as well as virtually all of its date formula. Nevertheless, it is highly unlikely that its presence in this British Museum collection is an accident: among the 1,106 tablets of the 1902–10–11 collection are almost fifty unpublished business documents belonging to the diviners Rīš-Marduk and

* The texts here are published by the kind permission of the Trustees of the British Museum, but were found in the first instance as a direct result of C.B.F. Walker's willingness to allow myself and other students broad-ranging access to the collections of the Department of Western Asiatic Antiquities (now Ancient Near East). It is thus a happy pleasure to acknowledge his help with our researches by dedicating these results to him. I am also grateful to Bede Sainsbury for his attention to this manuscript.

The following abbreviations are used: Aṣ: Ammiṣaduqa, Sd: Samsuditana, Si: Samsuiluna.

1 Temple (1982): 19: "I have been fortunate to know the owner of a small private abattoir…"

2 Bottéro (1992): 126, 136–137; similarly Biggs (1969): 159.

3 The names of clients are, withall, rare in the reports, and we are lucky that Texts 2, 3, and 4 here preserve them. Jeyes (1989): 36 notes that "in the compendia the client is, in most cases, the king."

Sîn-nādin-šumi,[4] as well as nine of the nineteen Old Babylonian omen compendia published by Jeyes (1989).[5] The fragmentary date formula in line 2′′ here suggests a restoration of [RN lugal].ᵀe¹, and is thus more likely to be a late Old Babylonian year-name. By collection, by subject matter, and probably by date, the fragment was likely produced by the diviners who, in their business documents, show that they were not in the business of sheep-liver divination strictly out of scientific interest.

Towards the end of the reign of Ammiṣaduqa, the two diviners routinely loaned silver and barley to various persons for the purchase of (and repayment in) ritual sheep.[6] By the early years of Samsuditana they were doing so under the explicit aegis of supplying cult food for Šamaš (*ana* šuku ᵈUTU / *ana* ᵈUTU *bēl* é.babbar-*rī*), ostensibly in satisfaction of duties charged by the palace (*pīḫātu* é.gal *ippal*). In most instances, the precise value of the sheep is not given in these texts (obscured by the unnumbered plural *ana* šám udu.níta.ḫá).[7] Yet, while most texts record loans running up to values no larger than 11 gín of silver or so, one text in particular (BM 97112, dated Aṣ 17+d[8]) appears to level the accusation that Sîn-nādin-šumi had absconded with (or at least failed to return) in excess of 1,500

4 Rīš-Marduk bears both the professional designation máš.šu.gíd.gíd and occasionally the title ugula máš.šu.gíd.gíd, while Sîn-nādin-šumi, son of Šamaš-bani, appears with only the former designation. Also numbered among texts of this archive are those of Sîn-nādin-šumi's daughter, Amat-Šamaš, a lukur ᵈUTU. The archive spans the years Ammiṣaduqa 10 through Samsuditana 21, a period of three decades; the analysis of this archive will form a chapter of my forthcoming dissertation, as will the Abdanu-family archive discussed below.

5 Nos. 1, 8, 9, and 11–16. It is further no accident that these are precisely the texts which Jeyes (1989) assigned to the time of Ammiṣaduqa, rather than the earlier texts (assigned by her to the time of Samsuiluna, pp. 4–5), which derived from other collections. The northern Babylonian provenance of the texts she posits is undeniable, but their assignment to Sippar proper is probably not tenable. The internal evidence of the diviners' archive suggests a site between Sippar and Babylon, perhaps Kullizu (uru.šà.gud^{ki}, not šà.ga, as RGTC 3: 216) or other small site. In this respect, it is significant that much of the rest of the late Old Babylonian material in the 1902–10–11 collection, assigned by van Soldt to Sippar (Introduction, AbB XII) seems to have little overlap with the names found in the diviners' archive. A third (undated) omen report from this collection, BM 97398, escaped my attention until too late to be included here (see Jeyes (1989): 187, n. 6).

6 In at least ten instances in this archive, the sheep are termed udu.níta.ḫá *ma-i-ša-a* / *ma-i-šu-ú* / *ma-i-ši-a*. This little-attested descriptor is only known from Middle Assyrian texts, given by CAD M/1 116, *s.v. ma'išu*, as "a breed of sheep"; similarly, AHw, 586 as "eine Schafrasse," noting especially the appearance of *ma'išu* beside *gukkallu* (cited for KAJ 190), and the common sacrificial use of the latter type. Note, for instance, *s.v. gukkallu*, (also, CAD G 126f., "a breed of sheep"), the commentary regarding a Middle Assyrian substitution of gukkal.sizkur for udu.sizkur.

7 BM 97592 and 97493, both dated Sd 03, give the value of a single sheep as 0.0.3 še and 2 gín kù.babbar, respectively. As these transactions probably intend to legally shield other, possibly pre-existing debts, it is unlikely that either is to be understood as the actual price of a sheep.

8 The place of the year-formula Ammiṣaduqa 17+d has not been located in late Old Babylonian chronologies (see Pientka (1998): 125, and Horsnell (1999) vol. 1: 87–91, and vol. 2: 351f.); the context of this document in the archive lends weight to Horsnell's conjecture that Aṣ 17+d is identical with Aṣ 19.

sheep and other goods probably belonging to the crown.[9] Clearly these men were operating their franchise on quite a large scale, with connections to both the crown and the Šamaš temple,[10] and are likely to have been using the cult economy as a shelter against a possible *mīšarum* for assets likely stolen from the crown in the first place.

It was the diviners' ambivalent relationship to both these institutions — legitimized *via* the practice of divination — that allowed their private interests to flourish. On the one hand, it is likely that the diviners were using the cult economy as a shelter against a real or anticipated *mīšarum* during the transition-period between the reigns of Ammiṣaduqa and Samsuditana, for assets likely stolen from the crown in the first place. Most of the cult-sheep loans take place during precisely these few years, and we must take note of the fact (if the Edict of Ammiṣaduqa may stand as representative of Old Babylonian royal debt-remissions)[11] that a *mīšarum* would have no authority to remit loans issued under temple authority. Moving between these two spheres, the diviners thus practiced as much *Tempel-* as *Palastgeschäfte*.

On the other hand, we find that divination was precisely the integral ideological component that enabled this nimble maneuvering. It is not surprising *per se* to find that these men acted as moneylenders under the guise of ritual titles;[12] but notable that their actual *practice* of divination, evidenced by these reports, makes clear that the inseparability of that role and their authority. The setting of divination-rituals and cult administration in offertory contexts to Šamaš, for one thing, suggests a syncretism of divination and temple-based religion that we may often suspect, but can rarely demonstrate in practice.[13] Such formal syncretisms in turn suggest the interests of multiple parties: if the archive does, in fact, derive from a military settlement in the countryside, we must take note that the ritual center established within it was at a location remote from the urban temples. The elaboration of formal cult in ex-urban garrison towns went hand-in-hand with their burgeoning economic, military and political power.

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9 This text, which is fragmentary, appears to charge the diviner with having transported [… l]im 550 usduḫa into his fortified city (*alim* ki.gub-*šu-ú*), which was established on the ri.bal Sîn-nādin-šumi. In this respect one is reminded of Jeyes' (1989): 22 analysis of singular references to the person of the diviner in apodictic constructions, from which she concluded: "he is closely associated with the army and in a position to take booty; he can be stationed in the fortified outposts of the country…"

10 Despite the reservations expressed above about the provenance of the archive, it is a virtual certainty that references to the é.babbar and the é ^{d}UTU nevertheless refer to the Ebabbar of Sippar.

11 Kraus (1984), *passim*, but note especially the absence of references to temple assets and agents in either the edicts of Samsuiluna or Ammiṣaduqa, pp. 154–157, 168–183. Such edicts, I argue in my dissertation, had jurisdiction over the spheres of crown and private persons and properties only.

12 Though note the archive treated by Fleming (2000), ch. 2, esp. 26–35, "The Diviner Who Does Not Divine," in which the practice of divination is a virtual formality.

13 There are few explicit references to Old Babylonian divination in temple contexts, the special relationship between *bārûm* and Šamaš notwithstanding: note Jeyes (1989): 192, n. 66 (re: YOS X 1), an extispicy performed in the Šamaš temple; and Goetze (1948): 78, n. to line 10. Jeyes (1989): 15ff., understood the diviner as either an independent actor or agent of the palace, not the temple (contra Pientka (1998): 595–597), classifying the máš.šu.gíd.gíd as "Tempelpersonal").

In Text 2 (BM 97433, from the same 1902–10–11 collection, No. 487), dated Aṣ 13, we are lucky to have the names of the clients preserved, Ilšu-ibnišu and Beltani.[14] Unfortunately, no specific information is given describing the occasion for the omen reading, and the personal names are among the most common in late Old Babylonian onomastica. However, we should take into account the thirty-odd texts of Ilšu-ibni(šu), son of Qaqqadu, PA.PA (*ša*) erén *Šarrum-laba*^{ki},[15] also in the 1902–10–11 collection, dating to the same years; or the Beltani who appears in BM 97553[16] from that collection, and who is almost certainly to be identified as the sister of the Sîn-nādin-šumi under discussion here. It is probably further no accident that the same Ilšu-ibnišu is also found in BM 97553, dated two years following the extispical reading, which records his delivery of silver and a garment as part-offering in order to assume the status of Beltani's heir.[17] The favorable[18] extispical reading in Aṣ 13 was, it thus seems, a precondition for the negotiation of a contract for the association of the two families (and, not coincidentally, the two archives?) by inheritance, in process two years afterwards. This proposition is strengthened by the very disproportion of compendia to reports within the 1902–10–11 collection: clients kept reports, not diviners, and it is likely that this report in particular was kept here (and perhaps Text 1 as well) only because the reading was for a member of the family.

It is probable that Text 3 (BM 26594 (98–5–14, 412), dated Aṣ 11/05/10) belonged to the archive of the client: the Galdani who is the beneficiary of this favorable report (ll. 15–16) is likely none other than one of the sons of a Sutaean family living in Sippar during the middle years of Ammiṣaduqa's reign. Galdanu (occasionally: ^{lú}*su-ti*), son of Abdanu, appears in at least nine unpublished tablets from the 98–5–14 collection,[19] and the family archive can be supplemented by at least four more tablets documenting the activites of his brother, Alkû.[20] Despite this body of information, it is difficult to assert any

14 On the restoration of the latter name here, see the note to Text 2, l. 3.

15 Evidence internal to this man's archive, however, suggests a provenance much closer to Sippar.

16 BM 97553, Aṣ 15/08/11: (obv.) [... g]ín kù.babbar / [1$^{?}$ túg.*ṣ*]*u-ba-tum* / šà *te-eq-ru-ba-at ap-lu-*^{r}*tim*^{1} / *ša* ìl-*šu-ib-ni* dumu *qà-aq*^{r}*-qá-di* / (5) *a-na be-el-ta-ni* lukur ^{d}UTU / dumu.munus ^{d}UTU-*ba-ni* / *id-di-nu* / (rev.) igi *e-ṭél-pi*$_4$-^{d}AMAR.UTU sanga ^{d}AMAR.UTU / igi *ša-al-lur-rum* ^{r}dumu.é^{1}.dub.ba.a / (10) iti apin.du$_8$.a u$_4$ 11.kam / mu *am-mi-ṣa-du-qá* lugal.e / (u.e.) ^{r}alan.a.ni^{1} šu.silim.ma / ab.sá.sá.e.dè^{l}.a.

17 The noun in line 3 of BM 97553 is not *teqrībatum* (for *taqrībatum*), "Eskorte," as in AbB X 67: 6, but, in the construct a by-form of, *teqribtu* (*for taqribtu*), "Darbringung" (both AHw 1324a, → *qerēbu*). This reading has no parallels known to me from Old Babylonian family law, but it is difficult to imagine any other context for *teqrubāt aplūtim*.

18 In Text 2, note especially the propitious signs in lines 5–6 and (most conclusively) 18.

19 The texts belonging to Galdanu include (in date order): BM 26351 (Aṣ 2), 26350 (Aṣ 4), 26317 (Aṣ 7), 26778, 26349, 26312 (Aṣ 10), 26345 (Aṣ 10?), 26332 (Aṣ 12), and 26324 (probably Aṣ?).

20 Alkû, son of Abdanu, can be found in the 98–5–14 collection in BM 26294 (Aṣ 14); a second unpublished tablet from this collection, BM 26296 (Aṣ 13), also sees his appearance as a witness in broken context. From other collections, the same Alkû also appears in: BM 13255 (Aṣ 12, 96–3–28 collection, publ. Anbar (1975): 112f.); BM 92588 (Aṣ 10, Bu. 88–5–12 collection, publ. CT 45 59, where he is designated *su-tu-û*); and PBS 7 96 (a letter), in broken context. It is possible, gaven the rarity of the name, that the Kurraḫu dumu Alkû who appears in BM 96955, col. III: 5 (a lengthy, if fragmentary and undated, ration list enumerating quantities of grain and silver to a variety of officials, professionals and people designated erén *su-tu-û*) is also a member of this family.

clear interpretation of the divinatory report: among the seven dated documents in which Galdanu acts as a principal, the last occurs five months prior to Text 3, in which he appears singularly as debtor rather than creditor.[21] Alkû's activities, meantime, are restricted to time periods and contexts which do not seem likely to be connected to the divination. One possibility does present itself in the form of the unpublished Sippar text BM 78447 (Bu. 88–5–12,352), the rental of a boat by two men, dated Aṣ 11/05/17,[22] a week after the liver reading and within the three-week period of time it specifies (Aṣ 11/05/10–11/06/02).[23] Our attention must be drawn to the *ištu … adi* phrase of Text 3 (ll. 3–4) with respect to the introductory statement, which specifies that the reading is performed *ana epēš ṣibûtim*, for a business trip or enterprise. BM 78447 cannot be shown to have any definitive links to the Galdanu-Alkû archive; but two possible prosopographical matches[24] may support the conjecture that the reading was undertaken in connection with an upcoming boat journey. Finally, we must make especial note of the unusual circumstances in which Galdanu's name is last known to us, from a document dated thirteen months after the expiration of the ominous period cited in Text 3. BM 26332 (98–5–14, 150, dated Aṣ 12/07/02) is an account of a distribution of more than 14.0.0 še.gur, to more than a dozen ⌜PN's,[25] by his

21 In BM 26312 (Aṣ 10/12/08), Galdanu borrows silver from Utul-Ištar, the famous *abi ṣābim*; note especially here the presence of an Ibni-Šamaš, máš.šu.gíd.gíd, as a witness. It must be held as a distinct possibility that some text addressing the probable cause for the extispical reading must await the full cataloguing of the 98–5–14 collection, to appear as CBT III; but note Galdanu's administrative role in BM 26332, discussed below.

22 (obv.) 1 má.[x … x] / má ìr-*ki-nu-*⌜*nu*⌝ dumu ⌜*ip*-x-x⌝ / ki ìr-*ki-nu-nu* lú.⌜x.x⌝ / ^{m}*a-ad-da-a* dumu ⌜*be-el-šu*⌝*-nu* / (5.) *ù* ^{d}EN.ZU-⌜šeš-*i*⌝*-din-nam* dumu ^{d}E[N.ZU]-*i-din-nam* / *iš-tu* ⌜iti diri⌝.še.gur$_{10}$.ku$_5$ [x …] / *a-na* kar-zimbir^{ki} / (l.e.) *a-na* 2.0.0 še.⌜gur⌝ […] / in.ḫun / (10.) igi ⌜*a-wi-il*⌝-iš$_8$.tár dumu *be-lí*-[x …] / ⌜igi *šu-mu-um-li*⌝*-ib-ši* dumu *ib-ni-*^{d}UTU / […].dub.⌜ba⌝.a / iti ne.ne.gar u$_4$ 17.kam / (u.e.) mu *am-mi*-[…]-*qá* lugal.e / (15.) ⌜bàd⌝.*a*[*m*-…-*q*]*á*.

23 The unusual specification of a period of days in Text 3 begs the question of the extent to which haruspicy and extispicy were considered to intersect. Goetze (1957): 94f., has noted that the introductory statements of Old Babylonian reports might typically cite a purpose, a god invoked, or some formal ritual aspect of the reading (whether as a prayer, gift, or for the *lipit qātim* ceremony); but never for any especial day or period of time. This is mildly surprising, as so many reports are dutifully dated. Note in this connection then, Goetze (1957), footnotes 23 (a reading which specifies the month of performance); 30 (a report which specifies that the reading was performed two days prior to the drafting of the document); and 37 (a Kassite-period reading for a man's boat journey to Emar, which we are safe to assume would have covered a period of more than one day). In this last case, however, we note that the document is entirely undated, and thus the reading seems specific to the activity, not the time during which the activity took place. See also footnote 30, below, re: VAT 13158: 2, which can clearly be read *ana šulum* mu 1.kam.

24 Interestingly, both of these clues possibly linking the boat rental to the Galdanu archive are to be found in the same text, BM 26350 (Aṣ 04), a loan of silver *ana usātim* by Galdanu to one Ardum, má.laḫ$_5$ (perhaps a hypocoristic form for the unusual name Warad-Kinunu, the owner of the boat in BM 78447?). BM 26350 is witnessed by a Šumum-libši dub.sar who may be identical to the witness in the boat rental document. This conjecture would require confirmation from some independent source, certifying that a Šumum-libši dub.sar/dumu.é.dub.ba.a was the son of Ibni-Šamaš; no such text is known to me.

25 Many of the names here seem to be of Amorite derivation (*e.g.* mí.*ia-di-da-tum*, mí.*ia-am-ti-nu*), but note also mí.*gu-ti-tum* and mí.*i-si-ni-tum*.

daughter Sa'ilatum: *qá-ti* šuku é *ša sa-i-la-tum* / [d]dumu[1] *ga-al-da-nu ú-ša-am-ḫi-ru*. The institutional and administrative tenor of the document is unmistakable: Galdanu's daughter was a powerful and important person whose name suggests an authority in part derived from the practice of divination.[26]

Text 4 (BM 130838, 1950–7–22,5) occupies a much less ambiguous position: it almost certainly comes from the neighborhood of Babylon and, with the exception of one or two other tablets,[27] it is the latest-known document bearing a date-formula of that city's First Dynasty, Sd 26/07/01. In fact, of the sixteen published documents dating to the last three known years of the reign of Samsuditana (including Text 4),[28] we must take note of the presence among them of no fewer than four extispical readings.[29] Of these, however, only Text 4 provides the name of the client, one Erībam-Nannaja, and can thus be connected with any confidence to the events of the day. Or perhaps to the events of the day before: VS 22 77 is dated Sd 26/06/30, and accounts for grain moved into the city of Babylon (*ša ana* ká.dingir.ra[ki] *illiku*) and disbursed to recipients by (gìr) three men—and one of those men was an Erībam-Nannaja (ll. 4–5, 9–10, 13). The last distribution listed under his name was made *ana* máš.šu.gíd.gíd (l.11).[30] The two texts, one in London, one

26 Sa'ilatum is previously known from the published texts TIM 4 53 and CT 8 10a, dated Aṣ 15/01/01 and 11, respectively. Harris (1975): 103f. noted the unusual authority and the "West Semitic names of both father and son" (subsequently clarified by the TIM 4 document as a daughter, rather than a son), as Sa'ilatum authorizes the lease of a field for an *abi ṣābi* in CT 8 10a. The authority of a female Sutaean over no less a person than the well-known Utul-Ištar *abi ṣābi* must deserve some attention: it is my suspicion that *sā'iltum* is a coincidence of personal and professional names → *sā'iltum*, "female diviner." The vocalic orthography *ša-i-la-* is well-attested in OB, CAD Š/1 109f.; the sibilant shift š→s would, admittedly, be remarkable, but note Gelb (1980): 348 *sa-i-la-tum* beside *ša-il-tum*; and GAG §30e, perhaps specific to the known Sutaean ethnicity in this case. Despite Yoffee's (1977): 26 assertion that "there is no indication that [the field lease CT 8 10a was] part of Utul-Ištar's official functions," further research may reveal that that text and BM 26332 represent separate aspects of another institutional connection between divination and the military establishment in the Late Old Babylonian period. The military connection of the Abdanu family was noted by Harris (1976): 147.

27 VS 22 55, a loan of silver *ana* šám *idê*, is dated to Month 10 of the same year, but it is cancelled; the other document is the last date-list itself, A 7754 (= "Date-list N," Horsnell (1999): 197–200, 272–275) which, in reserving its last lines for traces of further entries, perhaps postdates VS 22 55 and Text 4.

28 The texts in question can be found listed by Pientka (1998): 142f.. For the sake of brevity, I herein refer to the years she lists as Sd 24/25, 25/26, and 26/27, as Sd 24, 25, and 26, respectively.

29 These include: Goetze (1957) No. 9 (= MLC 2255, Sd 24/03/20); Klengel (1984), No. 10 (= VAT 13158, Sd 25/03/13); Goetze (1957), No. 8 (= YBC 11056, Sd 25/05/06); and the present Text 4. It was Pientka (1998): 142 n. 743, who first recognized that VAT 13158 was not, as published, a "Wirtschaftsnotiz," but rather a "Leberschauomenstext," correcting also the reading of the date from Sd 02 to "Jahr Sd 25/26."

30 The reverse of VS 22 77 is broken, and any subscript alluding to the institutional context of the document thus lost, although such an origin seems likely: the last visible line prior to the date offers the fragmentary "še šuku," and among the recipients are groups of persons, including lú.ḫun.gá and lú.*kaššû*. The surviving portion of the text is divided into two parts: first, a seven-line account of the grain brought into Babylon (total: 1,956 sìla še); second, some 23 lines recording small distributions of flour (visible total: 251 sìla).

in Berlin, are together the last known completed transactions prior to the onset of as much as two centuries of historical darkness following the end of the Old Babylonian period.

Among these sixteen documents from the last three years of Samsuditana another coincidence must be noted: three loans of silver for journeys (presumably from Babylon) up the Euphrates.[31] While loans for river trips were not, in themselves, unusual, it must be noted, with reference to the clear interrelationship of Text 4 and VS 22 77, that the concentration of these expensive river excursions[32] might profitably be understood in the context of an increased difficulty in the normal movement of people and goods through the countryside of northern Babylonia in the final years of the state; and/or a possibly aggravated need for food in the capital for those same reasons. Text 4 and VS 22 77 seem to suggest together that obstacles to the movement of personnel and resources outside of Babylon proper were of enough concern to warrant — perhaps to require — extispical information. This interpretation is consistent with the probable increased militarization of the countryside in northern Babylonia in the late Old Babylonian period.

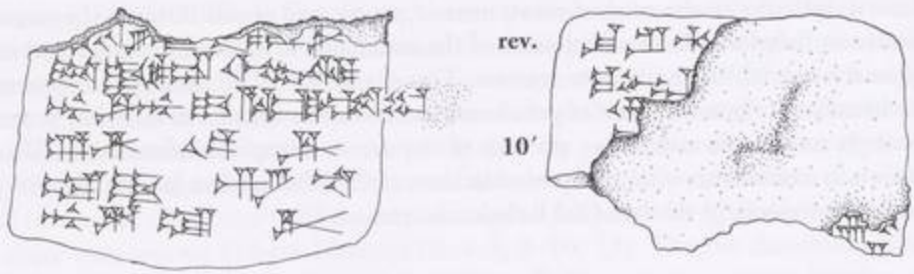
31 These include: VS 22 35 (Sd 25/10/16); 39 (Sd 25/10/15); and 40 (Sd 25/09/[ ]). Perhaps to be added to this list is Klengel (1984), No. 11 (= VAT 13201, Sd [ ]/02/[ ]), which is explicitly *ana* kaskal zimbir^{ki}, but lacks a full date formula; and Walker (1978), Text F (= BM 136798), which is dated Sd 26, and features Lipit-Ištar as creditor (the principal in VS 22 35: 39–40), but lacks a statement regarding the purpose of the loan.

32 Note that VS 22 35: 39–40 are dated within no more than six weeks of each other, and together in all probability deal with in excess of 8 mana kù.babbar.

TEXTS

Nº 1: BM 97919 (1902–10–11,973) 42×30*×15 mm OB []/[]/08

Extispical report, fragmentary.



obv.	[… broken …] […]	[…]
1′	⌜uzu.*te-er-tum* ki.gub tuk⌝	[An] extispicy: it had a Station.
	i-na zag ki.gub⌝ *ši-lum na-di*	At the right of the Station, there was a hole.
	gír tuk gír zag *a-na* é.gal *iṭ-ṭú-*[*ul*]	It had a Path. The Path [on] the right faced the Palace.
	kal tuk silim tuk	It had a Strength. It had a Well-Being.
5′	zé zag gi.na	The gall bladder was firm at the right.
	gír gùb zé tuk	There was a Path at the left of the gall bladder.
rev.	šu.si máš […]	The Finger … the *ṣibtum* […]
	ku-bu-u[*š* …]	The Turban [of the lung …]
	⌜14⌝ […]	14 [convolutions of the intestines.]
10′	u[zu.*te-er-tum* …]	[*It was a … oracle …*]
	[… broken …]	[…]
1′′	[…] 8.kam	[… Day] 8
	[…].⌜e⌝	[Year: …]

Notes

This is the lower half of a round-type tablet which is also missing most of its reverse. The script is unusually large and somewhat clumsy.

2′ See Goetze (1957): No. 8: 7 for this translation.

3′ This feature of the Palace is relatively unusual in readings, cf. CAD E 60f., *s.v. ekallu* 4; and CAD N/2 126, *s.v. naṭālu* 5b.

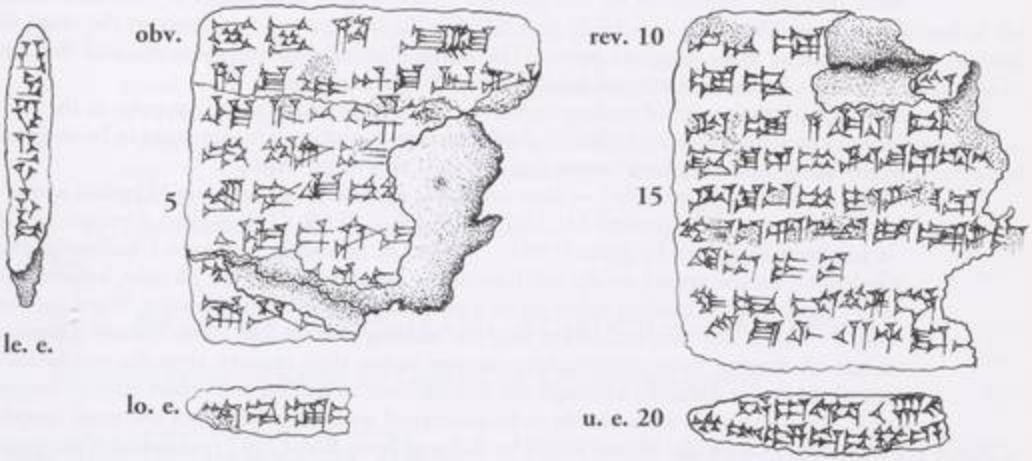
6′ See Goetze (1957): No. 6: 8.

7′ It is unusual for these features to be observed together, rather than, more typically, in sequence; but note Goetze (1957): No. 8: 16 *ṣibtum ki-ma ubānim*, "The *ṣibtum* was like a 'finger.'" The observations of the feature *kubuš ḫašîm* follows in sequence in that text as well.

10′ There are few instances in which any verbiage (save the date) follows the count of *tiranū*. Given the limited options, u[zu.*te-er-tum*], following Goetze (1957): 95, No. 17, seems the most likely restoration here.

Nº 2: BM 97433 (1902–10–11,487) 41*×43×17 mm Aṣ 13/10/17

Extispical report from ^{d}Sîn for Ilšu-ibnišu and Bel[tani].



obv.	siskur.siskur *a-na* ^{d}EN.ZU	Prayer-offering to Sîn,
	*a-na šu-*ˈ*lum*ˀ *ìl-šu-ib-ni-*ˈ*šu*ˀ	for the well-being of Ilšu-ibnišu
	ù ˈ*a-na*ˀ *be-*ˈ*el*ˀ*-t*[*a*ˀ*-ni* …]	and for Bel[*tani* …]
	uzu.*te-er-tum* […]	[An] extispicy: […]
5	*ru-uq-qí* du_8 […]	The hollow of the [wind]cleft […]
	ù pa-ni-š[*u* …]	and ˈits' tip […]
	g[ír x (x)] ˈx *si-ḫír*ˀ-[…]	ˈ*The Path* … the circumferenceˀ[*of the liver* …]
	kal ˈtuk xˀ […]	It had a Strength. [x …]
l.e.	ˈ*i-na*ˀ zag zé ˈxˀ […]	At the right of the gall bladder [x …]
rev.	ˈ*i-na*ˀ ˈzagˀ zé […]	At the right of the gall bladder […]
11	zé zag [… gi].na […]	The gall bladder was [firm] at the right […]
	ˈgùbˀ zé *a-*ˈ*di* silim.taˀ […]	The left of the gall bladder, as far ˈas the Well-Beingˀ […]
	zag šu.si duḫ gùb šu.si ˈ*ša*ˀ-*t*[*i-iq*]	The right of the Finger was split, the left of the Finger was [*rent*.]
	gùb šu.si duḫ *i-*ˈ*na* gùbˀ šu.si [*ši-lum na-dî*]	The left of the Finger was split, at the left of the Finger [*there was a hole*].
15	ˈx x x *-ri-iṭ*ˀ *i-na ṣe-er* [murub$_4$ …]	[…] Upon the [*middle*] surface of […] …
	ki.ta *i-*ˈ*šu*ˀ […]	was *above* […]
	mur zag *ta-li-il* […]	The lung was suspended at the right. […]
	šà *ša-lim* 12 *ti-ra-n*[*u* …]	The entrails were favorable. 12 intestinal [coils].
u.e.	iti ab.è <u$_4$> 17.k[am]	Month 10, <Day> 17,
20	mu *am-mi-ṣa-du-qá* lugal.e	Year Ammiṣaduqa 17.
le.e.	urudu.ˈkiˀ.lugal.gub ì.maḫ.ˈaˀ	

Notes

The tablet is round type, with a broken right edge.

2-3 We are fortunate in this, as in Texts 3 and 4, to have the names of the clients provided in the text; these instances are relatively rare.

3 With the signs *be-el-* quite clear, this is likely to be only one of a very few personal names from late Old Babylonian onomastica: Bellitim or Beltani. The former name, despite the more probable restoration on the grounds of spelling, is only borne by one individual (the son of Nakarum, CT 33 27 and BDHP 50) last attested very early in the reign of Ammiditana, some 48 years prior. The name forms Belessunu, Belšunu, and Beltum (CT 2 47: 3) must be rejected here for orthographic reasons.

4 Since the normal order of reading attends to the ki.gub and gír features prior to the *piṭir šārim* (which here appears in line 5), I assume that one or both readings are to be restored in the break following uzu *têrtum* [i.e., ki.gub and/or gír tuk].

5 The feature *ruqqi piṭir* [*šārim*] — here unusually expressed in a Sumero-Akkadian admixture, more typically expressed SAL.LA DU_8 IM (cf. CAD R 418b–419a *s.v. ruqqu* 3a.2′) — has been suggested by Jeyes (1989): 58f., to be an earlier synonym ("hollow of the windcleft") for the groove on the left lobe of the liver later called the *pû ṭābu*, believed by her to be an elliptic reading referring to a positive apodosis, "the Pleasing Word [of the God]." This is our first indication that the reading is favorable. The feature is almost exclusively known from compendious sources rather than reports, thus the reconstruction of the line is difficult: although the sole instance of ka.dùg in a report cites its length (gíd), the compendia seem chiefly to be concerned with whether or not the mark simply existed at all. A similar ellipsis might be deduced from BM 12287 (published Nougayrol (1969): 221f.), line 5 which reads zé *na-an-mu-ra-at*. Nougayrol translated, simply, "L'Amère était 'visible'"; but the meaning, as the gall bladder was commonly associated with the movement and fate of armies in the compendious literature (cf. Jeyes (1989): 62–64; and Starr (1983): 20, no. 18, (*in-na-ma-ar* → *amāru*) and 113), might better be given as "confrontation of the gall bladder." The noun *nanmurtu* ("a meeting, confrontation (of armies)," CAD N/1 259a) otherwise only appears in apodoses — in fact only in one-word apodoses. Thus, although it may be that this gall bladder was (not coincidentally) configured such that it literally confronted either itself or the aforementioned Well-Being by being bent in some manner, it seems that the reporter in this instance was not only noting an observed condition, but alluding by ellipsis to its associated apodosis. Such ellipses suggest the degree to which the authors of the reports were actually familiar with their interpretation, and that the authors of reports were, most likely, the interpreters as well.

6 The sole known context for *pānu* in extispical literature refers to the tip or front of a "Weapon" (giš.tukul), a fortuitous mark which typically alludes to a type of groove (such as the *piṭir šārim*), Jeyes (1989): 82.

7 The gír, although adjacent, is in the wrong order unless the reading has to do with the physical proximity of the *piṭir šārim* to the *padānum*; the partial signs ⌜*si-ḫír*⌝- suggest a reading of *siḫirti amūti*.

9–10 Although the critical portions of these lines are entirely missing, note the parallel construction of Text 4, ll. 6–8, below, at which point the marks of a Weapon are observed; see also Goetze (1957): No. 8: 9 for a similar construction beginning *martum imittam*; and No. 6: 5 and 7.

11 cf. Text 3, line 8, below.

12 The appearance of a feature stretching from the gall bladder as far as the šulum calls to mind Jeyes' (1989): 61f. observations about the feature called the *padān imitti martim*, which (as it appears on the right), is a positive reading. One might assume that such a feature to the left is, thus, a bad sign. It is possible, however, that reading to be restored here is *a-di* ⌜2⌝ *ša*-[*ti-iq*], similar to Goetze (1957): No. 8: 11: "The left of the finger was rent twice." This reading would also be a negative sign, Jeyes (1989): 149, n. 4. The reading as it appears in line 13 of this text, however, makes such a restoration unlikely.

13–14 The semantic difference between *paṭer* and *šatiq* is not entirely clear, and it may be here for the first time that the terms are specifically adduced for the same feature in apposition. Goetze (1957) understood the former as a "fissure," or a kind of scoring (No. 3: 6, p. 97), while giving the latter as "rent" (No. 8: 11, p. 100). Jeyes (1989): 85 and 166, concurred where the splits of a *piṭrum* are cited as those "like a comb"; while *šatāqum*, p. 149, suggests something closer to actual damage than of an mark or sign.

14 The apperance of a hole (*šilum nadi*) is a likely restoration here; cf. Goetze (1957): Nos. 3, 7, 8, and 13.

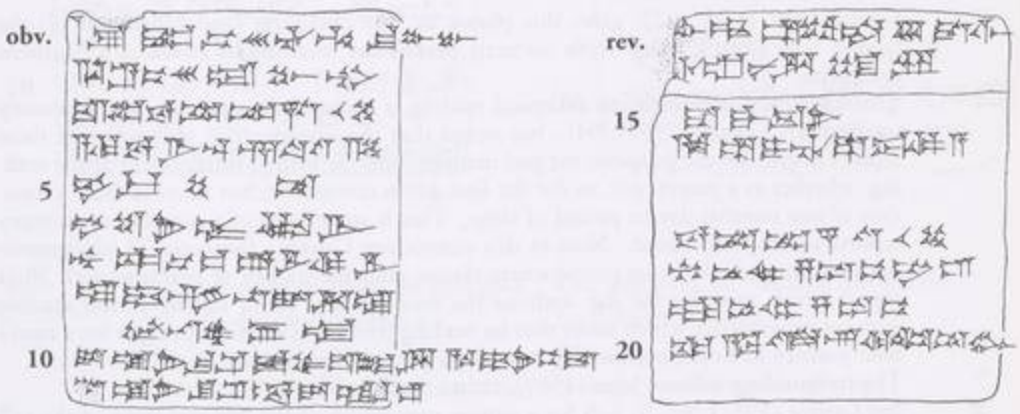
15 This fragmentary line is extremely hard to read, especially as it comes at the end of the text, at which point there ought to be few omina left to read, according to the conventional order of observations. The best restoration I can offer here is: ˹uzu.ellág *ma-ri-iṭ*˺, "the kidney was scratched."

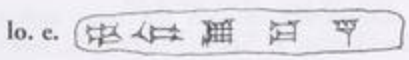
18 I prefer here Jeyes (1989): 78, šà udu.níta silim: "The entrails of the ram were favorable" to Goetze's (1957): No. 6: 12, šà *ša-lim*: "the heart was sound." See also Text 3 here, line 13, zag *ta-li-il* šà *ša-lim*.

19 The omission of the u_4 sign is unusual.

№ 3: BM 26594 (98–5–14,412) 42×45×20 mm Aṣ 11/05/10

Favorable extispical report for Galdani for a three-week period.





obv. 1 $sila_4$ *ne-pé-eš-ti* máš.šu.gíd.gíd
a-na e-pé-eš ṣi-bu-tim
iš-tu iti ne.ne.gar u_4 10.kam
a-di iti kin ^{d}INNIN.na u_4 2.kam
5 uzu *ep - še - et*
uzu *te-er-tum* ki.gub tuk
gír *ka-pí-iṣ* kal tuk silim tuk

zé zag gi.na i-na gùb zé

gìr *na-aḫ-sa-at*

One lamb for the ritual of the diviner,
for the (advisability of a) business enterprise,
from Month 5, Day 10,
to Month 6, Day 2,
flesh for the ritual.
Extispicy: It had a Station.
The Path was concave; it had a Strength; it had a Well-Being.
The gall bladder was firm at the right; [but] on the left of the gall bladder,
the Foot was shrunken.

10	*i-na ṣi-ir* šu.si egir mur *iš-tu* gùb ⌜*a-na*⌝ zag *er-bé-et*	The Plain of the Finger behind the lung, from left to right, (*was*) *four*;
	⌜*i*⌝*-na ṣi-ir* šu.si murub$_4$ *i-na* suḫuš ⌜šu⌝.si	the Plain of the Finger (at) the middle (was) at the base of the Finger,
l.e.	zag *ul-lu-ma* gar	it is set, thereon, at the right.
rev.	⌜mur⌝ zag *ta-li-il šà ša-lim*	The lung was suspended on the right, the heart was sound.
	[x *t*]*i-ra-nu* gùb *tu-ru*	[x] convolutions of the intestines, *bent* to the left.
15	*ša gal-da-ni*	For Galdani,
	a-na ta-i-ti-ša ba.silim.a	as far as the (oracular) message, it was favorable.
	iti ne.ne.gar u$_4$ 10.kam	Month 5, Day 10,
	mu *am-mi-ṣa-du-qá* lugal.e	Year Ammiṣaduqa 11.
	bàd.*am-mi-ṣa-du-qá*^{ki}	
20	ka íd.buranun^{ki}.na.ta bí.in.dù	

Notes

2 Goetze (1957): 94, n.23, gives this phrase as "for obtaining (and expression of) the (god's) wish"; but CAD Ṣ 169b correctly prefers the meaning of *ṣibûtu* as a "business enterprise."

3–4 This haruspical format for an extispical reading is perhaps unsurprising, but previously unattested. Goetze (1957): 94f., has noted that the introductory statements of these reports might cite the purpose, the god invoked, and the formal ritual aspect of the reading (whether as a prayer, gift, or for the *lipit qātim* ceremony); but never is there a mention of any especial day or period of time. This is something of a surprise, as so many reports are dutifully dated. Note in this connection Goetze's footnotes 23 (documenting a reading which, in its introductory clause, cites the month of performance); 30 (a report which specifies the day without the month); and 37 (a Kassite-period reading without provenience which states that its reading refers to the ominous signs for a man's boat journey to Emar, presumably covering a period of more than one day).

7 The terminology follows Jeyes (1989), rather than Goetze (1957).

8 See Goetze (1957) No. 9: 5–6 for a similar opposition of the left and right of the gall bladder.

9 "The 'foot' was shrunken." Goetze (1957) consistently emends the term *naḫṣat* ("shrunken") to *nasḫat* ("loose"), as in No. 6: 6 and No. 8: 9. Starr (1983): 65ff., however, understood the use of *naḫṣat* as part of a systematic opposition of *nasāḫu* to *alāku* to reflect a terminology of the recession and swelling, respectively of various features.

10-11 See Goetze (1957): No. 11: 14–15; but it is Jeyes' (1989): 66f. discussion of the Plains of the Finger to which we must refer. The flurry of locative terminology is, admittedly, confusing and must render the translation of these lines somewhat tentative.

11 An alternate reading for the end of this line might be parallel to Goetze (1957): No. 18: 16 *kasi*, "bound?"

12 The placement (*šakānu*) of features to one side is typical phraseology, cf. Goetze (1957): Nos. 6: 8 and 7: 6.

13 See also Text 2 lines 17–18.

14 CDA 401, *s.v. târu* 4, used to described observed features of the exta as "bent," here as a D-stem plural stative.

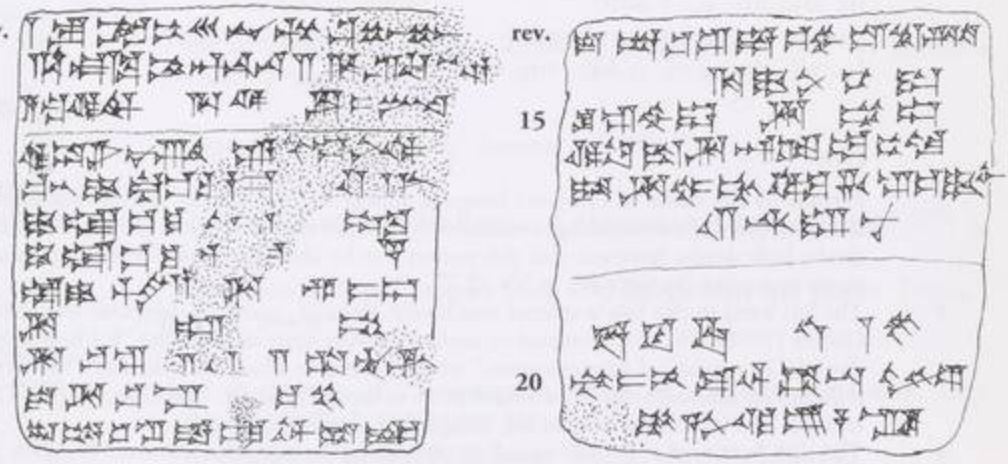
15 This person is almost certainly to be identified with Galdanu, lú.Sutû, son of Abdanu and brother of Alkû; the small business archive of this family will be treated in my forthcoming dissertation.

16 Cf. CDA 394, *s.v. ta'ittu*, "information, report" (→ *na'ādu* D, "to pay attention," thus a "notification"); Goetze (1957): 96 (esp. n. 42), emends such instances to *tam/wītum*, "message" on the strength of other readings specifying *ta-wi-ti/tum*.

19 The formula omits the ^{ki} sign.

N° 4: BM 130838 (1950–7–22,5) 52×56×19 mm Sd 26/07/01

Extispical report for Erībam-Nannaja.



obv.	1 udu *ne-pé-eš-ti* máš.˹šu.gíd.gíd˺	One sheep for the ritual of the diviner,
	a-na eri$_4$-ba-am-^{d}na-na-a	for Erībam-Nannaja,
	a-na ˹x x x *e*˺	for … […]
	a-la-ki-im a-na silim ˹šà.gi$_4$.guru$_6$˺	brought for a favorable *offering*.
	ki.gub tuk nu zi kal ˹x x *ni-di*˺	It had a station. No *peg*. The Strength […]
5	*šu-bat* zag ká.é.ˀgal x˺ ˹silim tuk˺	The right Quarter of the Palace Gate … It had a Well-Being.
	zag zé giš.tukul [x x] gub.ba	At the right of the gall bladder, a Weapon […] standing.
	zag zé giš.tukul ˹*maškán*˺ gar	At the right of the gall bladder, there was a Weapon *in the normal position*.
	zé zag gi.ˀa gùb˺ *la* tab.ba	The gall bladder on the right was firm, the left *was not its equal*.
	gùb ˹zé˺ duḫ	The left of the gall bladder was split.
10	gùb šu.si ˹*a-di*˺ 2 *ša-ti-iq*	The left of the Finger was rent twice.
	i-na gùb šu.si giš.ˀḫur˺	At the left of the Finger, a design.
	i-na egir šu.si murub$_4$ ˹giš˺.tukul ki.ta *et-qu*	At the back of the middle of the Finger a Weapon passed below.

rev.	*i-na* egir šu.si murub$_4$ giš.ḫur *iš-ṭe$_4$-ri-tú*	At the back of the middle of the Finger a design was inscribed;
	a-na zag *er-bé-et*	to the right, there were four.
15	šu.si mur murub$_4$ gùb duḫ^{at}	The middle finger of the lung was split at the left.
	ki-di-it gùb *ḫal^{l}-qà-at* ga.ríg	The outer surface of the left: missing *the comb*.
	i-na gùb mur gú *ki-ma ḫa-si-is* zà.^{r}mí^{1}	At the left of the lung, a neck like the Ear of a harp.
	12 *ti-ra-nu*	Twelve intestinal coils.
	iti du$_6$.kù^{l} u$_4$ 1.kam	Month 7, Day 1,
20	mu *sa-am-su-di-ta-na* lugal.e^{l}	Year Samsuditana *26/27*.
	[... x^{2}] alan.a.ni ù^{l}.luḫ níg.si.sá^{l}	

Notes

2 Persons by the name of Erīb(am)-Nannaja appear in a number of documents dated to the latest years of Ammiṣaduqa and Samsuditana (see esp. cf. Pientka (1998): 184); there can be little doubt, however, that this person is to be identified with the man of the same name appearing the next day in VS 22 77.

3 The last word in this line is offered tentatively; šà.gi/gi$_4$.guru$_6$ (= *šagigurû*) was cited by Goetze (1948): 75, as it appeared in animal delivery texts as (literally) "for heartening," though "in a technical religious sense," which I presume alludes to offertory. This is nevertheless an unusual term to be found in an extispical reading. See Goetze's (1957): 95 remarks on No. 18, concerning the bringing of an offering or gift.

4 The sign here read zi is understood to correspond to Akkadian *sikkatum* (CAD S 249, mng. A); but note also that the sign is employed as an "Akkadogram" for the feature máš (=*ṣibtu* A, CAD Ṣ 161b), in Hittite extispicy. The sign as copied in indistinct, and might alternately be read as gi (nu gi = "abnormal" or "not right"?). The end of this line is not intelligible to me.

5 The missing sign is perhaps to be restored ^{r}uru^{1}. A writing ká.é.gal uru would lend support to Jeyes' thesis, (1978): 212f. and (1989): 60, that the ká.é.gal is synonymous with the ká.gal (uru). Her characterization of the "erroneous writing" ká.gal ^{r}é.gal^{1} uru$^{a\text{-}lim}$ in No. 16 (1989): 60 is perhaps properly expressed in our Text No. 4. Note that the 'Quarter to the Right' is to be found proximate to the Path (gír) and the Palace Gate, Jeyes (1989): 57ff. Goetze (1957) typically rendered the *šulmum* as a "duct"; this is not necessarily at odds with Jeyes' (1989) literalist reading 'Well-Being.'

6 The compendious reading of giš.tukul ... gub-*iz* (→ *izzuzu*) suggests the good omen of the appearance of weapons on the right side described by Jeyes (1989): 82.

7 For *maš-kán* (= maš.gán), see especially Jeyes (1989): 64.

8 Normally to be written gi.na, but this is acceptable as a stative form of *kânu*. tab.ba is here understood as *tū'amu*, a term used for parts of the liver in Neo-Babylonian extispicy.

10 Jeyes (1989): 67 understands by this phrasing that there are "two splits," while Goetze (1957) gives "split in two," *passim*.

10–11 These lines parallel Goetze (1957): No. 8: 11–12; note, however, that in line 12, where Goetze reads "*i-na libbi(?)*," the copy (YBC 11056, p. 91) suggests more probably *i-na* gùb, "at the left."

16 The grammar here makes this reading awkward to say the least; but see CAD M/2 290f. *s.v. muṣṭu* c), esp. CT 30 29: 6, in which the comb features as a part of the lung.

21 The year name here, like VS 22 77 (note the similarity of sign-form for nì), omits the final verb.

BIBLIOGRAPHY

Anbar, Moshé
1975 "Textes de l'Époque Babylonienne Ancienne," RA 69, 109–136.

Biggs, Robert
1969 "*Qutnu, maṣraḫu* and Related Terms in Babylonian Extispicy," RA 63, 159–167.

Bottéro, Jean
1992 "Divination and the Scientific Spirit," in *Mesopotamia: Writing, Reasoning, and the Gods*. Chicago, 125–137.

Fleming, Daniel
2000 *Time at Emar: The Cultic Calendar and the Rituals from the Diviner's Archive*. Winona Lake.

Gelb, Ignace J.
1980 *Computer-Aided Analysis of Amorite* (AS 21). Chicago.

Goetze, Albrecht
1948 "Thirty Tablets from the Reigns of Abī-ešuḫ and Ammī-ditānā," JCS 2, 73–112.
1957 "Reports on Acts of Extispicy from Old Babylonian and Kassite Times," JCS 11, 89–105.

Harris, Rivkah
1975 *Ancient Sippar: A Demographic Study of an Old-Babylonian City (1894–1595 B.C.)* (PIHANS 36). Istanbul.
1976 "On Foreigners in Old Babylonian Sippar," RA 70, 145–152.

Horsnell, Malcolm J.A.
1999 *The Year-Names of the First Dynasty of Babylon*, vols. 1 and 2, McMaster University Press.

Jeyes, Ulla
1978 "The 'Palace Gate' of the Liver: A Study of Terminology and Methods in Babylonian Extispicy," JCS 30, 209–233.
1989 *Old Babylonian Extispicy: Omen Texts in the British Museum* (PIHANS 64). Istanbul.

Klengel, Horst.
1984 "Altbabylonische Texte aus Babylon," AoF 11, 92–109.

Kraus, F. R.
1984 *Königliche Verfügungen in Altbabylonischer Zeit* (Studia et Documenta XI). Leiden.

Nougayrol, Jean
1969 "Rapports Paléo-Babyloniens d'Haruspices," JCS 21 (Goetze FS), 219–235.

Pientka, Rosel
1998 *Die spätaltbabylonische Zeit. Abiešuḫ bis Samsuditana: Quellen, Jahresdaten, Geschichte* (Imgula 2). Münster.

Starr, Ivan
1977 "Extispicy Reports from the Old Babylonian and Sargonid Periods," in *Ancient Near Eastern Studies in Memory of J.J. Finkelstein*, Connecticut Academy of Arts and Sciences, Memoir 19, 201–207.
1983 *The Rituals of the Diviner* (Bibliotheca Mesopotamica 12). Malibu.

Temple, Robert
1982 "An Anatomical Verification of the Reading of a Term in Extispicy," JCS 34, 19–27.

Walker, C.B.F.
1978 "Texts and Fragments," JCS 30, 234–250.

Yoffee, Norman
1977 *The Economic Role of the Crown in the Old Babylonian Period* (Bibliotheca Mesopotamica 5). Malibu.

Bibliography

Anbar, Moshé
1975 "Textes de l'Époque Babylonienne Ancienne," RA 69, 109–136.

Biggs, Robert
1969 "*Qutnu, maṣraḫu* and Related Terms in Babylonian Extispicy," RA 63, 159–167.

Bottéro, Jean
1992 "Divination and the Scientific Spirit," in *Mesopotamia: Writing, Reasoning, and the Gods*. Chicago, 125–137.

Fleming, Daniel
2000 *Time at Emar: The Cultic Calendar and the Rituals from the Diviner's Archive*. Winona Lake.

Gelb, Ignace J.
1980 *Computer-Aided Analysis of Amorite* (AS 21). Chicago.

Goetze, Albrecht
1948 "Thirty Tablets from the Reigns of Abī-ešuḫ and Ammī-ditānā," JCS 2, 73–112.
1957 "Reports on Acts of Extispicy from Old Babylonian and Kassite Times," JCS 11, 89–105.

Harris, Rivkah
1975 *Ancient Sippar: A Demographic Study of an Old-Babylonian City (1894–1595 B.C.)* (PIHANS 36). Istanbul.
1976 "On Foreigners in Old Babylonian Sippar," RA 70, 145–152.

Horsnell, Malcolm J.A.
1999 *The Year-Names of the First Dynasty of Babylon*, vols. 1 and 2, McMaster University Press.

Jeyes, Ulla
1978 "The 'Palace Gate' of the Liver: A Study of Terminology and Methods in Babylonian Extispicy," JCS 30, 209–233.
1989 *Old Babylonian Extispicy: Omen Texts in the British Museum* (PIHANS 64). Istanbul.

Klengel, Horst.
1984 "Altbabylonische Texte aus Babylon," AoF 11, 92–109.

Kraus, F. R.
1984 *Königliche Verfügungen in Altbabylonischer Zeit* (Studia et Documenta XI). Leiden.

Nougayrol, Jean
1969 "Rapports Paléo-Babyloniens d'Haruspices," JCS 21 (Goetze FS), 219–235.

Pientka, Rosel
1998 *Die spätaltbabylonische Zeit. Abiešuḫ bis Samsuditana: Quellen, Jahresdaten, Geschichte* (Imgula 2). Münster.

theorem now named after him. Its original function is still the subject of great debate in the history of mathematics community (*e.g.*, Buck 1980; Friberg 1981). In the course of my recent work on the tablet, I went to Columbia to collate it and to attempt to identify its provenance. I discovered there a veritable goldmine of letters and documents, spanning the first third of the twentieth century, which not only answered my initial questions but provoked many more. The results of my research on Plimpton 322 have been published elsewhere (Robson 2001; 2002); here, I focus not on the tablet but its owner George Arthur Plimpton, his collaborator David Eugene Smith, and their various Assyriological correspondents including Hermann Hilprecht (who sheds interesting personal light on the controversy surrounding him in Philadelphia at the time) and Edgar J. Banks (who is still harking back to his expedition to Adab for the University of Chicago thirty years after its ignominious end) [Figure 1].

Back to the beginning: Hilprecht's books and Plimpton's letters, 1903–07

In 1903 Hermann Vollrath Hilprecht, newly promoted Clark Research Professor of Assyriology at the University of Pennsylvania in Philadelphia, published the monumental *Explorations in Bible Lands* (Hilprecht 1903). Hilprecht had commissioned essays on the nineteenth-century scholarship of Palestine, Egypt, Arabia, and Anatolia, but his own substantial contribution ran to some 600 of the 800 pages of the volume. He used fully half of it to describe the recent discovery of a 'temple library' in the ancient Babylonian city of Nippur by the Fourth Pennsylvania Expedition to Nippur under his direction in 1898–1900. This newly discovered temple library, he claimed, was parallel to, yet a thousand years older than, the famous library of King Aššurbanipal in Nineveh, dating to the seventh century BC, which had been discovered some 50 years previously and now formed the glorious core of the British Museum's cuneiform tablet collection. The Nippur library, Hilprecht hoped, would not only make his own name but secure the reputation of American scholarship in the race for interpretation and intellectual 'ownership' of the ancient Near East. Equally importantly, he was staking that claim for Philadelphia, his adoptive home, over Chicago, whose long-planned expedition to Babylonia was only just getting off the ground. That very same year its leader, Edgar J. Banks, had finally received a *firman* to excavate ancient Adab, by no means Chicago's first choice of site.

Amongst the key evidence for the temple library, Hilprecht felt, was "a complete set of multiplication tables," whose existence, "sometimes in several copies, speaks volumes for the height of that ancient civilization" (Hilprecht 1903: 531). He accurately described their very standardised contents, with multiplicands 1–20, 30, 40, and 50, and three consistent formats corresponding to Types A, C, and A′ of Neugebauer's definitive categorisation two decades later (*e.g.*, Neugebauer and Sachs 1945: 20). He listed 16 of the standard head numbers (we now know there were 40), but as the relative nature of the sexagesimal place value system had yet to be recognised he understandably interpreted two-place numbers such as 22 30 as integers, namely 1,350, not $22^{1}/_{2}$. Hilprecht does not appear to have come across tablets containing sequences of multiplication tables in descending order of head number, later dubbed 'combined' tables by Neugebauer (*e.g.*, Neugebauer and Sachs 1945: 24), for he understood the catch-line '1;12 (×) 1 (=) 1;12' at the end of a 1;15 times table to "indicat[e] that all the multiplication tablets from 720 to 750 (probably even to 780) were classified in the library as one series, known under the name 'Series 720×1.'"

Guaranteed Genuine Originals:

The Plimpton Collection and the Early History of Mathematical Assyriology

*Eleanor Robson — Oxford**

Prologue

It may seem odd to offer Christopher Walker a paper with no British Museum tablets in it — but how else is one to surprise him? Among Christopher's greatest contributions to the field are the very many texts he has not published himself but generously given to others to work on, myself included (Robson 1997; 1999). So in order to avoid presenting him with something he knows already, I discuss two other subjects close to his heart. By tracing the formation of the small collection which contains Plimpton 322, the most famous mathematical cuneiform tablet in the world (alas not in the British Museum but now held by Columbia University, New York), I aim not only to explore how the collection came to be, but also to examine attitudes to private collecting amongst early-twentieth-century museum professionals, and to reveal a little of the impact the first publication of mathematical cuneiform tablets made on the field of history of mathematics before the First World War. The article ends with an appendix listing the cuneiform tablets in Plimpton's collection, with copies of all his previously unpublished mathematical and school tablets.

Plimpton 322 has undoubtedly been the most debated and most celebrated pre-Classical mathematical artefact of the last fifty years. First published by Neugebauer and Sachs (1945: text A), this Old Babylonian cuneiform tablet shows incontrovertibly that the relationship between the sides of right triangles was systematically known in southern Mesopotamia over a millennium before Pythagoras was supposed to have proved the

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The tables, he surmised, served as aids to astronomical calculation, much as logarithmic tables did in his own day. This unprecedentedly detailed, and mostly remarkably acute, survey was accompanied by a photograph of the 6-times multiplication table CBS 3335 (Hilprecht 1903: 531; 1906: no. 2). It was the first time that Babylonian mathematics had been presented accessibly to the general public.

Hilprecht (1859–1925) was German by birth and like many of his generation had studied with Delitzsch in Leipzig, coming to the United States in 1886 (Foster 1999*b*; 2000). After a short stint lecturing in Egyptology at the University of Pennsylvania he was appointed to a professorship of Assyriology over the local candidate Morris Jastrow (Weschler 1999). Hilprecht participated in the university-affiliated first Babylonian Expedition to Nippur in 1888–89 and led the fourth in 1898–1900. Shortly after the death of his first wife in 1902 he married a rich local heiress, the widowed Sallie Crozer Robinson, thereby ensconcing himself in Philadelphia high society.

In 1903, then, Herman Hilprecht had reason to feel pleased with himself: he had acquired new status through his marriage, promotion, and publication, and the appointment of a new assistant in the person of his former student Albert Tobias Clay (Foster 1999*a*). His new book was reviewed in the major American papers[2] and attracted the attention of a wide public, avid for news of modern America's intellectual involvement in the recovery of one aspect of their distant cultural past. His own substantial contribution was reprinted the following year as *Excavations in Babylonia and Assyria* (Hilprecht 1904). He received many admiring notes and letters, from church groups, school teachers, and other interested individuals who wished to know more about the lost world he described, and in particular how to obtain examples or facsimiles of the cuneiform tablets whose photographs had adorned his book. Some of those letters are preserved in the University Museum archives; evidence of the work they generated for Hilprecht can also be found in a letter from him to William H. Furness, secretary to the Department of Archaeology:

> Several times this year questions have been asked with regard to casts of Babylonian objects — mostly having a biblical reference. Either the applicants (mostly schools) desire them as a gift or are ready to pay for them a moderate prize (*sic*). (HVH03)

Hilprecht asked for clarification about the conditions of presentation or sale, setting prices for such objects "as it is done in all the great museums," requesting permission to draw up a pre-printed price list.

Among his correspondents at this time was one George A. Plimpton, Esq., of New York City, who wrote to Hilprecht on 18 October 1904:

> In your excavations, have you ever found anything that was used by children in teaching them the letters of the alphabet or in teaching them numbers? I have a collection of school books illustrating the growth of education and I want to perfect it, especially in regard to the early nations, Nineveh, Babylon and Egypt. If you can put me on the track of anything of this sort, I shall be very much pleased. (GAP01)

2 For instance *The New York Times Saturday Review of Books and Art* carried a prominent and favourable review on 14 March 1903 (page 167), focussing especially on Hilprecht's inferences about scribal education at Nippur and concluding that Hilprecht "treats the whole subject as he should, in the light of a careful and competent archaeologist."

Hilprecht replied by referring to his Explorations and offering photographs of a 6-times multiplication table and "an exercise of the letter a" (HVH01).[3] This did not satisfy Plimpton, however, and he wrote again almost immediately, reiterating his request and his position more forcefully:

> I have illustrated the growth of education from the text-book standpoint; in other words, I have a library of perhaps 30 manuscripts on arithmetic and then the first arithmetic ever printed in each country, and so on down to the present time. Now, what I would like would be one of the exercise tables such as were used in Babylon or Nineveh, and it occurred to me that possibly you might be able to put me on the t[r]ack of where I could buy such a thing. Of course, if I cannot get an original, then I should like very much to have photographs of them. Professor David Eugene Smith of Columbia University is writing the history of my library and I should be glad to have the original material if possible. Eventually I intend the books for one of the libraries in this city. Possibly you know where I can purchase this sort of material.
>
> Some time when you are in the city I should be delighted to show you my collection. (GAP02)

Plimpton, then, was no ordinary inquirer: he was persistent, he knew what he wanted and had the means to get it. Almost exactly four years older than Hilprecht, Plimpton (1855–1936) had been a director of the highly successful New York publishers Ginn and Co. for over twenty years. Under his aegis the firm had begun to specialise in educational textbooks and had been conspicuously successful. Plimpton, as a result, was a very rich man looking for ways to spend some of his surplus wealth. He was involved in various forms of charitable giving (Plimpton 1993: 13), but had also become obsessed by collecting. Interested in Americana since he was a child in Massachusetts, he had later been led by his professional interests toward the history of the American textbook, broadening to early textbooks worldwide in the mid-1880s (Plimpton 1993: 51–67). His collaboration with David Eugene Smith (1860–1944) was sparked by a shared interest in books and collecting and had begun in earnest when Smith was appointed professor of mathematics at Teachers College of Columbia University in 1901 (Donoghue 1998: 361). Smith was not only a first-class mathematics educator, developing "the first genuinely professional course" for training secondary school mathematics teachers in the United States (Lewis 1999) and writing influentially on the subject (*e.g.*, Smith 1900). He was also a man of letters, with a degree in art and classical languages and a doctorate in art history. Smith soon encouraged Plimpton to narrow the focus of his hitherto disparate collection by aiming to "get a complete set of books in arithmetic published before some given time, as 1550. ... Such a collection would be unique."[4] Plimpton took this advice so seriously that within a few years, with Smith's astute recommendations "always balanc[ing] rarity and importance ... against price," he had amassed "the world's largest and most complete collection of pre-17th-

3 The "exercise of the letter a" was presumably something like CBS 10517 (Tinney 1998: 42 fig. 4), which preserves six columns of up to 35 lines each, consisting entirely in a vertical wedge followed by the cuneiform sign A, while the multiplication table must be CBS 3335 (Hilprecht 1903: 531 [photo]; 1906: no. 2).

4 Letter from Smith to Plimpton, dated 22 January 1902, now at Columbia, cited by Donoghue (1998: 362).

century printed arithmetics" (Donoghue 1998: 362).[5] It was only natural therefore, that he should seek to expand his collecting horizons as far as he possibly could.

Hilprecht seems to have grown weary of Plimpton's persistence, however, for he answered brusquely the following day, "I do not know of anybody who sells the kind of tablets desired" (HVH02). It is hardly surprising that Hilprecht was perhaps less attentive than he could have been to the queries of the public, for by this time he was caught in a storm that had become the talk of Philadelphia and much of American academe, and which later became known as the Peters-Hilprecht controversy. This much-analysed furore (*e.g.*, Ritterband and Wechsler 1981; Kuklick 1996: 123–40) had arisen over Hilprecht's *Explorations in Bible Lands*, which had, his detractors claimed, overplayed his own part in the Nippur expedition at the expense of the American participants. Worse, it had also led the non-expert reader to believe that illustrations in the book, such as that of the multiplication table (Hilprecht 1903: 531), were finds from the putative temple library while they had in fact been found in other excavations (on the other side of the site, as in the case of the multiplication table) or even purchased in Baghdad (Peters 1905: 154). Further, Hilprecht had no grounds on which to base his claim for a library as he had not been at Nippur when the tablets were discovered and had not yet unpacked them from their shipping crates (Kuklick 1996: 127–8). The highly charged atmosphere is well illustrated from an undated, anonymous document now housed in the Archives of the University Museum, Philadelphia (HVH05). A skit on a traditional English nursery rhyme, it reads (with the original shown for comparison on the right):

Ding-dong bell!
Hilprecht's in the well!
"Isn't it a sin?"
"Peters put him in!"
"Who pulled him out?"
"Jones — by the snout!"
What a naughty, naughty plan
To drown this nice, domestic man—
Who never left his native shore
But bought his tablets at the store!

Ding-dong bell!
Pussy's in the well!
"Who put her in?"
"Little Johnny Green!"
"Who pulled her out?"
"Little Tommy Stout!"
What a naughty boy was that
To try to drown poor pussy cat—
Who never did him any harm
And killed the mice in his father's barn!

At the top right corner is a sketch of a man, labelled "Mr J. Levering Jones," heaving a large cat (Hilprecht) out of a well in a bucket. Behind them looms an advertising hoarding on a wall, which reads,

Why go to Nippur for tablets?
Buy them at Loder's

Underneath it all is a note "(The above gives a general idea of the dinner card wh. was very large & finished in color.)." The "Peters" in line 4 of the rhyme is John Punnett Peters, Hilprecht's erstwhile archaeological collaborator on the Nippur expedition and now chief accuser, while "Jones" refers to Levering Jones, a lawyer, museum trustee and Hilprecht's

5 Smith's catalogue of Plimpton's collection, *Rara arithmetica* (Smith 1908; 1939), became a standard reference work. By the time the collection was bequeathed to Columbia it contained over 16,000 items (Lohf 1985).

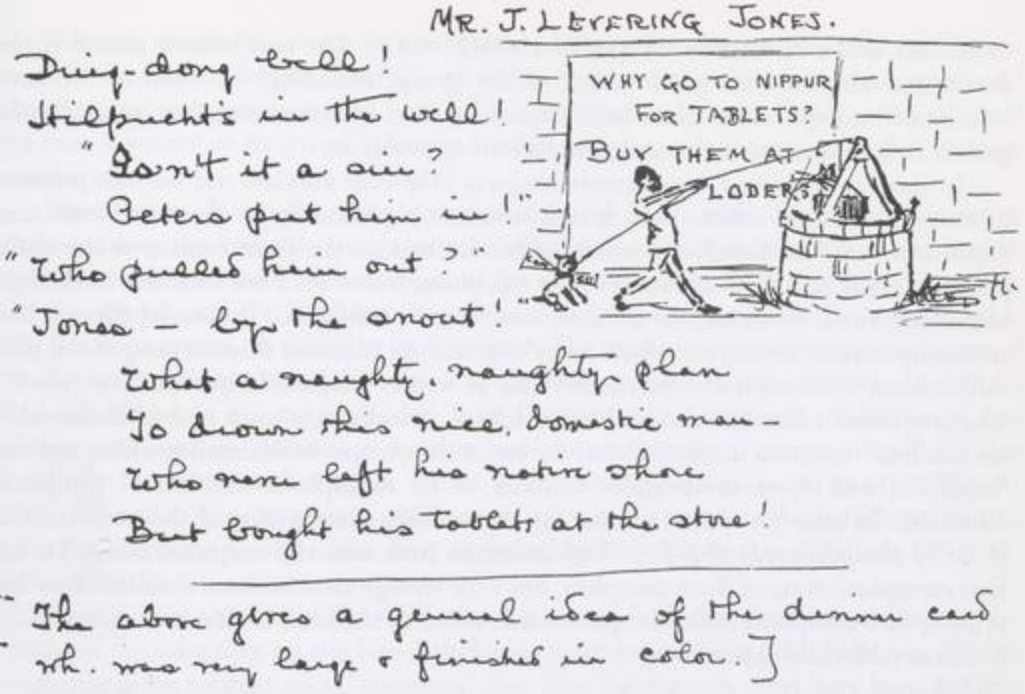

Figure 2: Anonymous sketch of a dinner card, Philadelphia *c.* 1905–08 (HVH05)

most vociferous Philadelphia supporter (Kuklick 1996: 132). Loder's was a druggist's, owned by one Constantine C. A. Loder, in the fashonable Aldine Hotel at 1541 Chestnut Street (Boyd's 1910: 1202). A pun on "tablets" of the medical and cuneiform varieties was clearly intended.[6]

Sadly we know nothing of the organisers and attendees of the anti-Hilprecht dinner that this card was commissioned for, although Morris Jastrow, Hilprecht's erstwhile competitor for the professorship, was among the most vocal of his local opponents (Kuklick 1996: 128). The rhyme's ironic tone speaks volumes about the strength of feeling against him in Philadelphia during the affair — which ran until Hilprecht's messy resignation at the end of 1910 (Ritterband and Wechsler 1981: 11–12; Kuklick 1996: 138).

In an attempt to justify his claims in the face of increasing attacks, in December 1906 Hilprecht published a volume called *Mathematical, Metrological and Chronological Tablets from the Temple Library of Nippur* (Hilprecht 1906). While it did little to prove the point he wanted to make, in that it provided no further hard evidence of the library's existence, it was a major milestone in the development of mathematical Assyriology. According to his survey of the previous literature, just 24 mathematical and metrological tablets had been published hitherto, all from the British Museum, the Vorderasiatisches Museum in Berlin, and the French excavations at Sippar. Fully half of them were metrological lists and tables, while the rest we would now describe as compilations of mathematical problems (2 tablets), multiplication tables (2 tablets), tables of squares, inverse squares, and inverse cubes

6 There were also rumours at the time that "Hilprecht had never gone to Nippur at all but had had the tablets manufactured across the river in New Jersey and just pretended he'd been to Mesopotamia" (B. Foster pers. comm. 8 February 2002, 6 March 2002).

(5 tablets), and a calculation (Hilprecht 1906: 11–13).[7] The new volume almost tripled the known corpus, adding 44 tablets to the group, including the hitherto unknown 'combined' multiplication tables and reciprocal tables, as well as contributing to all other genres, including calculations and compilations of problems.

In the second of four introductory chapters Hilprecht also laid out his interpretation of the mathematical tablets, which had advanced significantly in the three years since *Explorations in Bible Lands*. He reiterated his findings on the three formats of the multiplication tables and drew attention to the colophons found on a few of them. In the light of the 'combined' tables he now correctly understood catchlines to "indicat[e] the next lowest multiplication table of the whole series" but had yet to realise that the sexagesimal place value system could represent fractional values as well as integers (Hilprecht 1906: 18–19). The 'combined' tables had also led him to deduce correctly that "such multiplication tables are confined to certain numbers," that the series always runs in descending order, and that "besides 3 and 5, no undividable number or its multiple is multiplied" (Hilprecht 1906: 20). In other words, he was not far off the full understanding of their construction given by Neugebauer (1930–31). What held him back were the reciprocal tables. He had four exemplars, none of them complete, but with enough data between them to allow him to compile a composite text. He spotted that many of the head numbers from the multiplication tables also appeared in it:

> This interesting text may be described as a division table, containing the divisors of 12,960,000 (= 60^4 or 3600^2) to 72 in an increasing series (the left numbers), together with their corresponding quotients in a descending series (the right numbers). If we continued the calculation still further we would obtain all the numbers found in our list of multiplication tables and many additional numbers, which doubtless formed part of the complete series of multiplication tables. (Hilprecht 1906: 21–22)

He identified 12,960,000 as the so-called 'Platonic' or 'nuptial' number of Plato's *Republic* VIII, 546b–d (Adam 1891) and that featured prominently in late antique and medieval neo-Pythagorean numerology (Allen 1994). His long discussion concluded with the comment that:

> For the present it must suffice by means of the Nippur tablets to have traced its origin to Babylonia and to have connected it with the fundamental Babylonian doctrine, according to which the same divine power manifests itself harmoniously in all parts of the Universe. In view of the importance attributed to this number by the Greek philosopher the tablets here will receive additional significance. (Hilprecht 1906: 34)

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7 Metrological lists and tables: VAT 1155, VAT 2596 (Meissner 1893: pls. 56–58), unidentified (Scheil 1902: 49–54). Compilations of mathematical problems: BM 85194, BM 85210 (King 1900: pls. 8–15; Neugebauer 1935–37: I 142–193, 219–233, II pls. 5–6, 9). Multiplication tables: Ist Si 289 (×25) (Scheil 1902: 132; Neugebauer 1935–37: I 37 no. 13), BM 92703 = K 8527 (×45) (Bezold 1889–99: 935; Neugebauer 1935–37: I 36 no. 2). Table of squares, inverse squares, and inverse cubes: BM 92698 rev. I–III (Rawlinson *et al.* 1861–84: IV 37; Neugebauer 1935–37: I 69 no. 23). Table of squares only: BM 40107 (Rawlinson *et al.* 1861–84: IV 37; Neugebauer 1935–37: I 68 no. 4). Tables of inverse squares only: BM 92680 = K 3168 obv. (Neugebauer 1935–37: I 68 no. 13), VAT 253 (Königliche Museen zu Berlin 1889: 65; Neugebauer 1935–37: I 68, no. 17), Ist Si 639 (Scheil 1902: 48; Neugebauer 1935–37: I 68 no. 18). Calculation: Ist Si 428 (Scheil 1902: 48; Neugebauer 1935–37: I 80; Friberg 1987–90: 548 Fig. 5).

Whether or not his conscious aim was to reinforce the claimed existence and importance of the Nippur temple library, contemporary reviewers were indubitably impressed.[8] However, his interpretation held sway for less than a decade, until Scheil (1915) showed the true character of reciprocal tables and debunked their relationship with the 'Platonic number'.

Nevertheless, Hilprecht made several useful and much overlooked contributions to understanding the cultural context of multiplication and reciprocal tables. Most importantly, he catalogued and copied tablets of the sort now called Type II (Civil 1979: 5–7). On the obverse of Type II tablets the left-hand column contains a teacher's model table that has been copied on the right by a student. The reverse contains multiple columns of another composition, copied as revision by the same student (Veldhuis 1997: 32–37). In his book Hilprecht not only included Type II tablets with exclusively mathematical and metrological content,[9] but also those that had non-mathematical exercises too.[10] He also listed the numerous orthographic errors in the writings 19-lá-1 and a-rá (Hilprecht 1906: 23) and in his copies drew attention to numerical errors — all of which pointed to a scholastic context for the tables, long neglected by later scholarship (Veldhuis 1997: 57; Robson 2003).

Finally, after a review of the weights and measures including two alternative interpretations of the subscripts on the Neo-Babylonian metrological table CBS 8539 (no. 30), he summarised the mathematical "theorems" that "the Babylonians must have been familiar with":

> 1. The area of a rectangle is equal to the product of its base and altitude. 2. The area of a square is equal to the square of its side. 3. The area of a right triangle is equal to one-half of the product of its base and altitude. 4. The area of a trapezoid is equal to one-half the sum of its bases multiplied by its altitude. And, furthermore, [*depending on which interpretation was correct, either*] (5) the volume of a rectangular parallelepiped is equal to the product of its base and altitude; (6) the volume of a cube is equal to the cube of its edge [*or*] (1) that the circumference of a circles bears a constant ratio to its diameter, and (2) that they were familiar with the approximate value of this ratio (π) … though they may have expressed it less accurately than Archimedes, simply by π = 3. (Hilprecht 1906: 38)

We prefer nowadays to talk of Old Babylonian "rules" rather than "theorems" (Høyrup 1999) but Hilprecht's conclusions have otherwise stood the test of time.

Plimpton, meanwhile, had not given up on his hunt for ancient mathematical artefacts. On 15 March 1906 he wrote to John Dyneley Prince (1868–1945), Professor of Assyriology at Columbia University:

> Sometime I want very much to get a tablet of the multiplication table, or some of those tablets that have to do with the teaching of arithmetic. Now, you are wandering around

8 See the reviews collected by Hilprecht (1908: 340–353).

9 No. 20 = CBS 11340: obv. 45-times table, rev. reciprocal table and 50-times table; no. 21 = CBS 11368: obv. 50 times table, rev reciprocal table and 50 times table, repeated.

10 No. 23 = CBS 19760 — not 19790 as published: obv. OB Lu B ii 42–47 (Civil 1969: 175 Source I), rev. 'combined' multiplication tables; no. 24 = CBS 11097: obv. Proto-Aa 212–5 (Civil 1979: 88 Source M), rev. 'combined' multiplication tables; no. 37, no museum number: obv. Proto-Ea 177–85 (Civil 1979: 23 Source Fw), rev. table of capacities; no. 38 = CBS 10207: obv. cf. Ur_5-ra XVII Nippur Forerunner (= OB Ur_5-ra 5) Section A 19 (Landsberger and Reiner 1970: 121), rev. list of capacities.

> among different places, and if you happen to run across one, I wish you would let me know about it, so I can buy it. Sometime I want you to come and see my collection of old arithmetics. (GAP03)

No reply survives. The familiar tone, however, suggests that they already knew each other a little, perhaps through Smith's Columbia connections. Undaunted, though still apparently unsuccessful after more than two years of trying to obtain tablets, Plimpton looked further afield to London: on 3 January 1907 he wrote to Theophilus Pinches, formerly of the British Museum, who was then building up the private collection of Lord Amherst of Hackney (Finkel 1996):

> In talking with Mr. William Hayes Ward of this city he told me that you might put me on the track of getting some of those tablets that were used for the instruction of children in arithmetic, containing, for instance, the multiplication table.[11] Now, I shall be very grateful if you can give me any information as to where I can get tablets of this sort.
>
> I have a library in which I have illustrated the growth of education from the text-book standpoint. In other words, I have gotten together the tools that have been used to educate children. Of course, I should like to go back to the beginning.
>
> I take pleasure in sending you a copy of a pamphlet on "Some Landmarks in the History of English Grammars," which Professor Kittredge of Harvard University has just written and which is based on my collection of old English books.[12] (CUN01)

Plimpton uses a much more formal language in this letter, establishing his point of connection, explaining his interest in tablets, and establishing his academic and collecting credibility through enclosure of the pamphlet. Pinches replied on the 19th of the month, thanking Plimpton for the pamphlet and explaining:

> I am sorry to say that I have never found, in any of the numerous collections of Babylonian tablets which have come under my notice, specimens of those used in the instruction of children, except at the British Museum. Of course I may, by chance, come across some, sooner or later, in the hands of the dealers, but that possibility becomes more and more unlikely, as, on account of the stringency of the law against the exportation of antiquities, Babylonian tablets of all kinds seem to get rarer every day. Should I be fortunate enough to meet with anything which Lord Amherst of Hackney does not require in that line, I will let you know, but I am not very hopeful of seeing Babylonian or Assyrian educational tablets in the market.
>
> I hope to enclose, by next mail, a copy of my Assyriological Gleanings, which contain reproductions of tablets of the class in which you are interested from the originals in the British Museum. There are none referring to arithmetic, however. (CUN02)

The difficulty as Pinches saw it, was not ethical but practical: the antiquities laws did not present a moral obligation not to purchase tablets so much as an obstacle to their acquisition. Plimpton, dogged as ever, replied with a one-line message:

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11 Ward had led the Wolfe Expedition to Babylonia, which in 1885 had reconnoitred the Near East for possible excavations sites for the American Oriental Society and the Archaeological Institute of America. He had bought seals and tablets from Daniel Noorian for Columbia University in the 1890s and was later to buy on behalf of J.P. Morgan's private collection (Mendelsohn 1943: preface; Kuklick 1996: 25–26, 107). It is not clear to me why Ward did not act as Plimpton's agent too.

12 (Kittredge 1906). Plimpton presumably met George Lyman Kittredge, a renowned scholar of Chaucer and Shakespeare, through Ginn & Co, which published his co-authored textbook of English grammar (Gardiner *et al.* 1902).

> I should be very grateful to you, if you will put me on the track of some of those tablets. (CUN03)

Pinches appears to have replied simply by sending the pledged pamphlet, for on 25 February Plimpton thanked him for it, adding insouciantly:

> I got from Professor Hilprecht a copy of one of the tablets on the multiplication table. If I get over to London this spring, I am going to make it a point to come and see you. (CUN05)

Was that a threat or a promise?

Hilprecht's letter to Plimpton survives at Columbia, dated 21 February 1907:

> Enclosed please find the bill of $0.25 for the cast of multiplication table from the Temple Library of Nippur (the original of which is in the Museum of the University of Penn).[13] It reads
>
> 18 × 1 18
> times 2 36
> times 3 54
> etc in consecutive order
> till
> times 20 360 and then giving only the "tens"
> times 30 540
> times 40 720
> times 60[x] 1080
>
> [x] times 60 1080 is the only similar case known to me, all the other multiplication tables give times 50, and then stop. For further details on this class of tablets consult the book marked blue in enclosed list (a book which appeared only recently).[14]
>
> As matters look at present, I do not see, how it is possible to promise an original. In the bazaars of Constantinople those agents who sell cuneiform tablets are uneducated Armenians, who do not know cuneiform writing.
>
> I thank you very much for the pamphlet on 'Landmarks in the History of Engl. Grammars'.[15] (CUN04)

Plimpton, then, had continued to pursue Hilprecht since their extant 1904 correspondence, for the pamphlet was published only in 1906.

Hilprecht's doubts about Plimpton purchasing tablets were more specific than Pinches' of a few days earlier: not that the flow of tablets in general was drying up but rather that the dealers were not knowledgeable enough to identify particular genres amongst their holdings. Like Pinches, he had no principled objection to the private ownership of such artefacts.

In the interest of the cause: The Hilprecht-Smith correspondence, 1907

Just nine days earlier, on 12 February, Plimpton's friend and collaborator, Professor David Eugene Smith, had also written to Hilprecht in a letter that does not survive. Hilprecht replied by hand on the 14th, excitedly and at length:

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13 $0.25 in 1907 would be worth $4.72 in today's prices (EH.net).

14 The tablet is CBS 10221 (Hilprecht 1906: no. 5). The final line of the table is a learner's error for the correct 18×50 = 15 00 (*i.e.*, 900).

15 Kittredge (1906) again.

> Your letter of Febr. 12 reached me this morning. I hasten to reply that I saw an account of your mathematical exhibit[16] in some Philad. papers and at once thought: I wonder whether Prof. Smith knows of the mathematical treasures so near to New York. I first of all express to you my satisfaction of (*sic*) being able to contribute in any way (however slight) to your collection. Here then is my proposal:
>
> 1. Kindly accept my book on this class of texts recently published, with my compliments and I feel sure with those of our whole Committee, to which I shall speak about your exhibit at our first meeting. [*added later:* I mail it to-night.]
>
> 2. If you do not find it too unpleasant a task, please read the first 38 pages with all the notes, because the book is written for the Assyriologist and a good deal less interesting to him, is referred to the notes which might interest you. You can take in at a glance to what the notes refer. Read particularly the note on pp. 24 f., try whether you can solve better than I the geometrical progression on p. 28 and read the whole of pp. 29–38, particularly pp. 37–38.

He then took a full page to explain in minute detail how Smith should use the book to select tablets in Philadelphia and Constantinople from which Hilprecht would make casts, adding one postscript upside down in the upper margin of the reverse:

> In case you care to announce the volume and its contents in any scientific journal that will reach mathematicians, I shall be of course greatly obliged to you in the interest of the cause.

And another in the left margin of the obverse of the letter:

> If you care, I think I could procure you a complete set of the phototype plates I–XV, which generally came out well, and unless [*added later:* the odd pages were] destroyed by the binder, also a set of my autograph plates of plates 1–30, in addition to check.

This extraordinary document is in complete contrast to the distant business letter written to Plimpton just a week later. Here, at last, was a potential academic ally in Hilprecht's war with Peters and American Assyriology, who knew nothing of the accusations made against him and could judge him and his work on their merits without prejudice. He was worth a free copy of *Mathematical, Metrological and Chronological Tablets* — and more.[17]

In the paragraph numbered 2., Hilprecht drew particular attention to three passages. First, "the note on pp. 24 f." is a collation and reinterpretation of Ist Si 428 — which Huber (1957) finally showed was a student calculation of a square root by factorisation.[18] Second, the "geometrical progression on p. 28" is a transliteration of CBS 10201 (Figure 4), which we now understand as the standard series of doubled-and-halved reciprocal pairs, starting with 2 05 - 28 48. Hilprecht particularly needed help with the numbers written to the right of each pair, which did not follow an obvious pattern. Scheil (1916) was later to show that these were the first intermediate results from each reciprocal computation; a fuller analysis was given by Sachs (1947). Finally, "the whole of pp. 29–38, particularly pp. 37–38" was the long and speculative disquisition about the so-called 'Platonic number' 12,960,000 (or 60^4) mentioned above, followed by an attempt to understand the subscript of the first metrological table on CBS 8539 (Hilprecht 1906: no. 30; Powell 1987–90: 469) and the summary of Babylonian "theorems."

16 "For the benefit of students and teachers of mathematics who may be visiting Columbia University (New York), we have arranged in Teachers College a permanent exhibit of material available for the study of the history of mathematics" (Smith 1907*b*: 375).

17 Smith's copy, signed by Hilprecht, is now held by the Rare Book and Manuscript Library of Columbia University, catalogue number Smith R510.9 H56.

18 Copy in Friberg (1987–90: 548).

Smith responded equally enthusiastically just a few days later, with a six-page typescript, the sole survivor of his letters to Hilprecht (DES02). Not surprisingly, he failed to address the particularly difficult problem involved in the interpretation of Ist Si 428, which would only be fully solved decades later with the benefit of further exemplars and a deeper understanding of the sexagesimal place value system. Instead, he focussed on broader historical matters, in particular the possible relationship between Babylonian and Egyptian mathematics,[19] beginning with a discussion of fractions, as attested on the 'division tables'. He was, he told Hilprecht, "particularly interested in cylinders 22 and 25" [Figure 3; Figure 4].[20] Hilprecht's restoration of the first line of the standard reciprocal table as "*IGI*-1-*GAL-BI* 8,640,000 *A-AN*" (*i.e.* igi-1-gál-bi 40-àm) (1906: 25) especially concerned him:

> As you well know the Egyptians and early Greeks and many other ancient peoples dealt only with unit fractions, or almost wholly so. In the case of the Egyptian, as you well know, they had only one symbol for fractions save the unit fraction. This was their first symbol and was for two-thirds [*Egyptian symbol*]. I am therefore wondering whether line one does not refer, as you suggest on page 25, to some abbreviated expression for the first fraction symbol. This in the hieroglyphics was the only special symbol save that for one half, namely [*Egyptian symbol*]. Now I fancy there was such connection between the ancient culture of Egypt and that of Babylon to make a custom of this kind in one country at least somewhat known in the other. It would therefore look very much as if the unit scheme of fraction of the Egyptians had come from the same source as this scheme of the Babylonians.

Smith's intuition was right: exemplars more complete than those Hilprecht had access to have shown that the cuneiform symbol for $^2/_3$ is used in the first line of standard Old Babylonian reciprocal tables, typically in the expression "1-da $^2/_3$-bi 40-àm" (*e.g.*, Neugebauer and Sachs 1945: 12). However, there is no evidence for a common source for Egyptian and Babylonian unit fractions.

He then went on to make some handwritten suggestions about unit fractions and CBS 10201 [Figure 4], but frustratingly these were not transferred to the extant carbon copy. However, on the basis of close similarities between this letter and his later review of Hilprecht's book (Smith 1907*a*), we can fairly confidently assume a parallel. In the latter Smith argues that the mystery left-hand number in entries such as

2 05 12
28 48

(CBS 10201: obv 1–2) may hint at the use of continued fractions, "a form met not only among the Egyptians but among the early Greeks and other peoples about the Mediterranean," namely;

$$\frac{1}{60^2} \cdot 125 = \frac{1}{30} + \frac{1}{720},$$

where 125 is the decimal writing of 2 05 and 720 is for 12 00 (Smith 1907*a*: 396). Following Sachs (1947), who examined a much larger corpus of related texts, we would now express the relationship between the 2 05, 12 and 28 48 as:

19 Eisenlohr's edition of the Rhind mathematical papyrus had appeared in 1877 (Eisenlohr 1877); Smith and Plimpton both owned copies.

20 It is not at all clear why Smith consistently referred to tablets as "cylinders," as none of those in Hilprecht's book was a cylindrical prism, and neither were any of the tablets that Smith was eventually to acquire.

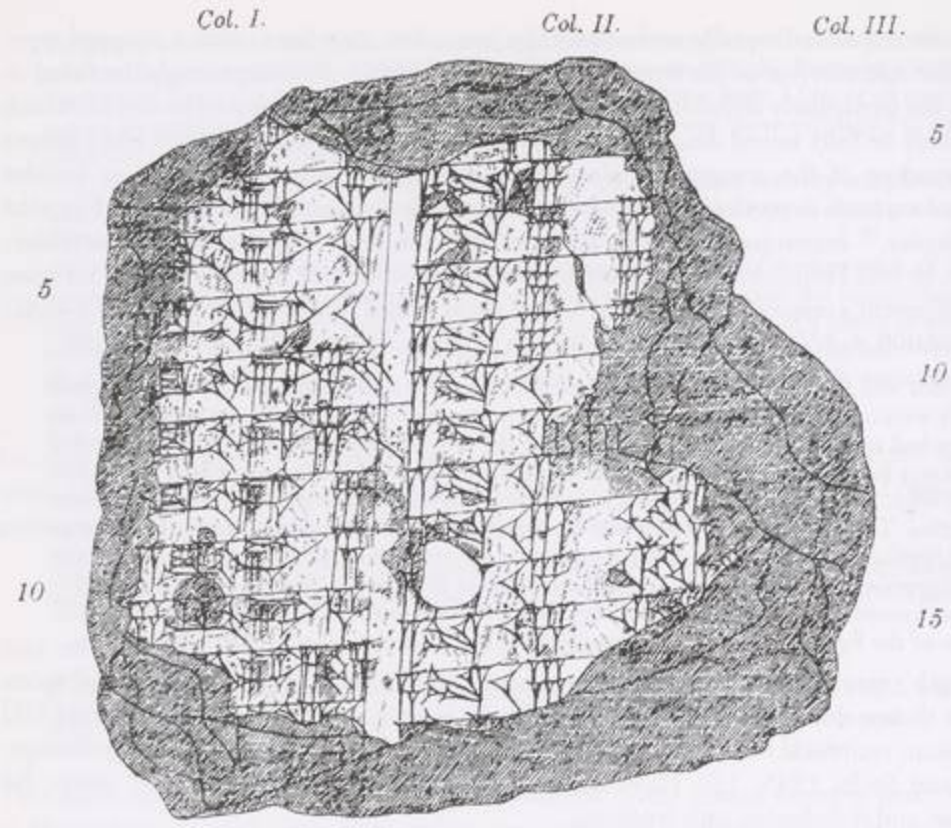

Figure 3: CBS 11902 (Hilprecht 1906: no. 22)

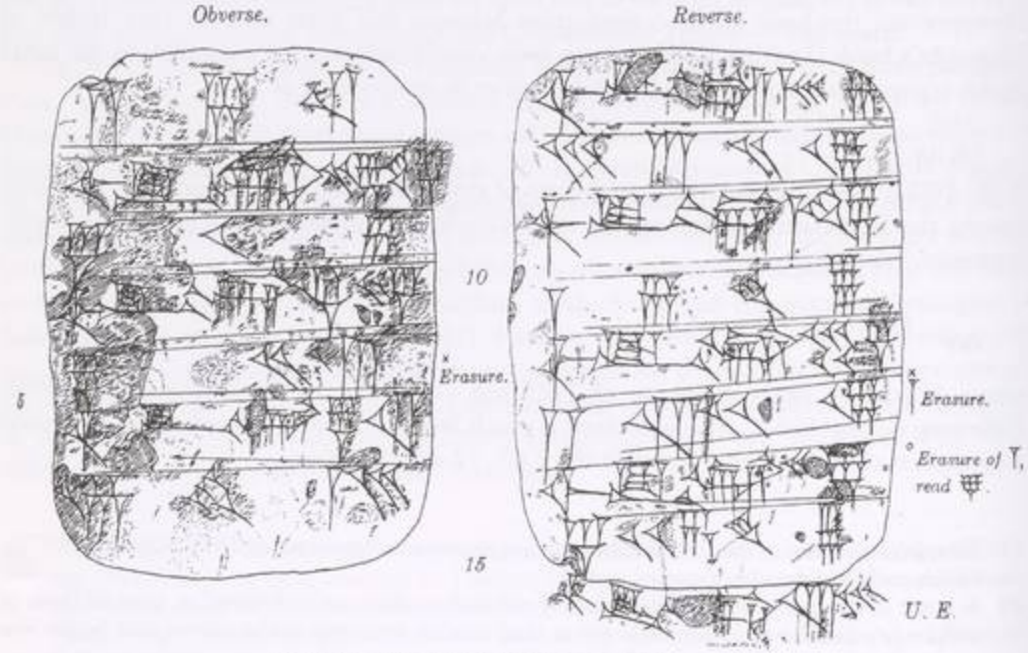

Figure 4: CBS 10201 (Hilprecht 1906: no. 25)

$$\frac{1}{2\,05} = \frac{1}{2\,00+5} = \frac{1}{5} \cdot \left(\frac{1}{1+2\,00 \cdot \frac{1}{5}}\right) = 0;28\,48.$$

That is, we understand the algorithm for finding reciprocals as essentially multiplicative rather than additive.[21] Nevertheless, Smith was absolutely right to identify 12 as $^1/_{720}$ (equivalent to $^1/_5$): we now know that the first step of the reciprocal procedure is to split off from the end of the number given a number whose reciprocal is in the standard table — in this case $5 = {}^1/_{12}$ — and to record that value, as seen on CBS 10201. Other tablets also record the results of the following intermediate steps (*e.g.*, CBS 1215, Sachs 1947).

Smith was also intrigued by possible terminological similarities between Babylonian and Egyptian unit fractions:

> Another thing that struck me as very interesting was that the symbol for denominator was the word IGI-GAL which means "having an eye."[22] It seems a pity that we cannot make some connection between that and the Egyptian symbol for fraction, namely [*Egyptian symbol*]. This in Egyptian is ro, meaning, as you know, a mouth. I however, wondering whether the original fraction may not have been an eye [*Egyptian symbol*] instead of a mouth [*Egyptian symbol*]. Of course this is very likely a mere fanciful guess like lots of the unscientific things we run across in the history of mathematics. I wish I might be able to get at some of the earliest hieroglyphic symbols in which fractions enter and see if there is any chance for such an hypothesis.

Smith was describing here what later became known as the 'Horus eye fractions' (Möller 1911), which would have made the parallel between the Egyptian and Babylonian unit fractions very striking indeed. However, we now understand it to be false on two counts: the cuneiform evidence is so meagre and ambiguous that "the literal meaning of the expression [igi-*n*-gál] is still unclear" (Høyrup 1990: 53), while "whatever the later Egyptian reinterpretation of the original hieratic signs may have been, the third millennium [evidence] leave[s] no doubt that the eye of Horus had nothing to do with the origins of the original hieratic signs" for fractions (Ritter 2000: 117).

Smith continued to make comparisons with more familiar ancient mathematical cultures:

> I was also very glad to find the reference to the subtractive principle on page 23.[23] I had never happened to meet this in my very cursory reading on the cuneiform inscriptions. We generally, of course, can attribute the principle to the Romans since it appears in their symbols and also in their notation. I wonder if the Babylonian system ever wrote 18 on the subtractive plan.
>
> As I looked over pages 35 to 38 I thought I recognized some relation to the Egyptian [metrological] system. I have not, however, been able to find anything definite upon this subject and of course, if it existed Eisenlohr would have mentioned it in his work upon Babylonian measures.[24] For example it occurred to me, as I glanced at the pages the first time that there might be such correspondence as the following [*2 hand-written lines not copied onto the extant carbon copy*]. This, however, is purely fanciful.[25]

21 Following Høyrup (1990), it is now considered conceptually more appropriate to represent the relationship visually: see Robson (2003).
22 Hilprecht (1906: 22).
23 Namely writings like 20-lá-1 for 19.
24 Eisenlohr and Scheil (1898).
25 The passage cannot be restored as this paragraph did not make it into Smith's review.

> With respect to the arrangement of the multiplication tables mentioned on page 20, it occurs to me that we have similar [*added by hand*: rather modern] cases, namely in the late mediaeval manuscripts of the Italian arithmeticians.[26] The separations of the numbers by intervals is very likely owing entirely to their system of measures. They gave in the tables the numbers which they used in their weights and other measures. Is it not possible that some similar explanation obtains for these cylinder symbols?
>
> ...
>
> I am also very much interested in the conclusions in the middle of page 38.[27] I have not the slightest doubt that you will find in due time that the Babylonians know the use of pi quite as closely as Ahmes knew it.[28] I judge this because their numerical system is as advanced. They certainly must have known it as closely as the Biblical value 3.

Smith offered to review Hilprecht's book in the *Bulletin of the American Mathematical Society* (of which he was an editor), taking up the offer of photographic plates and requesting the original copy of no. 25 (CBS 10201) to reproduce there. He was also delighted by Hilprecht's offer of casts, hesitantly choosing twenty-two:[29]

> I hardly know what to say. I do not wish to ask for an unreasonable number particularly as my students are not Assyriologists. I really feel, however, that we could make legitimate and permanent use of a considerable number. ...
>
> With respect to those in Constantinople I shall be very glad to pay, not only for them, but for reproducing any material which has a bearing upon the history of mathematics. In particular it is not impossible that there may be astrolabes or old measures which could be reproduced at a reasonable price in electrotype, or if not reproduced in that way could be photographed. Any assistance which you might give me in that line would be highly appreciated. I am hoping myself to be in Constantinople a year from this month [*i.e., February 1908*]. If you feel that there is any material that I should have attention called to particularly[,] possibly you might feel like giving me a letter to the authorities there.

At the end of the six-page letter, Smith admitted his intense intellectual excitement at Hilprecht's material:

> I must confess that if I were not so deeply plunged in my own work here I fear that you might see me in Philadelphia as a student of Babylonian mathematics, or at least as a rather constant caller at the museum.

If the prescient comments in this letter are anything to go by, the combination of Hilprecht and Smith could perhaps have rivalled the later partnership of Neugebauer and Sachs. But, promising as it appeared, this correspondence was not to prove a meeting of minds: Hilprecht was far too pre-occupied by the row still raging around him and was predisposed to defensiveness. He wrote to Smith at least three times in the following months (DES03, DES04, DES05), but only the first and longest letter, dated 20 March 1907, addressed the issues that Smith had raised:

---

26 Smith is referring to the fact that the 'combined' series of multiplication tables does not include every possible integer within the range it covers.

27 That is, the "theorems" that "the Babylonians must have been familiar with."

28 That is, the scribe of the Rhind papyrus.

29 Hilprecht (1903: nos. 2–5, 7, 9–12, 14, 17, 18, 20–22, 24, 25, 25a, 26–30, 33–35, 38) — ten 'single' multiplication tables, six 'combined', a calculation, the set of problems, a table of squares, two tables of inverse squares, six metrological lists and tables. Only nine are reasonably complete, and he did not choose all the complete tablets in the book. The surviving casts are now in the possession of Columbia University's Rare Book and Manuscript Library.

> Kindly pardon me for not answering your 2 letters of Febr 18 before. The only reason for my long silence is my poor health. I had a severe nervous collapse end of December which forced me to quit work for over 4 weeks at the University. Soon after I had resumed my duties, both my eyes and teeth showed the result of the previous collapse. Ever since I have been in the hands of the oculist and dentist. I spent 2 hours with them again to-day, and while I am writing, I am in a wretched physical condition. But after your letter of yesterday, which I received this morning, I shall not delay my answer any longer, especially as I look for little sleep to-night, owing to a very painful abscess. Let me take the letters up according to certain points contained in them. (DES03)

His first substantive point was this:

> 2. You are interested in the first line of the restoration of No. 22. My restoration IGI-1-GAL-BI (p. 22) is based upon the fact that the abbreviated form (i.e. the mere number 1 without IGI-GAL-BI [which may be omitted altogether or written only IGI, cf. p. 22]) is preserved twice. Cf. No. 20, Reverse, Col. II, and No. 24, Rev, Col. VI, line 1. In each case the cuneiform sign clearly written, is [*a vertical wedge*] which can only mean 1 or 60 etc (vf. p. 26). The following fractions may also be expressed by special signs in Babylonian texts of the same 2 periods as those published in my recent volume (*c.* 1350 B.C. and *c.* 2400–2200 B.C.), namely $^1/_2$, $^2/_3$, $^1/_3$, $^5/_6$.[30] It is absolutely certain, a) that none of these fraction signs was employed in the text in question b) that the text had [*a vertical wedge*], which never means a fraction in cuneiform documents thus far. What the secret is, I do not know. I hope my later investigation on unpublished material with clear up the matter, unless what I would prefer 12,960,000 times (not to say 1000 times) you would solve the matter as a mathematician with an infinitely better knowledge of such things than I possess.

We know now that Hilprecht's vigorously stated arguments for restoring the [igi-1-g̃ál-bi 40-àm] at the start of the reciprocal table do not hold water, for they are based on tersely formatted tables of the form *n* $^1/_n$ not the verbosely formatted igi-*n*-g̃ál-bi $^1/_n$. As he predicted, however, new material would soon settle the matter (Scheil 1915). Hilprecht continued in the same vein, unwilling to concede that anything he had written might be open to improvement and citing eminent German scholars in his support:

> 3. As to the Egyptian symbol for fraction namely [*Egyptian symbol*] "ro," 'mouth', I would leave it as it is, notwithstanding the Sumerian IGI-GAL 'having an eye' = denominator, for both the Semitic Babylonian and the Hebrew use pî, "mouth" also for "fraction" like the Egyptian. Cf. the Babylonian word for $^2/_3$,[31] which is shinipu evidently = šinâ 2 + pû "mouth," "fraction," conforming to the Hebrew pî sh'napim,[32] = 2 fractions = $^2/_3$.
>
> ...
>
> 5. As to the separations of the numbers by intervals in the arrangements of the multiplication tables, I am sorry to say that the principle (using only the numbers employed in their weights and other measures) does not hold good in the Babylonian arrangement. You will be interested to know that the most careful Assyriologist of Europe (notorious for his great care) Prof. Zimmern of Leipzig [*added later:* cf. my book, p. 35, note 1] (who has essentially contributed to Babylonian metrology and loves mathematics, which at first he wanted to study) has accepted (without a single exception) my whole theory with all its details (cf. pp. 34) in his very flattering review of my book: "Mathematische Wissenschaften," Berlin 8 Febr. 1907. (Scientific Section of the "National Zeitung" of Berlin). Prof. Hömmel of Munich and Prof. Winckler of Berlin, and nearly all the leading

30 Here Hilprecht has written the cuneiform symbols too.
31 Accompanied by the cuneiform sign for $^2/_3$.
32 Also written in Hebrew characters.

> Assyriological authorities of Europe in these matters have written to me in the same way and from what I hear, about 20–30 different reviews in Mathematical, Astronomical, Classical, Anthropological, Historical + Semitistic scientific journals will appear. I hope also Prof. Cantor of Halle will review it in January.[33]

After four pages of such bluster, however, Hilprecht had the good grace to "thank you most heartily for your kindness to review the book ... For the interest + help of specialists like yourself is exactly what I and the cause of science require." He also promised all the casts and photographic plates that Smith had asked for and admitted that "your explanation of No. 25 is very novel and interests me exceedingly." Reproductions of CBS 10201 from the original were impossible, however, for

> there are no woodcuts. All the 30 plates were drawn by my own hand, the photography on stone and the stones destroyed last fall. Every illustration therefore you decide to have inserted, you should have to reproduce from my book directly as half-tone or cut in New York.
>
> Unfortunately the Imperial Ottoman Museum has written direct to the Provost of our University, asking myself for a leave of absence for me, as they desire the definite organisation of the entire Assyriol section under my charge. I am thus forced to leave on March 26 by "Kaiser Wilhelm" from Hoboken for Bremen — much earlier than I had hoped. And of course I shall give you all the necessary help next year when you go yourself to Constantinople (with introductory notes). But before this takes place, I sincerely hope you will give me the pleasure of your visit in Philadelphia after my return (end of October).

After a further page of notes about the date of the supposed Nippur temple library, he finally drew the long letter to a close:

> May this suffice tonight, I suffer badly. It is past 12 o'clock (midnight).

Smith's very favourable review, which follows closely the ideas expressed in his first letter (DES02), came out just three months later, in the May issue of the *Bulletin of the American Mathematical Society* (Smith 1907*a*).[34] He immediately forwarded offprints to Hilprecht in Constantinople, who replied at the end of the month. Hilprecht was keen to assist Smith despite being much preoccupied with his continuing professional crisis. Over a year earlier, on 18 April 1906, "sixteen American Orientalists" headed by Charles Lanman of Harvard, had written to Hilprecht requesting "a full and frank statement of the facts, so far as they bear upon your activity at Nippur and your publications relating to the same" (Hilprecht 1908: 321). This letter was still weighing on his mind:

> Yesterday I received your 4 copies of your kind notice of my mathematical texts. I heartily appreciate your kindness and especially also what you say on p. 393 on the [*illegible*] criticism I had to stand from Jackson, etc as to the temple library.[35] Prof. Cantor of Heidelberg wrote to me that he also came to the conclusions that the Babylonians knew $\pi = 3$ from other considerations than mine, he felt sorry he could not use my results in his new edition of the History of Math., the first volume of which was just published before my volume

33 Hilprecht published extracts from the more favourable reviews in his later book on the controversy (1908).

34 The original is in the D. E. Smith Professional collection of the Rare Book and Manuscript Library of Columbia University, Box 88: "The mathematical tablets of Nippur."

35 The Sanskritist A.V. Williams Jackson of Columbia University was a signatory to the letter, along with Plimpton's acquaintances Richard Gottheil (also of Columbia) and William Hayes Ward. Presumably Hilprecht mentioned Jackson as someone known to Smith at Columbia.

> appeared, but he kindly [*illegible*] a review of the book. After all the suffering + unjust attacks through which I had to pass during the past years, I feel so grateful for the kindness with which my first volume on the temple library has been received everywhere, yourself [*illegible*] included.
>
> Meanwhile I have had a long talk with Halil [Edhem] Bey, Director of the Imperial Ottoman Museum, here on you + your work. He will support you heartily, in all he can. The cuneiform tablets leave to me. I have ordered casts already for you of all you will require in my opinion, and will take them with me for you to America, ready for you when you return there. There are several fine astrolabes and other mathematical things of interest for you in the Ancient Turkish section of the Museum. Halil Bey has promised me, he will give you either casts or photographs of those too. Just show him my introductory letter, in case things should get mixed up again in his mind after I left here. I shall speak about you + his promise once more before I leave. You will be sure to find a hearty welcome with him. I am only sorry, I shall not be here probably when you come. And I shall give you a hearty welcome in Philadelphia + have everything ready for you there. (DES05)

Smith received the Philadelphia casts on 19 September 1907 (HVH04) and must have immediately added them to his historical display at Teachers College. The exhibition label is still extant at Columbia. It reads:

> Collection of casts of Babylonian Cylinders in the Museum of the University of Pennsylvania and described in Hilprecht's work on Babylonian mathematics. They form the most noteworthy contribution to the history of very ancient mathematics extant. Presented by Professor Hilprecht (CUN06).

However, Smith's announcement of the exhibition in that year's *Bibliotheca Mathematica* declared that it "include[d] a Babylonian cylinder with cuneiform numerals [and] reproductions of various other cylinders" (Smith 1907*b*: 377). The reproductions we can account for as casts, but what might the original tablet have been? There is nothing else in either Smith's or Plimpton's *Nachlass* to account for it.

That manuscript of Archimedes: Plimpton's letters, 1908

In July 1907 an article appeared on the front page of the *New York Times* that was to distract Plimpton from the tablet hunt for a while:[36]

> BIG LITERARY FIND IN CONSTANTINOPLE
> Savant Discovers Books by Archimedes, Copied 900 A. D.

The 'savant' was the Danish classics scholar Johan Ludvig Heiberg, who had identified a unique source for the works of Archimedes in the Metochion Library in Constantinople. The book was a palimpsest: a tenth-century compilation of Archimedes' works under a late twelfth-century *euchologion*, or Christian prayer book. It is now known that the palimpsest

> includes the only copy of the treatise *Method of Mechanical Theorems*, in which Archimedes explained how he drew upon mechanical means to elucidate his mathematical theorems. It is also the only source in the original Greek for the treatise *On Floating Bodies*, in which Archimedes explores the physics of flotation and explains the formal proof for the principle of specific gravity. (Noel *et al.* 1999)

36 *New York Times*, 16 July 1907, page 1.

Plimpton, not surprisingly, was hugely excited. Smith was due to go on an Old World book-buying mission with the aim of completing Plimpton's collection as far was practicable before the publication of *Rara Arithmetica*. They had already planned a stop in Constantinople, for which Smith had solicited a letter of introduction from Hilprecht to Halil Edhem (DES05). Plimpton, "a firm believer in education for women," also had contacts in Constantinople, through his charitable work as a member of the Board of Directors of Constantinople Woman's College (Patrick 1934: 120; Plimpton 1993: 15).[37] He thus wrote at least twice to Isabel Dodd, the college's professor of art and archaeology, in late 1907 or early 1908, asking for help in tracking the manuscript down:

> I am interested in that manuscript of Archimedes, and I should be very glad to know what has become of it, and whether it could not be bought, and if so, at what price. I imagine if it is in a monastery, they would rather have the money than the manuscript, especially after the novelty has worn off. (GAP06)

This second letter must have crossed in the post with her reply, dated 8 February 1908:

> I inquired of our Greek Professor here in regard to the manuscript, and he asked at the Syllogos and said that they seemed very noncommittal. He did not really find out anything about the manuscript, but he said decidedly that, as it was owned by the Monastery, there would be no hope of their selling it to any one at any price.
>
> Then I wrote to the Swedish Embassy here and received their answer:- "Professor Heiberg discovered the manuscript at Phanar (on the Golden Horn) where it is guarded very carefully. He was, however, allowed to see it and copy from it, and some reproductions have been made from it by the Swedish photographer Berggren. He, however, is not allowed to print copies of the photographs without the permission of Professor Heiberg.
>
> Of course, there is no question of the manuscript being for sale; but as the American gentleman is interested in it, he might like to write to learn more of it, which he could do by writing to Professor Heiberg, whose address I enclose." (GAP05)

Dodd ended by offering her help in acquiring the necessary permits for viewing the Archimedes manuscript, should Plimpton ever come to visit. He thanked her for the information on 24 February (GAP07), writing to Heiberg the very same day:

> I should be glad to know something about the old manuscript of Archimedes, which you discovered in one of the monasteries of Constantinople. What is the character of the manuscript, and does it contain anything new in the subject that is not already known? Has the monastery put a price on it for which they would sell the same? Any information you can give me regarding it will be greatly appreciated. (GAP08)

Heiberg's reply, if there was one, does not survive.[38] Smith, meanwhile, was already in Constantinople buying books and manuscripts on Plimpton's behalf. While Smith pur-

37 Plimpton, in a letter of February 1906 to Caroline Borden, trustee of Constantinople Woman's College, congratulating her on recent work, intriguingly forwarded a letter from "Mrs Peters, the wife of Dr. Peters who has spent so much time at Nippur and Nineveh" (GAP04). What might that letter have contained?

Photographs of Dodd and Borden appear in the history of the college written by its first principal, Mary Mills Patrick (1934: opp. p. 148).

38 His first account of the palimpsest is given in Heiberg and Zeuthner (1907); see also Heiberg (1910–15). A new edition by Reviel Netz is in preparation (see Netz 2000).

chased a good deal of mathematics in Arabic through Halil Edhem's agency,[39] he does not seem to have had any success at all with the Archimedes palimpsest. At the end of February Smith moved on to Rome for a few months, where Plimpton inquired of him what, if any, luck he had had in locating it (GAP11); Smith's reply of 21 May failed to mention the manuscript at all (GAP12), and that was the end of that. The manuscript finally resurfaced at a Christie's auction in New York on 29 October 1998, where it transpired that it had been in private hands in Paris since at least the 1930s. It sold for $2,000,000 to an anonymous collector. Plimpton's instinct that the monastery "would rather have the money than the manuscript" might have been right after all.

A good little talk together: The Hilprecht-Smith correspondence, 1908–09

Did Smith purchase cuneiform tablets in Istanbul? If he did, no documentation survives. The tablet trail goes cold on us for several years. Meanwhile, though, Hilprecht continued to cultivate Smith as virtually the only academic in America who supported his cause. Although a hearing at the University of Philadelphia had exonerated him in 1905 (Kuklick 1996: 133), the rumours would not die down. Eventually Lanman and "the sixteen" published their letter in the *American Journal of Semitic Languages and Literatures* in October 1907. Hilprecht decided to clear his name by assembling documentation to do with the case, in the hope that disinterested scholars would be convinced by the weight of evidence on his side (Hilprecht 1908). In an appendix he added as many positive reviews as he could find of his book on the Nippur mathematical tablets (1906); Smith's had pride of place (Smith 1907*a*; Hilprecht 1908: 340–353). Four letters from Hilprecht to Smith over the period July 1908 to April 1909 survive (DES06, DES07, DES10, DES11); they make little mention of matters mathematical but show Hilprecht to be almost entirely wrapped up in his own affairs and continuing hypochondria. Publication had not put his mind at rest, as this lengthy letter written from his home in Germany vividly illustrates:

> Your letter of February 26, reached me in Philadelphia at a time when after three attacks of "grippe" and with a finger hurt by hydro-chloric acid which did not heal before June, I was using the bodily strength left to me to finish my controversy book, which immediately after its publication I sent to your London address. It was shipped in the second half of April and, I trust, reached you. Yesterday I sent you a pamphlet published by the Medical Professor Dr McClellan and the well known Assyriologist Dr Radau.[40] Matters took a decidedly favourable turn, as even as it became known that I meant to publish all the documents "[*illegible*] et cetera" and the whole mass of material constituting the basis of the decision of the U. of Pa.'s Court of Enquiry of 1905. My adversaries evidently feared publicity. I was visited by a number of scholars, including 3 of the 16 Orientalists who recognized that they had gone too far, requesting me not to publish anything, and even intimating, (yea writing out in so and so many words what I should say) that if I only made a trifling concession, the adversaries would keep silent. As I could not make those conces-

39 (GAP09; GAP10; DES08; DES09). Smith had reserved for Plimpton's purchase six Arabic manuscripts at $180 "in the library of a savant who is known to the learned Dr Halil Edhem Bey of the Imperial Museum, who has been doing all he can for me here" (GAP09).

40 Hilprecht's research student and sole academic ally in Philadelphia (Kuklick 1996: 139). I have been unable to identify the pamphlet.

sions, I published the book and sent a copy to each of the 16 Orientalists through their acting Secretary in connection with the Oriental Meeting at Boston towards the end of April. The Committee of 16 dissolved and informed me in letter before, that they hoped, matters would now stop. Prof. Robert Francis Harper of Chicago, one of the 16 but also a friend of mine, wrote to me a few days ago literally: "There was more fighting at these meetings than ever before. The conservative peace party won every point. I shall give you the history of the three days in Cambridge sometime when I see you. Taking everything into consideration I think that the letter sent to you was a virtual acquittal on all points. I know that all of your confreres, with perhaps the exception of two or three, are more than ready to wipe the bickerings of the last two or three years off the slate and to meet you more than half way with a distinctly friendly feeling."

As you will see from Dr McClellan's pamphlet, the leading Philad. families, the old aristocracy of the city, including half a dozen prominent millionaires who have the confidence of the entire city for what they have done for the welfare of Philadelphia in previous years, took matters into their own hands and demanded that these machinations which make scientific work for me impossible, must stop. European Assyriologists (including 3 professors of the Univ. of Leipzig who published a signed article in the "Liter. Centralblatt" in February, acknowledged the entire justice of the verdict reached by the Council of Inquiry of 1905, and stating frankly that this running down of a scholar was a disgrace to American scholarship) protested publicly. In short, unless I am entirely deceived, tranquillity has finally been restored. But at what expense of strength and health on the part of my wife and myself! We both were nearly exhausted when we left America at the beginning of May. She is in poor health even now, and whenever I study more than one hour, my nerves begin to tremble, and my arms get so weary, starting at the nerve-centre below the head, that I cannot lift a book without supporting the lifting arm with the other hand. I hope peace has not been restored too late.

This brief review of what has happened, given you entirely confidentially, as you took such a warm interest in my person and work, will explain to you, why I left your good letter so long unanswered: I could do almost nothing after I got out of the firing line.

I am glad I could be of some little assistance to you in Constantinople, and more than glad, that you had such a good time and real success wherever you went. Your cylinders (mathematical) and mathematical texts from originals in Constantinople are safely stored with me in Philadelphia. As soon as I come back they will be sent to you with those casts made from our Philad. originals, unless the latter were sent to your office during your absence.

I also will discuss with you all you want to know about the original position of the numbers — or |.[41] You must come over and spend the night in our house (807 Spruce Str.) so that you can see the Museum and tell me more of your trip in the evening. I hope that my controversy book has met with your approval.[42] I have tried to cover every point, but of course should like to hear, how it strikes you, a fair-minded objective outsider.

We shall be here at our place till about Aug. 7, then go to Beyreut and make a trip in our automobile to give Mrs Hilprecht (who is lame and fell very unfortunately 4 weeks ago) a much needed change. If you are anywhere near this part of the country, send a telegram upon receipt of this letter and spend a night with us. Both Mrs. Hilprecht + I would give you a hearty welcome. (DES06)

41 Presumably a question about the orientation of cuneiform numerals, put to Hilprecht in a letter that does not survive.

42 Interestingly, it does not survive in the Smith collection at Columbia, although all Hilprecht's other documented gifts to Smith do.

Hilprecht wrote again to Smith in October 1908, enclosing the casts of Constantinople tablets that Smith had requested back in February 1907 (DES07):[43]

> Excuse red ink — the only thing I have at present. We arrived Oct 20 late (the night) at Philad. As we had no time yet to do anything but unpack and try to get rid of more than 30 reporters who pester us owing to the presence of Princess Feinburg-Rüdiger [?], who will spend winter with us, I have not been able to buy black ink yet. The old bottle has dried up during summer. (DES07)

Smith, meanwhile, was on the publication committee for Hilprecht's Festschrift — one of only two U.S. members — to be presented to the recipient on 28 July 1909, his fiftieth birthday, but which he actually received in April 1910 (Kuklick 1996: 138).[44] The only mathematical contribution to the volume was, interestingly enough, by another of Plimpton's erstwhile correspondents. Theophilus Pinches gave a description of Bu 91–5–9, 263 = BM 80150, which contains a long extract from the standard Old Babylonian series of multiplication tables from 50 to 9, headed by a reciprocal table and rounded off by a table of halved-and-doubled reciprocal pairs very similar to CBS 10201.[45] The article was based on "a rough transcription" and draft copies of "the more doubtful portions" he had made "about 10 years ago" when he was still working for the British Museum but which he could now interpret "in the light of Prof. Hilprecht's discoveries" (Pinches 1909: 71). Indeed, the whole text comprised genres of tables published first in Hilprecht (1906).

Smith wrote twice on March 22 and again on April 5; the letters do not survive (DES10). The last piece of the correspondence dates to 13 April 1909:

> Pardon please my delay in answering your kind note of April 8. I have received leave of absence from my work at the University here, so that we shall be in New York on April 23d; and both Mrs. Hilprecht and I will really be most happy and grateful, if you & Mrs. Smith will give us the pleasure of dining with us at the Holland House that evening at 7 p.m. We long to make your personal acquaintance and have a good little talk together.
>
> Mrs. Hilprecht asks me particularly to write you, how much she appreciates Mrs. Smith's and your kind thoughtfulness. (DES11)

Presumably the dinner party went ahead as planned; but that is the last we hear of Smith and Hilprecht's correspondence, and one wonders whether a face-to-face meeting did not deter Smith from pursuing the relationship further. The fact that Hilprecht presented Smith with a copy of his next work on the Nippur tablets (Hilprecht 1910) suggests that coolness was on Smith's side. Hilprecht's new book met with renewed hostility and

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43 The casts (Hilprecht 1906: nos. 10, 12, 14, 18) survive at Columbia along with individual labels and a general notice, presumably written for the ongoing Teachers College exhibition on history of mathematics:
COLLECTION OF CASTS OF BABYLONIAN CYLINDERS IN THE IMPERIAL OTTOMAN MUSEUM AT CONSTANTINOPLE. DISCOVERED BY PROFESSOR HILPRECHT AT NIPPUR. THEY ARE ALL MATHEMATICAL AND OF THE PERIOD OF THOSE DESCRIBED IN HILPRECHT'S WORK. PRESENTED BY HIS EXCELLENCY HALIL EDHEM BEY AT THE REQUEST OF PROFESSOR HILPRECHT. (CUN07)

44 Hilprecht (1909). Smith's signature is reproduced on page V, sixth from the top, on the right. He is also list on p IX, under "Members of the Committee on Publication." Smith's copy of the *Hilprecht Anniversary Volume* is held at Columbia University's Rare Book and Manuscript Library, catalogue number Smith 510.9 H.56.

45 Subsequently re-published by Neugebauer (1935–37: I 11 no. 12, 23 no. 3, 49–50 no. 105) and Nissen, Damerow and Englund (1993: fig. 124).

criticism (*e.g.*, Prince and Vanderburgh 1910; Barton 1911) and Hilprecht finally resigned from the University of Pennsylvania at the end of 1910 (Kuklick 1996: 138).

Tablets of this class are extremely rare: Plimpton's letters, 1915

Meanwhile, Plimpton's Near Eastern contacts continued to grow. In late 1912 he wrote to James Henry Breasted, Director of the Oriental Institute in Chicago, asking for advice on the Egyptian holiday plans of a friend of his, and enclosing, as usual, a pamphlet (GAP13).[46] In 1920 Breasted stayed at the Plimptons' home in New York (GAP14). By 1914, the year in which he became chairman of Ginn & Co., Plimpton had enlisted the help of Richard J.H. Gottheil (1862–1936), Professor of Semitics at Columbia University and erstwhile detractor of Hilprecht, in locating tablets for him. On 29 April 1915, the dealer R.D. Messayeh wrote to Plimpton from his office at 63 East 125th Street, New York:

> About a year ago Prof. Richard Gottheil, of Columbia University, asked me if I could furnish you with a few tablets (Babylonian) used as school text-books. I have since endeavoured to get you some and as tablets of this class are extremely rare, I regret to say that I have not been ably (*sic*) to comply with his request earlier.
> I am to-day sending you a package containig (*sic*) five gramatical (*sic*) tablets. They have been selected from a large collection by Prof. Albert T. Clay, of Yale University. If you wish to retain them, you can remit $40.00.[47] If not kindly return them. I have included two cones from Warka (Biblical Erech) as they are interesting. (CUN08)

Clay, Hilprecht's former student and research assistant, now held a professorship at Yale which had been endowed by J.P. Morgan, whose tablet collection he was later to publish. Clay was currently building up the Yale Babylonian Collection of cuneiform tablets, "help[ing to] finance his purchases by buying large quantities of tablets, then reselling those of less interest to him" (Foster 1999*a*) — as was the case here.

Plimpton tried to get his old contact John Dyneley Prince to look over the tablets, apparently without success, and then wrote back to Messayeh on 1 July, saying that he would take some but not all (CUN09). Presumably he did not think the (non-educational) cones as interesting as Messayeh did. But Messayeh very politely declined to split the lot (CUN10), and it appears that Plimpton eventually did buy the whole group. At least, the two cones are identifiable in the Columbia collection as nos. 279 and 280 (see Appendix). The five others, if they indeed were school tablets, may have included nos. 266 or 267, 316, 318, and 320. Thus Plimpton acquired his first cuneiform tablets.

Undoubtedly mathematical: The Banks-Plimpton correspondence, 1922–23

Once again Plimpton's records fall silent for several years on the subject of cuneiform tablets. We pick up the story again in the early 1920s, nearly twenty years after Plimpton's first correspondence with Hilprecht. Back then, as Hilprecht had been drowning under the first wave of critical reaction to his interpretation of the Nippur dig, a rival American expedition from the University of Chicago was just opening excavations at the neighbouring

46 The pamphlet, on 'Shakespeare's boyhood', was eventually published as Plimpton (1933).
47 Equivalent to about $700 in today's money (EH.net).

Babylonian site of Bismya, ancient Adab, only 20 miles away from Nippur. Its leader was Edgar J. Banks (1866–1945), another former Delitzsch student, who resigned at the start of the second season in 1905 under suspicion of stealing antiquities (Banks 1912). The incident has never been satisfactorily explained. Banks returned to the Middle East in 1912, where, according to his *curriculum vitae*, he "climbed to [the] summit of Mt. Ararat, 17,212 ft., Aug. 20 [and] crossed the Arabian desert by camel … on an exploring exp[e]d[itio]n" (CUN25), the first American to do so. During that same year he acquired a large number of cuneiform tablets in Baghdad — perhaps as many as 6,000 — which he shipped back to the U.S. in order to sell.[48] Despite a brief Hollywood career as director of "Sacred Films, Inc." and president of "Seminole Films Co., Inc." in 1921–22 (CUN25), dealing in tablets was to supplement his main livelihood of growing oranges for the rest of his life, and he came to supply collectors large and small, institutional and private, all over the United States (Wasilewska 2000).

It is not at all clear how Plimpton and Banks came to know each other, for the first of their extant correspondence at Columbia, dated 30 December 1922, already shows Banks to be fully aware of Plimpton's particular wants:

> In my collection of Babylonian tablets which has lately arrived from Bagdad is an unusually large one measuring $7\,^3/_4$ inches wide and 5 inches high, with ten columns containing an inscription of 57 lines. The first nine columns consist of a series of numbers, with certain explanations of them in the tenth column. It is undoubtedly a mathematical text book, but I am not competent to translate it. The tablet was found in the ruin of Jokha, in Central Babylonia. It comes from about 2350 B.C. About one fifth of it is missing, and it is in two fragments which have been carefully put together, so that it forms an unusually good specimen. The writing is very distinct. The price of it is $50.[49] Should you be interested in seeing it with a view of adding it to your collection of text books, I should be pleased to send it to you for examination, and should you not care to keep it, it may of course be returned. (CUN11)

A sketch was enclosed. Plimpton promptly called in Smith for his opinion (CUN14), who confessed on 25 January 1923:

> I don't know what to say about this tablet. It is probably a table of squares and cubes. The price is rather high, but, on the other hand, the tablet is unusually large and probably is very interesting as a table. (CUN12)

What was the basis for Smith's judgement? It sounds like little more than a wild guess, based simply on the visual complexity of the artefact. Plimpton, it appears, was not entirely convinced, writing warily back to Banks on 29 January, who replied almost immediately:

> I have been holding the tablet, for I thought that you might reply in time. I am sending it to you by parcel post to day. I am not able to translate the tablet, but as I said in my former letter it consists of ten columns of figures, and then one long column of writing which seems to be an explanation of the columns of figures. It is undoubtedly a complicated mathematical tablet, and it should be of unusual importance. Since you desire a literal translation of it, I would suggest that you get into communication with Professor Raymond Dougherty, Goucher College, Baltimore. He would be quite competent to make the translation. So would Professor Albert T. Clay at Yale, but he might be so busy that he would not care to undertake it. (CUN13)

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48 Ewa Wasilewska, pers.comm., 28 November 2001.

49 Equivalent to about $520 today (EH.net).

Was Banks as convinced as Smith of the tablet's mathematical import, or was he simply telling Plimpton what he wanted to hear? Perhaps Plimpton did seek expert help, but apparently without success, for six weeks later he paid out, saying:

> Enclosed please find my check for $50.00 for the Babylonian tablet. I have not yet been able to get it translated, but I take for granted that it is worth this amount of money. Perhaps when it is translated I will find that it is not of any particular value, and then I will want you to take it back. (CUN15)

He never did; the tablet is now no. 348 in the Columbia collection, currently missing. It is probably neither late third millennium in date nor a complicated mathematical tablet, but an Old Babylonian tabular account in twelve columns.

Banks came up with the real goods just two months later. On 28 May 1923 he announced to Plimpton:

> In looking over some Babylonian tablets, which have just come from Bagdad, I have found one which is the multiplication table of five, and thinking that you may desire to possess it, or at least see it, I am sending it to you for examination. If you do not care to keep it, will you kindly return it. The tablet was found at Senkereh, the ruin of the ancient city of Elassar mentioned in Genesis 14:1. It comes from the forat (*sic*, for "first") Babylonian dynasty, and from the time of Hammurabi, King of Babylon. Its approximate date is 2000 B.C. The tablet was found with several letters and business document (*sic*), all of which are dated, but the multiplication tablet is not dated. The inscription or table reads:
> 2 fives are 10.
> 3 fives are 15.
> 4 fives are 20.
> 5 fives are 25.
> 6 fives are 30.
> and so on to the end. The last line reads
> 20 fives are 100.
> Just under the last line is written, "The day 2." That was the day, apparently, when the school boy wrote the tablet, and it probably refers to the 2nd day of the month, rather than of the week.
> The price of the tablet is $12.50.[50]
> I guarantee it to be a genuine ancient Babylonian original. (CUN16)

While this was indeed a genuine tablet from Old Babylonian Larsa, once again it was not quite what Banks claimed it to be: as Smith could have checked in Hilprecht's book (1906), no Babylonian multiplication table starts with 2 and ends at 20. This was in fact an extract from a metrological table of capacities, running from (4) gur = 20 00 (silà) to 20 gur = 1 40 00 (silà). It is now no. 319 in the Columbia collection.

Two months later, Banks was tempting Plimpton with another batch of goodies:

> I have just received from Babylonia twelve account tablets, unlike any I have seen before, and they seem to show the method of book keeping in ancient Babylonian times. The tablets were found at Senkereh, in the ruins of the ancient Elassar in Southern Babylonia, and come from about 2000 B.C. The face of the tablets is divided into squares, and in most of the squares are numerals, with the total of the numerals in the squares at the bottom. On the reverse are two lines containing a note and a date. They are in practically perfect condition. I am able to sell them at ten dollars each, or the twelve for $100.[51] Should you care

50 Equivalent to about $130 today (EH.net).
51 Equivalent to about $1045 today (EH.net).

> to see them, I should be pleased to send them to you for examination, and should you not care to take them, they may of course be returned. The sketch below will indicate the size of the tablets and how the face is inscribed. (CUN17)

On the left is a sketch marked "obverse," showing a tablet in landscape format, ruled into 8 lines of 7 columns. Some cells are marked "blank" and others have cuneiform-like squiggles in them. The reverse to the right has just two lines across the centre with squiggles and the word "date" in the bottom row. The word "reverse" is written underneath.

As usual, Plimpton asked for Smith's opinion (CUN18; CUN19). It seems to have been favourable, for on 21 August Plimpton sent to Banks for them (CUN20). They were delivered by parcel post on 30 August 1923, Banks reiterating their unique and genuine status:

> As you will notice, these tablets are divided into squares containing numerals, and at the bottom a note descriptive of the accounts. As far as I know, these are the only tablets of this type ever discovered. ...
>
> These tablets are so unusual that the little collection should be kept intact and sometime published.
>
> The lowest price which I am able to accept for the twelve tablets is $100. Should you not care to keep them all, but would select one or two of the best ones, the price should be $12.50 each, but I hope that you may decide to keep them all.[52] I guarantee them to be the genuine ancient Babylonian originals. (CUN21)

Plimpton did indeed decide to keep them all, and wrote a $100 cheque for them and the 'multiplication table' on 24 October (CUN23), Banks having gently nudged him that "a series of embarrassing circumstances just at the present time would make a check most acceptable" (CUN22). The group of tiny tabular accounts, which all date to the same year, do indeed form a unique corpus, and still deserve to be published. They are now nos. 286–294, 314, 323, and 324 of the Plimpton collection at Columbia.

A typed price list of four tablets, signed by Banks, probably also dates to 1923 or thereabouts. It reads:

> No. 1. $5.00. Found at Senkereh, the Biblical Elassar mentioned in Genesis 14:1, in southern Babylonia. The tablet is a school-boy exercise tablet for the practicing of writing. Few of these tablets have been found. They are generally of this shape, nearly flat on one side and rounded on the other. The writing is coarse, and the writing upon them consists of signs only, or sometimes words without forming sentences. The clay is sun dried clay, for there was little use in preserving the tablet. This tablet comes from the first dynasty of Babylon, and dates from the time of Hammurabi, King of Babylon about 2250 B.C.
>
> No. 2. $3.00. Found at Senkereh in southern Babylonia. This is a sun-dried tablet which was used as an exercise for an arithmetical lesson. There are about three columns of numerals upon each side. The date is about 2300 B.C.
>
> No. 3. $10.00. Found at Senkereh. A very large burned tablet with one edge broken away, but with the inscription practically complete. It is a mathematical tablet, and the column at the right contains the numerals 1 to 15. The numbers in the columns at the left are very large, and it seems to me that they are the cubes or squares of the numbers in the column at the right. It was used as a mathematical text book. The date is about 2250 B.C.
>
> No. 4. $2. Found at Drehem, a suburb of Nippur. The tablet is about the average in size, and in a perfect state of preservation. It is a receipt for sheep and goats. It is dated in the early part of the Ur dynasty of kings who ruled from 2400 to 2100 B.C. It comes from about 2350 B.C.

52 Notice that the price has risen from $10 given in the earlier letter.

> I guarantee each of the four tablets described above to be genuine ancient Babylonian tablets.[53] (CUN24)

Each of these can be identified, more or less, with tablets in Plimpton's collection at Columbia. The first, a typical round OB exercise tablet, must be either no. 266 or no. 267. The second is no. 317, the fourth no. 67, while the third is no other than the famous Plimpton 322. Banks identified it as a mathematical tablet, ironically, by its final column, which is simply a line count 1–15. Plimpton, it is fairly certain, went to his grave ignorant of the fact that in time this $10 clay tablet would prove to be an absolute bargain, and perhaps his most important mathematical acquisition of all.

Obliged to sell: The Banks-Plimpton correspondence, 1934–36

In October 1934, after a silence of over a decade, Banks was in touch with Plimpton again, offering a Lipit-Ishtar cone for sale:

> In a small collection of Babylonian antiquities which has just come from Bagdad are several terra cotta cones about four inches long and in a perfect condition. They were found at Ur of the Chaldees, the birthplace of Abraham, where the British Museum has been excavating. They bear a fine new inscription of twenty lines from Libit-Ishtat (*sic*), a prominent Babylonian king from 2150 B.C., just before the time of Abraham. The inscription is new and is now being translated by one of the Harvard professors. It is a fine illustration of the writing and culture of the exact age of Abraham.
>
> The owner of the collection sent it to me expecting that I would buy it, but I am not able to do so. I am returning it all but the cones, and they are so rare and valuable that they should be kept in this country. Therefore I am offering them to a few who would appreciate them for just the same price that I must pay for them, that is $15 each, without any profit whatsoever for myself. They are worth much more than that. I am wondering if you would care to have one of them to add to your collection of Babylonian inscriptions? If so, I should be pleased to send one of them to you to see, and of course it may be returned should you not wish to keep it. (CUN26)

Plimpton, aged 78, was by this time using his secretary Bridgewood as amanuensis, who wrote back,

> He would be very glad to have you send one to him for inspection,- one of an educational nature if possible,- and he would like by all means to have the translation of the inscription made by one of the Harvard professors. (CUN27)

With no further ado, the cone was in the post, and a cheque followed within the week (CUN28; CUN29).[54] The cone is now Columbia no. 281, and must have been the last cuneiform object to enter the Plimpton collection.

Plimpton had retired from Ginn & Co. in 1931, at the age of 75. He began to think about the long-term security of his enormous book and manuscript collection, which was already housed in a purpose-built fire-proof library attached to his house at 61 Park Avenue, between 37th and 38th Streets in Manhattan (Donoghue 1998: 364). He had been a founding member of the Friends of the Columbia University Libraries and was its

53 The modern price equivalents are: (1) $53, (2) $32, (3) $107, (4) $21 (EH.net).

54 Plimpton mentioned to Banks that "I was out in Chicago last week and saw Professor Breasted and the museum, which is very fine" (CUN29).

first chairman from 1928 until his death (Plimpton 1993: 1). It was only natural, then, that he should offer his collection, amounting to over 16,000 items, to that institution. Smith offered his papers too and the hand-over took place over 1934–36 (Plimpton 1993: 1; DES19). Smith made arrangements for the tablets to be catalogued, which he described to Ferris J. Stephens at Yale on 28th April 1934:

> Dr. Isaac Mendelsohn, whose address is Columbia University Library [is] in charge of the cataloguing of some cuneiform tablets which I have presented to the University and which relate chiefly to mathematical accounts and probably mathematical terms.
>
> Dr Mendelsohn feels that he would like to be perfectly sure of his ability to handle the mathematical terms. He is to begin work on my tablets at once and will have them all catalogued on my return from Istambul on July 11th. (DES19)

The resulting work, which comprised some 380 items including the 50 from Smith and Plimpton, eventually appeared almost a decade later (Mendelsohn 1943), and it was through the photograph published there that Neugebauer and Sachs (1945) discovered the true mathematical import of Plimpton 322.

Meanwhile, by January 1936 Banks was on his uppers, forced at last to sell his own private collection, which he had wanted to keep for himself or to sell whole to a big university or museum. However, money was short and he was desperate. He renewed old acquaintances and picked out possible new contacts from social columns and *Who is who in America* (Marquis 1899–), offering tablets to them.[55] Naturally, Plimpton was on his list:

> I am obliged to sell my collection of ancient Babylonian seals which I obtained in Babylonia many years ago. These seals are of a cylindrical shape, and are of hematite, onyx, alabaster and other stones and are engraved with the figures of Babylonian gods, priests, demons, animals, and with geometrical designs. They are considered the most beautiful objects left by the Babylonians. They were used as the signatures of their owners, and to roll over the soft clay of the contract tablets or business documents to prevent forgery. They were also worn about the neck or wrists as charms, and when their owners died, the selas (*sic*) were buried with them. They come from every period of Babylonian history, and no two of them have ever been found alike.
>
> The seals are now valuable not only as objects of Babylonian art, but they are also highly prized as pendants, fobs and similar objects, and they make most acceptable gifts. They are priced from $8 to $50 each, much less than their real value. Should you wish, I should be pleased to send one or more of them to you for your examination, to be returned if not desired. I positively guarantee them to be the genuine ancient Babylonian originals. (GAP15)

Banks signed off as "Field Director of the Recent Babylonian Expedition from the University of Chicago" — from which he had resigned apparently in disgrace some thirty years before. Plimpton, via Bridgewood, asked for further particulars of the seals (GAP16) and Banks promptly replied:

> Some of the seals I have already sold, but I still have a very fine collection of ten of them. They are made of several different kinds of stone, as hematite, chalcedony, crystal, marble, calcite, and others. They come from almost every period of Babylonian history, and all are in a fine condition. They are engraved with various designs, as the Babylonian gods and priests, animals and geometrical designs. I am enclosing wax impressions of two of them that you may form some idea of the engravings.

55 Ewa Wasilewska, pers.comm. 28 November 2001.

> I have priced the ten cylinders very reasonably, and altogether the prices amount to $283, but should you wish to take the entire collection, the price may be $250. ...
>
> May I also ask if you would be interested in a small barrel-shaped terra cotta cylinder of Nebuchadnezzar, King of Babylon? It is one of the choicest objects in my collection, and I would part with it only because my circumstances compel me to do so. It measures about $5^1/_2$ inches in length and nearly eight inches in its largest circumference. It is hollow, with an opening at each end. The inscription is in two columns, containing 36 lines of cuneiform writing. I am not aware that the inscription has ever been translated, but of this I am not sure. I am not competent to translate but the first five lines, and the translation of those lines reads: "Nebuchadnezzar, King of Babylon, the restorer of the temples Esagil and Ezida, the first born son of Nabopolassar [*added by hand:* King of Babylon], am I." It continues with an account of the restoration of the temple of the sun god, Shamash, at Sippar, and I think that it ends with a prayer. The cylinder is in perfect condition, and the inscription is perfectly legible. I am asking but $200 for it. Should you be interested in seeing it, I should be pleased to send it to you for examination.[56] (GAP17)

Plimpton was not interested in seeing the barrel cylinder, or in purchasing the seals. He had not forgotten, however, the last promise Banks had made to him:

> I should like to get those translated which I have already bought from you. The last one you stated went back to the days of Abraham. You said you would send me a translation of it, but I never got it. (GAP18)

Banks wrote back promptly and apologetically on 18 February with the translation of cone no. 281, "which was made by Professor Robert Pfeiffer of the Semitic Museum of Harvard University, and I am still enough of a Babylonian scholar to verify it, and it is correct" (GAP19). Plimpton died a few months later, on 1 July 1936, just short of his 81st birthday.

Much interested in the whole field: Smith's letters to Assyriologists, 1929–39

In the year of Plimpton's death, Smith was honoured as a major figure in the history of mathematics with a dedication in the first issue of the journal *Osiris* (Sarton 1936; Frick 1936). Even now he is considered "a major influence in establishing the history of mathematics as both an intellectual discipline and as a profession in the United States" (Lewis 1999: 160). His two-volume *History of Mathematics* textbook, first published in 1923–25 (the time of Plimpton's first correspondence with Banks), had acquired the status of a classic, and remains in print today (Smith 1923; 1925). For its time, it has an unusually strong focus on pre-Classical topics, with a first chapter on "Prehistoric Mathematics" and a second on "The Historic Period Down to 1000 BC," including six pages on Babylonian arithmetic. The preparatory work on this section (and others) are preserved at Columbia, including index cards, magazine cuttings, and an 11-page handwritten draft written in or shortly after 1907 and showing heavy dependency on Hilprecht (1906).[57] A sourcebook of historic mathematical writings, focusing on the period post-1450 (AD!), followed shortly afterwards (Smith 1929).

56 The wax impressions of the seals are preserved at Columbia with the letter. The modern equivalents of the prices Banks quotes are respectively $3600, $3200, and $2550 (EH.net) — a significant increase on the prices he was offering in the early 1920s.

57 D. E. Smith Professional Collection, Box 90: Notes on arithmetic — Babylon.

Smith retained a keen interest in Mesopotamian mathematics, communicating with mathematically minded Assyriologists about the breakthroughs made by the Neugebauer school in the late 20s and early 30s — which sadly came a decade too late for inclusion in his book. In mid-1929 he wrote to C. J. Gadd at the British Museum, who had published a large fragment of the geometrical tablet BM 15285 (Gadd 1922; Robson 1999: 209–218). This had proved an important key to Old Babylonian geometry, for its diagrams enabled many important technical terms to be identified with certainty. Gadd replied:

> Certainly it seems likely that our knowledge of Babylonian mathematics may soon be a good deal more advanced. ... As to material in the British Museum, I am much hoping to be able to devote some attention to it before long, but my present circumstances are such that I cannot undertake any new tasks in the near future. But there is no branch of study in which I am more interested. (DES 15)

Smith also followed Neugebauer's career from Göttingen to Copenhagen to the United States (DES25) and reviewed his work (Smith 1935). In a letter of June 1929 Neugebauer outlined his plans for *Mathematische Keilschriftexte* (Neugebauer 1935–37) and the series *Quellen und Studien* to which it belonged (DES14). Twice he apologised to Smith for being too busy with this work to write for the *American Mathematical Monthly* or even for Smith's own Festschrift (DES16; DES20). They finally met in 1939, shortly after Neugebauer's appointment to the professorship at Brown (DES24). At around this time Smith also received offprints from Thureau-Dangin (DES22; DES23), whose rival *Textes mathématiques babyloniennes* had recently been published (Thureau-Dangin 1938*a*; 1938*b*; 1938*c*).[58] Smith died in 1944 at the age of 84.

What, then, were Smith and Plimpton's contributions to the fledgling field of Babylonian mathematics? They were not as great or as many as they might have been. In particular a collaboration between Hilprecht and Smith, had circumstances been different, could have opened the floodgates to the decipherment of mathematical cuneiform texts two decades before Neugebauer. Foster (1999*b*) has reflected that "Hilprecht's substantial strengths as a scholar and success as a teacher were undoubtedly undermined by his inordinate vanity [and] inability to admit mistakes"; the solipsism, hypochondria, and defensiveness of his letters to Smith are a poignant case in point. But the blame for missed opportunities cannot be laid solely at Hilprecht's door. The pamphlets that Plimpton enclosed so regularly with his letters of enquiry to Hilprecht, Prince, Breasted, Pinches, and others — and the frequent invitations to visit his collection — were not simply offerings in a system of academic gift exchange (Kittredge 1906; Plimpton 1933). Being concerned with the very objects he had acquired as a collector of considerable means, they made a clear statement of financial wherewithal as well as intellectual engagement. If any of his Assyriological correspondents had chosen to cultivate him he might have proved as dedicated and generous a long-term benefactor to the field as he was to other academic causes.

Plimpton and Smith nevertheless made significant impacts on the subject in their different ways. Smith, through his review of Hilprecht's work in a prominent mathematics journal (Smith 1907*a*), was responsible for drawing the attention of the English-speaking mathematical community to Old Babylonian mathematics for the first time. Plimpton, on

58 Smith also corresponded sporadically with Breasted in Chicago, but these letters were more social than academic (DES12; DES13; DES17; DES18).

the other hand, rescued from potential oblivion the mathematical tablet that posthumously made his name. Since 1945 Plimpton 322 has been famous the mathematical world over and has been to a large degree responsible for establishing the reputation of Old Babylonian mathematics as a sophisticated and fascinating subject of study. In more recent times Christopher Walker has done much to perpetuate and enhance that reputation by stimulating the publication of mathematical cuneiform tablets in the British Museum; it is therefore particularly appropriate that we celebrate and applaud his contribution to the field in this his sexagenary year.

APPENDIX: The Plimpton and Smith collections of cuneiform tablets in the Rare Book and Manuscript Library of Columbia University

Plimpton donated thirty-four tablets to Columbia, of which nineteen are documented in his correspondence; Smith gave sixteen, none of which can be traced in his archives. How many of those are the mathematical and school exercise tablets they had hoped for?

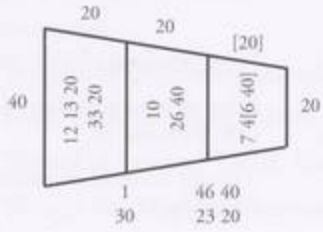
Smith was least successful, with just one round exercise tablet to his name (no. 268): the rest are all Ur III (Garfinkle *et al.*, to appear), OB, and NB economic records. Even no. 325, which Mendelsohn catalogued as a mathematical exercise, turns out to be an undated Old Babylonian account of three quantities of dates. Plimpton had better luck: eight of his were what he had wanted. Only no. 321, a Kassite or late OB tabular account, has been badly mis-catalogued: Mendelsohn's description of it as a "plan of a house" probably refers to no. 320, identified as a "plan of real estate property" but which is in fact a mathematical exercise.

In the table below M stands for Mendelsohn (1943), P for Plimpton, S for Smith. Descriptions in quotes are taken straight from Mendelsohn's catalogue; others are my own.

Museum no.	*Provenance*	*Description*
P 004	–	"Account of slaughtered animals." Ur III: Shulgi 32
P 011	–	"Daily list of sacrificed animals." Ur III: Shulgi 43
P 029	–	"Record of a sheep." Ur III: Shulgi 46
P 067	Banks, no date (CUN24 no. 4): Puzrish-Dagan	"Receipt for slaughtered animals." Ur III: Amar-Suen 2
S 091	–	"Record of cattle for sacrifice." Ur III: Amar-Suen 6
S 099	–	"Consignment of plants." Ur III: Amar-Suen 8
S 100	–	"List of canal diggers." Ur III: Amar-Suen 8
S 102	–	"Account of herbs, salt, and reeds." Ur III: Amar-Suen 8
P 266	Banks, no date. (CUN24: no. 1) or Messayeh 1915 (CUN08): Larsa?	Round OB school tablet (Type IV), *c.* 7 cm diameter. Unidentified composition with 3 lines each on obverse and reverse (reverse is copy of obverse): ni-du-ni ni-du-di ni-im-di Copied below [Figure 5].

Museum no.	*Provenance*	*Description*
P 267	Banks, no date (CUN24: no. 1) or Messayeh 1915 (CUN08): Larsa?	Round OB school tablet (Type IV), *c.* 7.5 cm diameter. List of personal names with 3 lines on obverse only (Chiera 1916–19: I 60, lines 119–121): [1]*ib-ni*-AN [1]*ib-ni*-é-a [1]*ib-ni*-[d]IŠKUR Copied below [Figure 6].
S 268	–	Round OB school tablet (Type IV), *c.* 8–9 cm diameter. Unidentified composition with three lines on obverse only. Copied below [Figure 7].
P 269	–	"List of labourers and their food rations." Ur III, no date
S 270	–	"Allowance of grain to various individuals." Ur III, no date
S 271	–	"List of animals." Ur III, date missing
S 273	–	"Donation of animals." Ur III, no date
S 275	–	"Temple-tablet: list of daily rations (herbs, salt, and reeds)." Ur III, no date
P 277	–	"Account of animals." Ur III, no date
P 278	–	"Account of wool." Ur III, no date
P 279	Messayeh 1915 (CUN08)	"Votive inscription of Sin-kašid king of Uruk." Cone, OB
P 280	Messayeh 1915 (CUN08)	"Copy of no. 279." Cone, OB
P 281	Banks 1934 (CUN26)	"Votive inscription of Lipit-Ishtar." Cone, OB
S 283	–	"List of animals." OB: Nur-Adad 2
P 286–294	Banks 1923 (CUN17): Larsa	Nine tabular accounts of animal fodder (Robson, to appear). OB: Rim-Sin 31
P 314	Banks 1923 (CUN17): Larsa	Tabular account of animal fodder (Robson, to appear). OB: Rim-Sin 31
P 315	–	"Account of animals and hides given out to various individuals." OB, no date
P 316	Messayeh 1915 (CUN08)?	Upper left hand corner of OB school tablet (Type II), *c.* 11.5× 5.5 cm. Obverse Proto-Ea lines 74–92 (Civil 1969: 21, source Dm "Plimpton 31"), reverse List of Trees and Wooden Objects (OB Ur_5-ra 1), lines 282–296 and 18+ damaged lines in the right hand column. See Veldhuis (1997: 157–8). Copied below [Figure 8].
P 317	Banks, no date (CUN24: no.2): Larsa	OB school tablet (Type III), *c.* 8.5×4 cm. Unfinished extract of metrological table of weights, from 1 še = 0;00 00 20 (mina) to 14 <še = 0;00 04 40 (mina)> on obverse. Colophon and catchline to table of lengths on reverse: [1]ur[2]-[d]nanna [1] 1 šu-si = 0;00 10 (ninda)

Museum no.	*Provenance*	*Description*
		This is the only instance I know of a catchline following a colophon on a metrological or mathematical school tablet — or a catchline outside Nippur, or a catchline on an unfinished tablet (Robson 1997: 67–70). Copied below [Figure 9].
P 318	Messayeh 1915 (CUN08)?	OB school tablet (Type III), now *c.* 7×4.5 cm. Inverse table of squares running from obverse to reverse, from 0;15 = $0;30^2$ to 0;58 01 = $0;59^2$, and ending with the 'funny numbers' 1;02 03 02 01 = $1;02\ 01^2$ (Neugebauer and Sachs 1945: 34; Friberg 1987–90: 546). Colophon (?) on the left edge: ^{1}en-ḫé-[...] The tablet is now in two pieces. The bottom edge has been deliberately smoothed to give the appearance of a complete tablet, although about a third of the original must be missing. Copied below [Figure 10].
P 319	Banks 1923 (CUN16): Larsa	Badly preserved OB school tablet (Type III), *c.* 6.5×4 cm. Extract from metrological table of capacities, now running from [4] gur = 20 00 (sila) to 20 gur = 1 40 00 (sila) and ending with a double horizontal ruling and an illegible colophon. According to Banks' description (above) the extract originally started at 1 gur and the colophon included the phrase "day 2"; too fragile to copy.
P 320	Messayeh 1915 (CUN08)?	OB school tablet, roughly square, *c.* 7×6.5 cm. Mathematical exercise and diagram about quadrilateral areas on the obverse; reverse blank. Copied below [Figure 11].



The external measurements of the figure are 60 (length), 40 (left width) and 20 (right width). The underlying problem appears to have been to find the two internal widths — 33;20 and 26;40 — if the length is trisected equally, and to find the area of the three resulting figures using the standard method of multiplying average widths and lengths:

$$20 \times \frac{(40+33;20)}{2} = 12\ 13;20$$

$$20 \times \frac{(33;20+26;40)}{2} = 10\ 00$$

$$20 \times \frac{(26;40+20)}{2} = 7\ 46;40$$

Part of the last calculation — averaging the opposite widths — is written very roughly over multiple erasures immediately below the diagram. See Friberg (1987–90: 556) and cf. Ash 1922.168 (Robson 1999: 273).

Museum no.	*Provenance*	*Description*
P 321	–	Kassite (?) account document
P 322	Banks, no date (CUN24: no. 3): Larsa	OB school tablet. Headed mathematical table, of 'Pythagorean' triples and associated calculations (Neugebauer and Sachs 1945: text A; Buck 1980; Friberg 1981; Robson 2001; 2002).
P 323–324	Banks 1923 (CUN24): Larsa	Two tabular accounts of animal fodder (Robson, to appear). OB: Rim-Sin 31
S 325	–	"Mathematical exercise tablet" — in fact an account of dates. OB, date missing
S 326	–	"Receipt for money." OB, date missing
S 334	–	"Receipt for money and cattle." OB, date missing
P 348	Banks 1922 (CUN11): Umma	Tabular account, currently missing
S 355	–	"Almost completely illegible." NB
S 357	–	"Responsibility assumed for a debtor." NB: Cyrus 1
S 363	–	"Allotment of provisions." NB, no date
P 380	–	"Food given out to various individuals." NB, no date

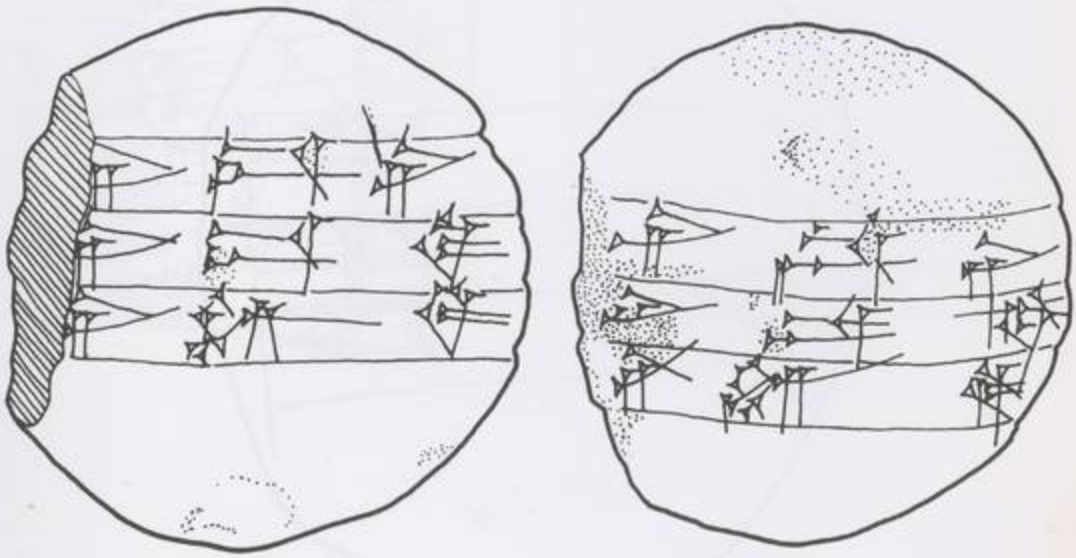


Figure 5: Columbia (Plimpton) 266 obverse and reverse.

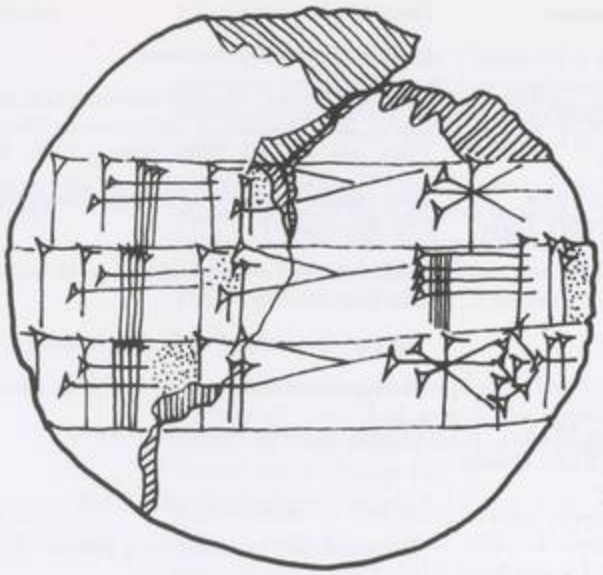


Figure 6: Columbia (Plimpton) 267 obverse; reverse blank.

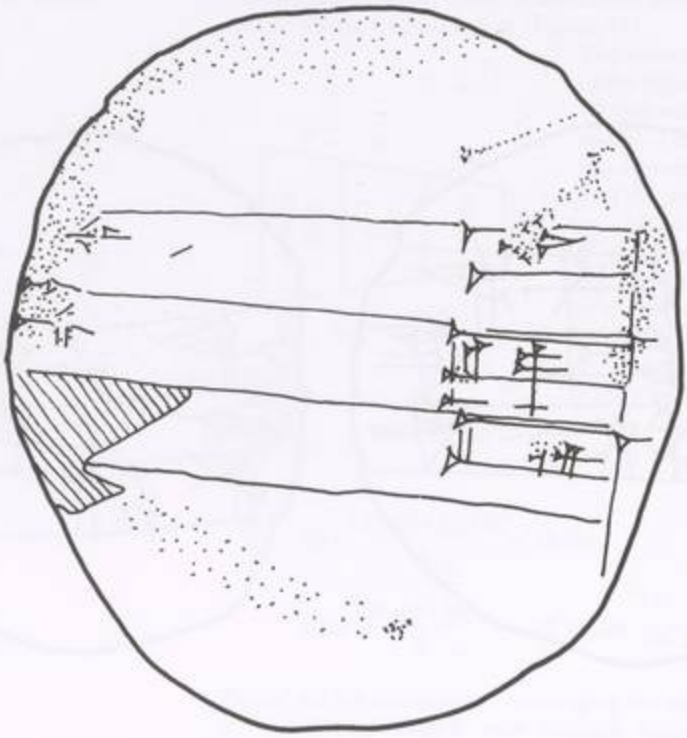


Figure 7: Columbia (Smith) 268 obverse; reverse blank.

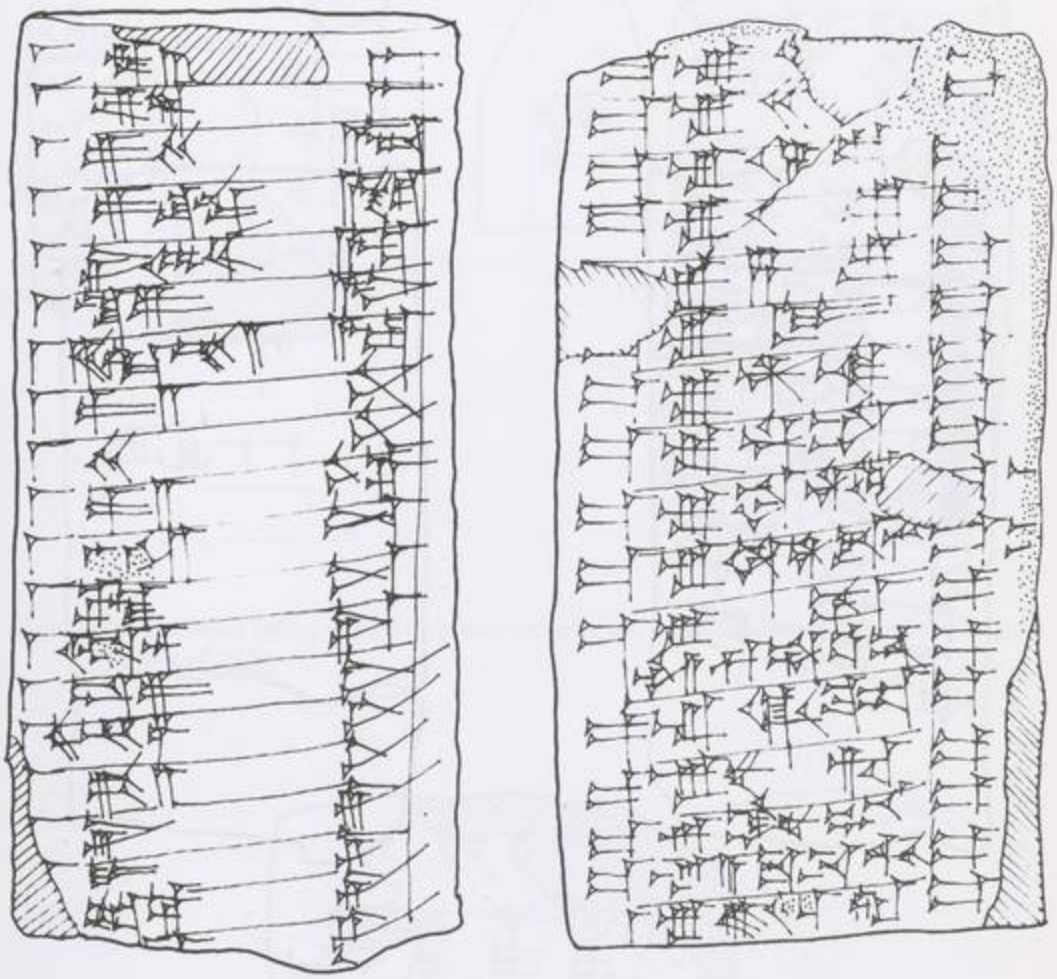


Figure 8: Columbia (Plimpton) 316 obverse and reverse.

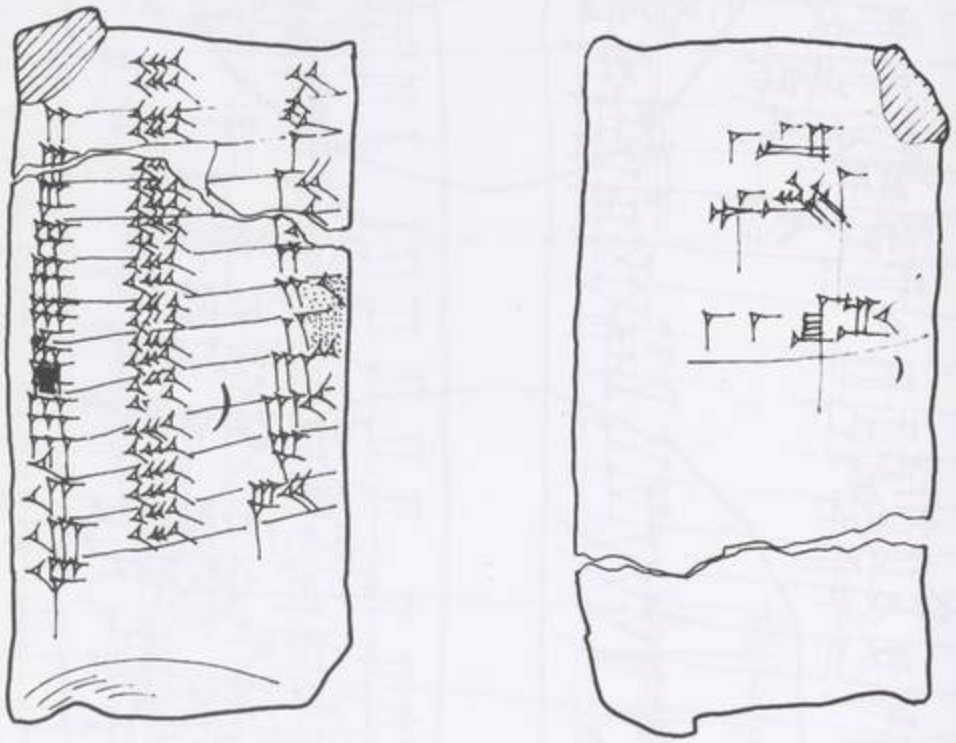


Figure 9: Columbia (Plimpton) 317 obverse and reverse.

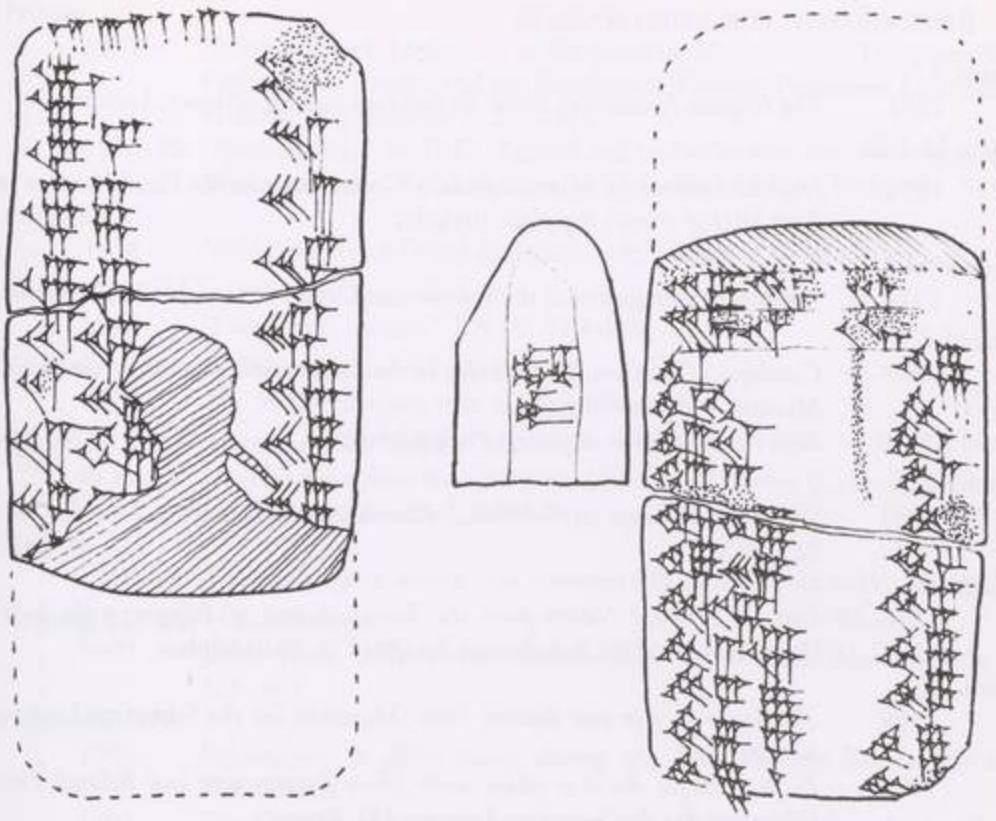


Figure 10: Columbia (Plimpton) 318 obverse, left edge and reverse, showing approximate original size of tablet.

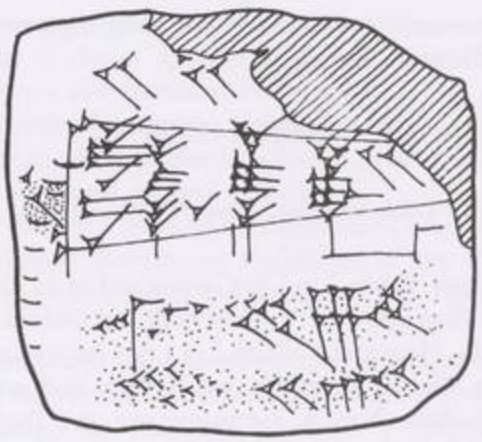


Figure 11: Columbia (Plimpton) 320 obverse; reverse blank.

BIBLIOGRAPHY: PUBLISHED SOURCES

Adam, J.
1891 *The Nuptial Number of Plato: Its Solution and Significance*. London.

Allen, M.J.B.
1994 *Nuptial Arithmetic: Marsilio Ficini's Commentary on the Fatal Number in Book VIII of Plato's Republic*. Berkeley.

Barton, G.A.
1911 "Hilprecht's Fragment of the Babylonian Deluge Story," JAOS 31, 30–48.

Bezold, C.
1889–99 *Catalogue of the Cuneiform Tablets in the Kouyunjik Collection of the British Museum*, vols. I–V. London.

Boyd's 1910 *Boyd's Philadelphia directory*. Philadelphia.

Buck, R.C.
1980 "Sherlock Holmes in Babylon," American Mathematical Monthly 87, 335–345.

Chiera, E.
1916–19 *Lists of Personal Names from the Temple School of Nippur*, vols. I–III (Publications of the Babylonian Section 11). Philadelphia.

Civil, M.
1969 *The Series lú = ša and Related Texts* (Materials for the Sumerian Lexicon 12). Rome.
1979 *Ea A = nâqu, Aa A = nâqu, with Their Forerunners and Related Texts* (Materials for the Sumerian Lexicon 14). Rome.

Donoghue, E.
1998 "In Search of Mathematical Treasures: David Eugene Smith and George Arthur Plimpton," Historia Mathematica 25, 359–365.

EH.net "How much is that?," Economic history services <http://www.eh.net/hmit/>, accessed December 2001.

Eisenlohr, A.
1877 *Ein mathematisches Handbuch der alten Aegypter* (Papyrus Rhind des British Museum). Leipzig.

Eisenlohr, A. and F.V. Scheil
1898 *Ein altbabylonischer Felderplan*. Leipzig.

Finkel, I.L.
1996 "Tablets for Lord Amherst," Iraq 58, 191–205.

Foster, B.R.
1999*a* "Clay, Albert Tobias," in J.A. Garraty and M.C. Carnes (eds.), *American National Biography*, vol. V. New York and Oxford, 17–18.
1999*b* "Hilprecht, Hermann Vollrath," in J.A. Garraty and M.C. Carnes (eds.), *American National Biography*, vol. X. New York and Oxford, 825–827.
2000 "A Mithridatic Nation: Germany and the Beginnings of American Semitic Scholarship," in J. Marzahn and H. Neumann (eds.), *Assyriologica et Semitica: Festschrift für Joachim Oelsner* (Alter Orient und Altes Testament 252). Münster, 53–65.

Friberg, J.
1981 "Methods and Traditions of Babylonian Mathematics: Plimpton 322, Pythagorean Triples and the Babylonian Triangle Parameter Equations," Historia Mathematica 8, 277–318.
1987–90 "Mathematik," in D.O. Edzard (ed.), *Reallexikon der Assyriologie und vorderasiatischen Archäologie*, vol. VII. Berlin and New York, 531–585.

Frick, B.M.
1936 "Bibliography of David Eugene Smith," Osiris 1, 9–78.

Gadd, C.J.
1922 "Forms and colours," RA 19, 149–159.

Gardiner, J.H., G.L. Kittredge and S.L. Arnold
1902 *The Mother Tongue*, vols. I–III. Boston.

Garfinkle, S., H. Sauren and M. Van De Mieroop
to appear *Ur III Tablets from the Columbia University Libraries* (Cornell University Assyriological Studies). Bethesda.

Heiberg, J.L.
1910–15 *Archimedis opera omnia cum commentariis Eutocii*, vols. I–IV. Leipzig.

Heiberg, J.L. and H.G. Zeuthen
1907 "Eine neue Schrift des Archimedes," Bibliotheca Mathematica 7, 321–363.

Hilprecht, H.V.
1903 *Explorations in Bible Lands during the 19th Century*. Edinburgh and Philadelphia.
1904 *The Excavations in Assyria and Babylonia* (Babylonian Expedition of the University of Pennsylvania. Series D: Researches and Treatises 1). Philadelphia.
1906 *Mathematical, Metrological and Chronological Tablets from the Temple Library of Nippur* (Babylonian Expedition of the University of Pennsylvania. Series A: Cuneiform Texts 20/1). Philadelphia.
1908 *The so-called Peters-Hilprecht Controversy. Part I: Proceedings of the Committee Appointed by the Board of Trustees of the University of Pennsylvania to Act as a Court of Inquiry. Part II: Supplemental Documents, Evidence and Statement.* Philadelphia.
1909 *Hilprecht Anniversary Volume: Studies in Assyriology and Archaeology Dedicated to Hermann V. Hilprecht upon … His Fiftieth Birthday (July 28)* (no attributed editors). Leipzig.
1910 *The Earliest Version of the Babylonian Deluge Story and the Temple Library of Nippur* (Babylonian Expedition of the University of Pennsylvania. Series D: Researches and Treatieses 5/1). Philadelphia

Høyrup, J.
1990 "Algebra and Naive Geometry: An Investigation of Some Basic Aspects of Old Babylonian Mathematical Thought," AoF 17, 27–69; 262–354.
1999 "Pythagorean 'Rule' and 'Theorem' — Mirror of the Relation between Babylonian and Greek Mathematics," in J. Renger (ed.), *Babylon: Focus mesopotamischer Geschichte, Wiege früher Gelehrsamkeit, Mythos in der Moderne* (CDOG 2). Saarbrücken, 393–407.

Huber, P.
1957 "Bemerkungen über mathematische Keilschrifttexte," L'enseignement mathématique 3, 19–27.
King, L.W.
1900 *Cuneiform Texts from Babylonian Tablets, &c., in the British Museum*, vol. IX. London.
Kittredge, G.L.
1906 *Some Landmarks in the History of English Grammars, with Illustrations from the Collection of G.A. Plimpton*. Boston.
Königliche Museen zu Berlin
1889 *Verzeichnis der vorderasiatischen Altertümer und Gipsabgüsse*. Berlin.
Kuklick, B.
1996 *Puritans in Babylon: The Ancient Near East and American Intellectual Life, 1880–1930*. Princeton.
Landsberger, B. and E. Reiner
1970 *The series ḪAR-ra = ḫubullu: Tablets XVI, XVII, XIX and Related Texts* (Materials for the Sumerian Lexicon 10). Rome.
Lewis, A.C.
1999 "Smith, David Eugene," in J.A. Garraty and M.C. Carnes (eds.), *American National Biography*, vol. XX. New York and Oxford, 159–161.
Lohf, K.A.
1985 "Collections," in K.A. Lohf and R. Ellenbogen, *The Rare Book and Manuscript Library of Columbia University: Collections and Treasures*, New York. Online at <http://www.columbia.edu/acis/textarchive/rare/rare12.html>.
Meissner, B.
1893 *Beiträge zum altbabylonischen Privatrecht* (Assyriologische Bibliothek 11). Leipzig.
Mendelsohn, I.
1943 *Catalogue of the Babylonian Tablets in the Libraries of Columbia University* (Catalogue Series 1). New York.
Möller, G.
1911 "Die Zeichen für die Bruchteile des Hohlmaßes und das Uzatauge," Zeitschrift für ägyptische Sprache und Altertumskunde 48, 99–101.
Netz, R.
2000 "The Origins of Mathematical Physics: New Light on an Old Question," Physics Today Online <http://www.aip.org/pt/june00/origins.htm>. American Institute of Physics.
Neugebauer, O.
1930–31 "Sexagesimalsystem und Babylonische Bruchrechnung, I–II," Quellen und Studien zur Geschichte der Mathematik, Astronomie und Physik B1, 183–193; 452–457.
1935–37 *Mathematische Keilschrift-Texte*, vols. I–III (Quellen und Studien zur Geschichte der Mathematik, Astronomie und Physik A3). Berlin.
Neugebauer, O. and A. Sachs
1945 *Mathematical Cuneiform Texts* (American Oriental Series 29). New Haven.

Nissen, H., P. Damerow and R.K. Englund
1993 *Archaic Bookkeeping: Early Writing and Techniques of Economic Administration in the Ancient Near East*. Chicago and London.

Noel, W., R. Leson, R. Netz, L. Wolfe and J. McCourt
1999 *Eureka! The Archimedes Palimpsest at the Walters Art Gallery: The Oldest Surviving Manuscript Containing the Works of Archimedes* <http://www.thewalters.org/archimedes/frame.html>. Baltimore.

Patrick, M.M.
1934 *A Bosporus Adventure: Istanbul (Constantinople) Woman's College, 1871–1924*. Stanford.

Peters, J. P.
1905 "The Nippur Library," JAOS 26, 145–164.

Pinches, T.G.
1909 "Some Mathematical Tablets of the British Museum," in *Hilprecht Anniversary Volume: Studies in Assyriology and Archaeology Dedicated to Hermann V. Hilprecht upon … His Fiftieth Birthday (July 28)* (no attributed editors). Leipzig, 71–78.

Plimpton, G.A.
1933 *The Education of Shakespeare: Illustrated from the Schoolbooks in Use in His Time*. London.
1993 *A Collector's Recollections* (ed. P. A. Plimpton), New York.

Powell, M.A.
1987–90 "Maße und Gewichte," in D.O. Edzard (ed.), *Reallexikon der Assyriologie und vorderasiatischen Archäologie*, vol. VII. Berlin and New York, 457–530.

Prince, J.D. and F.A. Vanderburgh
1910 "The New Hilprecht Deluge Tablet," AJSL 26, 303–308.

Rawlinson, H.C., E. Norris, G. Smith and T.G. Pinches
1861–84 *The Cuneiform Inscriptions of Western Asia*, vols. I–V. London.

Ritter, J.
2000 "Egyptian Mathematics," in H. Selin (ed.), *Mathematics Across Cultures: The History of Non-Western Mathematics*. Dordrecht, 115–136.

Ritterband, P. and H. Wechsler
1981 "A Message to Lushtamar: The Hilprecht Controversy and Semitic Scholarship in America," History of Higher Education Annual 1, 5–41.

Robson, E.
1997 "Three Old Babylonian Methods for Dealing with 'Pythagorean' Triangles," JCS 49, 51–72.
1999 *Mesopotamian Mathematics 2100–1600 BC: Technical Constants in Bureaucracy and Education* (Oxford Editions of Cuneiform Texts 14). Oxford.
2001 "Neither Sherlock Holmes Nor Babylon: A Reassessment of Plimpton 322," Historia Mathematica 28, 167–206.
2002 "Words and Pictures: New Light on Plimpton 322," American Mathematical Monthly 109, 105–120.

2003 "More than Metrology: Mathematics Education in an Old Babylonian Scribal School," in A. Imhausen and J. Steele (eds.), *Under One Sky: Mathematics and Astronomy in the Ancient Near East* (Alter Orient und Altes Testament). Münster.

to appear "Old Babylonian Tabular Accounts" [manuscript in preparation].

Sachs, A.J.

1947 "Babylonian Mathematical Texts, I. Reciprocals of Regular Sexagesimal Numbers," JCS 1, 219–40.

Sanua, M.

1999 "Gottheil, Richard," in J.A. Garraty and M.C. Carnes (eds.), *American National Biography*, vol. IX. New York and Oxford, 323–324.

Sarton, G.

1936 "Dedication to David Eugene Smith," Osiris 1, 5–8.

Scheil, J.V.

1902 *Une saison de fouilles à Sippar*. Cairo.

1915 "Les tables 1 igi-x-gal bi etc.," RA 12, 195–198.

1916 "Le texte mathématique 10201 du Musée de Philadelphie," RA 13, 138–142.

Smith, D.E.

1900 *The Teaching of Elementary Mathematics*. New York and London.

1907*a* "The Mathematical Tablets of Nippur," Bulletin of the American Mathematical Society 13, 392–398.

1907*b* "A Mathematical Exhibit of Interest to Teachers," Bibliotheca Mathematica 3, 375–377.

1908 *Rara Arithmetica. A Catalogue of the Arithmetics Written before the Year MDCI, with a Description of those in the Library of George Arthur Plimpton of New York*. Boston.

1923–25 *History of Mathematics*, vol. 1: *General Survey of the History of Elementary Mathematics*; vol. 2: *Special Topics of Elementary Mathematics*. Boston.

1929 *A Source Book in Mathematics*. New York and London.

1935 Review of O. Neugebauer, *Vorgriechische Mathematik*. Berlin 1934, in Scripta Mathematica 3, 162–164.

1939 *Addenda to Rara Arithmetica: Which Described in 1908 such European Arithmetics Printed before 1601 as were then in the Library of the Late George Arthur Plimpton*. Boston.

Thureau-Dangin, F.

1938*a* *Textes mathématiques babyloniennes* (Ex Oriente Lux 1). Leiden.

1938*b* "La méthode de fausse position et l'origine de l'algebra," RA 35, 71–77.

1938*c* "Notes assyriologiques: 1. Histoire d'un problème babylonien; 2. 'Multiplier par' dans les texts cuneiforms du temps des Séleucides," RA 35, 104–106.

Tinney, S.J.

1998 "Texts, Tablets, and Teaching. Scribal Education in Nippur and Ur," Expedition 40/2, 40–50.

Veldhuis, N.
1997 "Elementary Education at Nippur: The Lists of Trees and Wooden Objects." Unpublished doctoral thesis, University of Groningen.

Wasilewska, E.
2000 "The Forgotten Indiana Jones: From Ancient Mesopotamia to Hollywood," The World and I Online <http://www.worldandi.com/Public/2000/August/indy.html>.

Wechsler, H.
1999 "Jastrow, Morris," in J.A. Garraty and M.C. Carnes (eds.), *American National Biography*, vol. XI. New York and Oxford, 886–887.

Bibliography: unpublished sources held in the Rare Book and Manuscript Library, Columbia University

Cuneiform Collection, books and letters

CUN01 Letter from G. A. Plimpton to T. G. Pinches, 3.i.1907. Carbon copy of 1 page typescript.

CUN02 Letter from T. G. Pinches to G. A. Plimpton, 19.i.1907. Original of 1 page typescript.

CUN03 Letter from G. A. Plimpton to T. G. Pinches, 2.ii.1907. Carbon copy of 1 page typescript.

CUN04 Letter from H. V. Hilprecht to G. A. Plimpton, 21.ii.1907. Original of 2 page manuscript.

CUN05 Letter from G. A. Plimpton to T. G. Pinches, 25.ii.1907. Carbon copy of 1 page typescript.

CUN06 Typewritten label describing casts of Nippur tablets in Philadelphia, no date (1907?).

CUN07 Typewritten label describing casts of Nippur tablets in Constantinople, no date (1908?).

CUN08 Letter from R. D. Messayeh to G. A. Plimpton, 29.iv.1915. Original of 1 page typescript.

CUN09 Letter from G. A. Plimpton to R. D. Messayeh, 1.vii.1915. Carbon copy of 1 page typescript.

CUN10 Letter from R. D. Messayeh to G. A. Plimpton, 8.vii.1915. Original of 1 page typescript.

CUN11 Letter from E. J. Banks to G. A. Plimpton, 30.xii.1922. Original of 1 page typescript and 1 page manuscript.

CUN12 Letter from D. E. Smith to G. A. Plimpton, 25.i.1923. Original of 1 page typescript.

CUN13 Letter from E. J. Banks to G. A. Plimpton, 2.ii.1923. Original of 1 page typescript.

CUN14 Note to G. A. Plimpton concerning D. E. Smith, 23.ii.1923. Original of 2 page manuscript.

CUN15 Letter from G. A. Plimpton to E. J. Banks, 21.iii.1923. Carbon copy of 1 page typescript.
CUN16 Letter from E. J. Banks to G. A. Plimpton, 28.v.1923. Original of 1 page typescript.
CUN17 Letter from E. J. Banks to G. A. Plimpton, 25.vii.1923. Original of 1 page typescript.
CUN18 Letter from G. A. Plimpton to D. E. Smith, 1.viii.1923. Carbon copy of 1 page typescript.
CUN19 Letter from G. A. Plimpton to D. E. Smith, 2.viii.1923. Carbon copy of 1 page typescript.
CUN20 Letter from G. A. Plimpton to E. J. Banks, 21.viii.1923. Carbon copy of 1 page typescript.
CUN21 Letter from E. J. Banks to G. A. Plimpton, 30.viii.1923. Original of 1 page typescript.
CUN22 Letter from E. J. Banks to G. A. Plimpton, 17.x.1923. Original of 1 page typescript.
CUN23 Letter from G. A. Plimpton to E. J. Banks, 24.x.1923. Carbon copy of 1 page typescript.
CUN24 Document signed by E. J. Banks, no date (1923?). Original of 1 page typescript.
CUN25 Curriculum vitae of E. J. Banks, no date (1923?). Original of 1 page typescript.
CUN26 Letter from E. J. Banks to G. A. Plimpton, 5.x.1934. Original of 1 page typescript.
CUN27 Letter from E. M. Bridgewood (Plimpton's secretary) to E. J. Banks, 9.x.1934. Carbon copy of 1 page typescript.
CUN28 Letter from E. J. Banks to G. A. Plimpton, 11.x.1934. Original of 1 page typescript.
CUN29 Letter from G. A. Plimpton to E. J. Banks, 23.x.1934. Original of 1 page typescript.

G. A. Plimpton Collection, catalogued correspondence (*except where noted*)

GAP01 Letter from G. A. Plimpton to H. V. Hilprecht, 18.x.1904. Carbon copy of 1 page typescript; cf. HVH02 below. Collecting: dealers, H.
GAP02 Letter from G. A. Plimpton to H. V. Hilprecht, 29.xi.1904. Carbon copy of 1 page typescript; cf. HVH03 below. Collecting: dealers, H.
GAP03 Letter from G. A. Plimpton to J. D. Prince, 15.iii.1906. Carbon copy of 1 page typescript. Box 26: Collecting, 1898–1921.
GAP04 Letter from G. A. Plimpton to C. Borden, 2.vi.1906. Carbon copy of 1 page typescript. Box 32: Near East.
GAP05 Letter from I. Dodd to G. A. Plimpton, 8.ii.1908. Original of 1 page typescript. Box 26: Collecting, 1898–1921.
GAP06 Letter from G. A. Plimpton to I. Dodd, 13.ii.1908. Carbon copy of 1 page typescript. Box 26: Collecting, 1898–1921.
GAP07 Letter from G. A. Plimpton to I. Dodd, 24.ii.1908. Carbon copy of 1 page typescript. Box 26: Collecting, 1898–1921.

GAP08 Letter from G. A. Plimpton to J. L. Heiberg, 24.ii.1908. Carbon copy of 1 page typescript. Box 26: Collecting, 1898–1921.
GAP09 Letter from D. E. Smith to G. A. Plimpton, 20.ii.1908.
GAP10 Letter from G. A. Plimpton to D. E. Smith, 5.iii.1908.
GAP11 Letter from G. A. Plimpton to D. E. Smith, 7.v.1908.
GAP12 Letter from D. E. Smith to G. A. Plimpton, 21.v.1908.
GAP13 Letter from J. H. Breasted to G. A. Plimpton, 25.xi.1912.
GAP14 Letter from J. H. Breasted to Mrs G. A. Plimpton, 25.xii.1920.
GAP15 Letter from E. J. Banks to G. A. Plimpton, 18.i.1936. Original of 1 page typescript. Box 26: Collecting, 1936.
GAP16 Letter from E. M. Bridgewood to E. J. Banks, 7.ii.1936. Carbon copy of 1 page typescript. Box 26: Collecting, 1936.
GAP17 Letter from E. J. Banks to G. A. Plimpton, 9.ii.1936. Original of 1 page typescript. Box 26: Collecting, 1936.
GAP18 Letter from G. A. Plimpton to E. J. Banks, 14.ii.1936. Carbon copy of 1 page typescript. Box 26: Collecting, 1936.
GAP19 Letter from E. J. Banks to G. A. Plimpton, 18.ii.1936. Original of 1 page typescript. Box 26: Collecting, 1936.

D. E. Smith Professional Collection, catalogued correspondence (except where noted)

DES01 Letter from H. V. Hilprecht to D. E. Smith, 14.ii.1907. Original of 2 page manuscript.
DES02 Letter from D. E. Smith to H. V. Hilprecht, 18.ii.1907. Carbon copy of 6 page typescript.
DES03 Letter from H. V. Hilprecht to D. E. Smith, 20.iii.1907. Original of 7 page manuscript.
DES04 Letter from H. V. Hilprecht to D. E. Smith, 21.iii.1907. Original of 1 page manuscript.
DES05 Letter from H. V. Hilprecht to D. E. Smith, 31.v.1907. Original of 3 page manuscript.
DES06 Letter from H. V. Hilprecht to D. E. Smith, 28.vii.1908. Original of 6 page manuscript.
DES07 Letter from H. V. Hilprecht to D. E. Smith, 22.x.1908. Original of 2 page manuscript.
DES08 Letter from H. Edhem to D. E. Smith, 28.xi.1908.
DES09 Letter from D. E. Smith to H. Edhem, 6.i.1909.
DES10 Letter from H. V. Hilprecht to D. E. Smith, 6.iv.1909. Original of 2 page manuscript.
DES11 Letter from H. V. Hilprecht to D. E. Smith, 13.iv.1909. Original of 1 page manuscript.
DES12 Letter from J. H. Breasted to D. E. Smith, 25.iv.1918.
DES13 Letter from J. H. Breasted to D. E. Smith, 28.v.1919.
DES14 Letter from O. Neugebauer to D. E. Smith, 15.vi.1929. Original of 2 page typescript.

DES15 Letter from C. J. Gadd to D. E. Smith, 17.vii.1929. Original of 1 page manuscript.
DES16 Letter from O. Neugebauer to D. E. Smith, 17.vi.1931. Original of 1 page typescript.
DES17 Letter from J. H. Breasted to D. E. Smith, 13.xii.1932.
DES18 Letter from J. H. Breasted to D. E. Smith, 16.i.1933.
DES19 Letter from D. E. Smith to F. J. Stephens, 28.iv.1934. Carbon copy of 3 page typescript. Box 59: Miscellaneous correspondence, S.
DES20 Letter from O. Neugebauer to D. E. Smith, 7.x.1936. Original of 1 page typescript.
DES21 Letter from O. Neugebauer to D. E. Smith, 27.xii.1936. Original of 1 page typescript.
DES22 Letter from D. E. Smith to F. Thureau-Dangin, 24.x.1938. Carbon copy of 1 page typescript. Box 59: Miscellaneous correspondence, T.
DES23 Letter from D. E. Smith to F. Thureau-Dangin, 24.i.1939. Carbon copy of 1 page typescript. Box 59: Miscellaneous correspondence, T.
DES24 Letter from O. Neugebauer to D. E. Smith, 24.ii.1939. Original of 1 page typescript.
DES25 Cutting from *Christian Science Monitor*, "European savant accepts chair at Brown University" , 27.ii.1939. Catalogued correspondence: O. Neugebauer.

BIBLIOGRAPHY: UNPUBLISHED DOCUMENTS HELD BY THE UNIVERSITY OF PENNSYLVANIA MUSEUM ARCHIVES

HVH01 Letter from G. A. Plimpton to H.V. Hilprecht, 18.x.1904. Original of 1 page typescript, annotated by H.V. Hilprecht. Near East Section – Hilprecht – Box 1: correspondence 1901–1905. Cf. GAP01 .
HVH02 Letter from G. A. Plimpton to H.V. Hilprecht, 29.xi.1904. Original of 1 page typescript, annotated by H.V. Hilprecht. Near East Section – Hilprecht – Box 1: correspondence 1901–1905. Cf. GAP02 .
HVH03 Letter from H.V. Hilprecht to W. H. Furness 23.xii.1904. Original of 3 page manuscript. Near East Section – Hilprecht – Box 1: correspondence 1901–1905.
HVH04 Letter from S. M. Neilson (D. E. Smith's secretary) to H.V. Hilprecht, 19.ix.1907. Near East Section – Hilprecht – Box 1: correspondence 1906–1910.
HVH05 Anonymous handwritten document, no date. Near East Section – Hilprecht – Box 5: Hilprecht Controversy, 1898–1911.

Some Lunar Ephemerides and Related Texts from Babylon

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Probably the most well-known, but still by no means fully understood, part of Babylonian astronomy is the group of mathematical astronomical texts published by Neugebauer in his *Astronomical Cuneiform Texts*,[1] commonly known by the acronym ACT. Some of these texts had been edited and their contents explained previously by Epping, Kugler and others,[2] but Neugebauer placed their study on a firm footing by publishing many more texts than had hitherto been known, by further explaining their mathematical structure, and by establishing the terminology we still use today in describing them. Since the publication of ACT, about 50 additional texts have been published, primarily by Neugebauer, Sachs and Aaboe.[3]

The ACT texts may be divided into two groups: those that deal with the planets, and those that deal with the moon. ACT lunar theory, for want of a better term, may itself be divided into two groups: texts that calculate the longitude of the moon at syzygy by means of step functions, which we call texts of System A, and those that use linear zigzag functions, which we say are of System B,[4] although the differences between System A and System B extend far beyond this formal distinction. System A, for example, exhibits a much tighter theoretical structure than System B, and is internally self consistent, whereas

* I wish to thank the Trustees of the British Museum for permission to study and publish these tablets. My work on them was made possible by a Leverhulme Trust Research Fellowship and a Royal Society Research Grant. All photographs © The British Museum.

1 O. Neugebauer, *Astronomical Cuneiform Texts*. London 1955.

2 *E.g.*, J. Epping, *Astronomisches aus Babylon*. Freiburg, 1889; F.X. Kugler, *Die babylonische Mondrechnung*. Freiburg 1900; F.X. Kugler, *Sternkunde und Sterndienst in Babel* (3 volumes + 3 supplements, the last by J. Schaumberger). Münster 1907–1935; etc.

3 *E.g.*, A. Aaboe, *Some Lunar Auxiliary Tables and Related Texts from the Late Babylonian Period* (Det Kongelige Danske Videnskabernes Selskab Matematisk-fysiske Meddelelser 36/12). Copenhagen 1968; A. Aaboe, *A Computed List of New Moons for 319 B.C. to 316 B.C. from Babylon: BM 40094* (Det Kongelige Danske Videnskabernes Selskab Matematisk-fysiske Meddelelser 37/3). Copenhagen 1969; A. Aaboe, *Lunar and Solar Velocities and the Length of Lunation Intervals in Babylonian Astronomy* (Det Kongelige Danske Videnskabernes Selskab Matematisk-fysiske Meddelelser 38/6). Copenhagen 1971; A. Aaboe and N.T. Hamilton, *Contributions to the Study of Babylonian Lunar Theory* (Det Kongelige Danske Videnskabernes Selskab Matematisk-fysiske Meddelelser 40/6). Copenhagen 1979. For a recent bibliography, see H. Hunger and D. Pingree, *Astral Sciences in Mesopotamia*, Leiden 1999.

4 For a step function, the difference in longitude between two successive conjunctions or oppositions $\Delta\lambda$ is functionally dependant upon the longitude λ, whereas in a zigzag function, $\Delta\lambda$ is functionally dependant upon the previous value.

System B is riddled with inconsistencies,[5] but uses parameters that are frequently better than those of System A. Perhaps the most important distinction, however, is that all known texts of System A are *connectable*, *i.e.*, any System A text can be seen as a thin slice of some giant table generated by consistently applying the rules of System A to the previous line in that table, whereas this is not true for System B texts. Although columns from some System B texts can be connected, this is generally the case only if the texts are separated by a small number of years.

The history of the development of Systems A and B is still a major question in the study of Babylonian astronomy. It has frequently been stated that System A is older than System B on the grounds that the parameters in System B are an improvement over those of System A.[6] But this ignores the fact that the precise parameters used in both theories are constrained by the mathematical structure of the Systems, and so "better" parameters do not necessarily reflect a conscious choice by the designers of System B. Furthermore, if one wants to pursue such a positivist approach, it could equally well be argued that the tighter theoretical structure of System A reflects a higher, and therefore later, level of development than System B. Such arguments, of course, get us nowhere, and in any case are invalidated by the available textual evidence that shows that both systems were used contemporaneously.[7] In addition, it is now clear that the ACT material did not come out of nowhere. Semi-empirical mathematical functions were apparently used in making predictions in the texts we customarily describe as containing non-mathematical astronomy, which were used both before and during the time of Systems A and B.[8] Furthermore, it is not possible to date the invention of System A and System B by comparing the position of the equinoxes etc., or on the basis of any other apparent fit between the recorded astronomical data and modern computations, as van der Waerden tried to do. Nevertheless we can, at least, put forward a *terminus ante quem* in each case based upon the available textual evidence. But even this may be misleading and raises some problematical methodological questions, questions that appear to have largely been ignored in most recent studies.

Because of the connectibility of all System A texts, it is generally possible to date precisely small fragments of System A lunar ephemerides. Only those texts that preserve only column F (which is generally calculated using abbreviated parameters), or only columns to the right of K cannot be dated in this way. As a result, of the 42 System A ephemerides

5 *E.g.*, see, A. Aaboe, "On Columns H and J in Babylonian Lunar Theory of System B", in J.M. Steele and A. Imhausen (eds.), *Under One Sky: Astronomy and Mathematics in the Ancient Near East*. Münster (forthcoming).

6 Most recently by L.J. Fatoohi, F.R. Stephenson, and S.S. Al-Dargazelli, "The Babylonian First Visibility of the Lunar Crescent: Data and Criterion", Journal for the History of Astronomy 30 (1999), 51–72. These statements continue to be made despite Neugebauer's comments on p. 42 of ACT.

7 *E.g.*, ACT No. 7a is a System A new moon ephemeris from Babylon for SE 180–181, and the latter year is also covered by ACT No. 121a, a new moon ephemeris from Babylon calculated using System B.

8 In particular a function used in calculating eclipse times, see J.M. Steele, "A Simple Function for the Length of the Saros in Babylonian Astronomy", in J.M. Steele and A. Imhausen (eds.), *Under One Sky: Astronomy and Mathematics in the Ancient Near East*, Münster (forthcoming), and methods for predicting the lunar six, see L. Brack-Bernsen, "Goal-Year Tablets: Lunar Data and Prediction", in N.M. Swerdlow (ed.), *Ancient Astronomy and Celestial Divination*. Cambridge, Mass. 1999, 149–177.

published in ACT, it has been possible to date 37 in this way.[9] A handful of dated examples have been published elsewhere, and to them I add a few more in the present article. However, of the 22 currently known System B ephemerides from Babylon, only 8 have been dated. All but one of these are dated on the basis of connecting columns to ACT No. 122, whose own date is then determined by connecting column A to ACT Nos. 142, 143, 144, and 170, which are all from Uruk. But as I have mentioned, in System B the columns are generally only connectable over a few years (column A of ACT No. 122 seems to be an extreme case which is connectable with the same column from ACT No. 170 about a century earlier), and so this means that only texts dating from around the same period as ACT No. 122 (SE 208–210) can be dated by this method. Certainly no very early or very late texts can be dated in this way. This may well distort our view of the chronology of System B. For example, had Text A published here been part of a System B ephemeris, it would not have been possible to establish its pre-Seleucid date.

Bearing this in mind, we should be very wary about drawing any conclusions concerning the relative chronologies of Systems A and B. One observation that has been made in the past is that the System B ephemerides from Babylon only begin after those from Uruk end. This fact might seem to suggest that System B was brought to Babylon from Uruk, perhaps by scribes fleeing the Parthian occupation.[10] But I suggest that the comparatively late date for System B texts from Babylon is nothing more than an artefact of the way in which the texts have been dated. Lack of dated System B ephemerides from before SE 176 should not be taken as evidence that the System was not in use in Babylon before that time.[11]

The seven texts published here are all from Babylon. The first five are System A texts, either ephemerides or, in the case of Text B, an auxiliary table containing values of Φ and G. They range in date from just before the beginning of the Seleucid Era to the third century of the Seleucid Era. The final two texts, both of which are small fragments, are undated System B texts. Two of the texts (Texts C and D) are composites of new fragments with fragments that were previously published in ACT. In neither case are there any physical joins, but there can be little doubt that the fragments are from the same texts. In these cases, my editions of the ACT fragments are based almost wholly on Neugebauer's, and I have not made detailed collations of the tablets, other than to compare them with the new fragments to ensure that they are indeed from the same original tablets.

In my transcriptions I have largely followed the conventions used by Neugebauer in ACT. For example, sexagesimal digits are separated by commas, preserved edges of tablets are indicated by double ruled lines, etc. In restoring columns of System A texts, I have generally given all columns that can be calculated with full precision. Consequently, column F, which is frequently abbreviated on preserved texts, is not restored. Furthermore, I have always restored column Ψ′, rather than Ψ, even though Ψ, Ψ′, both Ψ and Ψ′, or neither may be found on any given text.

9 Not all of these texts were dated at the time of publication of ACT, however. The advent of computers has meant that some of the more complicated columns, particularly column K, which is a sum of three other columns, can now be readily computed.

10 On the implausibility of this statement, see pp. 130–132 of J.M. Steele, "A 3405: An Unusual Astronomical Text from Uruk," *Archive for History of Exact Science* 55 (2000), 103–135.

11 The existence of a System B auxiliary text from Babylon, ACT No. 149, containing eclipse magnitudes for at least SE 54 to 67, also supports this argument.

Text A **BM 36890** (80–6–17,631)

Contents: Lunar System A columns M_2 and P_2(?) for Philip Arrhidaeus 6 XII to 7 X.

Critical Apparatus

I 10′ 49,11: mistake for 48,1.

Commentary

The text is a fragment measuring approximately 6×5 cm from one side of a large tablet. Only the bottom(?) edge remains. Parts of two columns are preserved, separated by a vertical ruling. The surface is in very good condition, and the script is clearly written.

The text is part of a lunar ephemeris dating to the reign of Philip Arrhidaeus. The preserved side covers the period from year 6, month XII to year 7, month X. It is likely, therefore, that the fragment is from the obverse of a tablet, and the remainder of year 7 and possibly the following year were written on the reverse. The text is of considerable interest because it is only the second example of a System A lunar ephemeris dating to before the Seleucid Era. The other text, BM 40094 + 45662,[12] is a new moon ephemeris for Philip Arrhidaeus 4 XII to 7 XII. Thus both texts come from about the same time. BM 40094 + 45662 is the only example of an ephemeris to give columns Λ and Y, which are used in determining the length of a twelfe-month interval, in addition to the usual G and J used in determining the length of 1 month, and it must be wondered whether this is connected with its early date. Unfortunately, only two columns on BM 36890 remain, and so it is not known whether columns Λ and Y were recorded on this text as well.

12 Aaboe, *A Computed List of New Moons* …; Aaboe and Hamilton, *Contributions* … (see n. 3 above).

Obv		[-IX (T_2)]	[-VIII (Φ_2)]	[-VII (B_2)]	[-VI (C_2)]	[-V (E_2)]	[-IV (Ψ'_2)]	
1'		[ŠE]	[2,16,21,51, 6,40]	[4,45 RÍN]	[2,56,30]	[6,42,10,54 U U]	[1,52,32,22]	⇨
	[Philip 7	BAR]	[2,13,35,55,33,20]	[2,52,30 GÍR-TAB]	[3,15,15]	[5,43, 3,24 U LAL]	[1,12,57, 8]	
		[GU_4]	[2,10,50]	[1 PA]	[3,28,24]	[3,44,17,42 U LAL]	[33,21,54]	
		[SIG]	[2, 8, 4, 4,26,40]	[29, 7,30 PA]	[3,34,33]	[1, 7, 4, 0 U LAL]	[6,13,20]	
5'		[ŠU]	[2, 5,18, 8,53,20]	[27,15 MÁŠ]	[3,33,42]	[2,37,13,42 LAL LAL]	[45,48,34]	
		[IZI]	[2, 2,32,13,20]	[25,22,30 GU]	[3,25,51]	[4,35,59,24 LAL LAL]	[1,25,23,48]	
		[KIN]	[1,59,46,17,46,40]	[24,12 *zib*]	[3,10,32]	[6,37,33, 6 LAL LAL]	[1,54, 4,58]	
		[DU_6]	[1,58,35,33,20]	[24,12 ḪUN]	[2,50,32]	[5,40,11,12 LAL U]	[1,11,59,44]	
		[APIN]	[2, 1,21,28,53,20]	[24,12 MÚL]	[2,34,19,12]	[3,33,55,30 LAL U]	[29,54,30]	
10'		[GAN]	[2, 4, 7,24,26,40]	[24,12 MAŠ]	[2,26, 6,24]	[31,19,36 LAL U]	[12,10,44]	
		[AB]	[2, 6,53,20]	[24,12 ALLA]	[2,25,53,36]	[3, 2,35,54 U U]	[54,15,58]	⇨

	[-III (G_2)]	[-II (J_2)]	[-I (C'_2)]	[0 (K_2)]	I (M_2)	II (P_2)	
⇦	[2,40]	[15,43,26 LAL]	[9,11,48 LAL]	[2,15, 4]	[x 40], 8 [DU]	[...]	1'
	[2,40]	[57, 3,45 LAL]	[9,22,30 LAL]	[1,33,33]	[1]'4' 2,13,42 'DU'	[...]	
	[2,51,50]	[57, 3,45 LAL]	[6,34,30 LAL]	[1,48,12]	13 4,1,54 'DU'	[...]	
	[3,17,35,18,31, 6,40]	[57, 3,45 LAL]	[3, 4,30 LAL]	[2,17,27]	13 19,21 'DU'	[...]	
	[3,43,23,57, 2,13,20]	[57, 3,45 LAL]	[25,30 TAB]	[2,46,46]	13 3, 6, 7 [DU]	[...]	5'
	[4, 9,12,35,33,20]	[57, 3,45 LAL]	[3,55,30 TAB]	[3,16, 4]	13 22,11 'DU'	[...]	
	[4,35, 1,14, 4,26,40]	[35,45,33 LAL]	[7,39,30 TAB]	[4, 6,55]	'1'3 4,29, 6 DU	[...]	
	[4,56]		[10 UŠ TAB]	[5, 6]	'1'3 3,35,6 DU	'10'[+x ...]	
	[4,43,15,33,20]		[8, 6,24 TAB]	[4,51,22]	14 2,26,28 DU	'10'[+x ...]	
	[4,17,26,54,48,53,20]		[4, 6,24 TAB]	[4,21,33]	[1]5 49,11 DU	10[+x ...]	10'
⇦	[3,51,38,16,17,46,40]		[6,24 TAB]	[3,51,44]	[1]4 4,39,46 DU	10[+x ...]	

Text B **BM 76973 + 77033** (AH 83–1–18,2345+2408)

Contents: Lunar System A columns Φ_2 and G_2 for SE 1,36 IV to 1,40 II.

Critical Apparatus

Obv. I 2′	2,15,⌜5⌝,3[3,20]: The preserved traces look like 6, but 5 is required.
Obv. I 6′	⌜2⌝,8, . ,23,1⌜3⌝,[20]: 23 is an error for 22; only 12+x is preserved of 13.
Obv. I 9′	1,59,42,3⌜5⌝,3⌜3⌝,20: The preserved traces look like 36,31+x.
Obv. I 11′	2, 1,2⌜5⌝,11,[6,40]: Only 23+x is preserved of the 2⌜5⌝.
Obv. I 12′	⌜2⌝,4,11,⌜6⌝,[40]: Only 5+x is preserved of the ⌜6⌝.
Obv. I 13′	2,⌜6⌝,5⌜7⌝,[2,13,20]: Only 5+x,54+x is preserved of ⌜6⌝,5⌜7⌝.
Obv. I 21′	[2, 5, 5,11],⌜6⌝,[40]: Only 4+x is preserved of the ⌜6⌝.
Obv. I 30′	[2,15,24],⌜7+x⌝,26,40: The preserved traces look like 7+x, but 4 is required.
Obv. I 31′	[2,15,59,3]⌜7⌝,⌜46⌝,[40]: Only x+3+x is preserved of [3]⌜7⌝.
Rev. I 2	[2,10],28,25,26,40: Mistake for 2,10,27,46,40.
Rev. I 3	[2],⌜7⌝,41,51,6,40: Only 6+x is preserved of ⌜7⌝.
Rev. I 5	[2, 2,10]: All that is preserved is a blank space corresponding to the final empty places.
Rev. I 13	2,16,3⌜3⌝,20: Mistake for 2,15,33,20.
Rev. I 16	[2,10],18,⌜33⌝, 6,40: The traces look like 33, but 31 is required.
Rev. I 18	[2, 4],4⌜6⌝,40: Only 45+x remains of the 4⌜6⌝.
Rev. II 5	The ruling separating the columns here impinges upon the number 4 at the beginning of column II.

Commentary

The tablet measures approximately 5×14.5 cm. The bottom edge is partially preserved on the reverse, and the other edges are all broken away. On the obverse at least, however, a few signs giving the months of each entry remain, and so this will be the first column on the tablet. The numbers following the month names are the corresponding values of Φ_2.

The second column is divided from the first by an untidy vertical ruling. At places this ruling impinges upon the signs in column II, indicating that the ruling was added after the text had been written. Only a few signs at the start of column II remain, but they are sufficient to show that we have here the values of G_2 corresponding to the Φ_2 values in column I. Thus this text is an auxiliary table containing monthly values of Φ_2 and G_2.

The preserved text covers the period from SE 1,36, month IV to 1,40, month II. When complete, it probably extended back to the beginning of SE 1,36 and continued up to the end of SE 1,40. Several other auxiliary texts containing Φ and G are known.[13] It may only be coincidence but these are all fairly early in date.

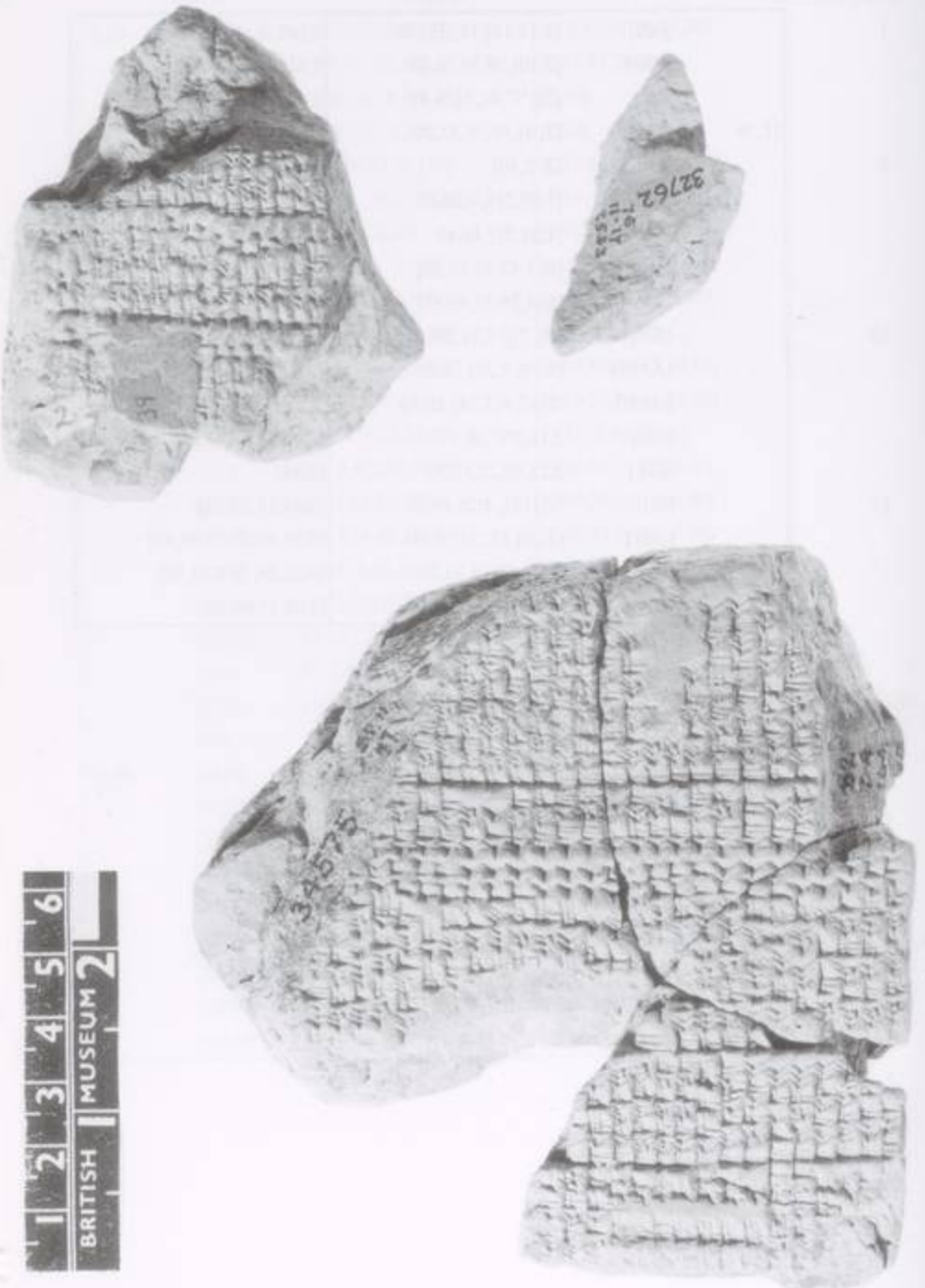
13 *E.g.*, the texts published by Aaboe, *Some Lunar Auxiliary Tables* … (see n. 3 above).

Text B

Obv.			I (Φ_2)	II (G_2)
1'	[1,36	ŠU]	[2,12,19,37,46,40]	[3, 0,52,50,22,13,20]
		'IZI'	2,15,'5',3[3,20]	[2,41,14,26,40]
		'KIN'	2,1[6],18, 8,5[3,20]	[2,40]
		[DU_6]	2,1'3',32,13,20	[2,40]
5'		'APIN'	2,10,46,17,46,[40]	[2,52,23,20]
		'GAN'	'2', 8, ,23,1'3',[20]	[3,18, 9,52,35,33,20]
		AB	2,'5',14,26,40	[3,43,58,31, 6,40]
		ZÍZ	2, 2,28,31, 6,[40]	[4, 9,47, 9,37,46,40]
		ŠE	1,59,42,3'5',3'3',20	[4,35,35,48, 8,53,20]
10'		DIR	1,58,39,15,3[3,20]	[4,56, 4,26,40]
	[1,37	BAR]	2, 1,2'5',11,[6,40]	[4,42,40,59,15,33,20]
		[GU_4]	'2', 4,11,'6',[40]	[4,16,52,20,44,26,40]
		[SIG]	2,'6',5'7',[2,13,20]	[3,51, 3,42,13,20]
		[ŠU]	[2], 9,4[2,57,46,40]	[3,25,15, 3,42,13,20]
15'		[IZI]	[2,12,28,53,20]	[2,59,26,25,11, 6,40]
		[KIN]	[2,15,14,48,53,20]	[2,40,48,53,20, 0, 0]
		[DU_6]	[2,16, 8,53,20]	[2,40]
		[APIN]	[2,13,22],5[7],4[6,40]	[2,40]
		[GAN]	[2,10,37], 2,13,[20]	[2,53,47,39,15,33,20]
20'		[AB]	[2, 7,51],6,40	[3,19,36,17,46,40]
		[ZÍZ]	[2, 5, 5,11],'6',[40]	[3,45,24,56,17,46,40]
		[ŠE]	[2, 2,19,15],33,[20]	[4,11,13,34,48,53,20]
	[1,38	BAR]	[1,59,33,20]	[4,37, 2,13,20]
		[GU_4]	[1,58,4]8,31, 6,40	[4,56,22,57,46,40]
25'		[SIG]	[2, 1,34],26,40	[4,41,14,34, 4,26,40]
		[ŠU]	[2, 4,20],22,13,20	[4,15,25,55,33,20]
		[IZI]	[2, 7, 6,1]7,46,40	[3,49,37,17, 2,13,20]
		[KIN]	[2, 9,52],13,20	[3,23,48,38,31, 6,40]
		[DU_6]	[2,12,38],'8',53,20	[2,58]
30'		[APIN]	[2,15,24],'7+x',26,40	[2,40,30,22,13,20]
		[GAN]	[2,15,59,3]'7','46',[40]	[2,40]

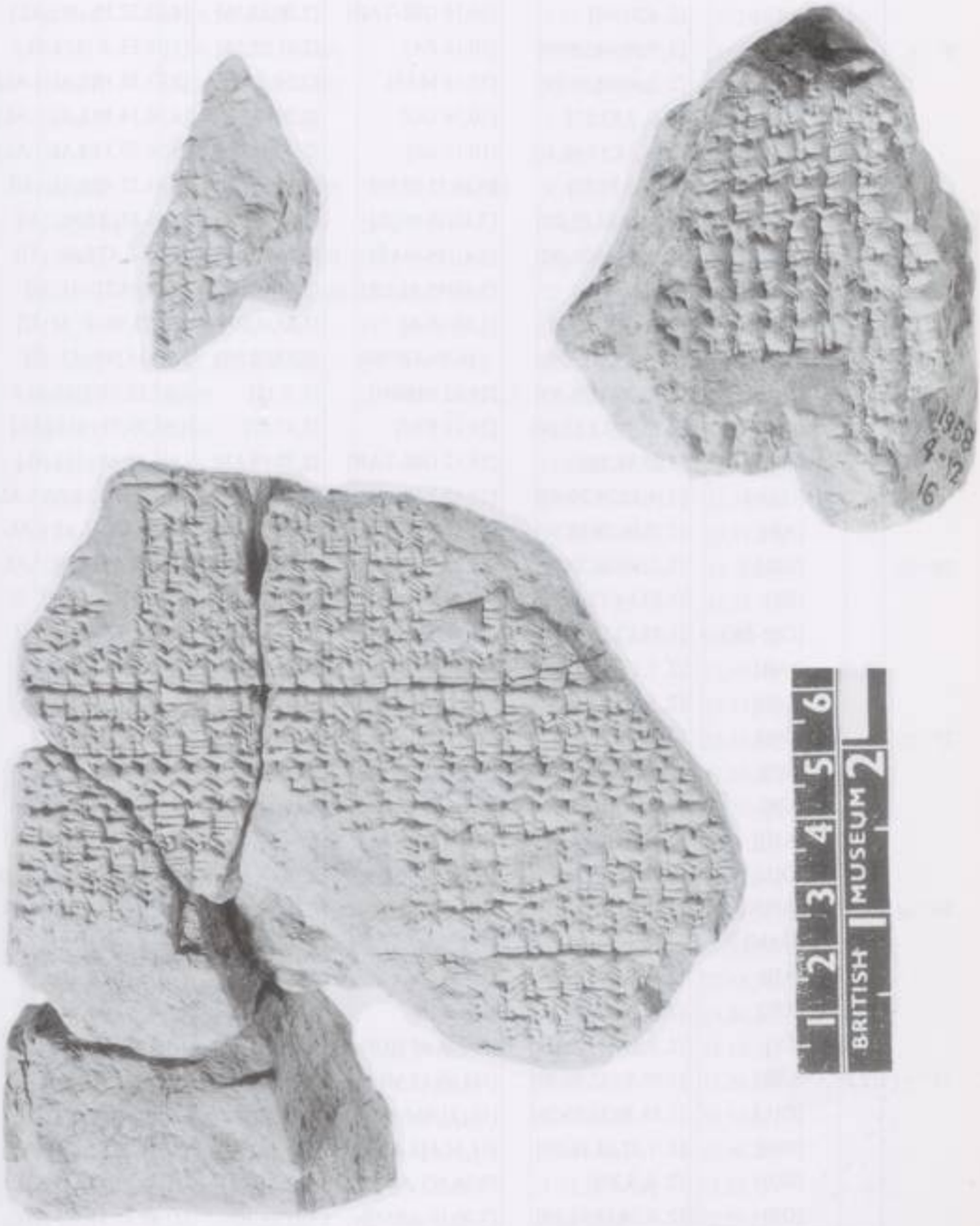
Rev.			I (Φ_3)	II (G_3)
1		[AB]	[2,13,13],42,1[3],20	2,[40, 6,17,46,40]
		[ZÍZ]	[2,10],28,24,26,40	2,5[5,14, 4,26,40]
		[ŠE]	[2], '7',41,51, 6,40	3,2[1, 2,42,57,46,40]
	[1,39	BAR]	[2, 4],55,55,33,20	3,[46,51,21,28,53,20]
5		[GU_4]	[2, 2,10]	4,[12,40]
		[SIG]	[1,59,2]4, 4,26,40	'4',[38,28,38,31, 6,40]
		[ŠU]	[1,58,5]7,46,40	[4,56,35,33,20]
		[IZI]	[2, 1,43,42,13,20]	[4,39,48, 8,53,20]
		[KIN]	[2, 4,29,37,46,40]	[4,13,59,30,22,13,20]
10		[DU_6]	[2], 7,[15,33,20]	[3,48,10,51,51, 6,40]
		[APIN]	[2,10, 1,28],53,20	[3,22,22,13,20]
		[GAN]	'2',12,4[7,24],26,40	'2',[56,33,34,48,53,20]
		[AB]	2,16,3'3',20	[2,40,14,48,53,20]
		[ZÍZ]	2,15,50,22,13,20	[2,40]
15		[ŠE]	'2',[13], 4,26,40, 0	[2,40,15,33,20]
		[DIR]	[2,10],18,'33', 6,40	[2,56,40,29,37,46,40]
	[1,40	BAR]	[2, 7],32,35,33,20	[3,22,29, 8, 8,53,20]
		[GU_4]	[2, 4],4'6',40	[3,48,17,46,40]

Text C **BM 32762+34575+34687+132282**
(76–11–17,2533+Sp. 2, 47+Sp. 2, 174+1958–4–12,16)



Contents: Lunar System A columns B_1, C_1, E_1, F_1, G_1, J_1, C'_1, and K_1 for SE 2,24 IV to 2,30 I.

Previous Publication: BM 34575 + 34687 published as ACT No. 4; BM 32762 and BM 132282 unpublished.



Text C obverse

Obv.	[-I (T_1)]	[0 (Φ_1)]	I (B_1)	II (C_1)	III (E_1)
1'	[2,24 ŠU]	[2,16,39,26,40]	[12,18,45 A]	[3,31, 4,30]	[4, 0,51,39 U U] ⇒
	[IZI]	[2,13,53,31, 6,40]	[10,26,15 ABSIN]	[3,19,42,30]	[5,59,37,21 U U]
	[KIN]	[2,11, 7,35,33,20]	[10,16 RÍN]	[2,59,49,20]	[6,18,47,57 U LAL]
	[DU_6]	[2, 8,21,40]	[10,16 GÍR-TAB]	[2,39,53,36]	[4,12,32,15 U LAL]
5'	[APIN]	[2, 5,35,44,26,40]	[10,16 PA]	[2,27,57,52]	[1,48,33, 6 U LAL]
	[GAN]	[2, 2,49,48,53,20]	[10,16 MÁŠ]	[2,24, 2, 8]	[2,23,58,18 LAL LAL]
	[AB]	[2, 0, 3,53,20]	[10,16 GU]	[2,28, 6,24]	[4,30,14,51 LAL LAL]
	[ZÍZ]	[1,58,17,57,46,40]	[10,16 *zib*]	[2,40,10,40]	[6,36,30,33 LAL LAL]
	[ŠE]	[2, 1, 3,53,20]	[9,26,15 ḪUN]	[2,59,37,30]	[5,44,32,45 LAL U]
10'	[2,25 BAR]	[2, 3,49,48,53,20]	[7,33,45 MÚL]	[3,18,22,30]	[3,45,47, 3 LAL U]
	[GU_4]	[2, 6,35,44,26,40]	[5,41,15 MAŠ]	[3,30,16,30]	[1,10, 2,42 LAL U]
	[SIG]	[2, 9,21,40]	[3,48,45 ALLA]	[3,35,10,30]	[2,35,44,21 U U]
	[ŠU]	[2,12, 7,35,33,20]	[1,56,15 A]	[3,33, 4,30]	[4],3[4,30, 3 U U]
	[IZI]	[2,14,53,31, 6,40]	[3,45 ABSIN]	[3,23,58,30]	6,33,15,[45 U U]
15'	[KIN]	[2,16,30,11, 6,40]	[29,12 ABSIN]	[3, 7,12]	5,47,55,33 [U LAL]
	[DU_6]	[2,13,44,15,33,20]	[29,12 RÍN]	[2,47,12]	3,41,39,51 U L[AL]
	[APIN]	[2,10,58,20]	[29,12 GÍR-TAB]	[2,32,19,12]	[46,48,18 U LAL]
	[GAN]	[2, 8,12,24,26,40]	[29,12 PA]	[2,25,26,24]	[2],54,51,33 LAL LAL
	[AB]	[2, 5,26,28,53,20]	[29,12 MÁŠ]	[2,26,33,36]	[5, 1], 7,15 LAL LAL
20'	[ZÍZ]	[2, 2,40,33,20]	[29,12 GU]	[2,35,40,48]	[7, 7],22,57 LAL LAL
	[ŠE]	[1,59,54,37,46,40]	[29, 3,45 *zib*]	[2,52,42,30]	[5,10,5]4,21 LAL U
	[DIR-ŠE]	[1,58,27,13,20]	[27,11,15 ḪUN]	[3,11,27,30]	[3,12], 8,39 LAL U
	[2,26 BAR]	[2, 1,13, 8,53,20]	[25,18,45 MÚL]	[3,26, 7,30]	[2,45,54 LAL U]
	[GU_4]	[2, 3,59, 4,26,40]	[2]3,26,15 MAŠ	[3,33,47,30]	[3, 9,22],45 U U
25'	[SIG]	[2, 6,45]	[2]1,33,45 ALLA	[3],34,27,[30]	[5, 8], 8,27 U U
	[ŠU]	[2, 9,30,55,33,20]	[19],41,15 A	3,28, 7,3[0]	[7, 6],54, 9 U U
	[IZI]	[2,12,16,51, 6,40]	[1]8, 8 ABSIN	3,14,34,40	[5,17], 3, 9 U LAL
	[KIN]	[2,15, 2,46,40]	[1]8, 8 RÍN	2,54,34,40	3,[10,4]7,27 U LAL
	[DU_6]	[2,16,20,55,33,20]	[1]8, 8 GÍR-TAB	2,36,44,48	1[4,56],30 LAL LAL
30'	[APIN]	[2,13,35]	[1]8, 8 PA	2,26,54,56	3,25,[43],57 LAL LAL
	[GAN]	[2,10,49, 4,26,40]	[1]8, 8 MÁŠ	2,25, 5, 4	5,31,59,39 LAL LAL
	[AB]	[2, 8, 3, 8,53,20]	[1]8, 8 GU	2,31,15,12	6,45,44,39 LAL U
	[ZÍZ]	[2, 5,17,13,20]	[1]8, 8 *zib*	2,45,25,20	4,39,28,57 LAL U
	[ŠE]	[2, 2,31,17,46,40]	[16],48,45 ḪUN	3, 4,32,30	2,38,30,15 LAL U
35'	[2,27 BAR]	[1,59,45,22,13,20]	[1]4,56,15 MÚL	3,21,58,30	[1], 4,30,54 U U
	[GU_4]	[1,58,36,28,53,20]	[13, 3],45 MAŠ	3,32,24,30	[3],43, 1, 9 U U
	[SIG]	[2, 1,22,24,26,40]	[11,11,1]5 ALLA	3,35,50,30	[5],41,46,51 U U
	[ŠU]	[2, 4, 8,20]	[9,18,4]5 A	3,32, 5,[30]	[6],43,27,27 U LAL
	[IZI]	[2, 6,54,15,33,20]	[7,26,15 ABSI]N	3,21,[1,30]	[4],44,41,45 U LAL ⇒

	IV (F_1)	V (G_1)	VI (J_1)	VII (C'_1)	VIII (K_1)	
⇐	[15,54]	[2,40]	[57, 3,45 LAL]	'2',1[1] TAB	1,[45,7]	1'
	[15,12]	[2,40]	[57, 3,45 LAL]	'5','4'1 TAB	[1,48,37]	
	[14,30]	[2,49,21,28,53,20]	[5,11,] '5'6,9 LAL	[9,5]6,35 TAB	2,[54,6]	
	[13,48]	[3,14,51, 6,40]		9,57,52 TAB	3,'2'[4,48]	
	[13,6]	[3,40,39,45,11, 6,40]		5,57,52 TAB	3,'4'[6,37]	5'
	[12,24]	[4, 6,28,23,42,13,20]		1,57,52 TAB	4,[8,26]	
	[11,42]	[4,32,17, 2,13,20]		2, 2, 8 LAL	4,'3'[0,14]	
	[11,8]	[4,54,57, 2,13,20]		6, 2, 8 LAL	4,'4'[8,54]	
	[11,50]	[4,45,59,45,11, 6,40]	[25],15, 2,30 LAL	9,[43],25 LAL	4,11,[2]	
	[12,32]	[4,20,11, 6,40]	[57], 3,45 LAL	[9],22,30 LAL	3,13,44	10'
	[13,14]	[3,54,22,28, 8,53,20]	[57], 3,45 LAL	[5],'57' LAL	2,51,21	
	[13,56]	[3,28,33,49,37,46,40]	[57, 3],45 LAL	'2',27 LAL	2,29,'3'	
	[14,38]	[3, 2,45,11, 6,40	[57, 3,45] 'LAL'	[1],'3' TAB	2,6,44	
	[15,20]	[2,41,51,51, 6,40]	[57, 3,45 LAL]	[4],23 TAB	1,49,'11'	
	[15,52]	[2,40]	[26,14,55,30 LAL]	[8],23,15 TAB	2,[22,8]	15'
	[15,10]	[2,40]		[10 UŠ TAB]	[2,50]	
	14,[28]	[2,50,35,33,20]		[7,26,24 TAB]	[2,58,1]	
	13,46	3,[16,17,31,51, 6,40]		[3,26,24 TAB]	[3,19,43]	
	13,4	3,42, 6,[10,22,13,20]		[33,36 LAL]	[3,41,32]	
	12,22	4, 7,54,48,[53,20]		[4,33,36 LAL]	[4, 3,21]	20'
	11,40	4,33,43,27,24,[26,40]	[4,11, 4,30 LAL]	[8,30,51 LAL]	[4,21, 1]	
	11,10	4,55,34, 4,26,40]	[57, 3,45 LAL]	[9,22,30 LAL]	[3,49, 7]	
	11,52	4,44,33,20	[57, 3,45 LAL]	[7,20 LAL]	[3,40, 9]	
	12,34	4,18,44,41,28,53,20	5[7, 3,45 LAL]	[3,50 LAL]	[3,17,50]	
	13,16	3,52,56, 2,57,46,40	5[7, 3,45 LAL]	[20 LAL]	[2,55,32]	25'
	13,58	3,27, 7,24,26,40	[57, 3,45 LAL]	[3,10, 0 TAB]	[2,33,13]	
	14,40	3, 1,18,45,5[5,33,2]0	[47,17,54,30 LAL]	[6,46,25 TAB]	[2,20,47]	
	15,22	2,41,22,46,40		[10 UŠ TAB]	[2,51,22]	
	15,50	2,40		[8,54,56 TAB]	[2,48,54]	
	15,8	2,40		[4,54,56 TAB]	[2,44,54]	30'
	14,26	2,51,58,20		[54,56 TAB]	[2,52,53]	
	13,44	3,17,43,57, 2,13,20		[3, 5, 4 LAL]	[3,14,38]	
	13, 2	3,43,32,35,33,20		[7, 5, 4 LAL]	[3,36,27]	
	12,20	4, 9,21,14, 4,26,40	[40,11,50,30 LAL]	[9,33,35 LAL]	[3,19,35]	
	11,38	4,35, 9,52,35,3[3,20]	[57, 3,45 LAL]	[8,43 LAL]	[3,29,23]	35'
	[11,12]	[4,56]	[57, 3,45 LAL]	[5,13 LAL]	[3,53,43]	
	[11,54]	[4,43, 6,54,48,53,20]	[57, 3,45 LAL]	[1,43 LAL]	[3,44,20]	
	[12,36]	[4,17,18,16,17,46,40]	[57, 3,45 LAL]	[1,52,30 TAB]	[3,22,7]	
⇐	[13,18]	[3,51,29,37,46,40]	[57, 3,45 LAL]	[5,32 TAB]	[2,59,37]	

Text C reverse

Rev.		[-II (T_1)]	[I (Φ_1)]	[0 (B_1)]	I (C_1)	II (E_1)	
1		[KIN]	[2, 9,40,11, 6,40]	[7, 4 RÍN]	[3, 1,57,20]	[2],39,55, 3 U LAL	⇒
		[DU_6]	[2,12,26, 6,40]	[7, 4 GÍR-TAB]	[2,41,57,20]	[1,16],41,18 LAL LAL	
		[APIN]	[2,15,12, 2,13,20]	[7, 4 PA]	[2,29,10,24]	[3],56,36,21 LAL LAL	
		[GAN]	[2,16,11,40]	[7, 4 MÁŠ]	[2,24,23,28]	[6], 2,52, 3 LAL LAL	
5		[AB]	[2,13,25,44,26,40]	[7, 4 GU]	[2,27,36,32]	[6,1]4,52,15 LAL U	
		[ZÍZ]	[2,10,39,48,53,20]	[7, 4 *zib*]	[2,38,49,36]	[4], 8,36,33 LAL U	
		[ŠE]	[2, 7,53,53,20]	[6,26,15 ḪUN]	[2,57,37,30]	[1,45,4]3,42 LAL U	
	[2,28	BAR]	[2, 5, 7,57,46,40]	[4,33,45 MÚL]	[3,16,22,30]	[2,17,5]3,51 U U	
		[GU_4]	[2, 2,22, 2,13,20]	[2,41,15 MAŠ]	[3,29, 4,30]	[4,16,39],33 U U	
10		[SIG]	[1,59,36, 6,40]	[48,45 ALLA]	[3,34,46,30]	[6,15,25,15] U U	
		[ŠU]	[1,58,45,44,26,40]	[28,56,15 ALLA]	[3,33,28,30]	[6, 9,49, 3 U LA]L	
		[IZI]	[2, 1,31,40]	[27, 3,45 A]	[3,25,10,30]	[4,11, 3,21 U] LAL	
		[KIN]	[2, 4,17,35,33,20]	[26 ABSIN]	[3, 9,20]	[1,54, 5,18] U LAL	
		[DU_6]	[2, 7, 3,31, 6,40]	[26 RÍN]	[2,49,20]	[2,18,26, 6] LAL LAL	
15		[APIN]	[2, 9,49,26,40]	[26 GÍR-TAB]	[2,33,36]	[4,27,28,4]5 LAL LAL	
		[GAN]	[2,12,35,22,13,20]	[26 PA]	[2,25,52]	[6,33,44],27 LAL LAL	
		[AB]	[2,15,21,17,46,40]	[26 MÁŠ]	[2,26, 8]	[5,43],59,51 LAL U	
		[ZÍZ]	[2,16, 2,24,26,40]	[26 GU]	[2,34],2[4]	[3,3]7,44, 9 LAL U	
		[ŠE]	[2,13,16,28,53,20]	[26 *zib*]	[2,5]0,[4]0	38,5[6,5]4 LAL U	
20		[ŠE-DIR]	[2,10,30,33,20]	[24,11,15 ḪUN]	[3, 9],27,30	2,51,32,15 U U	
	[2,29	BAR]	[2, 7,44,37,46,40]	[22,18,45 MÚL]	[3,2]4,55,30	4,50,17,57 U U	
		[GU_4]	[2, 4,58,42,13,20]	[20,26,15 MAŠ]	[3],33,23,30	6,49, 3,39 U U	
		[SIG]	[2, 2,12,46,40]	[18,33,45 ALLA]	[3],34,51,30	5,36,10,39 U LAL	
		[ŠU]	[1,59,26,51, 6,40]	[16,41,15 A]	[3],29,19,30	3,37,24,[57] U LAL	
25		[IZI]	[1,58,55]	[14,56 ABSIN]	[3,16],42,40	52,20,30 U LAL	
		[KIN]	[2, 1,40,55,33,20]	[14,56 RÍN]	[2,56,4]2,40	2,52, 5,27 LAL LAL	
		[DU_6]	[2, 4,26,51, 6,40]	[14,56 GÍR-TAB]	[2,38, 1,36]	4,58,21, 9 LAL LAL	
		[APIN]	[2, 7,12,46,40]	[14,56 PA]	[2,27,20,32]	[7, 4],36,51 [LAL LAL]	
		[GAN]	[2, 9,58,42,13,20]	[14,56 MÁŠ]	[2,24,39,28]	[5,13, 7,27 LAL U]	
30		[AB]	[2,12,44,37,46,40]	[14,56 GU]	[2,29,58,24]	[3, 6,51,45 LAL U]	
		[ZÍZ]	[2,15,30,33,20]	[14,56 *zib*]	[2,43,17,20]	[22,47,54 U U]	
		[ŠE]	[2,15,53, 8,53,20]	[13,48,45 ḪUN]	[3, 2,32,30]	[3,25,10,39 U U]	
	[2,30	BAR]	[2,13, 7,13,20]	[11,56,15 MÚL]	[3,20,46,30]	[5,23,56,21 U U]	⇒

	III (F_1)	IV (G_1)	V (J_1)	VI (C'_1)	VII (K_1)	
⇐	1[4]	3,25,[40,59,15,33,20]	[11,17, 8,30 LAL]	[9,32, 5 TAB]	[3,23,55]	1
	1[4],42	2,59,52,2[0,44,26,40]		[10 UŠ TAB]	[3,9,52]	
	15,24	2,40,55		[6,23,28 TAB]	[2,47,18]	
	15,48	2,40		[2,23,28 TAB]	[2,42,23]	
	15,6	2,40		[1,36,32 LAL]	[2,38,23]	5
	14,24	2,53,21,43,42,13,20		[5],3′6,32 LAL’	′2′,[47,45]	
	13,42	3,19,10,22,13,20	1[9, 8,51,30 LAL]	9,23,57 LAL	2,[50],3′8’	
	13	3,44,59, . ,44,26,40	5[7, 3,45 LAL]	[9,2]2,30 LAL	2,38,33	
	12,18	4,10,47,39,15,33,20	[57, 3,45 LAL]	[6,2]1 LAL	3, 7,[22]	
	11,3[6]	[4,36,36,17,46,40]	[57, 3,45 LAL]	[2,51] LAL	3,3[6,41]	10
	11,14	4,56,17,24,26,40	[57, 3,45 LAL]	[39 TAB]	[3,59,52]	
	11,56	4,41,40,29,37,46,4[0]	[57, 3,45 LAL]	[4, 9 TAB]	[3,48,45]	
	12,38	4,15,51,51, 6,40	[32,20, 7,30 LAL]	[7,55,15 TAB]	[3,51,26]	
	13,20	3,50, 3,12,35,33,[20]		[10 UŠ TAB]	[4, . , 3]]	
	14,2	3,24,14,34, 4,26,4[0]		[7,52 TAB]	[3,32, 6]	15
	14,44	2,58,25,55,33,20		[3,52 TAB]	[3, 1,17]	
	15,26	2,40,35,55,33,20		[8 LAL]	[2,40,27]	
	15,46	2,40		[4, 8 LAL	[2,35,52]	
	15,4	2,40,13,3[1, 6,40]		[8, 8 LAL]	[2,31,55]	
	14,22	2,54,4[8, 8,53,20]	[55, 9,37,30 LAL]	[9,23,45 LAL]	[1,50,14]	20
	13,40	3,20,[36,47,24,26,40]	[57, 3,45 LAL]	[7,44 LAL]	[2,15,49]	
	12,58	3,[46,25,25,55,33,20]	[57, 3,45 LAL]	[4,14 LAL]	[2,45, 7]	
	12,16	[4,12,14, 4,26,40]	[57, 3,45 LAL]	[44 LAL]	[3,14,26]	
	11,34	[4,38, 2,42,57,46,40]	[57, 3,45 LAL]	[2,46 TAB]	[3,43,44]	
	11,1[6]	[4,56,35,33,20]	[53,23, 6,30 LAL]	[6,18,25 TAB]	[4, 9,30]	25
	11,[58]	[4,40,14, 4,26,40]		10 U[Š TAB]	[4,50,14]	
	[12,40]	[4,14,25,25,55,33,20]		9,20,32 TAB	′4′,23,[45]	
	[13,22]	[3,48,36,47,24,26,40]		5,20,32 TAB	3,′5′3,56	
	[14,4]	[3,22,48, 8,53,20]		1,20,32 TAB	3,24,8	
	[14,46]	[2,56,59,30,22,13,20]		2,39,28 LAL	2,54,20	30
	[15,28]	[2,40,17,35,33,20]		6,39,28 LAL	2,33,′3′8	
	[15,44]	[2,40]	34, 6,3′8’ LAL	9,′3′7,′3′5 LAL	1,56,17	
⇐	[15,2]	[2,40,12,46,40]	[57, 3,45 LAL]	9, 7 LAL	[1,34, 2]	

Critical Apparatus

Obv. II 38′	3,32,5,[30]: Perhaps 22 instead of 32.
Obv. VI 3′	[5,11],⌜5⌝9: Perhaps 49 instead of 59.
Obv. VI 9′	[25],15,2,30: Mistake for [25],14,3,30.
Obv. VII 1′	⌜2⌝,1[1]: Only 1+x of the ⌜2⌝ remains.
Obv. VII 2′	⌜5⌝,⌜4⌝1: Perhaps 4,31.
Obv. VII 11′	[5],⌜57⌝: Perhaps 58 instead of 57.
Obv. VII 12′	⌜2⌝,27: Only 1+x of the ⌜2⌝ remains.
Obv. VII 13′	[1],⌜3⌝: Only 2+x of the ⌜3⌝ remains.
Obv. VIII 4′	3,⌜2⌝[4,48]: Only 10+x of the ⌜2⌝[4] remains.
Obv. VIII 5′	3,⌜4⌝[6,37]: Only 20+x of the ⌜4⌝[6] remains.
Obv. VIII 7′	4,⌜3⌝[0,14]: Only 20+x of the ⌜3⌝[0] remains.
Obv. VIII 8′	4,⌜4⌝[8,54]: Only 30+x of the ⌜4⌝[8] remains.
Obv. VIII 14′	1,49,⌜11⌝: Perhaps 20 instead of 11.
Rev. II 8	[2,17,5]3,51: Mistake for [2,11,4]7,42 caused by ignoring the fact that it is still near the nodal zone.
Rev. IV 19	2,40,13,3[1,6,40]: Mistake for 2,40,3,3[1,6,40]
Rev. V 32	24, 6, 3⌜8⌝: Only 5+x of the 3⌜8⌝ remains. The signs in this line run into the next column.
Rev. VI 6	[5],3⌜6,32⌝: Only 33+x remains of the 3⌜6⌝.
Rev. VI 32.	9,⌜3⌝7,⌜3⌝5: Because of the overflow from the previous column these signs are squeezed in to the available space. Perhaps there is only 27 instead of 37.
Rev. VII 6	⌜2⌝,[47,45]: Only 1+x of the ⌜2⌝ remains.
Rev. VII 7	2,[50],3⌜8⌝: Perhaps 35 instead of 38.
Rev. VII 31	2,33,⌜3⌝8: Perhaps 28 instead of 38.
Rev. VII 32	1,56,15: Mistake for 1,56,17.

Commentary

This text is restored from three disconnected fragments that almost certainly belong to the same tablet. The largest piece, BM 34575 + 34687, was published as ACT No. 4. BM 32762 is a small flake from the reverse measuring approximately 5×3 cm. It contains parts of columns C'_1 and K_1. BM 132282 measures approximately 8.5×6.5 cm and is preserved on both sides. It contains columns J_1, C'_1 and K_1. Part of the bottom edge is preserved on BM 34575 + 34687; no other edges remain. The columns are separated by vertical rulings.

The text is a large new moon ephemeris covering at least 5 years. Column Ψ_1 is not given, and the text uses an abbreviated column F. ACT Nos. 4a and 5 cover some of the same years. Interestingly, column F_1 is identical in ACT No. 4a, whereas rather different values are given in ACT No. 5.

Text D **BM 32302+32531+32742** (76–11–17,2031+2273+2512)

Contents: Lunar System A columns T_1, Φ_1, B_1, C_1, E_1, Ψ'_1, F_1 for SE 2,30 VI to 2,35 III.

Previously published: BM 32302 + 32742 published as ACT No. 6aa; BM 32531 unpublished.

Critical Apparatus

Obv. I 6′ [ŠE]: According to Neugebauer, there are traces of a sign near the edge, but rather [3] than [ŠE].
Obv. II 17′ 2, 4,45,22,1⌜3⌝,[20]: Only 12+x preserved of the 1⌜3⌝.
Obv. II 18′ 2, 7,31,17,4⌜6⌝,[40]: Only 41+x preserved of the 4⌜6⌝.
Obv. III 22′ 1[5],⌜3⌝3,4[5]: Traces could either be 33 or 23.
Obv. III 23′ 14,41,1[5]: Mistake for 13,41,1[5].
Obv. V 18′ 4,21,24,27: Mistake for 4,31,24,27.
Rev. I 12′ 2,⌜35⌝: The traces look like either 2,35 or 2,25. This is a mistake for 2,34.
Rev. II 1′ 2,1⌜5⌝,[58],20: Only 14+x is preserved of the ⌜15⌝.
Rev. II 4′ ⌜2⌝, 9,53,31, 6,40: Only 1+x is preserved of the ⌜2⌝.
Rev. II 5′ ⌜2⌝, 7, 7,35,33,20: Only 1+x is preserved of the ⌜2⌝.
Rev. II 8′ 1,58,49,48,⌜5⌝3,20: Traces could be either 53 or 43.
Rev. II 16′ 2,1⌜5⌝,[16, 6,40]: Only 14+x is preserved of the 1⌜5⌝.
Rev. II 17′ ⌜2⌝,[12,30,11, 6,40]: Only 1+x is preserved of the ⌜2⌝.
Rev. III 1′ ⌜3⌝,[18,45]: Only 1+x is preserved of the ⌜3⌝.
Rev. III 11′ ⌜2⌝[6,41,15]: Only 10+x is preserved of the 2⌜6⌝.
Rev. III 12′ ⌜2⌝[4,48,45]: Only 10+x is preserved of the 2⌜4⌝.
Rev. V 24′ 2, 8,25,27: Mistake for 1,52,50,54. The scribe overlooked the fact that two values belong to the nodal zone.
Rev. VI 6′ [2]0,16,3[7]: According to Neugebauer, the traces of 16 look more like 17.
Rev. VI 9′ 1,33,46, 1: According to Neugebauer, the traces look more like 1,33,46, 5; perhaps dittography from line 8.
Rev. VII The restoration of this badly preserved column depends essentially on Neugebauer's reading of line 4′ where the last 15 seems to be a plausible rendering of the traces.
Rev. VII 3′ 14,[57]: According to Neugebauer, traces of tens (at least 40) and units (between 5 and 8) support the restoration [57].

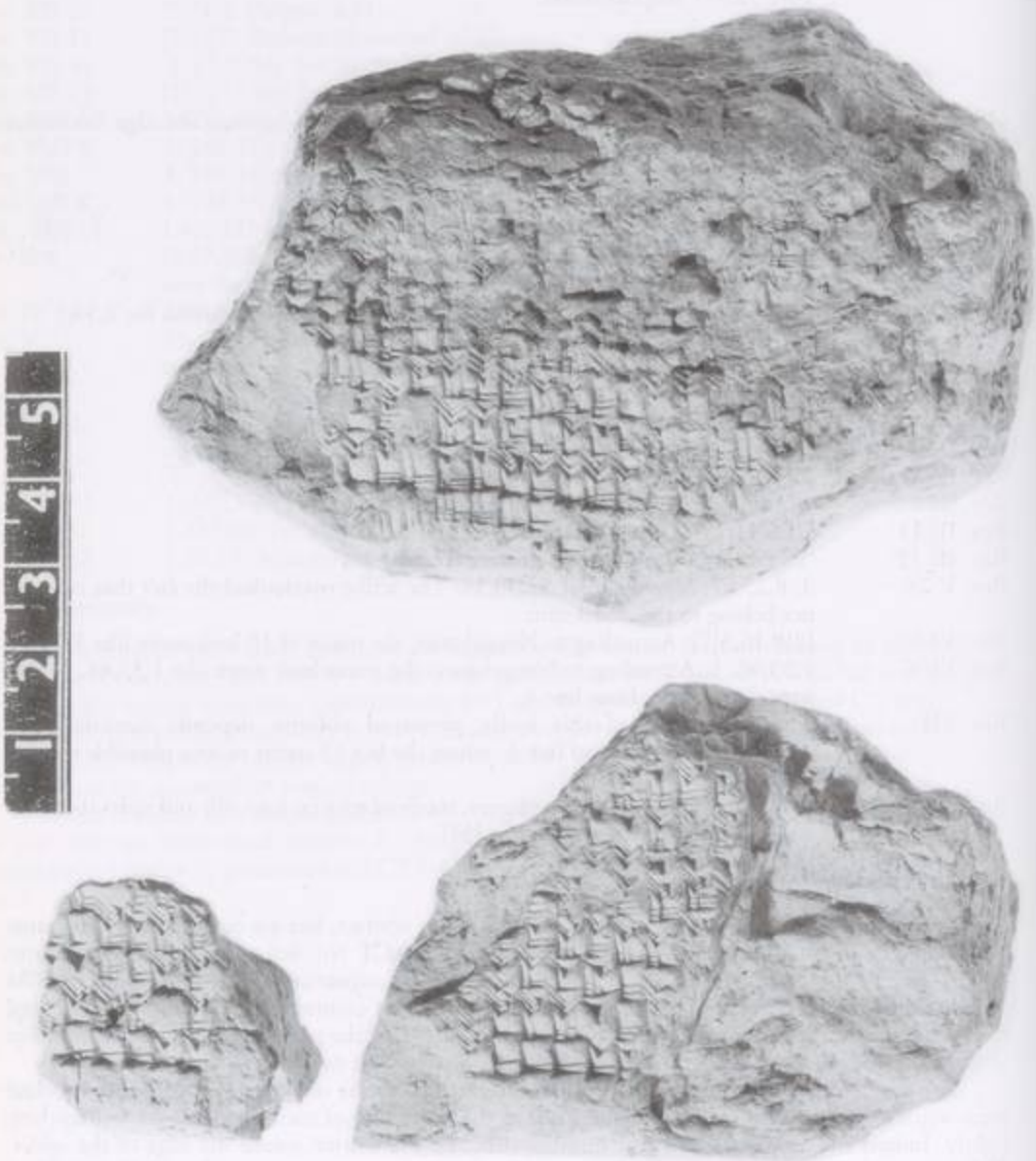
Commentary

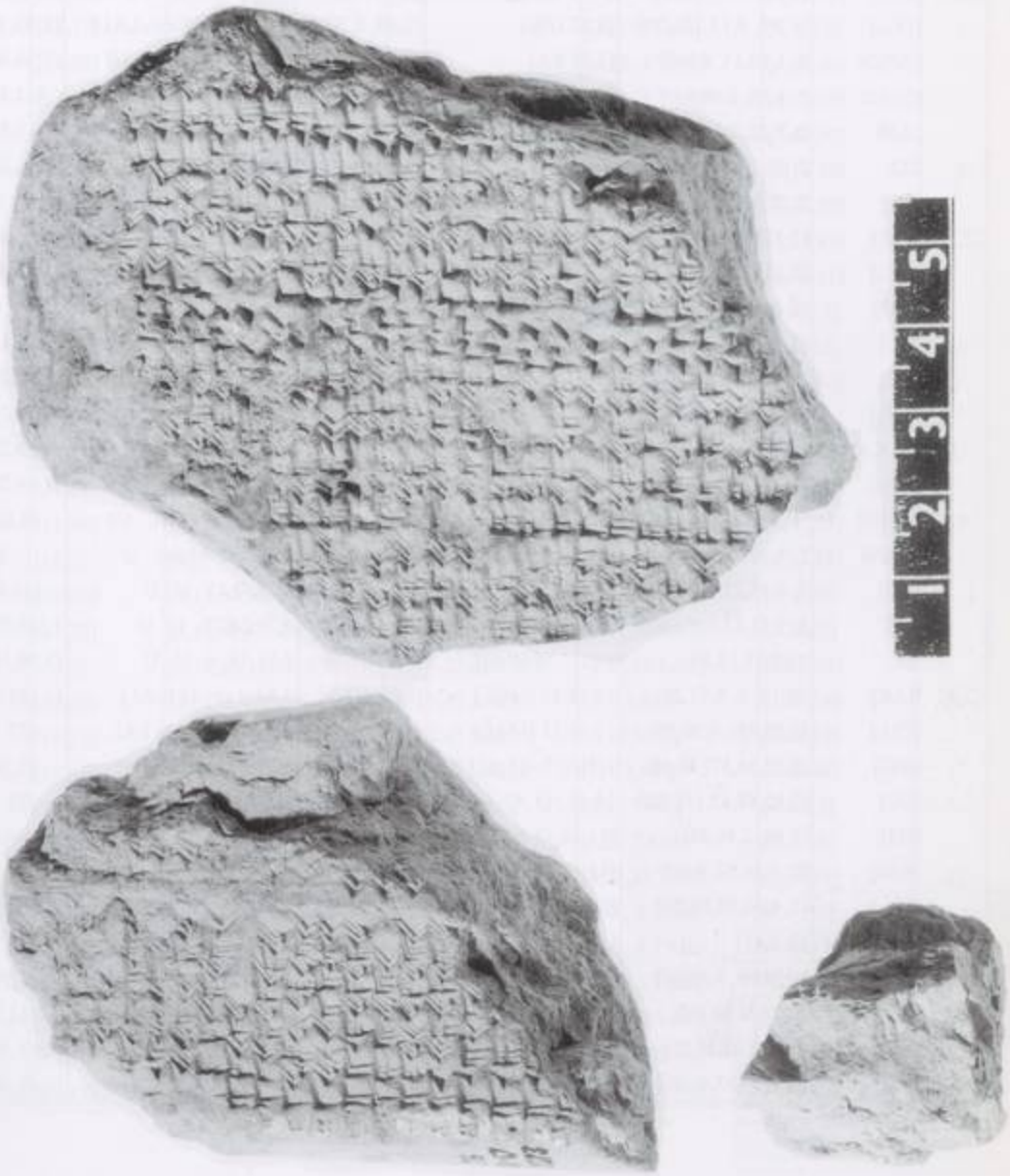
The three fragments that comprise this text have no direct contact, but are certainly from the same tablet. The fragments BM 32302 and 32742 published as ACT No. 6aa contain parts of columns C_1, E_1 and F_1 (obv. and rev.), and T_1 and Φ_1 (obv. only) respectively. The new fragment, BM 32742, which measures approximately 5×8 cm, adds parts of columns T_1, Φ_1, and B_1 (obv. and rev.). Only the left edge is partially preserved, but it is likely that the tablet originally covered the five years from SE 2,30 to SE 2,35. There are no rulings between the columns.

The year and month names appear to have been added to the text after the main contents had been written. They are squeezed into the space at the beginning of each line, and are written very lightly. Indeed the only preserved year number (Rev. 11′) is written round the edge of the tablet. This may explain why the scribe has apparently written the wrong year number (2,35 instead of 2,34).

Column F_1 is the abbreviated version, but is not connectable with the abbreviated column F_1s in either Text C above or ACT No. 5 (continuation of Text C yields values that are 1 higher in the last place; ACT No. 5 values that are 4 higher in the last place).

Text D




1
2
3
4
5

Text D obverse

Obv.	I (T_1)	II (Φ_1)	III (B_1)	IV (C_1)	V (E_1)	VI (Ψ'_1)
0'	[2,30 [KIN]	[1,59,17,35,33,20]	[3,52 RÍN]	[3, 4, 5,20]	[3,22,57,51 LAL LAL]	[1, 1, 3,17]
1'	[DU$_6$]	'1',59, 4,15,3[3,20]	[3,52 GÍR]	[2,44, 5,20]	[5,29,13,33 LAL LAL]	[1,43, 8,31]
	[AP]IN	2, 1,50,11, 6,[40]	[3,52 PA]	[2,30,27,12]	[6,48,30,45 LAL U]	[1,34,46,15]
	[G]AN	2, 4,36, 6,40	[3,52 MÁŠ]	[2,24,49, 4]	[4,42,15, 3 LAL U]	[52,41, 1]
	[A]B	2, 7,22, 2,13,[20]	[3,52 GU]	[2,27,10,56]	[2,35,59,21 LAL U]	[10,35,47]
5'	ZÍZ	2,10, 7,57,46,[40]	[3,52 *zib*]	[2,37,32,48]	[1,24,32,42 U U]	[31,29,27]
	[ŠE]	2,12,53,53,20	[3,26,15 ḪUN]	[2,55,37,30]	[3,58,49, 3 U U]	[1,13, 0,21]
	[2,31 BAR]	[2,15],3[9,48,53,20]	[1,33,45 MÚL]	[3,14,22,30]	[5,57,34,45 U U]	[1,52,35,35]
	[GU$_4$]	[2,15,43,53,20]	[29,41,15 MÚL]	[3,27,52,30]	[6,27,39,33] U L[AL]	[1,27,49,11]
	[SIG]	[2,12,57,57,46,40]	[27,48,45 MAŠ]	[3,34,22,30]	[4,28,53,5]1 U LAL	4[8,13,57]
10'	[ŠU]	[2,10,12, 2,13,20]	[25,56,15 ALLA]	[3,33,52,30]	[2],3[0], 8, 9 U LAL	8,38,[43]
	[IZI]	[2, 7,26, 6,40]	[24, 3,45 A]	[3,26,22],30	1,21,15, 6 LAL LAL	30,5[6,31]
	[KIN]	[2, 4,40,11, 6,40]	[22,48 ABSIN]	[3,11,2]8	3,53,50,15 LAL LAL	1,1[1,2]0,[45]
	[KIN-2-KAM]	[2, 1,54,15,33,20]	[22,48 RÍN]	[2,51,28]	6, . , 5,57 LAL LAL	1,[53,25,59]
	[DU$_6$]	[1,5]9,[8,20]	[22,48 GÍR]	[2,34,52],48	6,17,38,21 LAL U	1[,24,28,47]
15'	[APIN]	'1',59,13,[31, 6,40]	[22,48 PA]	[2,26,17],36	4,11,22,39 [LAL U]	42,[23,33]
	[GAN]	2, 1,59,26,[40]	[22,48, MÁŠ]	[2,25,42],24	1,46,13,54 LAL U	18,[19]
	[AB]	2, 4,45,22,1'3',[20]	[22,48 GU]	[2,33, 7],12	2,25, 8,45 U U	[41,4]6,[55]
	'ZIZ'	2, 7,31,17,4'6',[40]	'22',[48 *zib*]	[2,48,3]2	4,21,24,27 U U	1,[23,52, 9]
	'ŠE'	2,10,17,13,20	21,1[1,15 ḪUN]	[3, 7,2]7,30	6,31,13, 9 U U	[1,56,11,37]
20'	[2,32 BAR]	'2',13, 3, 8,53,20	19,18,45 [MÚL]	[3,23,4]3,30	5,54, 1, 9 U [LAL]	[1,16],3[6,23]
	[GU$_4$]	[2,15,4]9, 4,26,40	17,26,15 [MAŠ]	[3,32,59],30	3,55,15,2[7] U LAL	[37, 1, 9]
	[SIG]	[2,15,34,37],46,40	1[5],'3'3,4[5 ALLA]	[3,35,15,3]0	1,28,59,3[0] U LAL	[2,34, 5]
	[ŠU]	[2,12,48,42,13],'20'	14,41,1[5 A]	[3,30,31,30]	2,26,1[5],5[7 LAL LAL]	[42, 9,19]
	[IZI]	[2,10, 2,46,40]	[11,48,45 ABSIN]	[3,18,47,30]	[4],25, 1,3[9 LAL LAL]	1,21,4[4,33]
25'	[KIN]	[2, 7,16,51, 6,40]	[11,44 RÍN]	[2,58,50,40]	[6,3]0,58,[21 LAL LAL]	1,56,16,[33]
	[DU$_6$]	[2, 4,30,55,33,20]	[11,44 GÍR]	[2,39,18,24]	[5,46],4[5,57 LAL U]	[1],1[4],1[1,19]
	[APIN]	[2, 1,45]	[11,44 PA]	[2,27,46, 8]	[3,40,3]0,1[5 LAL U]	[32, 6, 5]
	[GAN]	[1,58,59, 4,26,40]	[11,44 MÁŠ]	[2,24,13,52]	[44,2]9,[6 L]AL [U]	[9,59, 9]
	[AB]	[1,59,22,46,40]	[11,44 GU]	[2,28,41,36]	[2,56, 1, 9 U U]	[52, 4,23]
30'	[ZÍZ]	[2, 2, 8,42,13,20]	[11,44 *zib*]	[2,41, 9,20]	[5, 2,16,51 U U]	[1,34, 9,37]
	[ŠE]	[2, 4,54,37,46,40]	[10,48,45 ḪUN]	[3, 0,32,30]	[7, 4,51,33 U U]	[1,44,58,49]

	VII (F)	[VIII (G_1)]	[IX (J_1)]	[X (C'_1)]	[XI (K_1)]	
⇐	[11,33]	[4,39,29, 8, 8,53,20]	[17,22,20,30 LAL]	[9, 4, 5 TAB]	[4,31,10]	0'
	[11,17]	[4,56,35,33,20]		[10 UŠ TAB]	[5, 6,35]	1'
	[11,59]	[4,38,47,39,15,33,20]		[6,49, 4 TAB]	[4,45,36]	
	[12,41]	[4,12,59, 0,44,26,40]		[2,49, 4 TAB]	[4,15,48]	
	[13,23]	[3,47,10,22,13,20]		[1,10,56 LAL]	[3,45,59]	
	[14,5]	[3,21,21,43,42,13,20]		[5,10,56 LAL]	[3,16,10]	5'
	[14,47]	[2,55,33, 5,11, 6,40]	[13, 3,39,30 LAL]	[9, 2,21 LAL]	[2,33,27]	
	[15,29]	[2,40, 8,20]	[57, 3,45 LAL]	[9,22,30 LAL]	[1,33,42]	
	[15,43]	[2,40]	[57, 3,45 LAL]	[6,45 LAL]	[1,36,11]	
	[15,1]	[2,40,26,17,46,40]	[57, 3,45 LAL]	[3,15 LAL]	[1,40, 7]	
	[14,19]	[2,57,40,59,15,33,20]	[57, 3,45 LAL]	[15 TAB]	[2, 0,22]	10'
	[13,37]	[3,23,29,37,46,40]	[57, 3,45 LAL]	[3,45 TAB]	[2,22,40]	
	[12,55]	[3,49,18,16,17,46,40]	[38,25,19,30 LAL]	[7,27,15 TAB]	[3,18,20]	
	[12,13]	[4,15, 6,54,48,53,20]		[10 UŠ TAB]	[4,25, 6]	
	[11,31]	[4,40,55,33,20]		[8,17,36 TAB]	[4,49,12]	
	[11,19]	[4,56,33,42,13,20]		[4,17,36 TAB]	[5, . , 51]	15'
	[12,1]	[4,37,21,14, 4,26,40]		[17,36 TAB]	[4,37,38]	
	[12,43]	[4,11,32,35,33,20]		[3,42,24 LAL]	[4, 7,50]	
	[13,25]	[3,45,43,57, 2,13,20]		[7,42,24 LAL]	[3,38, 1]	
	[14,7]	[3,19,55,18,31, 6,40]	[49, 4,25,30 LAL]	[9,27,45 LAL]	[2,21,23]	
	[14,49]	[2,54, 6,40]	[57, 3,45 LAL]	[8, 8 LAL]	[1,48,54]	20'
	[15,31]	[2,40]	[57, 3,45 LAL]	[4,38 LAL]	[1,38,18]	
	[15,41]	[2,40]	[57, 3,45 LAL]	[1, 8 LAL]	[1,41,48]	
	[14,59]	[2,40,44,48,53,20]	[57, 3,45 LAL]	[2,22 TAB]	[1,46, 3]	
	[14,17]	[2,59, 7,24,26,40]	[57, 3,45 LAL]	[5,52 TAB]	[2, 7,54]	
	[13,35]	[3,24,56, 2,57,46,40]	[2,24,33,30 LAL]	[9,58,25 TAB]	[3,32,29]	25'
	[12,53]	[3,50,44,41,28,53,20]		[9,46, 8 TAB]	[4, . ,30]	
	[12,11]	[4,16,33,20]		[5,46, 8 TAB]	[4,22,19]	
	[11,29]	[4,42,21,58,31, 6,40]		[1,46, 8 TAB]	[4,44,8]	
	[11,21]	[4,56,15,11, 6,40]		[2,13,52 LAL]	[4,54, 1]	
	[12,3]	[4,35,54,48,53,20]		[6,13,52 LAL]	[4,29,40]	30'
⇐	[12,45]	[4,10, 6,10,22,13,20]	[28, 1,26,30 LAL]	[9,41,35 LAL]	[3,32,23]	

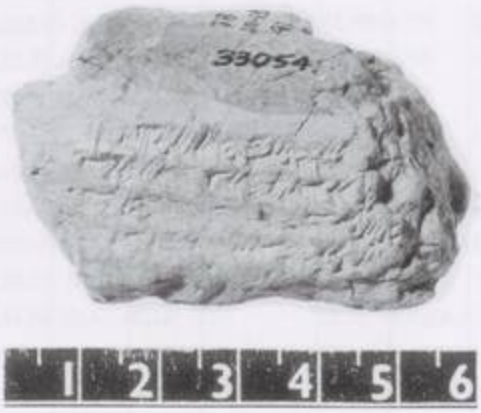
Text D reverse

Rev.	I (T_1)	II (Φ_1)	III (B_1)	IV (C_1)	V (E_1)	VI (Ψ'_1)
	[2,33 BAR]	[2, 7,40,33,20]	[8,56,15 MÚL]	[3,19,17,30]	[5,20,22,45 U LAL]	[1, 5,23,35]
	[GU_4]	[2,10,26,28,53,20]	[7, 3,45 MAŠ]	[3,30,49,30]	[3,21,37, 3 U LAL]	[25,48,21]
0'	[SIG]	[2],1[3,12,24,26,40]	[5,11,15 ALLA]	[3,35,21,30]	[0,21,42,42 U LAL]	[13,46,53]
1'	[ŠU]	[2],1'5',[58],20	'3',[18,45 A]	[3,32,53,30]	[2,59,54,21 LAL LAL]	53,22, 7
	[IZI]	[2],15, '25',22,13,20	1,2[6,15 ABSIN]	[3,23,25,30]	[4,5]8,[40, 3 LAL LAL]	1,32,57,21
	[KIN]	[2],12,39,[26],40	40 [RÍN]	[3, 6,13,20]	[7, 1],50,[45] LAL LAL	1,45,59, 5
	[DU_6]	'2', 9,53,31, 6,40	40 [GÍR]	[2,46,13,20]	[5,15,53,33 LAL] U	[1], 3,53,51
5'	[APIN]	'2', 7, 7,35,33,20	[40 PA]	[2,31,44]	[3, 9,3]7,5[1 LAL U]	21,48,3[7]
	'GAN'	2, 4,21,40	[40 MÁŠ]	[2,25,14,40]	[17,1[5,[42 U] U	[2]0,16,3[7]
	'AB'	2, 1,35,44,26,40	[40 GU]	[2,26,45,20]	3,[26,53,33] U U	1, 2,21,51
	ZÍZ	1,58,49,48, '5'3,20	[40 *zíb*]	[2,36],16	[5],33,[9,15 U] U	1,4[4],27, 5
	ŠE	1,59,32, 2,13,20	[26,15 ḪUN]	[2,53],3[7],30	6,45,30, 3 [U LA]L	1,33,46, 1
10'	DIR-ŠE	2, 2,17,57,46,40	2[8,33,45 ḪUN]	[3,12],22,30	4,4[6],44,21 U LAL	54,10,47
	2,'35' BAR	2, 5, 3,53,20	'2'[6,41,15 MÚL]	[3],26,40,30	[2,47,5]8,39 U LAL	14,35,33
	'GU_4'	2, 7,49,48,53,20	'2'[4,48,45 MAŠ]	[3],33,58,30	45,34, 6 LAL LAL	24,59,41
	'SIG'	2,10,35,44,26,40	[22,56,15 ALLA]	[3],34,16,30	[3],33,32,45 LAL LAL	1, 4,34,55
	ŠU	[2,13,21, '4'[0]	[21, 3,45 A]	[3,27],3[4],30	[5],32,1[8],27 LAL LAL	1,44,10, 9
15'	'IZI'	2,16,[7,35,33,20]	[19,36 ABSIN]	[3],13,36	6,51,1[6,5]1 LAL U	1,35,41,37
	'KIN'	2,1'5',[16, 6,40]	[19,36 RÍN]	[2,5]3,36	4,45, 1, 9 LAL U	53,36,23
	'DU_6'	'2',[12,30,11, 6,40]	[19,36 GÍR]	[2,3]6,[9,3]6	2,38,45,27 LAL U	11,31,[9]
	[APIN]	[2, 9,44,15,33,20]	[19,36 PA]	[2,26],43,12	1,19, . ,30 U U	30,34,[5]
	[GAN]	[2, 6,58,20]	[19,36 MÁŠ]	[2,25],16,48	3,57,45,57 U U	1,12,39,1[9]
20'	[AB]	[2, 4,12,24,26,40]	[19,36 GU]	[2,31],50,24	6, 4, 1,39 U U	1,54,44,[33]
	[ZÍZ]	[2, 1,26,28,53,20]	[19,36 *zíb*]	[2,46],24	6,13,42,39 U LAL	1,23,10,[13]
	[ŠE]	[1,58,40,33,20]	[18,11,15 ḪUN]	[3, 5,2]7,30	4,13, 5,57 U LAL	4[2,57,59]
	2,35 [BAR]	[1,59,41,17,46,40]	[16,18,45 MÚL]	[3,22,31],30	2, 4,40,30 U LAL	[3,22,45]
	[GU_4]	[2, 2,27,13,20]	[14,26,15 MAŠ]	[3,32,35,30]	2, 8,25,27 [LAL LAL]	[36,12,29]
25'	[SIG]	[2, 5,13, 8,53,20]	[12,33,45 ALLA]	[3,35,39,30]	[4, 7],11,[9 LAL LAL]	[1,15,47,43]

	VII (F)	[VIII (G_1)]	[IX (J_1)]	[X (C'_1)]	[XI (K_1)]	
⇐	[13,27]	[3,44,17,31,51, 6,40]	[57, 3,45 LAL]	[9,22,30 LAL]	[2,37,51]	
	[14, 9]	[3,18,28,53,20]	[57, 3,45 LAL]	[5,46 LAL]	[2,15,39]	
	[14,51]	[2,52,41,40]	[57, 3,45 LAL]	[2,16 LAL]	[1,53,21]	0'
	1[5, 33]	[2,40]	[57, 3,45 LAL]	[1,14 TAB]	[1,44,10]	1'
	15,[39]	[2,40]	[57, 3,45 LAL]	[4,44 TAB]	[1,47,40]	
	14,[57]	[2,41, 8,20]	[23,27,32,30 LAL]	[8,36, 5 TAB]	[2,26,16]	
	14,15	[3, . ,33,49,37,46,40]		[10 UŠ TAB]	[3,10,33]	
	13,[33]	[3,26,22,28, 8,53,20]		[7,14,40 TAB]	[3,33,37]	5'
	12,[51]	[3,52,11, 6,40]		[3,14,40 TAB]	[3,55,25]	
	12,[9]	[4,17,59,45,11, 6,40]		[45,20 LAL]	[4,17,14]	
	11,2[7]	[4,43,48,23,42,13,20]		[4,45,20 LAL]	[4,39, 3]	
	11,2[3]	[4,55,53,20]	[6,58,27,30 LAL]	[8,40,45 LAL]	[4,40,14]	
	12,[5]	[4,34,28,23,42,13,20]	[57, 3,45 LAL]	[9,22,30 LAL]	[3,28, 2]	10'
	12,[47]	[4, 8,39,45,11, 6,40]	[57, 3,45 LAL]	[7, 9 LAL]	[3, 4,27]	
	1[3,29]	[3,42,51, 6,40]	[57, 3,45 LAL]	[3,39 LAL]	[2,42, 8]	
	1[4,11]	[3,17, 2,28, 8,53,20]	[57, 3,45 LAL]	[9 LAL]	[2,19,49]	
	14,[53]	[2,51,18,20]	[57, 3,45 LAL]	[3,21 TAB]	[1,57,35]	
	15,[35]	[2,40]	[44,30,31,30 LAL]	[6,59,15 TAB]	[2, 2,28]	15'
	15,[37]	[2,40]		[10 UŠ TAB]	[2,50]	
	1[4,55]	[2,41,36, 6,40]		[8,43,12 TAB]	[2,50,19]	
	[14,13]	[3, 2, . ,14,48,53,20]		[4,43,12 TAB]	[3, 6,43]	
	[13,31]	[3,27,48,53,20]		[43,12 TAB]	[3,28,32]	
	[12,49]	[3,53,37,31,51, 6,40]		[3,16,48 LAL]	[3,50,20]	20'
	[12, 7]	[4,19,26,10,22,13,20]		[7,16,48 LAL]	[4,12, 9]	
	[11,25]	[4,45,14,48,53,20]	[42,59,13,30 LAL]	[9,31,45 LAL]	[3,52,43]	
	[11,25]	[4,55,16,17,46,40]	[57, 3,45 LAL]	[8,32 LAL]	[3,49,40]	
	[12, 7]	[4,33, 1,58,31, 6,40]	[57, 3,45 LAL]	[5, 2 LAL]	[3,30,56]	
	[12,49]	[4, 7,13,20]	[57, 3,45 LAL]	[1,32 LAL]	[3, 8,37]	25'
⇑	[13,31]	[3,41,24,41,28,53,20]	[57, 3,45 LAL]	[1,58 TAB]	[2,46,18]	

Text E **BM 33054** (78–10–15,41)

Contents: Lunar System A columns G_1 and J_1 for SE 3,49.



	[-V (T_1)]	[-IV (Φ_1)]	[-III (B_1)]	[-II (C_1)]	[-I (E_1)]	
1	[3,49] [BAR]	[2,10,36,51, 6,40]	[7,56,15 MÚL]	[3,18,37,30]	[3,18,24,45 U LAL]	⇨
2	[GU_4]	[2, 7,50,55,33,20]	[6, 3,45 MAŠ]	[3,30,25,30]	[15,18, 6 U LAL]	
3	[SIG]	[2, 5, 5]	[4,11,15 ALLA]	[3,35,13,30]	[3, 3, 6,39 LAL LAL]	
4	[ŠU]	[2, 2,19, 4,26,40]	[2,18,45 A]	[3,33, 1,30]	[5, 1,52,21 LAL LAL]	⇨

	[0 (Ψ'_1)]	I (G_1)	II (J_1)	[III (C'_1)]	[IV (K_1)]	
⇦	[24,44,15]	2,53,49,22,57,46,40	[57, 3,45 LAL]	[9,22,30 LAL]	[1,47,23]	1
	[14,50,59]	3,19,3ˈ8ˈ, 1,28,53,20	ˈ5ˈ[7, 3,45 LAL]	[5,54 LAL]	[2,16,40]	2
	[54,26,13]	3,[45,2]ˈ6ˈ,40	5ˈ7ˈ,[3,45 LAL]	[2,24 LAL]	[2,45,58]	3
⇦	[1,34, 1,27]	[4],11,1ˈ5ˈ,[18],31,[6],40	ˈ5ˈ[7, 3,45 LAL]	[1, 6 TAB]	[3,15,17]	4

Critical Apparatus

I 2 3,19,3ˈ8ˈ, 1,28,53,20: Only 34+x remains of the 38.
I 3 3,[45,2]ˈ6ˈ,40: Only x+4+x remains of the 26.
I 4 [4],11,1ˈ5ˈ,[18],31,[6],40: Perhaps 12 not 11; only 11+x remains of the 15.
II 2 ˈ5ˈ[7, 3,45]: Only 40+x remains of the 57.
II 3 5ˈ7ˈ,[3,45]: Only 54+x remains of the 57.
II 4 ˈ5ˈ[7, 3,45]: Only 30+x remains of the 57.

Commentary

This small fragment, measuring approximately 5.5×3 cm, is crudely written and has suffered considerable surface damage. Only the upper edge is preserved. Traces of a vertical line at the left edge of the tablet must have separated column G_1 from the now missing column F_1. A similar vertical line separates G_1 from the following column J_1. The fragment is part of a new moon ephemeris for (at least) SE 3,49. ACT No. 16a is also a new moon ephemeris for this year, but it is clear by comparing the scripts on the two fragments that they are not from the same tablet.

Text F **BM 41120** (81–4–28,667)

Contents: Lunar System B columns H and J.

	I (H)	II (J)
1'	[2],'3'7,30	'3'[0,31,30 TAB]
2'	[9],25	21,[6,30 TAB]
3'	[1]6,12,30	4,54 [TAB]
4'	[19]	'1'4,'6' [LAL]
5'	[12,12,30]	[2]'6',18,'3'[0 LAL]
6'	[5,25]	[3]1,4[3,20 LAL]
7'	[1,22,30]	[3]1,[50,22 LAL]

Critical Apparatus

5' [2]'6',18,'3'[0]: only 20+x remains of the final 30.

Commentary

The preserved numbers on this small fragment, which measures 5×4 cm, are consistent with columns H and J of a System B ephemeris. Neither column can be connected with any previously known System B ephemeris from Babylon, so it is not possible to date the text, or even to tell whether the ephemeris is for new or full moons. I have restored column J assuming the first preserved value is positive, but it could equally well be negative, in which case TAB and LAL should be swapped throughout the column.

Text G **BM 46264** (81–7–6, 729)

Contents: Lunar System B columns G_2, H_2 and J_2.

	I (G_2)	II (H_2)	III (J_2)
1'	[3,49,27,10]	[8,3]^{r}3^{1},30	[29,29 LAL]
2'	[4,11,57],10	1,46	3[1,15 LAL]
3'	[4,24,2]7	5,1,30	28,[39,30 LAL]
4'	[4,1,5]7	11,49	16,[50,30 LAL]
5'	[3,39,2]7	18,36,30	1,[46 TAB]
6'	[3,16,5]7	16,36	[18,22 TAB]

Critical Apparatus

1' [8,3]^{r}3^{1},30: Only x+2 of the 33 remains.

Commentary

This small fragment, measuring only about 3×3.5 cm, duplicates the System B full moon ephemeris ACT No. 126, Obv. III–V 14–19. Although these lines are missing in ACT No. 126, it is clear that the new fragment is not from the same tablet. For example, there is a vertical ruling between columns G_2 and H_2 on ACT No. 126, but none on BM 46264. Because this tablet is apparently from a duplicate of ACT No. 126, I have restored column J_2 using 32,28,0 for its extrema, rather than the usual 32,28,6.

Endogamy in Mesopotamia in the Neo-Babylonian Period

Caroline Waerzeggers — Ghent

I. Introduction

Endogamy is the practice of contracting marriage within a closed group. The group may be defined variously: in terms of descent or blood, affinity (relatives by law, *i.e.*, by marriage or adoption), space (the local community), or more generally in terms of a shared social background (in which case one may prefer to speak of homogamy or isogamy). In anthropology endogamy usually refers to marriage systems in which custom *requires* a person to marry within a prescribed local, social or kinship group. Outside anthropology the term may be applied to isolated marriages (mostly between relatives) in a society that does not practice endogamy as a rule.

The present article is restricted to *consanguineous endogamy* (marriage between blood relatives) in Mesopotamia in the Neo-Babylonian period (ca. 600–480 BC). Affinal endogamy will not be considered here. In this last category we find such marriage practices as the levirate (marriage with the widow of a deceased brother), the sororate (marriage with a sister of the deceased wife) and the *adoption matrimoniale* (marriage with an adopted brother),[1] as well as matrimonial alliances involving broader circles of affinal relatives: marriages between two or more sibling groups,[2] multiple marriages between the same two families or within a restricted group of families. This last type of affinal endogamy borders on homogamy, which is likely to have been the prevailing marriage practice in Mesopotamia.

In spite of the progressive publication of Neo-Babylonian tablets and archives in recent years, consanguineous endogamy remained badly attested with no more than two certain reports and some heavily debated cases of sibling marriages. There is reason to believe that this seemingly marginal marriage practice was more widespread. A single unpublished family archive from Sippar increases the evidence so dramatically that it seems warranted to collect all available data and reconsider the matter.

1 Levirate and sororate are both attested in the Ea-ilūta-bani archive from Borsippa (San Nicolò, Aegyptus 27, 119f.; Joannès, *Archives*, 39f.; Joannès, RAI 32). Additional examples of sororate: Wunsch, AfO 42/43, 42 and TCL 12, 32. An example of adoption matrimoniale is Nbn 356.

2 For instance in the Nappāḫu family, cf. Ungnad, AnOr 12, 321, 323.

The segment of society subject to this study is very narrow. This is a matter of documentation rather than of selection, except for the royal marriages, which I exclude on the basis of their extraordinary context. Outside this highest level of society, consanguineous endogamy can be demonstrated only in private archives of urban propertied families. The nature of the subject demands insight into a family's history and it is therefore not surprising to find the evidence in the context of family archives. Such archives always imply property. The lower segments of the population are generally less visible in the available documentation, especially if not their workforce but their women, marriages and family matters are sought for.

II. The prohibition of incest and the question of sibling marriages

The prohibition of incest bars certain close relatives from contracting marriage and thus functions as a limit to endogamy. The notion of incest is universal but its details differ from culture to culture. The Mesopotamian concept has been studied by H. Petschow in the RlA entry "Inzest." According to the law codes only first-grade relatives (father–daughter, mother–son) are affected by the principle, together with certain spouses of these first-grade relatives after and/or during the relatives' lifetimes. This last set of prohibitions is relevant to affinal endogamy only and does not matter any further here.

The only explicit restriction on consanguineous endogamy is the immediate kin: one's parents and children. In Mesopotamia there seems to be no objection (at least not in a way that leads to sanctions by the community) to sexual intercourse between siblings. Does this mean that sibling marriages occurred? This question is much debated. There are at least four potential cases in Neo-Babylonian texts. Two of them concern spouses bearing the same patronym without mention of a family name. These cases have been contested as proof of sibling marriages by G. van Driel on the basis of scribal error (Camb 110) and accidental homonymy of the spouses' fathers (Kohler and Peiser, BRL, II 35–36).[3] Slightly more compelling is the famous Egibi case in Cyr 49 where fQudāšu, daughter of Šulā//Egibi is mentioned as the wife of Nabû-aḫḫē-iddin, son of Šulā//Egibi.[4] Notwithstanding the shared patronym and family name, fQudāšu and Nabû-aḫḫē-iddin need not be siblings. A. Ungnad put forward the convincing argument that fQudāšu might well have been the daughter of Šulā/Bēl-upaḫḫir/Egibi as this would explain the presence of this Šulā's tablets in the archive of Nabû-aḫḫē-iddin, who was a son of Šulā/Nabû-zēra-ukīn/Egibi.[5] In addition to this argument, one should consider the negative effect of a brother-sister marriage on the family's social and economic position as it implies the drawback of being denied new family ties and the incoming capital from a dowry.[6] This consideration equally renders the fourth potential sibling marriage in the archive of Bēl-rēmanni doubtful. Here we find fInbā, daughter of Nabû-šuma-iddin//Ile'i-Marduk married to Šamaš-šumu-līšir//Ile'i-Marduk. Though there is a well-attested Šamaš-šumu-līšir, son of Nabû-šuma-iddin//Ile'i-Marduk (and hence probably a brother of fInbā), M. Jursa considers fInbā's husband to be

3 JEOL 29, 66; Phœnix 31, 46.
4 A full account of the debate on this case is given by C. Wunsch in AfO 42/43, 35–36.
5 AfO 14, 59.
6 G. van Driel, JEOL 29, 66.

Šamaš-šumu-līšir, son of Bēl-kēšir//Ile'i-Marduk, who is attested once.[7] In this way a brother–sister marriage need not be considered an option.

In conclusion: although sibling marriages were not considered incestuous it is doubtful whether they actually occurred. Most potential attestations can be safely discarded on the basis of scribal error, homonymy and the uninviting economic and social prospect of such an alliance. Moreover, we should be aware that Neo-Babylonian kinship notation does not reflect the subtleties of biological descent (a general problem when studying family ties): full siblings, paternal half-brothers and -sisters, and adopted children will all appear under the same father's name in the texts. A shared patronym is therefore a shaky basis for building a hypothesis.

III. Limits of documentation

Whereas the prohibition of incest functions as a cultural limit to endogamy, the nature of the available documentation sets another, practical limit to the subject. At present only third- and fourth-degree endogamy (*e.g.*, uncle/niece, first cousins) can be demonstrated, which is certainly a matter of documentation. Kinship ties beyond the fourth degree are extremely difficult to pin down as this requires a family tree covering four or more generations and at least two lines of descent. Most genealogies centre on one line of descent because archives were handed down from father to son to grandson and so on, a practice which makes even third- and fourth-degree endogamy difficult to recognise. Notable exceptions to this one-sidedness are archives where an endogamous marriage led to the unification of tablets from different branches, which was the case in the Ea-ilūta-bani archive (affinal endogamy) and in the Maštuk archive (consanguineous endogamy, discussed below). A better understanding of family ties and matrimonial alliances in the propertied segment of society will doubtlessly be gained if the publication of family archives, especially those from densely documented sites like Sippar, Babylon and Borsippa, is further encouraged.

I will now proceed to the presentation of the evidence on third- and fourth-degree endogamy in the Neo-Babylonian period. The material will be treated according to file or archive and will then be submitted to more general questions as to the motives for such alliances and the frequency of the practice.

IV. Evidence from the Maštuk archive (Sippar)

1. The archive

Although this is one of the larger private archives surviving from Neo-Babylonian Sippar, its existence is virtually unknown. Apart from a handful of tablets the archive has remained unpublished and its extraordinary contribution to the present subject unnoticed. One section of the archive did get some attention recently but its broader context could not be recognised. The tablets were considered to form an archive in their own right and they

7 Jursa, *Bēl-rēmanni*, 37–38.

received the label "archive of Ardia," son of Nergal-iddin//Balīḫu. This group of texts was first noticed by P.-A. Beaulieu, who listed 20 tablets dated between Camb 02 and Dar 06 (all unpublished) under this heading in the catalogue of cuneiform tablets in the Nies Babylonian Collection (NBC) at Yale.[8] At that time Ardia's archive seemed confined to the Nies collection, but later on A. Bongenaar drew attention to the presence of an additional tablet in the Royal Ontario Museum (ROMCT II 14).[9] Five more tablets can be assigned to this group, all unpublished and presently in the John Frederick Lewis collection (FLP) in the Free Library of Philadelphia.[10]

A handful of these tablets do not mention Ardia himself but his sister ᶠBusasa/Nergal-iddin/Balīḫu. Obviously widowed when she appears in the texts, her late husband's name can be inferred from her daughters' filiation in FLP 1457 (no. 1) and NBC 6184 (no. 2): Bēl-iddin from the Maštuk family.

This Bēl-iddin is no stranger. He is mentioned with full filiation (son of Nādin// Maštuk) as the protagonist in two FLP tablets published by H. Stigers in JCS 28 (1976), and in three NBC tablets published recently by P.-A. Beaulieu in YOS 19.[11] These tablets are only a part of the remains of a full-fledged family archive in NBC and FLP: five generations of the family Maštuk are represented, starting from Bēl-iddin's great-grandfather right down to his sons.[12]

This means that the tablets of Ardia and his sister ᶠBusasa share the same museum context with the archive of ᶠBusasa's family-in-law. The implication is obvious: these tablets originally formed one file. After discussion of the genealogy it will become apparent that the tablets of Ardia entered into the Maštuk archive as a result of a series of endogamous marriages. I shall return on the mechanics leading to this integration further on.

At present 43 tablets can be assigned to the Maštuk archive (this is including the Ardia component). An impressive time span of 125 years separates the oldest tablet (FLP 1518, Nbp 08) from the last (JCS 28 no. 58, Dar 29) while the majority dates between Nbn 10 and Dar 13. Ardia's and ᶠBusasa's tablets form an enclave in the larger archive, all items being dated between Camb 02 and Dar 10, an interval that yielded next to no (proper) Maštuk tablets (only FLP 628 (no. 4) dated to Dar 09). Except for four tablets drafted in Babylon, the geographical range of the archive is limited to Sippar and vicinity (Tīl-Gubbi, Ālu-ša-Šamaš, Ālu-ša-ina-bāb-Nār-Šamaš, Āl-Nāṣir). Its composition is typical for an inactive or dead archive. The bulk of the archive consists of debt notes, receipts and other text types with shortlived value (house rental contracts, accounts of a business venture). The only real estate property deed is the oldest tablet in the archive. Other property deeds and contracts attesting to property (*e.g.*, in the context of a lawsuit or a dowry) concern movable goods (slaves, cattle, a donkey, household items) and most of them date well before the end of the archive. A problem in this respect is caused by JCS 28 no. 58: the latest dat-

8 Beaulieu, *Yale Catalogue* 1, 6, 89.
9 Bongenaar, *Ebabbar*, 465.
10 FLP 633. 652 (duplicate of FLP 1473), FLP 1457 (no. 1), FLP 1467. 1473 (no. 2).
11 JCS 28 no. 10 and no. 13; YOS 19 17. 18 and 252.
12 Add to the tablets mentioned in the previous note: FLP 628. 1518. 1556. 1589; YOS 19 23; FLP 1594. 1597. 1602; JCS 28 no. 23. 41. 45. 58; NBC 6115. 6208. Some of the unpublished FLP tablets have been treated by Dillard in his (unpublished) dissertation.

able tablet of the archive is a slave sale contract under the name of one of the protagonists of the last generation.

The breakdown of the tablets by museum is clearcut: the archive is more or less evenly divided between FLP and NBC, with a stray in the Royal Ontario Museum. The isolated tablet in Ontario did not accidently end up there as FLP and NBC have other tablet groups in common with ROM.[13] All three collections were acquired in the 1910–1920s, obviously from a single source on the antiquities market. In addition to the Maštuk archive, FLP and NBC share two other, smaller groups from Sippar: one concerns the sons of Kiribti-Marduk//Ṣāḫit-ginê and their business partner Ninurta-aḫa-uṣur/Kakkussu, the other has a certain Bēl-apla-iddin/Iddinā as protagonist.[14] It seems reasonable to assume that these smaller groups and the Maštuk archive belong together, but a convincing connection is still to be found.

2. The family

The following genealogical tree (p. 324f.) is intended to serve as a guideline to the discission of the family history in the next section. The names of family members acting as protagonists in the archive are embolded. Most of these persons are documented in the texts edited below, others are mentioned in unpublished texts. These will be edited along with the rest of the Maštuk archive in a forthcoming publication.

3. The marriages

fBusasa and Bēl-iddin

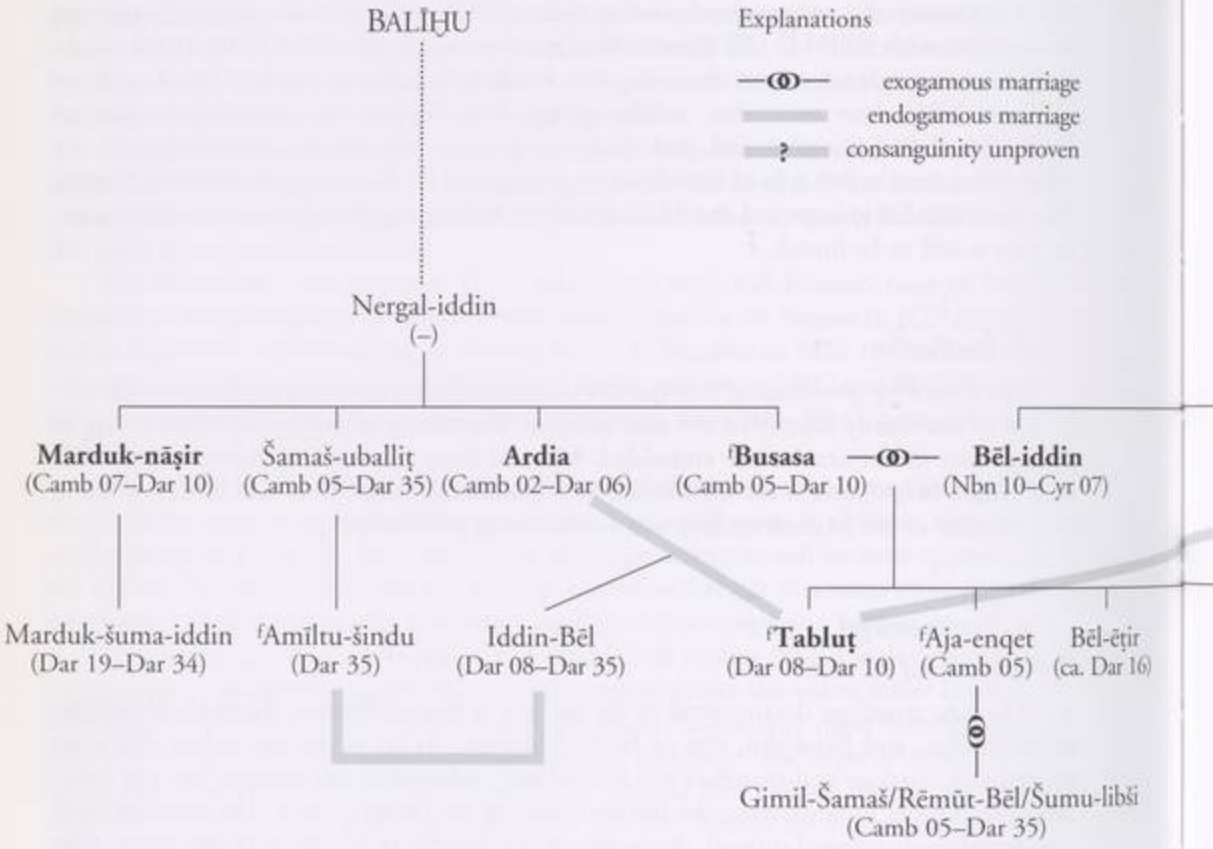
The first marriage documented in the archive is that of fBusasa, daughter of Nergal-iddin//Baliḫu, and Bēl-iddin, son of Nādin//Maštuk. As far as we can judge, this is an exogamous marriage and therefore not immediately relevant to the subject, but it is indispensable in order to understand the further course of the family history. The marriage itself is only indirectly attested through the names of two daughters, fTabluṭ and fAja-enqet, who bear their father's name and family name in FLP 1473 (no. 2), NBC 6184 (no. 3) and FLP 1457 (no. 1). Only fTabluṭ is explicitly stated to be a daughter of fBusasa, but for fAja-enqet this can be inferred from the fact that fBusasa acted as the agent in her marriage arrangements (FLP 1457, no. 1), a duty known to fall upon the mother after the father had died.[15] In addition to fTabluṭ and fAja-enqet, three sons of Bēl-iddin are known: Bēl-ēṭir, Ina-qībi-Bēl and Bēl-ikṣur. We cannot be sure that they were born out of the marriage with fBusasa but as they were of the same age as fTabluṭ and fAja-enqet this is plausible.

13 Tablets from the Ekur of Nippur (cf. Zadok, NABU 1997/13; Joannès, MOS 1, 176 n. 9 and Beaulieu, *Catalogue Yale* 1, 6, 90) and tablets from the archive of Itti-Šamaš-balāṭu from Larsa (cf. Beaulieu, MOS 2, 65–71).

14 Tablets of Kiribti-Marduk's sons date between Dar 12 and Xer 01: JCS 28 no. 18. 33. 37. 49; FLP 659. 702. 1446. 1623; NBC 6155. 6156. Tablets of Bēl-apla-iddin date between Dar 29 and Dar 34: JCS 28 no. 9. 26. 29. 48; FLP 667; NBC 6152.

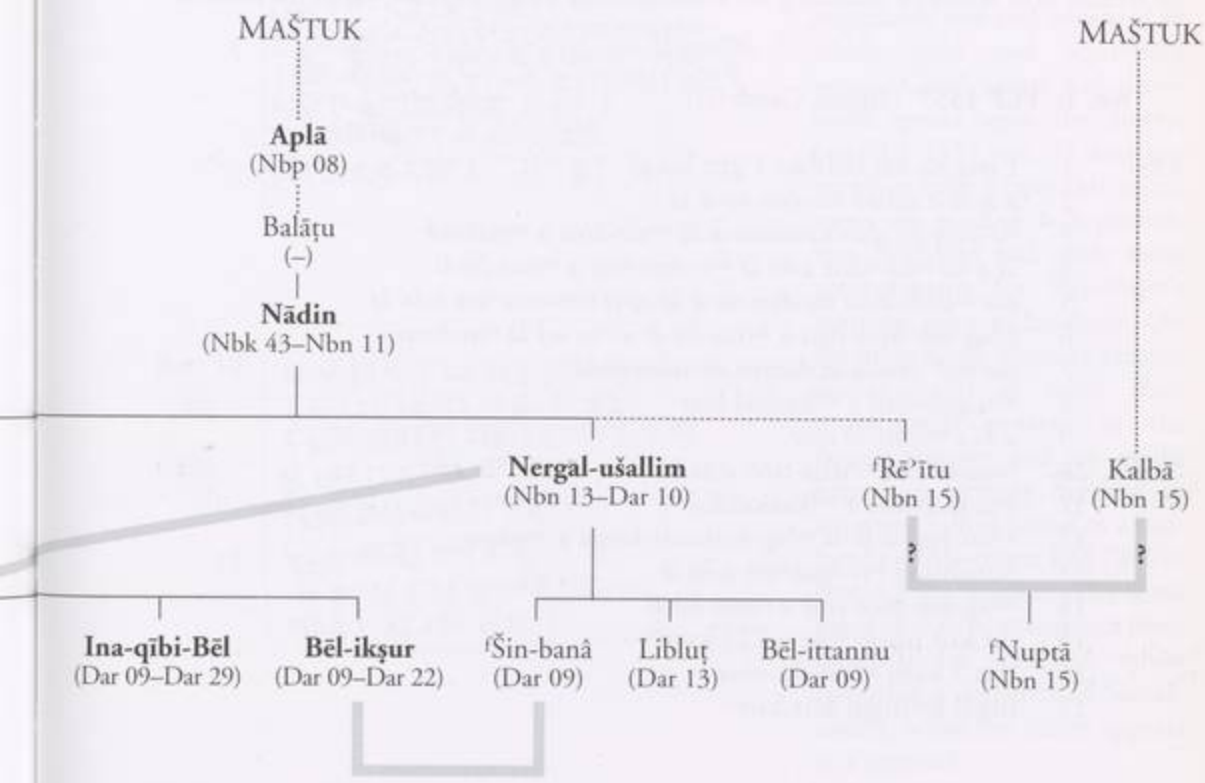
15 Roth, CSSH 29, 723–727.

Genealogical Tree of the Balīḫu and Maštuk Families



A fact of major significance is Bēl-iddin's short active lifetime: fourteen years between Nbn 10 and Cyr 07. There is no reason to assume that fBusasa and Bēl-iddin were married long before Nbn 10: the moment of independent economic activity of a man and his marriage were probably related.[16] This implies that fBusasa was left with five relatively young children when her husband died. Confirmation of the children's ages can be found in the marriage date of fAja-enqet and Bēl-ikṣur, who would have reached the typical marriageable age if they had been born somewhere in the late reign of Nabonidus: fAja-enqet would have been between 14 and 20 years of age in Camb 05 when her dowry was transferred in FLP 1457 (no. 1), and Bēl-ikṣur would have been between 26 and 32 years of age in Dar 09, when he was promised his wife's dowry in FLP 628 (no. 4).

16 Roth, CSSH 29, 747.



Widowed and with five children to raise, fBusasa must have turned to her family or in-laws for support. By that time both her father and father-in-law had died. The task to marry off her offspring was to become a major concern in the following years and it seems that she received some assistance in this matter from her brother Šamaš-uballiṭ.[17] His involvement in contracting marriages for fBusasa's children implies that he had some kind of authority over them, possibly as head of the family after his father's death. In widowhood, fBusasa seemed to rely more heavily upon her own family than upon her family-in-law, which disappeared from the scene for the next twenty years or so after her husband's death.

17 Šamaš-uballiṭ is mentioned as a witness in three dowry tablets concerning fBusasa's children: FLP 1457 (no. 1), NBC 6184 (no. 3) and FLP 628(no. 4). He is the only relative of fBusasa who acts in this capacity.

fAja-enqet and Gimil-Šamaš

fAja-enqet and fTabluṭ were first to be married. In the years following their father's death, both reached marriageable age. Only fAja-enqet's marriage can be dated, so hers will be treated first. A receipt recording the transfer of her dowry is preserved in the archive:

No. 1: FLP 1457 (Sippar, Camb 05)

Obv.	1	1 ma.na kù.babbar 1 gín kù.gi
	2	*u ú-de-e* zabar *nu-dun-nu-ú šá*
	3	fd*a-a-en-qit dumu.munus-su šá* md en-mu a m*maš-tuk*
	4	*šá a-na* mšu-dutu a-*šú šá* m*re-mut-*den a mmu-*líb-ši*
	5	*ina* imdub *a-na nu-dun-nu-ú šá-aṭ-ri* m*re-mut-*den a-*šú šá*
	6	mdag-šeš-meš-mu a mmu-*líb-ši* ≪m≫ ad *šá* dšu-dutu
	7	*ina* šuII f*bu-sa-sa* dumu.munus-*su šá*
	8	mdu.gur-mu a mdkaskal.kur^{ú}
	9	*a-ki-i* imdub-*šú e-ṭir*
Rev.	10	lú*mu-kin-nu* mdutu-tin^{ú} a-*šú šá*
	11	mdu.gur-mu a mdkaskal.kur^{ú}
	12	mden-mu a-*šú šá* mdag-numun-ba-*šá* a m*rak-su*
	13	lúumbisag m*re-mut-*den a-*šú šá*
	14	mdag-šeš.meš-mu a mmu-*líb-ši*
	15	ud.kib.nunki ituše ud.21.kam
	16	mu.5.kam m*kam-bu-zi-ia*
	17	lugal eki lugal kur.kur

Translation

(1) (Concerning) one mina of silver, one šeqel of gold and bronze utensils, the dowry of fAja-enqet, daughter of Bēl-iddin//Maštuk, promised to Gimil-Šamaš/Rēmūt-Bēl/Šumu-libši by written account: (5) Rēmūt-Bēl/Nabû-aḫḫē-iddin/Šumu-libši, the father of Gimil-Šamaš, has received (these items) from fBusasa, daughter of Nergal-iddin//Balīḫu, in accordance to his tablet.

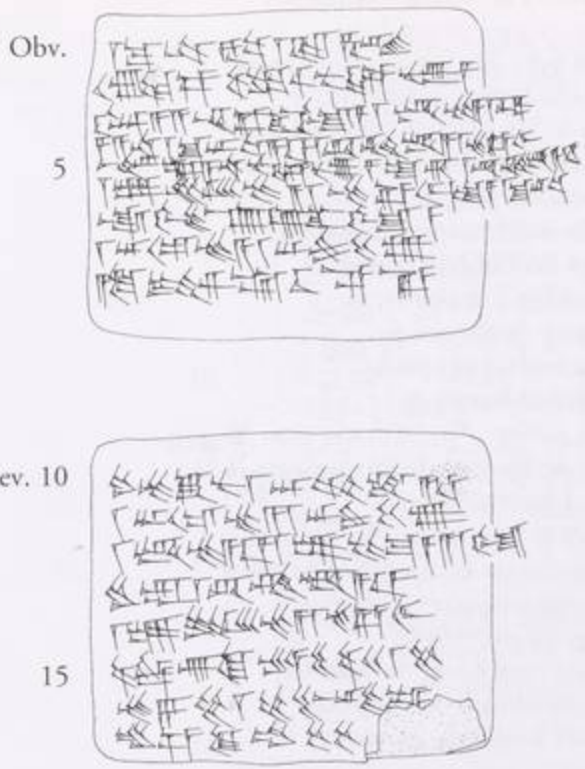
(10) Witnesses: Šamaš-uballiṭ/Nergal-iddin/Balīḫu, Bēl-iddin/Nabû-zēra-iqīša/Raksu.

(13) Scribe: Rēmūt-Bēl/Nabû-aḫḫē-iddin/Šumu-libši.

(15) Sippar, 21st of addaru (twelfth month), fifth year of Cambyses, king of Babylon, king of the lands.

According to FLP 1457 (no. 1) fAja-enqet married Gimil-Šamaš, son of Rēmūt-Bēl//Šumu-libši in or prior to Camb 05. The groom, a reasonably well-connected man in Sippar,[18] does not seem to have been related to fAja-enqet — a fact of some importance as

18 Gimil-Šamaš is attested twice outside the Maštuk archive: in BM 74570/Bertin 2746 (Dar 35) and in Beaulieu, JCS 42 no. 4 (Dar 13?) (where his patronym is mistakenly written Rēmūt-Šamaš instead of Rēmūt-Bēl).



this is the only exogamous marriage documented for ᶠBusasa's children.

ᶠAja-enqet's dowry was of respectable size and consisted of silver, gold and household goods. Gimil-Šamaš had previously agreed upon the dowry, but FLP 1457 (no. 1) does not mention with whom this agreement was reached. It is possible that Bēl-iddin had made some arrangements for ᶠAja-enqet's marriage prior to his death. On the other hand, ᶠBusasa's brother Šamaš-uballiṭ is more than prominently present at the dowry transfer and he might have been actively involved in attracting Gimil-Šamaš as a husband for ᶠAja-enqet: BM 74570/ Bertin 2746 seems to offer some proof of their acquaintance (here Gimil-Šamaš writes a tablet favouring a daughter of Šamaš-uballiṭ, while her father appears as a witness).

ᶠTabluṭ and Ardia

So ᶠAja-enqet was safely married to a man with a social network in Sippar and (although she could not have known it at the time) a long life ahead.[19] Her sister ᶠTabluṭ was less lucky in this respect. She shared her mother's fate and found herself widowed after a short marriage, with a child to care for.

We learn of the marriage only after it had ended. In FLP 1473 (no. 2, Dar 08) a huge amount of silver (two minas) is charged against ᶠTabluṭ and her son Iddin-Bēl, who rely on ᶠBusasa to stand surety for them. The phrasing implies that ᶠTabluṭ was widowed and that her son was too young to handle a debt that was doubtlessly incurred by his father. The patronym of the son provides us with the name of the father: Ardia from the Balīḫu family. This must be Ardia, son of Nergal-iddin//Balīḫu, the only Ardija known in this family and the person whose tablets are mingled with the Maštuk archive in NBC and FLP. He was a brother of ᶠBusasa and hence ᶠTabluṭ's maternal uncle.

19 Gimil-Šamaš is last attested in Dar 35 (see the previous note), this is almost forty years after his marriage.

No. 2: FLP 1473 (Dar 08, Sippar). FLP 652 is a duplicate.

Obv.	1	2 ma.na kù.babbar *šá ina* 1 gín *bit-qa nu-uḫ-ḫu-tú*
	2	*šá la gi-in-nu šá* ^{m}mu^{a} a-*šú šá* ^{m}*mu-še-zib-*^{d}en
	3	*ina muḫ-ḫi* ^{m}mu-^{d}en a-*šú* [*šá*] ^{m}ìr-*ia* a ^{md}kaskal.kur^{ú}
	4	*u* ^{f}*tab-luṭ* dumu.munus-*su šá* ^{md}en-mu a ^{m}*maš-tuk*
	5	ama *šá* ^{m}mu-^{d}en ^{fd}*na-na-a-ši-min*$_4$*-ni*
	6	^{sal}*qal-lat-su maš-ka-nu ku-mu* 1 ma.na kù.babbar
	7	*i-di* lú^{meš} *ia-a-nu u* ur$_5$.ra kù.babbar *ia-a-nu*
	8	*ù* 1 ma.na *šá* itu *ina muḫ-ḫi* 1 *ma-né-e*
	9	1 gín kù.babbar *ina muḫ-ḫi-šú i-rab-bi*
Lo.E.	10	^{f}lú$^{?}$tuk^{ú} *šá-nam-ma a-na muḫ-ḫi ul i-šal-ṭu*
	11	*a-di muḫ-ḫi šá* ^{m}mu^{a} kù.babbar-*šú* a_4
Rev.	12	2 ma.na *in-ni-ṭir pu-ut e-ṭè-ru*
	13	*šá* kù.babbar 2 ma.na-*šú* ^{f}*bu-sa-sa* dumu.munus-*su šá*
	14	^{md}u.gur-mu a ^{md}kaskal.kur^{ú} *na-šá-a-ta*
	15	^{lú}*mu-kin-nu* ^{m}lú-^{d}ag a-*šú šá* ^{md}en-mu a ^{m}ìr-^{d}gir$_4$.kù
	16	^{m}mu^{a} a-*šú šá* ^{m}*mu-še-zib-*^{d}amar.utu a $^{m.lú}$sanga-^{d}*aḫ-u*$^{?}$
	17	^{md}ag-mu-ùru a-*šú šá* ^{md}ag-mu-gar^{un} a ^{m}*rak-su*
	18	^{m}mu^{a} a-*šú šá* ^{md}é-dingir-*gu-zu* ^{md}en-gi
	19	a-*šú šá* ^{m}*šu-la-a* a ^{lú}simug ^{lú}umbisag ^{m}*re-mut-*^{d}ag
	20	a-*šú šá* ^{md}ag-tin^{ú} a ^{m}*ár-kát-*dingir-meš *sip-par*^{ki}
	21	^{iti}^{f}šu$^{?}$ ud.^{f}25$^{?}$.kam mu.8.kam ^{m}*da-ar-*^{f}*mu-šú*$^{?}$
	22	lugal e^{ki} *u* kur.kur-meš
L.E.	23	kù.babbar *šá a-na* ^{lú}sanga *sip-par*^{ki}
	24	sum^{na}

Translation

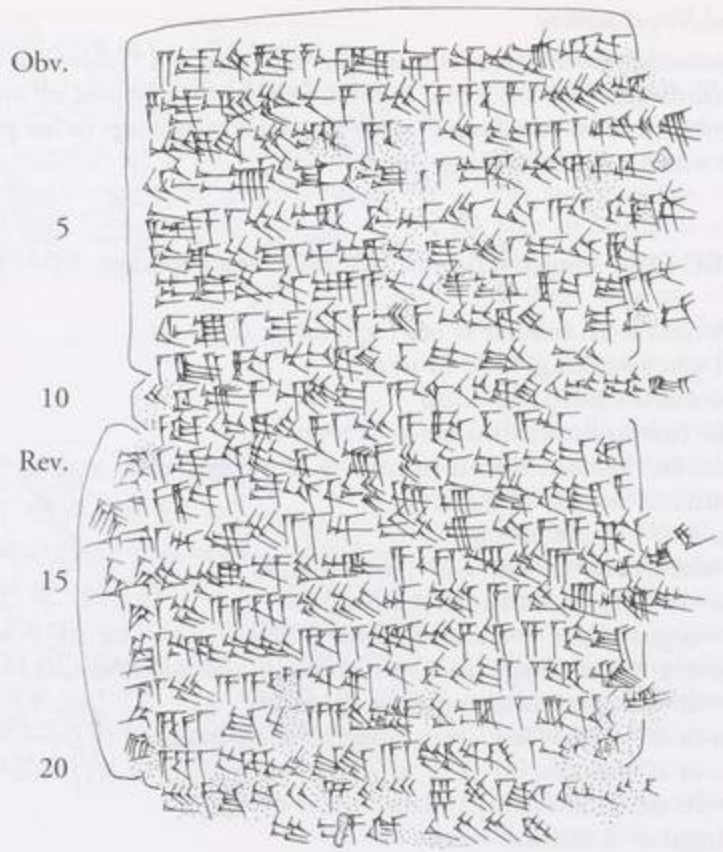
(1) Two minas of silver, with one eighth alloy per šeqel, *nuḫḫutu*, unmarked, due to Iddinā/Mušēzib-Bēl by Iddin-Bēl/Ardia/Balīḫu and ^{f}Tabluṭ/Bēl-iddin/Maštuk, the mother of Iddin-Bēl. (5) ^{f}Nanā-šiminni, her slave, is pledged for 1 mina of silver. (7) No slave wage, no interest on the silver. (8) But there will be a monthly increase of one sheqel per mina on the other mina of silver due. (10) No second creditor will dispose of (the slave) until Iddinā has received his two minas of silver. (12) ^{f}Busasa/Nergal-iddin/Balīḫu stands surety for repayment of the two minas of silver.

(15) Witnesses: Amēl-Nabû/Bēl-iddin/Arad-Nergal, Iddinā/Mušēzib-Marduk/Šangû-^{d}*aḫ-u*$^{?}$, Nabû-šuma-uṣur/Nabû-šuma-iškun/Raksu, Iddinā/Bīt-ilī-gūzu, Bēl-ušallim/Šulā/Nappāḫu.

(19) Scribe: Rēmūt-Nabû/Nabû-uballiṭ/Arkāt-ilāni.

(20) Sippar, 25th of Du$^{?}$ūzu (fourth month), eighth year of Darius, king of Babylon and the lands.

(23) It is the silver that has been given to the *šangû* of Sippar.



Comments

16 Šangû-^{d}*aḫ-u'*: the family name and the deity are unattested.

17 The same Nabû-šuma-uṣur is probably meant in ABC 37: 14 (Sippar, Dar 17), where the spelling of the patronym is mistaken (^{md}ag-mu-*un-nat*).

18 Iddinā/Bīt-ilī-gūzu reappears as a witness in BM 79734 (Sippar, Dar 10), a debt note from the archive of Marduk-rēmanni against ^{f}Busasa's brother, Marduk-nāṣir/Nergal-iddin/Balīḫu.

19 Rēmūt-Nabû returns as a witness in ^{f}Šin-banâ's dowry tablet (see below).

FLP 1473 (no. 2) attests to the marriage of ^{f}Tabluṭ and her mother's brother Ardia. The date of the marriage is not precisely known but the beginning of Cambyses' reign is suggested by the fact that tablets concerning Ardia's affairs start entering the archive in Camb 02 (see below). If this is correct, ^{f}Tabluṭ was married before ^{f}Aja-enqet, almost immediately after their father's death. Why ^{f}Busasa gave her in marriage to her brother is a question that cannot be answered with certainty. It seems to me that the marriage was a practical solution to a social problem that had arisen in ^{f}Busasa's family after the death of Bēl-iddin. ^{f}Busasa had four children under the age of fourteen to support in addition to ^{f}Tabluṭ, who was marriageable. Marrying ^{f}Tabluṭ to Ardia strengthened ^{f}Busasa's position in her father's family. It is even possible that ^{f}Busasa and her children found refuge in the new household thus created.

ᶠTabluṭ and Nergal-ušallim

After approximately twelve years of marriage, Ardia died and ᶠTabluṭ was left widowed with a son. According to FLP 1473 (no. 2) there were debts to be paid off and this might have caused problems. Two years later ᶠTabluṭ was given in marriage to her paternal uncle Nergal-ušallim with a suspiciously large dowry.

No. 3: NBC 6184 (Sippar, Dar 10). NBC 6230 is a duplicate.

Obv. 1 5 ma.na kù.babbar *šá ina* 1 gín *bit-qa šá gìn-nu*
2 1 gín *gír-u* kù.gi *ù* 1^{em} lú-*ut-tu*$_4$
3 *ù ú-de-e é a-ki-i ina* ^{im}dub
4 *šá* ᶠ*tab-luṭ* dumu-munus-*su šá* ^{md}en-mu
5 *ina* šu^{II} ᶠ*bu-sa-sa* dumu-munus-*su šá* ^{md}u.gur-mu
6 ama *šá* ᶠ*tab-luṭ* ^{m}[^{d}u].gur-gi
7 a-*šú šá* ^{m}*na-din ma-ḫir*
Rev. 8 ^{lú}*mu-kin-nu* ^{m}lú-^{d}ag ᶠa-*šú*ˀ [*šá* ^{md}en-mu]
9 a ^{m}ìr-^{d}gir$_4$.kù ^{md}utu-tin[^{ii} a-*šú šá*]
10 ^{md}u.gur-mu a $^{m.lú}$en.kaskal.kur[^{i} ^{m}PN]
11 a-*šú šá* ^{m}*pi-di*-dingir-meš ^{m}numun-dù a-*šú* [*šá* ^{m}PN]
12 ^{md}*šàr*-ad-ùru a-*šú šá* ^{m}*ab-di-*ᶠ*ia* ^{m}*gi-mil-lu*ˀ
13 a-*šú šá* ^{m}*re-mut-*ᶠ^{d}enˀˀ ᶠˡúumbisagˀ [^{md}GN]-*bul-liṭ-su*
14 a-*šú šá* ^{m}*ḫaš-da-a* ᶠaˀ [x x x] ᶠxˀ [*sip*]-*par*^{ki}
15 ^{iti}ab ud.6.kam [mu].10.kam ^{m}*da-ri-i*ˀ-*muš*
16 lugal e^{ki} *u* kur.kur-ᶠmešˀ

Translation

(1) Nergal-ušallim/Nādin received 5 minas of stamped silver with $^{1}/_{8}$ alloy, $1^{1}/_{24}$ šeqels of gold and one slave from ᶠBusasa/Nergal-iddin, the mother of ᶠTabluṭ, in accordance to the terms set in the tablet of ᶠTabluṭ/Bēl-iddin.

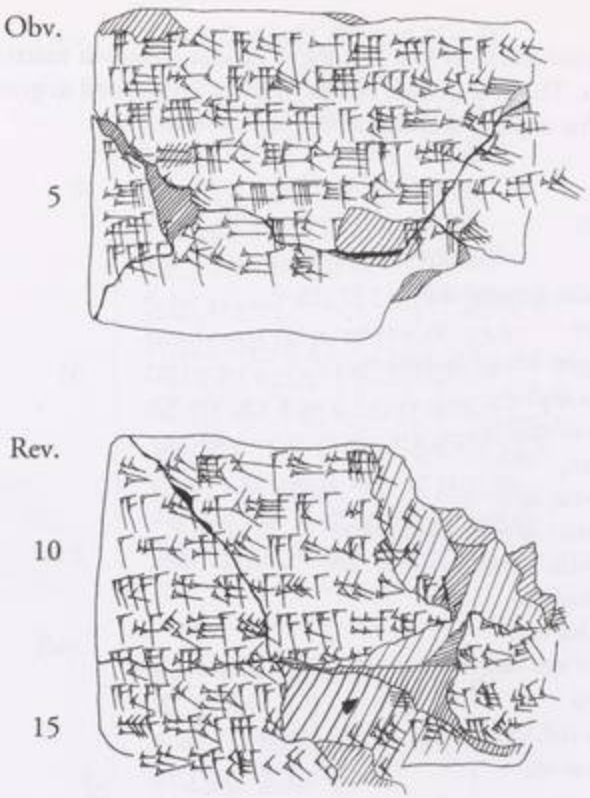
(8) Witnesses: Amēl-Nabû/Bēl-iddin/Arad-Nergal, Šamaš-uballiṭ/Nergal-iddin/Balīḫu, [PN]/Pīdi-ilāni, Zēra-ibni/[PN], Iššar-aba-uṣur/Abdia, Gimillu/Rēmūt-Bēl[2].

(13) Scribe: [GN]-bullissu/Ḫašdā/[FN].

(14) Sippar, sixth day of ṭebētu (tenth month), tenth year of Darius, king of Babylon and the lands.

Comments

(12–13) This is probably Gimil-Šamaš/Rēmūt-Bēl/Šumu-libši, ᶠAja-enqet's husband, cf. FLP 1457 (no. 1).



Finally ᶠBusasa's in-laws reappear on the scene. After her husband's death ᶠBusasa seems to have turned to her own family for support, but her sons were heirs of her family-in-law, who must have kept an interest in their fate. NBC 6184 (no. 3) records the transfer of a huge amount of silver, some gold, a slave and household goods from ᶠBusasa to her brother-in-law. The word dowry is not used, but the goods are typical dowry items and they are stated to have been entered in a tablet belonging to ᶠTabluṭ, a phrasing that usually refers to the transfer of property in the context of a marriage.

At the moment of the marriage Nergal-ušallim had three grown-up children: ᶠŠin-banâ, Libluṭ and Bēl-ittannu.[20] ᶠTabluṭ, the daughter of his deceased brother, became his second wife, she herself having a son from a previous marriage with her maternal uncle. This is an impressive succession of endogamous marriages, but family ties were even more perplexing as will be seen in the next section.

For a remarriage on both sides, the huge amount of silver transferred at the occasion (5 minas) is rather suspicious, especially when compared to the one mina in ᶠAja-enqet's dowry. The fact that the word *nudunnû* is missing in NBC 6184 (no. 3) might not be accidental. We know that ᶠTabluṭ faced financial problems after Ardia's death (FLP 1473, no. 2). She managed to meet that debt (otherwise the debt note and its duplicate would not be in the archive), but she might have needed help. If the debt (which had been incurred by her husband) was paid out of her deceased father's estate, this would have caused an imbalance in favour of her family-in-law, Balīḫu. The fact that the debt note and duplicate entered the archive of Bēl-ikṣur, who belonged to the Maštuk branch, seems to indicate an involvement of her father's family in paying off the debt. The subsequent remarriage to her father's brother and the huge sum of silver accompanying her at the occasion might represent a clearance of arrears owed to her father's family.

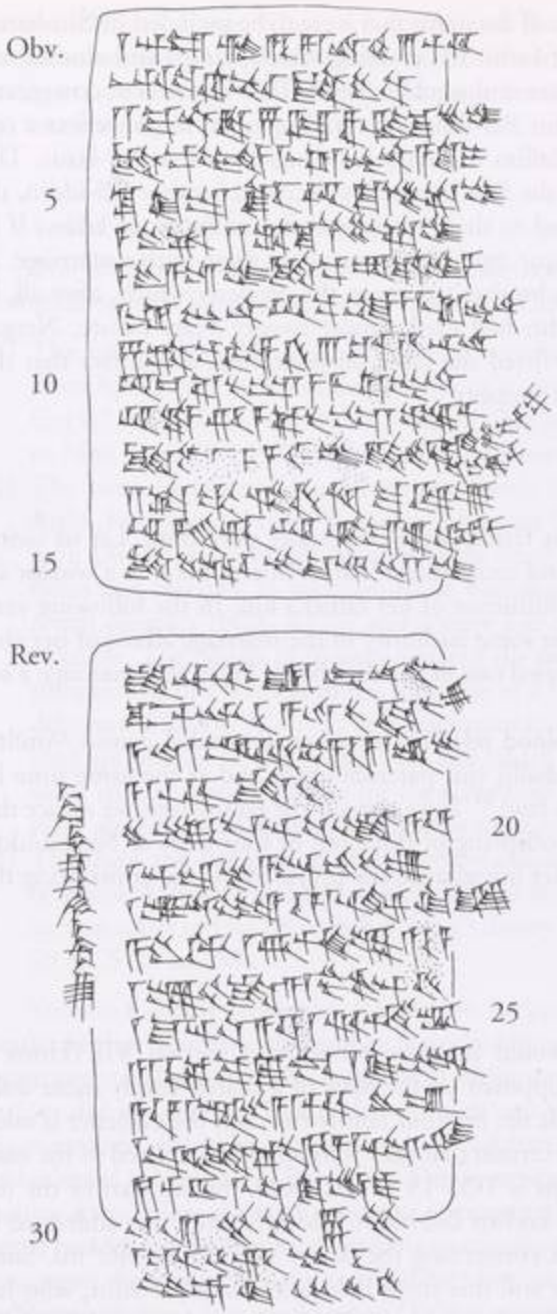
20 ᶠŠin-banâ: FLP 628 (no. 4, Dar 09); Libluṭ: JCS 28 no. 23 (Dar 13); Bēl-ittannu: FLP 628 (no. 4, Dar 09).

Bēl-iḳṣur and ^{f}*Šin-banâ*

When ^{f}Tabluṭ remarried her paternal uncle in Dar 10, there existed already a matrimonial alliance between her and his kin. The year before, Nergal-ušallim had agreed to give his daughter ^{f}Šin-banâ in marriage to his nephew Bēl-iḳṣur (^{f}Tabluṭ's brother).

No. 4: FLP 628 (Sippar, Dar 09)

Obv.	1	^{md}u.gur-gi a-*šú šá* ^{m}*na-din* a ^{m}*maš-tuk*
	2	*ina ḫu-ud lìb-bi-šú* 1^{et} lú^{tú}
	3	2 ma.na kù.babbar 5 gín kù.gi *šu-kul*^{l}-*tu*$_4$
	4	1^{et} ^{giš}ná *šá me-suk-kan-na a-di-i*
	5	^{túg}*ki-iš-ki-šú* 1^{en} ^{túg}*tar-pu-uš-tu*$_4$
	6	*šá* ^{lú}nita 2ta ^{túg}*tar-pu-uš-tu*$_4$
	7	*šá* ^{lú}*a-mil-tu*$_4$ 1^{et} ^{giš}*šid-da-tu*$_4$ *šá*
	8	*me-suk-kan-na* 1^{en} ^{giš}banšur *šá me-suk-kan-na*
	9	5ta ^{giš}gu.za-meš 3 ^{giš}*maš-*^{r}*ša*$^{?}$*-an-na*
	10	1^{en} ^{giš}é-*nu-úr šá me-suk-kan-na*
	11	1^{en} *kar-ri šá* é-*nu-úr* ud.ka.bar
	12	1^{et} ud.ka.bar *šá-ši-tu*$_4$ 1^{et} *mu-šaḫ-ḫi-in-nu šá* 2 bán || ud.ka.bar
	13	2ta gú.zi-meš 1^{en} *ba-ṭu-ú*
	14	1^{en} *šá-ḫi-ri*$^{!}$ 1^{en} *nam-su-ú* ud.ka.bar
	15	1^{et} ud.ka.bar *mu-qat-ti-iš-tu*$_4$
Rev.	16	*it-ti* ^{f}*šin-ban-na-a*$_4$
	17	dumu.maš$^{!}$-*ti-šú a-na nu-dun-nu-ú*
	18	*a-na* ^{md}en-*ik-ṣur* a-*šú šá* ^{md}en-mu
	19	a ^{m}*maš-tuk id-din*
	20	^{lú}*mu-kin-nu* ^{md}utu-tin^{it} a-*šú šá*
	21	^{md}u.gur-mu a $^{lú.d}$kaskal.kur^{ú}
	22	^{md}ag-*na-din*-šeš a-*šú šá* ^{md}iškur-*ki-mir*$^{!}$
	23	a ^{lú}nagar ^{m}*re-mut-*^{d}ag a-*šú šá*
	24	^{md}ag-tin^{it} a ^{m}*ár-kát*-dingir-meš
	25	^{m}šu-^{d}utu a-*šú šá* ^{m}*re-mut-*^{d}en
	26	a ^{m}*šul-ma-lu-ub-šú* ^{m}*qí-bi-*^{d}en
	27	a-*šú šá* ^{md}en-mu a ^{m}*maš-tuk* ^{lú}umbisag
	28	^{md}en-*it-tan-nu* a-*šú šá* ^{md}u.gur-gi
	29	a ^{m}*maš-tuk sip-par*^{ki} ^{itu}zíz
U. E.	30	ud.13.kam mu.9.kam
	31	^{m}*da-ar-mu-šú*
	32	lugal e^{ki} *u* kur.kur-meš
L.E.	33	1-*en-na-ta-a*$^{?}$ ti-*ú*



Translation

(1) Nergal-ušallim/Nādin/Maštuk has consented to give (the following items) with his daughter fŠin-banâ to Bēl-ikṣur/Bēl-iddin/Maštuk as dowry: a slave, two minas of silver, a golden jewel weighing 5 šeqels, a wooden bed and its cover, one garment (*tarpuštu*) for a man and two garments for a woman, a wooden vat stand, a wooden table, five chairs, three *maššānu*, a wooden lamp, a bronze lamp stand, a bronze lantern, a bronze cooking pot with a capacity of 12 liters, two goblets, a platter, a strainer, a washbowl, a bronze censer.

(20) Witnesses: Šamaš-uballiṭ/Nergal-iddin/Balīḫu, Nabû-nādin-aḫi/Adad-kēšir/Naggāru, Rēmūt-Nabû/Nabû-uballiṭ/Arkāt-ilāni, Gimil-Šamaš/Rēmūt-Bēl/Šumu-libši, Qībi-Bēl/Bēl-iddin/Maštuk.

(27) Scribe: Bēl-ittannu/Nergal-ušallim/Maštuk.

(29) Sippar, 13th of šabaṭu (eleventh month), ninth year of Darius, king of Babylon and the lands.

(33) Each party has taken a copy of this tablet.

Comments

The text is very corrupt: (3) *šu-kul-tu*$_4$ for *šukuttu*, (11) *kar-ri* for *kallu* (a lamp stand; cf. Roth, AfO 36/37, 25), (14) *šá-ḫi-ri* for *šāḫilu*; (17) dumu.maš-*ti-šú* for dumu.munus-*ti-šú*, (22) ^{md}iškur-*ki-mir*$^{?}$ for Adad-kēšir.

5 A *kišku* is obviously a kind of bedcloth, possibly suspended above the bed (cf. *ki-iš-ki* an.na in Dar 530+; Roth, AfO 36/37, 30–31).

5–6 The word *tarpuštu* is not yet attested, as far as I know. It designates a piece of clothing and is derived from the verb *rapāšu* "to extend, enlarge," therefore a "cloak"?

9 ^{giš}*maš-*^{r}*šá*$^{?}$*-an-na*: though the first part is unclearly written and damaged, *maššānu* (meaning uncertain) seems the only option (cf. Roth, AfO 36/37, 25).

26 Note the unconventional spelling of the family name Šumu-libši.

FLP 628 (no. 4) offers a detailed list of the items that were to be included in ᶠŠin-banâ's dowry. Apart from an impressive set of furniture, cooking vessels, lamps and clothes, the tablet mentions two minas of silver, a slave and a golden jewel. This very decent dowry, certainly superior to the dowry provided for Bēl-ikṣur's sister ᶠAja-enqet, might reflect a certain eagerness on the part of Nergal-ušallim to marry his daughter off to Bēl-ikṣur. This nephew was the son and possibly even the first heir of his deceased brother Bēl-iddin, the only one with whom Nergal-ušallim had to share his inheritance as far as we know. If he could strengthen family ties with Bēl-ikṣur, optimally concealing them with a marriage, he would not lose his grip so much on his brother's share in the property which, after all, he had been managing solo since Bēl-iddin had died almost twenty years before. Nergal-ušallim's marriage to ᶠTabluṭ probably fitted the same purpose, next to the fact that this young widowed mother in debt needed support.

Iddin-Bēl and ᶠAmīltu-šindu

The endogamous tendancies in this family were even more pervading. Let us switch back to the Balīḫu side of the family and recapitulate. After ᶠBusasa became a widow she seems to have re-entered the sphere of influence of her father's kin. In the following years her brother Šamaš-uballiṭ would exercise some authority in the marriage affairs of her children, while another brother, Ardia, married one of her daughters. From this marriage a son was born, Iddin-Bēl.

In his turn, Iddin-Bēl married a blood relative: his paternal parallel cousin ᶠAmīltu-šindu, who was a daughter of Šamaš-uballiṭ (his paternal uncle and at the same time his mother's maternal uncle and brother-in-law).[21] If we consult the family tree, we notice that this marriage succeeded in uniting the offspring of three out of four heirs of Nergal-iddin Balīḫu. As in the previous case, I consider inheritance the prime mover for contracting this marriage.

ᶠRē'ītu and Kalbā

The discussion of this marriage would fit more properly in section VII (Hints at endogamy), because consanguinity is supposed on the basis of a shared family name only. It is not precisely known how this couple fits into our family tree, but the evidence is taken from the Maštuk archive and we can be certain that they were somehow related to the main branch. The tablet causing the problems is YOS 19 17. As usual, the last part of the text clarifies the fragmentary start: our well-known Bēl-iddin/Nādin/Maštuk was addressed by a woman named ᶠNuptā/Kalbā/Maštuk concerning the dowry of a certain ᶠRē'ītu. Some silver belonging to ᶠRē'ītu's dowry was still due from Bēl-iddin's father Nādin, who had died at that moment (Nbn 15). ᶠNuptā's relationship to ᶠRē'ītu is nowhere explained, but she must have been her daughter. The fact that the dowry was due from Nādin implies that

21 The marriage is attested in BM 74570 (Bertin 2746), a tablet from the archive of Šullumā/Nergal-ēṭir/Ša-nāšišu dated in Dar 35. In this *ēpišānūtu*-contract Iddin-Bēl/Ardia/Balīḫu is the *ēpišānu* and his wife ᶠAmīltu-šindu/Šamaš-uballiṭ is to receive a share of the income (l. 8–11). Her father is mentioned with his full filiation (Šamaš-uballiṭ/Nergal-iddin/Balīḫu) as the first witness.

he was ᶠRē'ītu's father. Thus, if I understand the text correctly, Bēl-iddin's sister ᶠRē'ītu had been married to Kalbā//Maštuk (to be inferred from ᶠNuptā's filiation) — possibly an endogamous marriage as they share the same family name (and in the context of this family, one would not be surprised …).

4. The composition of the archive

The composition of the archive reflects the family history. If the tablets are put in chronological order it becomes apparent that the archive consists of three separate sections.

(1) The first twelve tablets record business activities and purchases of the Maštuk branch, from Aplā down to Bēl-iddin. The focus is clearly on Bēl-iddin and the section ends in Cyr 07 (JCS 28 no. 13) with his death. One tablet of his brother Nergal-ušallim dated to Nbn 16 (FLP 1597) might have been inserted later on (see below).
(2) The next 24 tablets, dated between Camb 02 and Dar 10, concern three persons: Ardia, his widowed sister ᶠBusasa and his wife ᶠTabluṭ. The tablets of Ardia end abruptly in Dar 06, presumably because of his death. This subgroup consists mainly of debt notes and receipts, in addition to an exchange contract of cattle (FLP 633), a house rental contract (NBC 6173) and a slave sale contract (NBC 6240) — nothing really valuable. The tablets of ᶠBusasa concern the transfer of her daughters' dowries and the summoning of a witness to the purchase of a house (FLP 1467). ᶠTabluṭ's tablet is the debt note FLP 1473 (no. 2). It is important to note that no tablets of Iddin-Bēl (Ardia's son) are present in this group, nor any tablet of his father that may have been of any value to him (except maybe for the slave sale). Another important remark is the complete absence of Maštuk tablets at this stage of the archive.
(3) The third and last section of the archive consists of seven tablets concerning Bēl-ikṣur (the son of ᶠBusasa and Bēl-iddin) and to a lesser extent his brother Ina-qībi-Bēl. This section starts in Dar 09 with Bēl-ikṣur's dowry tablet (FLP 628, no. 4) and ends in Dar 29 (JCS 28 no. 58).

Section 1 clearly represents the archive (or part of it) that was left by Bēl-iddin at his death. At that moment, his brother Nergal-ušallim took over the management of the family property and affairs, as the sons of Bēl-iddin were too young to inherit. Nergal-ušallim's archive did not survive. This ended up with one of his two sons, Libluṭ or Bēl-ittannu. In the meantime, Bēl-iddin's widow and his children were probably residing with Ardia, who had married a daughter of Bēl-iddin. This is section 2. The tablets of Ardia surviving in the archive are no more than a discard: the documents that truly mattered were doubtlessly collected by Iddin-Bēl when he started his own independent life. The other tablets in section 2 document the fate of ᶠBusasa and ᶠTabluṭ after his death. Both women might have moved to Nergal-ušallim's household when ᶠTabluṭ married him in Dar 10. In the meantime, Bēl-ikṣur (ᶠBusasa's son and heir of Bēl-iddin) had married ᶠŠin-banâ, a daughter of Nabû-ušallim. This was the beginning of his own carreer, documented by section 3. Around this time, he would have received the tablets belonging to his father (*i.e.*, section 1), possibly from Nergal-ušallim, as well as the tablets of his mother and those of Ardia, maybe after ᶠTabluṭ had died. The tablet of Nergal-ušallim referred to above concerns the vindication of a slave and might have entered Bēl-ikṣur's archive through his wife ᶠŠin-banâ, who brought a slave with her as part of her dowry.

Thus it is Bēl-ikṣur's archive that came down to us, or rather, a part of it. The property deeds are missing: we are looking at a discard — but one that is truly reflective of the family history.

5. Conclusion

The extraordinary rate of endogamous marriages in this family is matched by no contemporary source I know of. One pair of siblings contracted three endogamous marriages, as well in the paternal as in the maternal line. The practice was even repeated in the next generation, when a man born out of an endogamous marriage married a consanguine relative himself. The degree of consanguinity separating the spouses is twice the third grade and twice the fourth grade. Motives leading to these marriages seem to vary from case to case; financial as well as social considerations can be recognised.

V. Evidence from the Šangû-Šamaš family (Sippar)

Although the genealogy of the Balīḫu – Maštuk family is unique, similar endogamous marriage alliances will have been contracted in other families as well. A close look at the evidence from the archive of Tabnēa//Šangû-Šamaš of Sippar points in this direction.

The family Šangû Šamaš was very extended in Sippar. The branch of the family we will be looking at is A. Bongenaar's branch II,[22] who left an extensive archive consisting of at least 34 tablets dated between Nbk 01 and Dar 36. Four generations are documented:

1 Iqīša and Šamaš-šumu-līšir, sons of Šamaš-nāṣir,
2 Bēl-aḫḫē-iddin and Etel-pî-Šamaš, sons of Šamaš-šumu-līšir,
3 fṬâbātu, daughter of Bēl-aḫḫē-iddin, and Iqīša-Marduk and fTašmētu-damqat, children of Etel-pî-Šamaš,
4 Iddin-Bēl, Ea-udammiq and Tabnēa, sons of Iqīša-Marduk.

Only the second and third generations are of interest for the present study.

The consanguineous marriage of fTašmētu-damqat, daughter of Etel-pî-Šamaš, and her paternal uncle Bēl-aḫḫē-iddin is known from Sack, AmM 57. According to the text, Etel-pî-Šamaš changed his daughter's previously assigned dowry before transferring it to her husband. Such dowry conversions were common practice, but AmM 57 stands out for two reasons. First, the consanguinity of the parties involved is explicitly stated (Bēl-aḫḫē-iddin is marked as Etel-pî-Šamaš's brother, šeš-*šú* l. 9). Second, the convertion is unusual as three slaves were replaced by a large piece of real estate consisting of a date grove (1 kor) and arable land (4 kor). This looks like the brothers were settling an inheritance problem.

The key to the background of AmM 57 could be the age difference between fTašmētu-damqat and her brother Iqīša-Marduk. Nearly twenty years separate her marriage (AmM 02) from Iqīša-Marduk's first independent activity (Nbn 16; cf. Bongenaar, *Ebabbar*, 452). The brothers might have felt the need to reconsider inheritance matters at the moment when hope for a male heir to Etel-pî-Šamaš was given up, or when a male heir was born from a second marriage.

22 Bongenaar, *Ebabbar*, 461.

ᶠTašmētu-damqat and Bēl-aḫḫē-iddin had a daughter ᶠṬâbātu, as far as we know the only child born from this marriage. Two tablets of ᶠṬâbātu are preserved in the archive: BOR 2, 119 (Dar 08) and PSBA 9 (reign of Darius). The fact that these tablets entered the archive of Iqīša-Marduk's sons (being the children of her maternal uncle) could be an indication of an endogamous marriage comparable to that of Iddin-Bēl/Ardia/Balīḫu, but this is purely hypothetical. If so, the marriage would have united all known heirs of Šamaš-šumu-līšir.

VI. ᶠTupqītu's case (Borsippa)

In VS 6 95 (= AOAT 222 no. 10) Nabû-šuma-ukīn, son of Bēl-šuma-iškun//Nannāḫu asks his paternal parallel cousin ᶠTupqītu in marriage from her mother. ᶠTupqītu's father Nabû-zēra-ukīn had died and she was his only heir. Bēl-šuma-iškun and Nabû-zēra-ukīn had not divided their inheritance and the marriage would keep the property at least partly together (as Nabû-šuma-ukīn had a brother, cf. VS 5 54//143). The mother consented to the marriage proposal and included the full paternal estate and her own belongings in ᶠTupqītu's dowry on the condition that she would provide a male or female heir. This was exactly what went wrong: at least sixteen years later ᶠTupqītu was forced to return the property to her mother presumably because she had not given birth (VS 5 54//143).[23]

VII. Hints at endogamy

Endogamous marriages are not easy to recognise in the texts. Even if the spouses bear the same family name (which will not be the case if they are cross-cousins or related in the maternal line of descent), we still need a fairly extensive family tree in order to identify the common ancestor and decide on the degree of kinship. If such genealogical background is missing, consanguinity cannot be proven. Many such isolated marriages between persons with the same family name are known.[24] At least some of these must represent endogamous marriages, hinting at a much larger corpus than the one that could be presented here.

VIII. Conclusion

The Maštuk archive has drastically increased the number of cases of consanguineous endogamy known from the Neo-Babylonian period. Third- and fourth-degree endogamy must have been fairly common (though it was not the normal marriage practice). Most marriages were contracted in the male line of descent, *i.e.*, with the daughter of a brother,

23 Roth, AOAT 222, 56.

24 Eighteen cases are known to me. It is not very useful to list them here. In addition to some unpublished material from Sippar, most cases can be found in Wunsch, CM 20b; the index to M. Roth's article on the Neo-Babylonian dowry in AfO 36/37; Joannès, *Archives*; Rutten, RA 41; and Kessler, AUWE 8.

or with the daughter of a father's brother. Endogamy in the female line of descent was exceptional, thus far represented by one case only where a man married his sister's daughter (fTabluṭ and Ardia).

Marrying a blood relative was not normal practice, at least not in the propertied circles visible in the documentation. Consanguineous endogamy can be defined as the way a family chose to react on a problem that was threatening to the continued well-being of the family or some of its members. The nature of the problems leading to endogamy could vary. The absence of a male heir was a vital problem. Several solutions were at hand to react to such a situation, *i.e.*, adoption. If there was a daughter, endogamy became one of several possibilities. Many endogamous marriages through the paternal line of descent have to be seen in this context. fTupqītu's case is the most obvious example, but we have seen other marriages fitting this model, fTašmētu-damqat for example, and maybe fAmīltu-šindu and fṬâbātu as well. When a husband died and left behind wife and children, this could constitute a social as well as a financial problem to both sides of the family especially if the children were too young to inherit. It seems reasonable that families wanted to keep their young heirs near at hand. Here again consanguineous endogamy is one of several options (*e.g.*, fTabluṭ's first marriage), affinal endogamy (*e.g.*, the Ea-ilūta-bani archive) being another.

Problems of inheritance, childlessness and widowhood are situations of distress leading to endogamy. To fully understand the practice it should be valued in relation to the other ways in which a family might react to such problems, *i.e.*, adoption, affinal endogamy, donations, producing a testament etc., a purpose much beyond the scope of the present article.

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Bibliography

Beaulieu, P.-A.

Catalogue Yale 1 *Catalogue of the Babylonian Collections at Yale*, 1. *Late Babylonian Texts in the Nies Babylonian Collection*. Bethesda 1994.

JCS 42 "Four Neo- and Late Babylonian Texts from a Private Collection," JCS 42 (1990), 98–104.

MOS 2 "A Finger in Every Pie: The Institutional Connections of a Family of Entrepreneurs in Neo-Babylonian Larsa," in A.C.V.M. Bongenaar (ed.), *Interdependency of Institutions and Private Entrepreneurs* (*MOS Studies 2*). *Proceedings of the Second MOS Symposium* (*Leiden 1998*) (PIHANS 87). Istanbul 2000, 43–72.

Bongenaar, A.C.V.M.

Ebabbar *The Neo-Babylonian Ebabbar Temple at Sippar: Its Administration and Its Prosopography* (PIHANS 80). Istanbul 1997.

van Driel, G.

JEOL 29 "The Rise of the House of Egibi: Nabû-aḫḫē-iddina," JEOL 29 (1985–1986), 50–67.

Phœnix 31 "De opkomst van een Nieuwbabylonische familie: de Egibi's," Phœnix 31/2 (1985), 33–47.

Dillard, R.B.

diss. „Neo-Babylonian Tablets from the John Frederick Lewis Collection of the Free Library of Philadelphia" (unpublished Ph.D. dissertation), Dropsie University 1975.

Joannès, F.

RAI 32 "Un cas de remariage d'époque néo-babylonienne," in J.-M. Durand (ed.), *La femme dans le Proche-Orient antique, XXXIIe Rencontre Assyriologique Internationale, Paris 7-10 juillet 1986*. Paris 1987, 91–96.

Archives *Archives de Bosippa. La famille Ea-ilûta-bâni. Etude d'un lot d'archives familiales en Babylonie du VIII^e^ au V^e^ siècle av. J.-C.* Genève 1989.

MOS 1 "Structures et opérations commerciales en Babylonie à l'époque néo-babylonienne," in J.G. Dercksen (ed.), *Trade and Finance in Ancient Mesopotamia* (*MOS Studies 1*). *Proceedings of the First MOS Symposium* (*Leiden 1997*) (PIHANS 84). Istanbul 1999, 174–194.

Kessler, K.

AUWE 8 *Uruk. Urkunden aus Privathäusern. Die Wohnhäuser westlich des Eanna-Tempelbereiches, Teil 1* (AUWE 8). Mainz 1991.

Petschow, H.

"Inzest" "Inzest," RlA 5, 144–150.

Roth, M.

AfO 36/37 "The Material Composition of the Neo-Babylonian Dowry," AfO 36/37 (1989–1990), 1–55.

AOAT 222 *Babylonian Marriage Agreements 7th – 3rd Centuries B.C.* (AOAT 222). Neukirchen-Vluyn 1989.

CSSH 29 "Age at Marriage and the Household: A Study of Neo-Babylonian and Neo-Assyrian Forms," CSSH 29 (1987), 715–747.

Rutten, M.
RA 41 "Contestation au sujet d'une donation d'une mère à son fils," RA 41 (1947), 99–103.

San Nicolò, M.
Aegyptus 27 "Due atti matrimoniali neobabilonesi," Aegyptus 27 (1947), 118–143.

Stigers, H.G.
JCS 28 "Neo- and Late Babylonian Business Documents form the John Frederick Lewis Collection," JCS 28 (1976), 3–59.

Ungnad, A.
AfO 14 "Das Haus Egibi," AfO 14 (1941–1944), 57–64.
AnOr 12 "Babylonische Familiennamen," AnOr 12 (1935), 319–326.

Wunsch, C.
AfO 42/43 "Die Frauen der Familie Egibi," AfO 42/42 (1995–1996), 33–63.
CM 20a–b *Das Egibi-Archiv. I. Die Felder und Gärten. Bd. I und II.* (Cuneiform Monographs 20a–b). Groningen 2000.

Zadok, R.
NABU 1997/13 "LB Texts from the Yale Babylonian Collection," NABU 1997/13.

Du sollst nicht darüber spotten: eine Abschrift der 10. Tafel von úru àm.ma.ir.ra.bi

Michaela Weszeli — Wien

In meinem dritten Semester lasen wir in Wien in einem Seminar Texte aus Christopher Walkers CT 52. Wir waren fasziniert von dieser „Spinnwebenschrift", wie wir sie nannten, die den Charakter der Tafeln mit sparsamen und eleganten Strichen so treffend wiedergab und die Texte für uns Anfänger so schwer zu lesen machte. Hierbei dürfte die Lage des British Museum in Bloomsbury und der Geist der Bloomsbury-Gruppe[1] auf den Kopierstil des Jubilars, dem diese Zeilen hier gewidmet sind, nicht ohne späten Einfluß gewesen sein, erklärte doch Roger Fry 1913, der Künstler „should give up the idea of imitative likeness and aim at the creation of absolutely necessitated form".[2]

Der hier edierte Text ist eine Abschrift der 10. Tafel des balaĝ-Liedes úru àm.ma.ir.ra.bi „die Stadt, die geplündert wurde"[3]. Die Tafel setzt sich aus den folgenden von mir gejointen Stücken zusammen: BM 78903 (Bu 88–5–12,89), BM 50313 (82–3–23,1304) und BM 51065 (82–3–23,2061).[4] Sie stammen alle aus der Sippar-Sammlung des British Museum.[5] Die beiden kleineren Fragmente aus der Sammlung 82–3–23 stammen aus Rassams Grabungen, BM 78903 wurde von J.M. Shemtob angekauft.[6] Der Join dieser Fragmente zeigt sehr deutlich, daß der Antikenhändler J.M. Shemtob (und nicht nur er) seine Tafeln direkt von den Grabungen bezogen haben muß, die Tafeln offensichtlich noch vor Ort von den Arbeitern abgezweigt wurden.

Die Abschrift wurde laut Kolophon am 12.X.7 Šamaš-šum-ukīn in Nippur geschrieben. Durch BM 50313+ ist der Umfang der 10. Tafel von úru àm.ma.ir.ra.bi nun bekannt: Er beträgt in dieser Zeit — ohne die akkadische Übersetzung miteinzurechnen — 42 Zeilen. BM 50313+ ist teilweise stark abgerieben und abgebrochen und bietet daher keinen vollständigen Text. Wir bieten aus diesem Grund hier eine vorläufige Umschrift mit Besprechung einiger Probleme, jedoch keine volle Edition der 10. Tafel.[7]

1 Zu ihren Vertretern gehörten neben Roger Fry u.a. Vanessa und Clive Bell, Dora Carrington, Lytton Strachey sowie Virginia und Leonard Woolf.
2 Zitat nach Frances Spalding, Character Sketches: The Bloomsbury Group, 5.
3 Zum Namen des balaĝ-Liedes s. Volk, FAOS 18, 11ff.
4 Die beiden letzteren Fragmente, werden bereits von Volk, FAOS 18, 6 als zu dieser Tafel gehörig bezeichnet.
5 Die Tafel wird mit der freundlichen Genehmigung der Trustees des British Museum publiziert. Ich danke H. Hunger und M. Jursa für das Lesen einer früheren Fassung des Manuskriptes.
6 Leichty, CBT 6, xxxii und Leichty *et al.*, CBT 8, xviif.
7 Die 10. Tafel von úru àm.ma.ir.ra.bi wurde von Civil in AuOr 1 (1983), 45ff. erstmals ausführlich besprochen. Das Genre der balaĝ-Lieder wurde von Cohen, CLAM behandelt, unser

Unsere Kopie enthält einen außergewöhnlichen, langen und interessanten Kolophon. Der Beginn ist gut bekannt (s. Hunger, *Kolophone*) und zeigt bis zum Datum nichts Ungewöhnliches. Der Schreiber der Kopie ist der Klagesängerlehrling Šamaš-uballiṭ, Sohn von Nabû-ēreš, der seinem Gott Ninurta, dem Starken unter den Göttern, vertraut (s.u. zu Z. 48f.). Der Besitzer der Tafel ist Nabû-zēr-līšir, Sohn von Bēl-ēṭer, der ein Klagesänger von Enlil und Ninlil ist. Wir dürfen wohl annehmen, daß Šamaš-uballiṭ bei Nabû-zēr-līšir in Ausbildung war und die Kopie im Zuge dieser Ausbildung für seinen Lehrer anfertigte. Auf eine Fluchformel gegen denjenigen, der die Tafel nimmt und nicht zurückstellt, und das Datum folgt ein frei formulierter Zusatz, der die Qualität der Kopie von úru àm.ma.ir.ra.bi auf der Vorderseite betrifft. Šamaš-uballiṭ beteuert, die „Winkelhaken" so, wie er sie vorfand — auch wenn sie dem Leser zu viele erscheinen — abgeschrieben zu haben. Sollte er aber „Winkelhaken" vergessen haben, so fordert er den Leser der Tafel auf, nicht über seine Kopie zu lachen, sondern, wenn er es besser verstünde oder wisse, Korrekturen vorzunehmen und die fehlenden „Winkelhaken" einzutragen. Der Kolophon drückt zugleich den Stolz des Schreibers auf seine Leistung aus, aber auch seine Unsicherheit in Bezug auf die Korrektheit bzw. die Vollständigkeit der Abschrift.

Šamaš-uballiṭ, der seine Schreiber(grund)ausbildung bereits abgeschlossen hatte, liefert eine schön, klein und eng geschriebene Kopie der 10. Tafel von úru àm.ma.ir.ra.bi.[8] Der frei formulierte Kolophon zeigt aber, daß er noch kein routinierter Schreiber war. Die Syntax des Kolophons ist in der Passage, die nicht „Kolophonrepertoire" war, nicht korrekt und gegen Ende durch mangelnde Klarheit des Ausdrucks schwer zu interpretieren (s.u.). Einige Zeichenformen sind „eigenartig" (vgl. z.B. lugal in Z. 54, nam in Z. 55f. und gur in Z. 57. 59 und 64 u.a.), die Keile seiner Zeichen „flattern" oft; die Raumaufteilung im Kolophon, d.h. die Verteilung der Zeichen in einer Zeile, ist unregelmäßig, etc. Andererseits verwendet er das seltene Wort *gigurrû* „Winkelhaken" statt des geläufigeren *santakku* „Keil". *gigurrû* wird syllabisch geschrieben und findet sich hier erstmals außerhalb lexikalischer Listen und Omina (s.u.).

Mehr als seine Unsicherheit bezeugt der Kolophon jedoch die „Wissenschaftlichkeit" Šamaš-uballiṭs. Er hat so gut gearbeitet, wie er konnte, er hat die Vorlage so genau, wie es ihm möglich war, abgeschrieben. Er ist aber nicht der Meinung, daß sein Werk nicht der Verbesserung bedürfen könnte. Er hat seine Arbeit gewissenhaft erledigt, nun sind die Kollegen gefordert. Über schlechte Arbeit zu lachen, ist leicht, es besser zu machen, ist schwieriger. Die mesopotamischen Schreiber des ersten Jahrtausends waren bei der Arbeit des Kopierens von wissenschaftlichen und literarischen Texten auf Genauigkeit bedacht. Authentizität wurde versichert, indem betont wurde, daß von einem „Original", einer älteren Version, abgeschrieben wurde. Zerstörte Passagen wurden gewissenhaft mit *hepi*

balaĝ-Lied im 2. Band S. 536ff. (Rez.: Cavigneaux, JAOS 113, 251ff.; Konkordanz der Texte: Borger, BiOr 47, 5ff.) Eine Zusammenstellung der Textzeugen von balaĝ-Liedern erstellte Black, BiOr 44, 32ff., unser balaĝ findet sich unter Nr. 36. Eine Bearbeitung der Tafeln 18–21 von úru àm.ma.ir.ra.bi publizierte Volk in FAOS 18. S. 5ff. stellt er die Quellen auch für die von ihm nicht bearbeiteten Tafeln zusammen, wobei BM 78903 nachzutragen ist (s. Leichty *et al.*, CBT 8, 171).

8 úru àm.ma.ir.ra.bi gehörte nicht zum Schulcurriculum im 1. Jt., s. Gesche, AOAT 275, oder früher, s. Tinney, Iraq 61, 159ff.

„beschädigt, zerbrochen" oder auch *hepi eššu* „neu beschädigt" markiert. Weiters wurde die Kopie nach Abschluß der Arbeit kollationiert und nötigenfalls ausgebessert.[9] Der Inhalt unseres Kolophons steht dementsprechend auch nicht ganz alleine. Es gibt eine Parallele in Hunger, *Kolophone*, 498, die aber wesentlich knapper formuliert wurde. Ähnlich wie Šamaš-uballiṭ drückt auch Urad-Gula, der *mašmaššu*-Priester, in diesem Kolophon seine Erwartung an die „Fachkollegen" aus: „Nach dem Wortlaut zerbrochener Tafeln geschrieben. Wer (sie) sieht, soll sie nicht schmähen! Zerstörtes soll er wiederherstellen!"[10]

úru àm.ma.ir.ra.bi, 10. Tafel
BM 50313 (82–3–23,1304) + **BM 51065** (82–3–23,2061) + **BM 78903** (88–5–12,89)

Aufbauend auf die erste Bearbeitung der 10. Tafel durch M. Civil in AuOr 1, 45ff. übernehme ich in meiner Bearbeitung seine Siglenzuweisung[11] und gebe BM 50313+ im Anschluß das Siglum „D". (Die im Appendix gegebene Umschrift von BM 77519 erhält das Siglum „E"[12].) Die Zeilenzählung richtet sich, falls nicht anders angegeben, ebenfalls nach der Ausgabe Civils, wobei die akkadischen Zeilen zusätzlich mit „b" bezeichnet sind.

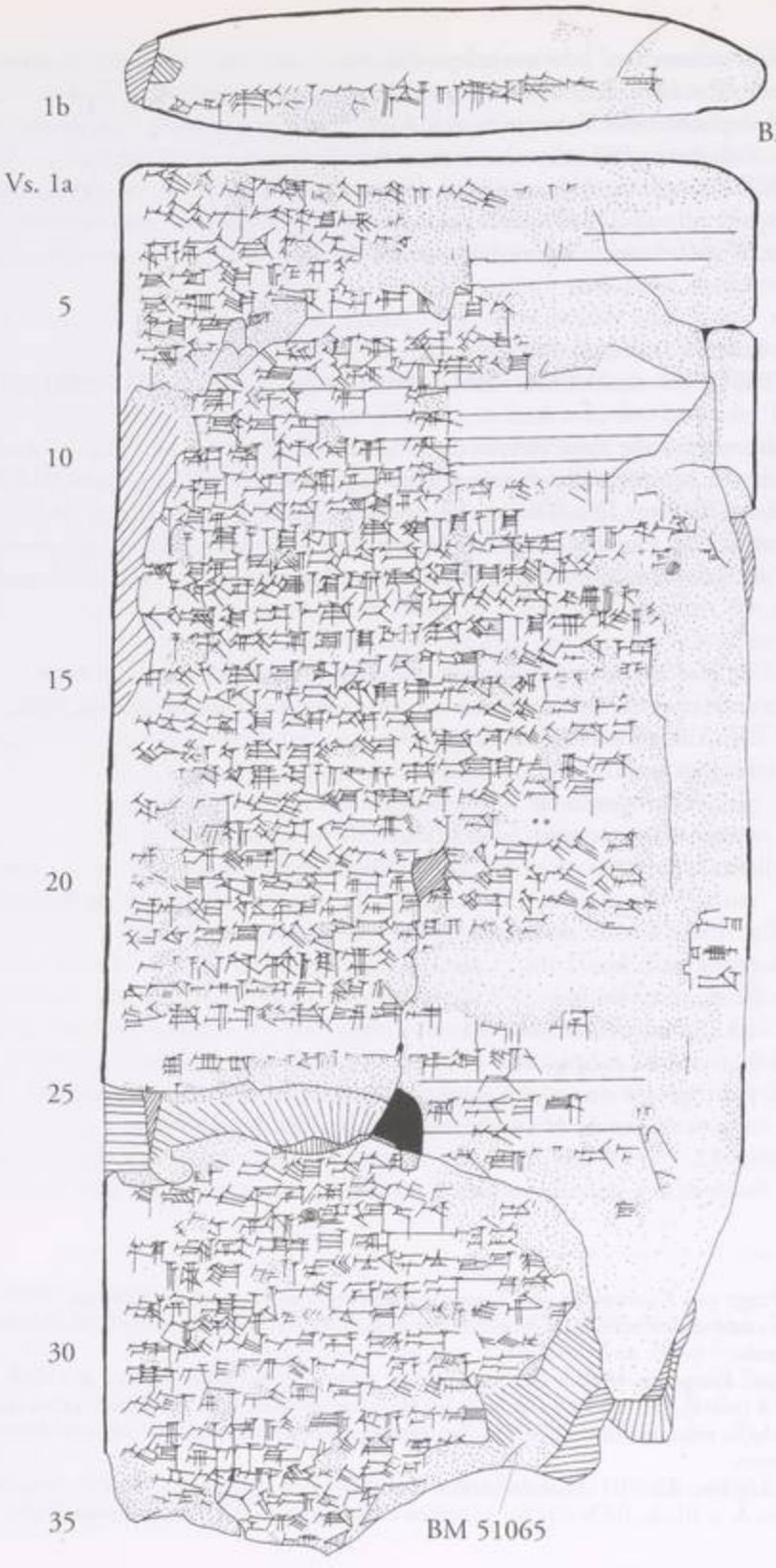
o.R. 1.b [*šá*?] *ar-da-*˹*tu*˺ x x a : *šá* min *ana*<-*ku*> *ú-*<*ru-*>*ka*˹-*i-t*[*i ana*?-*k*]*u*?!
Vs. 1.a mu.˹tin˺ na.ág.nunus a.na.a ˹mu.tin˺[.mèn unug^{ki}.ga na.mèn]
2 mu.tin.an.na nin.˹zi.˺[an.na (?)]
3 sag$_9$.ga gašan ˹x.si x˺ [x (x)]
4 gašan dub.sar.a.ra.˹li˺[^{ki} x x (x)] ˹x˺
5 gašan dub.sar.maḫ ˹nin guruš˺ ˹x x˺
6 nin i.˹lu˺ [0?] [ni]n.A[Ḫ
7 unug^{ki} [ku]l.aba$_4^{ki}$ al bí.in.e[$_{11}$.dè mu.tin unug^{ki}.ga na.mèn]
b [ ]˹*u*˺ *i-tel-li ar-da-tu ana-*[*ku*
8 [é.]˹a˺.ra.li.ke$_4$ al
9 [é.du$_6$.]su$_8$.ba.ke$_4$ al
10 [du$_6$].bàd.tibira^{ki}.ke$_4$ al
11 [é.]múš.ka.nag.gá.ke$_4$ al
12 [unu]g^{ki}.ga na.mèn unug^{ki}.ga ˹na.mèn mu.tin.mèn˺ m[e.e]
b *šá ana-ku šá ana-ku ar-da-tu ana-*˹*ku*˺ *šá ana-ku*

9 Zur Frage von Kanonizität von Texten s. Lieberman in der *Festschrift Moran*, 305ff., besonders 332ff., und davor bereits Rochberg-Halton, JCS 36, 127ff., besonders. 128f., beide mit älterer Literatur.

10 Hunger, *Kolophone*, 498: 3. Für „schmähen" verwendet der Schreiber hier das Verb *ṭapālu*. Lies in Z. 4 (mit Kopie in Gadd, StOr 1, 33) ^{lú}maš.maš-me˹.en˺ „(Tafel des Urad-Gula, *mašmaššu* bin ich (!), ([des Soh]nes …)". Vgl. die Syntax unseres Kolophons in Z. 8, mit dem Verb in der 1. Person.

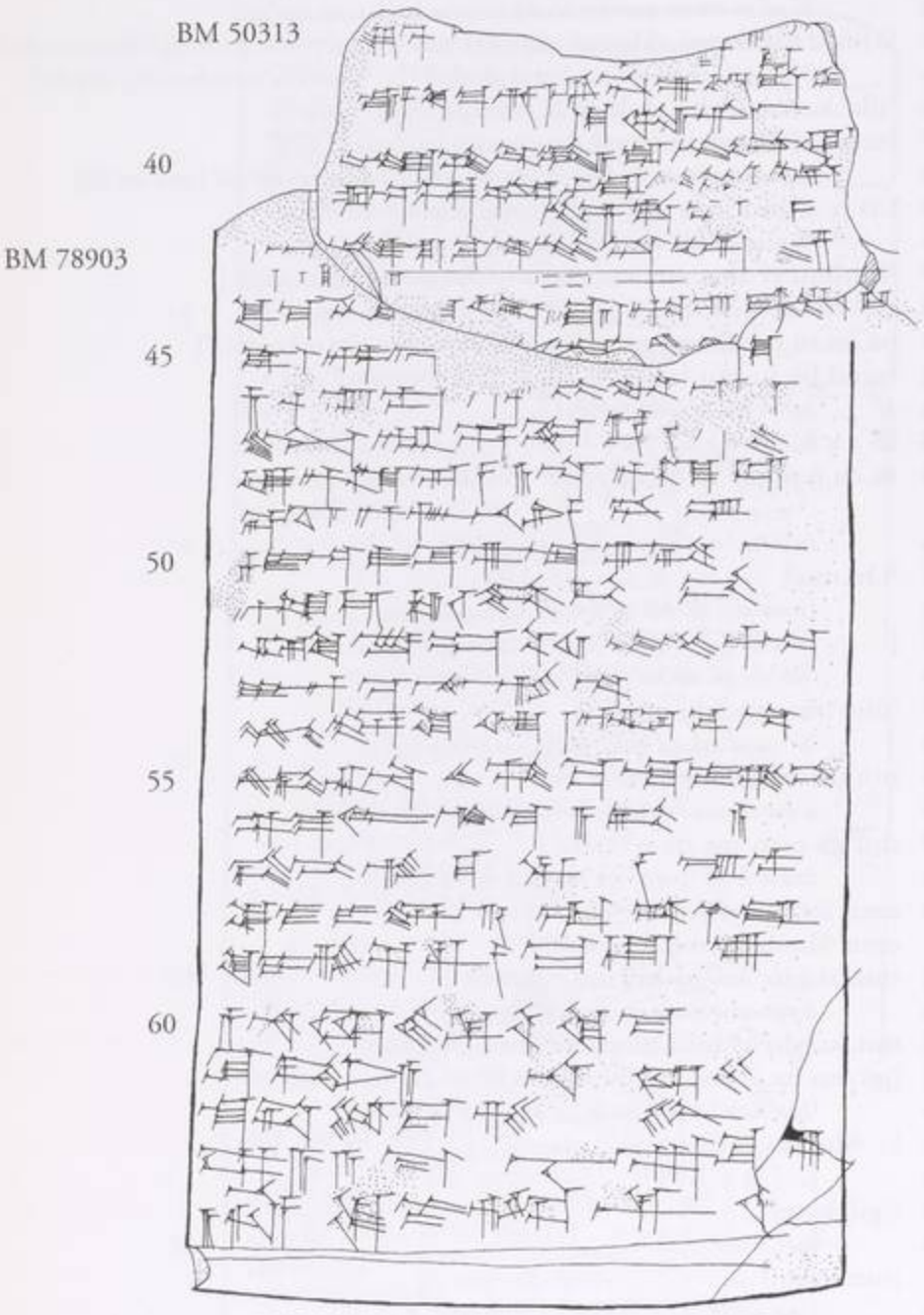
11 A = Langdon, BL VIII (neubabyl.); B = K 3327+ (neuassyr.); C = OECT 5, 45 (altbabyl.).

12 E joint A, s. Black, BiOr 44, 50. Es fehlen zwei Zeilen zwischen den beiden Teilen.


1b
BM 78903
Vs. 1a
5
10
15
20
25
30
35
BM 51065

13 [u]nug^{ki} é.gi$_4$.a.bi na.mèn m[u.t]in.mèn sag.dul$_6$ a.na unu[g^{ki}
b *šá ul kal-lat-su ana-ku ar-da-tu ana-ku am-me-ni p[u-u]s-su[-ma]-⌜ku⌝[*
14 kul.aba$_4^{ki}$ um.me.da.bi na.mèn mu.tin.mèn ù.a ig[i
b *šá ul ta-rit-su ana-ku ar-da-tu ana-ku ú-nam-za-⌜az⌝]*
15 ⌜é.[m]u sila.da.ma.al.la<.aš> dè.íb.lá mu.tin.mèn me.e [unug^{ki}.ga na.mèn]
b *bi-ti ana re-bi-ti lu ú-ḫat-ti ar-d[a]-t[u$_4$] ana-k[u ú-ru-ka-i-tu$_4$ ana-ku]*
16 ⌜sila⌝.kul.aba$_4^{ki}$.ka.aš dè.íb.lá mu.tin.mèn ⌜me.e⌝ [
17 in.tu.ud.da.ma in.tu.ud.da.ma mu.⌜tin.mèn⌝ GIŠ[
b *⌜a-na⌝ bu-lu-ṭi-šú min ar-da-tu$_4$ ana-ku ina? šu?-uḫ?-ṭiḫ? [ana-ku (?)]*
18 UD [x x]⌜ama⌝.mu in.tu.ud.da.ma mu.tin.mèn ma
b ⌜x x⌝ *a-ḫi um-mi ú-l[i]-du*
19 ^{d}[du]mu.zi ama.mu in.[t]u.[ud].⌜da⌝.ma mu.tin.mèn [
20 ⌜in⌝.⌜tu.ud⌝ min⌝ ḫé.bí.gá.gá⌝ [i]n.tu.ud mu.tin.mèn
21 ba.an.tu.ud áb.sag.gá.gá ba.an.tu.ud mu.tin.mèn m[a?]
22 tu.ud.ba šu.mu lul BI/GA DU x ⌜mu.tin.mèn⌝[ ] ⌜x x⌝
b *sur-ri qa-ta-a lu ú-l[i]-[*]⌜x⌝-*ú* 0?
23 áb x x me.ri sag.gá x a [ ].mèn
24 in.da.gur.gur in.da.ra.⌜zé.zé⌝ [mu.tin.mèn]
⌜me.ri⌝ ⌜sag⌝.gá[
b *lu ú-ta-⌜ri ù⌝ [lu ú-ba]-⌜aq-qí-im*
25 ⌜i.bí.mu⌝[ ].til
b *[i-na-a-a di-ma-tu?* (…)?] *uš-tag-ma-ra*
26 [ ] ⌜x x⌝ [ ] ⌜mu.gar⌝
b *⌜lib⌝-bi ṭú-ub ka⌝-[bat-]ti-ia [iš?⌝-tak-k[a-an]*
27 ⌜únu⌝.mu u$_6$.di.bi mu.[
b *⌜le⌝-ta-a tab-ra-tu-ši-na* [x]-*tak*-[x x] ⌜x⌝ [
28 nin úru.ta ezen ma.al.⌜la ta⌝
b *a-ḫa-tu ina* ⌜uru⌝ *i-sin-nu mi-nu ⌜i⌝-ba-⌜áš⌝-[ši]*
29 úru.gá ezen me.na.e i[t]i]ab.è [
b *ina a-li-ni ⌜i-sin⌝-nu ma-ti a-bu* ni ba/ma [
30 ezen šeš.mu me.na.e iti]ab ⌜i⌝-*sin-nu* [
31 ezen ^{d}dumu.zi me.na.e iti]ab⌝ [
32 mu.šu.gán ⌜šeš⌝.gá.ke$_4$ mu.tin.mèn [
b *ú-na-at a-ḫi-ia ar-da-tu$_4$ [ana-ku]*
33 mu.šu.gán ^{d}dumu.⌜zi⌝.da.ke$_4$ ⌜mu⌝.[tin.mèn
34 [gú.]en.na.ar šeš.mu gú.e[n.na.ar
b ⌜*ina nap?⌝-ḫ[ar] be-lu$_4$ a-ḫi ina n[ap-ḫar*
35 [... ^{d}du]mu.zi.da [
b […] ⌜x x⌝ […]
36 [^{d}gilgameš ...
b [*bēl erṣeti …*
37 [umun.mu ...
b [*ina limīt …*
38 [^{d}dumu.zi …
b [*itti …*

Rs.



Rs. 39 [šeš mu].lu a[m.gin$_7$ ná.a.ra mu.tin.mèn] ⌜ù⌝ / [nu.mu.un.]⌜ku.ku
b *[ana a-ḫi]-ia šá ki-ma ri-me ir-du-ú ar-da-tu$_4$ / ana-ku ul a-ṣal-lal*
40 [^{d}dumu.z]i mu.lu am.gin$_7$ ná.a.ra mu.tin.mèn ù ⌜nu⌝[.mu.un]
41 [sag šen.še]n.na sag zabar.ra m[u].tin.⌜mèn⌝ nu.uš / mu.un.da.⌜ab.⌝[sú]m
42 [anše⌝.⌜na] tu.lu.ba.na mu.tin.mèn nu.uš ⌜mu⌝.un

43 Rasur
44 *ki-ma* sumun-*š*[*u* giš]-*ma* igi.kár *ina* šu^{II} ^{d}utu-*ú*-⌜*ba*⌝-⌜*li*⌝-*ṭu*
45 dumu ^{d}pa-ur[u$_4^?$ ^{lú}]⌜šáman.lá⌝ ^{lú}⌜uš.⌝ku
46 *šá*-⌜*ṭir*⌝ *ṭup-pi* ^{If}⌜^{d}pa⌝-numun-*li*-⌜*šir*⌝
47 bu-kúr ^{d}en-*e-ṭè-ri*$^{!}$ ⌜šú ^{d}50⌝
48 *ù* ^{d}nin.líl *šá a-na* ^{d}nin.urta
49 *dan-nu* «x» dingir^{meš} *be-li-šú tak-lak*
50 *šá i-na-áš-šu-ú la ú-ta-rù*
51 ⌜^{d}⌝nin.urta záḫ-*šú li-iq-bi*
52 nibru^{ki} ^{itiab} ud.12.kam mu.an.na
53 7 ^{d}giš.nu$_{11}$-<mu->gi.na
54 lugal$^{!}$ tin.tir^{ki} *ù* ^{d}en.líl-*ba-na*
55 ^{lú}gú.en.na *man-nam*$^{!}$-*ma la i-qab-bi*
56 *um-ma mi-nam-ma a-ga-a*
57 *gab-bi gi-gur*$^{!}$-*ru* ⌜*šá*⌝$^{!}$ *ṭup-pi*
58 *ki-i i-tir-ri al-ta-ṭar-ra*
59 *ki-i gi-gur*$^{!}$-*ru-šú ma-ṭu-ú*

60 *a-na muḫ-ḫi ru-ud-di-ma*
61 *šu-ṭur a-na muḫ-ḫi*
62 *la ta-le-ez-zi-in*
63 *ka-a-a-ma-nu-ú šu-ú*
64 *a-ga-a ki-i gi-gur*$^{!}$-*ru-šú*

Übersetzung des Kolophons

44–49: Gemäß seinem Original [geschrieben] und geprüft; (mit der Hand) von Šamaš-uballiṭ, Sohn von Nabû-ēr[eš$^{?}$], dem Klagesängerlehrling geschrieben. Tafel des Nabû-zēr-līšir, Erstgeborener von Bēl-ēṭer, ⌜Klagesänger⌝ von Enlil und Ninlil, der ich auf Ninurta, den Starken unter den Göttern, meinen! (wörtl.: seinen) Herrn, vertraue.

50f.: Ninurta soll die Vernichtung desjenigen aussprechen, der sie (die Tafel) nimmt und nicht zurückbringt.

52–55: Nippur, 12. X. 7 Šamaš-<šum>-ukīn, König von Babylon, und Enlil-bāni, der Gouverneur.

55–64: Niemand soll folgendermaßen sprechen: „Warum dies alles?“ Wenn die Winkelhaken der Tafel zu viele sind, habe ich sie (getreu) abgeschrieben. Wenn ihre Winkelhaken zu wenige sind, so füge (sie) hinzu und schreibe (sie) hin! Du sollst darüber nicht spotten! Sie ist (in ihrer Gänze) so zuverlässig wie ihre (einzelnen) Winkelhaken (wörtlich: Sie (die Tafel, die Abschrift) ist zuverlässig — diese ist wie ihre Winkelhaken).

Kommentar

Der Textzeuge D ist weitestgehend parallel zu A, unterscheidet sich aber durch kleinere orthographische Eigenheiten: Bevorzugung von *tu* (5) vor tu_4 (2) bei der Schreibung von *ardatu* und *am-me-ni* statt *ana mi-nim* in Z. 13b; für weitere Unterschiede s. die Einzelbemerkungen.

1.b: Die ersten beiden Zeilen sind sehr schwer zu lesen. Ob am Ende von 1.b. tatsächlich noch *ana-ku* steht ist unsicher; der schräge Keil in der Kopie bei *k*]*u* ist vielleicht nur ein Kratzer. Die beiden Zeilen sind im Verhältnis zu den beiden Anfangszeilen in A vertauscht. Die Tafel beginnt mit der akkadischen Version am oberen Rand. Cavigneaux und Ismail veröffentlichten in ASJ 20, 1ff. eine zweisprachige Hymne aus Assur, wo dieselbe Eigenheit zu beobachten ist. Wie sie sicher richtig vemuten, geschah dies aus bibliothekarischen Erwägungen, ähnlich unserer Beschriftung der Buchrücken (S. 6). In der Mitte der Zeile befinden sich Trennkeile, die hier unerwartet stehen, da der Text in akkadischer Sprache fortsetzt; oder ist in der Lücke etwa ein sumerisches Wort zu ergänzen? Nach *ardatu* erwartet man *ana-ku*, die Zeichenreste passen aber nicht.

1.a: Die Lesung na.ág.nunus verdanke ich I. Finkel.

13: unug am Ende der Zeile findet sich auch in Text A; s. Civil, AuOr 1, 49.

14.b: *ta-rit-su* statt *ta-ri-i*[*s-su*] in Text A.

15: Der Lokativ-Terminativ an damala fehlt hier ebenso wie in der altbabylonischen Version C. Da er in Z. 16.b und in der zeitgleichen Kopie A erhalten ist, habe ich dementsprechend ergänzt.

15.b: Die von Langdon in BL, S. 19 vorgeschlagene und von Civil, AuOr 1, 50 verworfene Lesung *ú-ḫat-ti* (für Sumerisch dè.íb.lá) wird hier bestätigt (s.a. CAD Ḫ *s.v. ḫatû* A). Schretter, Emesal, S. 158, *s.v.* 62. /damal/, liest *u-ḫaṭ-ṭì*. Die Lesung von TI als *ṭì* ist aber für die neubabylonische Zeit unüblich. Der neubabylonische Beleg, den Röllig und von Soden in ihrem Syllabar, Nr. 46 anführen, ist verlesen. Das Verb in Nbn. 50: 16 ist von *watārum*, nicht von *eṭērum* abzuleiten. Entweder man postuliert trotzdem eine Lesung *ṭì* oder man nimmt einen Irrtum des Schreibers aufgrund der Bedeutungsähnlichkeit der Verben *ḫatû* und *ḫaṭû* an. lal wird laut AHw. mit *ḫaṭû* II „sich verfehlen, sündigen", D-Stamm, nB, „ruinieren, verderben" geglichen, nicht aber mit *ḫatû*, d.h. *ḫatû* II, das „niederschlagen" bedeutet (D – G) und nicht sehr gut belegt ist.[13] Unser Schreiber hätte nun diese beiden verwechselt. In den Wörterbüchern finden sich einige wenige Belege für *ḫatû* II bzw. A im D-Stamm mit „Haus" als direktem Objekt.

17: Der Beginn von 17.b bietet ohne Zweifel *ana bulluṭīšu* für das sumerische in.tu.ud.da.ma und gegen Civils Ergänzung keine finite Verbalform. Die Lesung *ina šu-uḫ-ṭù* folgt einem Vorschlag M. Gellers.

18.b: *ú-li-du* statt *ú-li-di-šú* in Text A. Der Rest der Zeile ist leer, *ardatu anāku* wurde vergessen, oder eine Beschädigung des Originals an dieser Stelle nicht gekennzeichnet.

22: Für lul *surratu* „Lüge" steht in der akkad. Version *surru* „Unrecht", falls die Lesung richtig ist. Für den Imperativ in der sumerischen Version findet sich affirmatives *lū* in der akkadischen Version. Ab LUL kann ich keine überzeugende Interpretation bieten.

23: Ab hier setzt die Vorderseite von BM 77519 (E) ein (s.u.), nach der auch im folgenden ergänzt wurde. Zwischen A und E fehlen die Zeilen 21–22.

24: Gegen Civil, AuOr 1, 54 (Text E): 2′f.: zé.zé = *baqāmu* „die Haare ausraufen". Das affirmative *lū* des Akkadischen findet hier keine sumerische Entsprechung.

25: „Meine Augen werden veranlaßt werden, die Tränen zu beenden". Der passive Št-Stamm ($Št_1$) von *magārum* ist meines Wissens hier erstmals belegt.

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13 Das CAD Ḫ, das vor dem AHw. Faszikel Ḫ erschienen ist, kennt die Gleichungen für *ḫaṭû* „to make a mistake" mit lal noch nicht. Es stellt unsere Stelle zu *ḫatû* A „to smite", erwägt aber aufgrund von lal im Sumerischen die Ableitung von *ḫâṭu* „to watch over, to take care of", D-Stamm „to trace". Diese Bedeutung ergibt hier aber keinen Sinn.

26: „Mein Herz wird auf Dauer Fröhlichkeit hinsetzen". Vielleicht so mit Fragment E zu lesen. Für ur_5 *kabattu* s. Oberhuber, ISL I.1, 512, für *ṭūb kabatti* „Wohlbefinden, Freude, Fröhlichkeit" vgl. auch Langdon, AfK 1, 18, Z. 44: *a-šar ṭu-ub ka-bat-ti*. Das Verb ist vielleicht als ein Gt Präsens von *šakānu* zu lesen.

27: u_6.di = *tabrâtu*, Pl. zu *tabrītu* „das Schauen, Gesicht", Pl. (staunendes) Anschauen (AHw. 1299, *s.v.*); Oberhuber, ISL I.1, 491 *tabrâtu* „Staunen, Wunder".

29.b: Das Ende der Zeile kann ich nicht sinnvoll ergänzen.

30: Die akkadische Übersetzung schließt hier ausnahmsweise direkt an die sumerische Version an; der Schreiber hat sie wohl ursprünglich vergessen.

39.b: Für meinen Bruder, den man wie einen Wildstier führte; …". A hat als Verb *irbiṣu* „(der sich wie ein Wildstier) lagerte", das dort (mir unverständlich) mit einem N-Stamm von *redû* „geführt werden" (*irbiṣu* : *irredû*) erklärt wird. Muß man D zu *ir-<re->du-ú* emendieren? Die sumerische Version schreibt ná „sich hinlegen, lagern".

40.42: Die Verbalformen werden nicht ganz ausgeschrieben, da sie sich jeweils wiederholen und nicht genügend Platz vorhanden ist.

47. Für die Schreibung (lú)šú für *kalû* „Klagepriester" statt des üblicheren (lú)gala vgl. Hunger, *Kolophone*, S. 164 (Index).

48f.: Der Relativsatz ist aus grammatikalischer Sicht auf jeden Fall auf den Besitzer der Tafel, Nabû-zēr-līšir, zu beziehen und dementsprechend übersetzt worden. Inhaltlich bezieht er sich aber sicherlich auf den Schreiber selbst. Die Stellung des Relativsatzes verwirrte unseren Schreiber offensichtlich: Das Suffix des Nomens ist 3. Person m. Sg., das Verb steht aber in der 1. Person Sg. des Stativs. Da Šamaš-uballiṭ einerseits von sich selbst in der 3. Person spricht, andererseits die Passage Z. 46–48 eingeschoben ist, ist er mit den Rückbezügen auf das Bezugswort (sein Eigenname) durcheinander gekommen (s.a. Anm. 9). Solche Konstruktionen sind für das Akkadische bisher noch nicht untersucht worden (in Vorbereitung durch M. Jursa); vgl. aber ein ähnliches Problem in der Syntax arabischer Relativsätze, die sich auf ein Personalpronomen der 1. oder 2. Person beziehen: Bloch, *Studies in Arabic Syntax and Semantics*, 15ff.

50f.: Zu dieser Formel vgl. Hunger, *Kolophone*, 160: 6 und 424: 4.

52: Die Ungeschicklichkeit des Schreibers zeigt sich bei der Datumsangabe an mehreren Orten. Die Schreibung des Regierungsjahres als „mu.an.na 7" ist sehr ungewöhnlich und mir so nicht bekannt, beim Königsnamen wurde das Zeichen MU vergessen, die ersten beiden Keile von lugal zu schräg gestellt. Die Datierung nach König und Gouverneur (*šandabakku*) ist wahrscheinlich den sehr unsicheren Zeiten zuzuschreiben. Enlil-bāni belegte das Amt des Gouverneurs von Nippur zwischen 664 und 661; s. Brinkman, *Prelude to Empire*, 92[455] (mit Lit.) und zuletzt PNA 2/I, 519 *s.v.* Illil-bāni 2.

55: *man-nam*^{1}*-ma* oder vielleicht *man-am*^{1}*-ma*^{2} Beide Schreibungen sind ungewöhnlich, man findet sonst nur Schreibungen, die mit *ma-nam-* oder *ma-na-* beginnen.

57ff.: *gi-gur-ru*, der Name des Zeichens U, „Winkelhaken" muß hier wohl gemeint sein, obwohl das Zeichen GUR eher wie LAGAB oder SI aussieht. Das Wort ist bis jetzt nur aus lexikalischen Texten bekannt und wird dort *gi-gu-ru*(*-u*) geschrieben. In den Omina hingegen wird *gigurrû* niemals syllabisch, sondern immer mit dem Zeichen U geschrieben. Das Wort leitet sich aus dem sumerischen gi gur.ra „umgedrehtes Schreibrohr" ab.[14] Die sumerische Schreibung mit „verdoppeltem 'r'" läßt uns Akkadisch *gigurrû* statt *gigurû* ansetzen; vgl. parallele Entlehnungen aus dem Sumerischen wie z.B. *igigubbû*, *gilimmû*, *nutillû*,[15] oder s. die Wörterbücher unter *gizillû*, *izišubbû* etc. Daß Nabû-zēr-līšir nicht das bei weitem häufigere *santakku* „Keil" verwendet, mag auf seinen Stolz als Schreiber zurückzuführen sein, auch ungeläufige Wörter zu kennen und dies zeigen zu wollen (die lexikalischen Texte, die *gigurrû* anführen, waren Teil des Schulcurriculums).[16] Ein Winkelhaken ist neben dem Keil ebenfalls die kleinste Einheit eines Zeichens.[17] Ob „Winkelhaken" nicht nur ausschließlich wört-

14 S. die Diskussion in CAD G, 70 sub *gigurû* A.

15 Gong Yushu, AOAT 268, 24f. 26f. und 35. S.a. GAG^{3}, 90 § 58b.

16 Ea, Aa und S^{a}: S. Gesche, AOAT 275.

17 S. Gong Yushu, AOAT 268, 39.

lich zu nehmen ist, sondern auch *pars pro toto* für ein ganzes Zeichen stehen kann, mag dahingestellt sein. In der Kopie werden keine Stellen als „ausgebrochen" bezeichnet, jedoch fehlt in Z. 18.b die akkadische Entsprechung für mu.tin.mèn ma. Wahrscheinlich ist unter dem Hinzufügen von fehlenden Winkelhaken auch das Ausbessern fehlender Passagen zu verstehen.

63f.: Die Interpretation dieser beiden Zeilen ist besonders schwierig. Da der Schreiber sich in diesem Abschnitt auf die Anzahl der Keile seiner Abschrift bezieht, haben wir uns für obige Interpretation entschieden. Eine andere Möglichkeit wäre, dem Schreiber eine Thema-Rhema-Verletzung zu unterstellen und das Possessivsuffix in Z. 64 auf das Original, die Tafel, von der abgeschrieben wurde, zu beziehen und zu übersetzen: „Diese (die Abschrift) ist (genauso) wie seine (des Originals) Winkelhaken".

APPENDIX

Im Anhang gebe ich noch nach Kollation eine neue Umschrift von Text „E", BM 77519 (84–2–11,260), da Civil in AuOr 1, 54 nur die der Vorderseite bietet und Lesungen verbessert werden konnten. E und A gehören nach Black, BiOr 44, 50 zu derselben Tafel (wobei nicht hervorgeht, ob die Fragmente physisch joinen — es fehlen zwei Zeilen zwischen den Fragmenten). Die Zahlen in runden Klammern entsprechen der Zeilenzählung von Civil, AuOr 1, 47f. Z. 4′ fehlt in E und ist somit nur in der altbabylonischen Kopie C erhalten.

Vs. 1′	[ ]	
2′ = 23	]ti	^{d}dumu.z[i
3′ = 24	].zé*.zé	mu.tin.mèn$^{\rceil}$[
4′ = b	]$^{\lceil}$*-ta*$^{\rceil}$-ri lu u-ba-aq-qí-im*	/ me.re sag[
5′ = 25	[i.]$^{\lceil}$bí$^{\rceil}$.mu	ér.$^{\lceil}$ra$^{\rceil}$[
6′ = b	$^{\lceil}$*i-na*$^{\rceil}$*-a-a**	*di-ma*[
7′ = 26	šà.ab.mu	ur$_5$.$^{\lceil}$x$^{\rceil}$[
8′ = b	*li-ib-bi*	*tu-*[
9′ = 27	únu.mu	$^{\lceil}$u$_6$$^{\rceil}$[.di
10′ = b	*le-ta-a-a**	$^{\lceil}$*tab*$^{\rceil}$[-
Rs. 1. = 28 (2′)	$^{\lceil}$nin úru$^{\rceil}$.ta ezen ma.al.la.bi [	
b	*a-ḫa-tu$_4$ ina* uru *i-sin-nu mi-nu* [	
2. = 29 (3′)	úru.gá ezen.ezen me.na.e	[
b	*ina a-li-ni i-sin-nu mi-nu*	$^{\lceil}$x$^{\rceil}$[
3. = 30 (5′)	ezen šeš.mu me.na.e	^{it}[^{i}
b		*i-sin a-ḫi-ia* [
4. = 31 (6′)	ezen a$^{?}$ ^{d}dumu.zi me.e	^{it}[^{i}
5. = 32 (7′)	[mu.]$^{\lceil}$šu$^{\rceil}$.gán šeš.gá.ke$_4$ mu.tin.mèn me.na.a [	
Reste von Z. 33		

Kommentar

4′ = 24.b: me.ri sag[… am Ende der Zeile gehört noch zu Zeile 24, die, wie Kopie D zeigt, gebrochen wurde. In E ist dies dadurch zu erkennen, daß me.ri sag[etwas tiefer als die akkkadische Zeile geschrieben ist.

7′ = 26: s.o. den Kommetar zu Z. 26.

Die bekannten Exemplare der 10. Tafel von úru àm.ma.ir.ra.bi geben somit folgende Zeilen:

A(+)E	(nB):	1 a–b ..... 20 [21–22] 23 .....42 (+ Stichzeile)
D	(nB):	1 b–a ..... 35.b [36–38.b] 39.... 42 (keine Stichzeile)
B	(nA):	28 38
C	(aB):	'11' ... 16 [ ] '27' ... 31+

Literatur

Black, J.A.
BiOr 44 „Sumerian *Balag* Compositions", BiOr 44 (1987) 32–79.

Bloch, A.A. *Studies in Arabic Syntax and Semantics*. Wiesbaden 1986.

Borger, R.
BiOr 47 „Schlüssel zu M.E. Cohen, *CLAM*", BiOr 47 (1990) 5–39.

Brinkman, J. A. *Prelude to Empire. Babylonian Society and Politics, 747–626 B.C.* (Occasional Publications of the Babylonian Fund 7). Philadelphia 1984.

Cavigneaux, A.
JAOS 113 „Mesopotamian Lamentations", JAOS 113 (1993) 251–257.

Cavigneaux, A. und B.K. Ismail
ASJ 20 „Eine zweisprachige Hymne aus dem Haus des Beschwörungspriesters", ASJ 20 (1998) 1–7.

Civil, M.
AuOr 1 „The 10th Tablet of úru àm-ma-ir-ra-bi", AuOr 1 (1983) 45–54.

Cohen, M.E.
CLAM *The Canonical Lamentations of Ancient Mesopotamia*. Potomac 1988.

Gadd, C. J.
StOr 1 „On Two Babylonian Kings", StOr 1 (1925) 25–33.

Gesche, P.D.
AOAT 275 *Schulunterricht in Babylonien im ersten Jahrtausend v. Chr.* (AOAT 275). Münster 2000.

Gong, Y.
AOAT 268 *Die Namen der Keilschriftzeichen* (AOAT 268). Münster 2000.

Hunger, H.
Kolophone *Babylonische und assyrische Kolophone* (AOAT 2). Kevelaer und Neukirchen-Vluyn 1968.

Langdon, St.
AfK 1 „Hymn in Paragraphs to Ishtar as the Belit of Nippur", AfK 1 (1923) 12–18.
BL *Babylonian Liturgies*. Paris 1913.

Leichty, E.
CBT 6 *Catalogue of the Babylonian Tablets in the British Museum. Vol.* 6: *Tablets from Sippar* 1. London 1986.

Leichty, E., Finkelstein, J.J. und Walker, C.B.F.
CBT 8 *Catalogue of the Babylonian Tablets in the British Museum. Vol.* 8: *Tablets from Sippar* 3. London 1988.

Lieberman, St.J.
Festschrift Moran „Canonical and Official Cuneiform Texts: Towards an Understanding of Assurbanipal's Personal Tablet Collection", in Tz. Abusch *et al.* (Hrsg.), *Lingering Over Words. Studies in Ancient Near Eastern Literature in Honor of William L. Moran*. Atlanta 1990, 305–336.

Oberhuber, K.
ISL *Innsbrucker Sumerisches Lexikon* (ISL) *des Instituts für Sprachen und Kulturen des Alten Orients an der Universität Innsbruck.* Abteilung I: *Sumerisches Lexikon zu den zweisprachigen literarischen Texten.* Band 1: *Sumerisches Lexikon zu „George Reisner, Sumerisch-babylonische Hymnen nach Thontafeln griechischer Zeit (Berlin* 1896)" *und zu verwandten Texten.* Innsbruck 1990.

PNA Radner, K. / Baker, H.D. (Hrsg.), *The Prosopography of the Neo-Assyrian Empire*. Helsinki 1998ff.

Rochberg-Halton, F.
JCS 36 „Canonicity in Cuneiform Texts", JCS 36 (1984) 127–144.

Schretter, M.K.
Emesal *Emesal-Studien. Sprach- und literaturgeschichtliche Untersuchungen zur sogenannten Frauensprache des Sumerischen* (Innsbrucker Beiträge zur Kulturwissenschaft, Sonderheft 69). Innsbruck 1990

Spalding, F., *Character Sketches: The Bloomsbury Group*. London ³1999.

Tinney, St.
Iraq 61 „On the curricular setting of Sumerian Literature", Iraq 61 (1999) 159–172.

Volk, K.
FAOS 18 *Die Balaĝ-Komposition úru àm-ma-ir-ra-bi. Rekonstruktion und Bearbeitung der Tafeln 18 (19'ff.), 19, 20 und 21 der späten, kanonischen Version*. Stuttgart 1989.

„Du hast meinen Sohn geschlagen!"*

Cornelia Wunsch — Tübingen und Kansas City

Urkunden über die Regelung von Streitigkeiten auf gerichtlichem oder außergerichtlichem Wege, die einen Einblick in die mesopotamische Rechtspraxis liefern, sind selbst aus der neubabylonischen und frühachämenidischen Zeit mit ihrer Fülle an überlieferten Rechts- und Verwaltungstexten nicht eben zahlreich. Seltenheitswert wiederum haben innerhalb dieser Gruppe jene Dokumente, die keine aus Geschäften oder Erbangelegenheiten resultierenden Streitfälle um Vermögensfragen betreffen, sondern das, was nach moderner Terminologie in die Kategorie Strafrecht[1] fallen würde: Diebstahl, Mord und Totschlag, Körperverletzung und Gewaltanwendung jeglicher Art.[2] Wenn es sich nicht um Protokolle zum Tathergang mit Befragung von Zeugen handelt, dann stehen die vermögensrechtlichen Konsequenzen in Form von Kompensationsleistungen im Mittelpunkt, während die Details des Prozeßrechts weitgehend im Dunkeln bleiben. Diesbezüglich bildet die hier edierte Urkunde keine Ausnahme. Formal gesehen handelt es sich um eine Bürgschaftsübernahme für die Zahlung einer Kompensationsleistung, sollte sich der Täter seiner

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1 Die moderne Unterscheidung von Strafrecht und Privatrecht existierte nicht in den Keilschriftrechten, dazu J. Renger, JESHO 20 (1977), 66[2] unter Berufung auf D. Nörr.

2 Einige spektakuläre Fälle sind seit längerem aus dem Eanna-Archiv bekannt, etwa der Prozeß gegen den Tempelfunktionär Gimillu, dem zahlreiche Delikte, Betrügereien und Veruntreuung von Tempelgut vorgeworfen und nachgewiesen wurden (San Nicolò, ArOr 5). Beispiele dafür, daß Diebstahl mit dem Dreißigfachen bestraft wurde, hat ebenfalls San Nicolò zusammengestellt: ArOr 4 325–348; eine Auswahl bei Joannès, *Rendre la justice*, 211–225, Nr. 155–166. Laut TCL 12 117 hat jemand gegen einen hohen Tempelbeamten den Dolch gezückt, selbst von einer Gefängnismeuterei wissen die Quellen zu berichten (San Nicolò, *Fs Wenger*). Das Opfer eines Raubüberfalls benennt vor den *mār banê* die Täter, zwei Sklaven, die deren Eigentümer binnen 30 Tagen dem Gericht zu überstellen sich verpflichtet (YOS 7 189). Auch Prügeleien haben die Gerichte beschäftigt, wenn einer der Beteiligten zu Schaden kam, wie der Brief YOS 3 123 bezeugt. In YOS 7 184 wird eine wegen „Schlagens" (*terû*) verhängte Strafe verrechnet. In BM 79049 (Wunsch, AoF 24), einem von „Richtern des Königs" gesiegelten Verpflichtungsschein, erscheint ein wohlhabender Babylonier als Schuldner, der, nachdem er einen anderen verprügelt und ihm eine schwere Wunde im Gesicht geschlagen hat, zur Zahlung von 30 š verpflichtet wird. In der jüngst publizierten Urkunde BM 64153 (Jursa, *Fs Cagni*) geben Zeugen einer Entführung zu Protokoll, was sie gesehen und gehört haben. Belege für Mord, Totschlag und Körperverletzung aus früheren Perioden hat C. Wilcke in Xenia 32 zusammengestellt, des weiteren ist auf die RlA-Artikel „Körperverletzung" (Ries, RlA 5) und „Mord" (Alster, RlA 8, einschließlich neuassyrischer Belege) zu verweisen.

Verantwortung durch Flucht entziehen. In ihrem lakonischen Stil bietet die Urkunde fast keine Hintergrundinformationen, obendrein ist der obere Rand abgebrochen und damit Beginn und Ende des Textes nicht erhalten. Trotz dieser Mißlichkeiten läßt sie zumindest erkennen, wie in einem konkreten Einzelfall verfahren wurde, bevor die Sache vor Gericht kam. Die Urkunde liefert damit einen höchst willkommenen Einblick in die neubabylonische Rechtspraxis.

Die Herkunft der Tafel

Die unscheinbare, handtellergroße Tontafel gehört zum Ankauf 81–8–30 der Babylon-Sammlung des Britischen Museums und stammt aus dem Antikenhandel. Im selben Ankauf befinden sich Teile des Šangû-Ninurta-Archivs[3] und eine Textgruppe um Kittija aus der Familie Ir'anni, die jeweils überwiegend in Babylon und Umgebung ausgestellt wurden. Rein äußerlich unterscheidet sich die vorliegende Tafel nicht von diesen Urkunden. Ein Archivzusammenhang kann auf prosopographischer Grundlage nicht nachgewiesen werden, die Namen der Beteiligten deuten aber in Richtung Babylon oder Borsippa. Für eine Datierung stehen ebenfalls keine internen Kriterien zur Verfügung; von Nebukadnezar II. bis Darius ist daher alles möglich. Vom Äußeren her ähnelt die Tafel allerdings eher jenen aus 81–7–1 und 81–8–30, die aus der Zeit ab Nabonid datieren.

BM 46660 (81–8–30,126)
(Kopie im Maßstab 1:1)

3 Es handelt sich um ca. 60 Texte, die (abgesehen von einem einzeln registrierten) aus den Ankäufen 81–7–1 und 81–8–30 stammen. Zur Verteilung des Materials in 81–7–1 vgl. M. Jursa, *Bēl-rēmanni*, 4–6. Die Šangû-Ninurta-Tafeln befinden sich in den hohen 81–7–1-Nummern und wurden bislang nicht als zusammenhängende Textgruppe erkannt (eine Bearbeitung durch Verf. ist in Vorbereitung). In beiden Ankäufen befinden sich Texte, die dem Šangû-Ninurta-Archiv und Kittija//Ir'anni zuzuordnen sind, während sich Bēl-rēmanni-Material aus Sippar m. W. nur in ersterem findet.

Transliteration

1′ [*u* ^{m}*Ki-na-a mār-šú šá* ^{m}*Iqīša*(B]A)^{id}*-a a-na* [o]
2′ ^{f}[^{lú}*mār*(DUMU) ^{m}]⸢x x (x)⸣ *it-ti a-ḫa-me*[*š*]
3′ *il-la-ku-ú-ma di-i-nu* [*šá*]
4′ ^{md}*Marduk*(AMAR.UTU)*-šarra* (LUGAL)*-a-nu a-*⸢*na* ^{m}]*Ki-na-*[*a*]
5′ *iq-bu-ú um-mu mār*(DUMU)*-ú-*⸢*a*⸣ [o]
6′ *ta-an-da-ḫa-aṣ ina pān*(IGI) ^{lú}[…]
7′ *i-dab-bu-ub* ^{md}*Nabû*(AG)*-*[*zēra-iddin*]
8′ *mār*(A)*-šú šá* ^{m}*Aḫḫū*(ŠEŠ)^{meš}*-šá-iá u* [^{f}*Iṣṣur*…]
uRd 9′ *aḫāt*(NIN)*-šú pu-ut* ^{m}[*Ki-na-a*]
10′ *mār*(A)*-šú šá* ^{m}*Iqīša*(BA)^{id}*-a na-š*[*u-u ki-i*]
Rs 11′ ^{m}*Ki-na-a iḫ-te-l*[*i-qu*]
12′ *napšāti*(ZI)^{meš} *šá mār*(DUMU)*-šú šá* ^{md}[*Marduk-šarra-a-nu*]
13′ ^{md}*Nabû*(AG)*-zēra*(NUMUN)*-iddi*(MU)*n u* ^{f}*Iṣ-ṣ*[*ur-*…]
14′ *ú-šal-lim-mu* ^{lú}*mu-kin-nu* ^{m}[…]
15′ *mār*(A)*-šú šá* ^{m}*Ibna*(DÙ)*-a mār*(DUMU) ^{lú}*Rab*(GAL)*-banê*(DÙ) ^{m}*Ra-šil-*[(x)]
16′ ^{f}*mār*(A)*-šú šá* ⸢ ^{md}*Bēl*(EN)*-ušallim*(GI) *mār*(A) ^{m}*Eppeš*(DÙ)^{eš}*-ilī*(DINGIR)
17′ [^{m}…]*-ti-iq mār*(A) ^{m}*Ir-a-nu*
18′ […*-b*]*u-un-šu-tu*[*r*]
19′ […] ^{f}x x^{1} […]
Rest weggebrochen

lRd 1′′ [… *-upaḫ*]*ḫir*(NIGIN)^{ir}
2′′ […]*-si-ia*

Übersetzung

[… und Kīnaja, der Sohn des Iqīš]aja, werden gemeinsam zu den *mār* [*banê*(?)] gehen, und einen Rechtsstreit, [da] Marduk-šarrānu zu Kīnaja folgendermaßen gesagt hat: ‚Meinen Sohn hast du geschlagen!‘ werden(!) sie(!) vor den [Richtern] führen (oder: wird er, d.h. Marduk-šarrānu, anstrengen).

Nabû-[zēra-ukīn], Sohn des Aḫḫūšaja, und ^{f}Iṣṣur[…], seine Schwester, bürgen für Kīnaja. [Wenn] Kīnaja (bis dahin) ent[flohen sein sollte], werden(!) Nabû-zēra-ukīn und ^{f}Iṣṣur[…] (die Kompensationszahlung für) das Leben des Sohnes des [Marduk-šarrānu] leisten.

Zeugen […]/Ibnaja/Rab-banê
Rāšil(ja)/Bēl-ušallim/Eppeš-ilī
[…]/[…]tiq/Irʾanni
Schreiber (?) […]-bun-šūtur/[…]
nachträglicher Zeuge […-upa]ḫḫir//[B]asija

Ausstellungsort weggebrochen, wahrscheinlich Babylon
Datum nicht erhalten

Kommentar

1′: Am Anfang der Urkunde ist der Name des Kontrahenten Marduk-šarrānu mit Filiation zu ergänzen, da beide laut Z. 2′ gemeinsam zu den *mār* […] gehen sollen. Es könnte auch ganz am Anfang ein Termin (*ūm* x.kam *ša* ᶦᵗᶦy …) angegeben sein; ob darüber hinaus noch etwas zu erwarten ist, erscheint fraglich.

2′: Die Zeichenspuren sprechen recht eindeutig für LÚ und DUMU; es folgt ein Senkrechter. Die nächstliegende Ergänzung wäre die zu *mār banê* (üblicherweise ˡᵘDUMU.DÙᵐᵉš geschrieben), freilich ist der Senkrechte für DÙ falsch positioniert: Der untere Waagerechte ist nicht da. Man könnte allerdings auch eine Schreibung ᵐ*ba-né-e* in Erwägung ziehen, wie sie beim Familiennamen Rab-banê gelegentlich vorkommt (z.B. Nbk 209: 13, mit Kollation Wunsch, CM 3, Nr. 4). Eine Lesung ˡᵘDUMU(ᵐᵉš) … (gefolgt von einem Ortsnamen, z.B. Babylon, Uruk etc.) wäre ebenfalls denkbar, stößt aber auf dieselben epigraphischen Probleme. Als Alternative wäre noch an *mār šipri* „Bote" zu denken (*š*[*ip-ri*] scheint möglich), allerdings sollte dann der Auftraggeber (*šá* PN) folgen, und so viel Platz gibt die Lücke nicht her. Mit ˡᵘ*mār* ᵐ[…] (gefolgt von einem Ahnherrennamen) könnte zwar auch eine ganze (Groß)familie gemeint sein (wie etwa in den Garantieklauseln von Kaufverträgen), aber dies ist inhaltlich nicht zu erwarten: Weder die Familie des Klägers noch des Beklagten kämen als neutrale „Anlaufstelle" bei einem Rechtsstreit in Frage.

3′: Angesichts von *itti aḫāmeš* „miteinander, gemeinsam" ist ein Subjekt im Plural zu erwarten (es kann sich also nicht um einen Singular im Subjunktiv handeln, zumal die Pleneschreibung für Plural spricht). Die Form von *alāku* ist eindeutig Präsens/Futur, auch wenn eine Vergangenheitsform inhaltlich eher befriedigte: Dann würde man die vorliegende Bürgschaftsübernahme als Ergebnis einer vorläufigen Übereinkunft vor den *mār banê* betrachten können, die bis zum eigentlichen Gerichtstermin Gültigkeit besitzt.

6′: Am Ende ist *mār banê* oder *dajjānē* zu ergänzen.

7′: *dabābu* im Singular könnte sich auf den Kläger allein beziehen, allerdings setzt dies einen etwas uneleganten Subjektwechsel voraus. Aber auch *šullumu* in Z. 14′ erscheint im Singular, obwohl es sich eindeutig auf zwei Personen bezieht. Daher scheint hier die Interpretation „sie werden Rechtsstreit führen" nicht völlig ausgeschlossen.

9′: Das Possessivsuffix dürfte sich auf den Beklagten selbst beziehen, nicht auf den zuvor genannten Bürgen. Vermutlich war dieser der Ehemann der Schwester und wird daher vor ihr genannt. Korrekterweise müßte es … *altīšu aḫātu ša* ᵐ*Kīnaja* lauten.

12′: *napšāti* (geschrieben *nap-šá-ti* in Nbk 356: 7) *šalāmu* im Sinne von „Kompensationszahlung für ein Leben leisten" ist gut bezeugt; hier wäre allerdings der Plural beim Verb zu erwarten.

Die Beteiligten

Zum Status der Parteien lassen sich nur vage Aussagen treffen. Der Täter und sein Bürge werden nur mit Vatersnamen, nicht aber Ahnherrennamen genannt. Sie dürften demnach nicht zum Kreis wohlhabender, etablierter städtischer Familien gehören, wie sie in den Privaturkunden vornehmlich anzutreffen sind. Als Tempelangehörige (*širku*, „Oblate") sind sie freilich auch nicht ausgewiesen. Wegen der Beschädigung am Anfang des Textes bleibt leider unklar, ob der Kläger eine vollständige Filiation hatte. Sein Kind wird nicht beim Namen genannt,[4] auch über dessen Alter ist nichts in Erfahrung zu bringen. Die Bürgen sind höchstwahrscheinlich Verwandte des Täters: ᶠIṣṣur[…] dürfte seine

4 Nach Stamm, *Namengebung*, 8 erhalten Kinder „normalerweise bald nach der Geburt" ihren Namen. Es ist kaum anzunehmen, daß Marduk-šarrānus Sohn noch ein Baby war, vielmehr war der Name im Kontext der vorliegenden Urkunde nicht wichtig. Es konnte im Nachhinein kaum Unstimmigkeiten geben, um welches Kind es sich handelte.

Schwester sein (wenn sich das Suffix, wie vorgeschlagen, auf Kīnaja bezieht). In dem vor ihr Genannten haben wir dann wohl ihren Ehemann zu sehen. Auch wenn unsere Vermutung nicht zuträfe, sollten wir die Bürgen im verwandtschaftlich-nachbarschaftlichen Umfeld des Täters suchen.

Der Vorfall

Die Urkunde behandelt einen Vorfall, der extrem selten schriftlich dokumentiert ist. Der Kläger Marduk-šarrānu hat Kīnaja bezichtigt, seinen Sohn geschlagen (oder: erschlagen) zu haben, und die Zahlung einer Entschädigung steht zur Debatte. Da akkadisch *maḫāṣu* sowohl die Bedeutungsnuance „schlagen" als auch „erschlagen" ausdrückt, kann man nicht mit Sicherheit sagen, wie im vorliegenden Fall zu übersetzen ist.[5] Möglich wäre entweder, daß der Tod unmittelbar eingetreten ist, oder erst nach gewisser Zeit als Folge von Verletzungen, oder das Opfer zwar noch lebt, aber wegen schwerer Verletzungen sein Tod zu befürchten ist. Somit könnte es sich nach moderner Terminologie sowohl um Mord, als auch um Totschlag oder schwere Körperverletzung mit Todesfolge bzw. fahrlässige Tötung handeln.[6]

Über die Tatumstände ist nichts zu erfahren. Ein Unfall kann es nicht gewesen sein, denn die Verwendung von *maḫāṣu* impliziert, daß das Schlagen — wenn auch nicht unbedingt die Verletzung — intendiert war.[7] Wenn es einen Streit gegeben hat, so kann er nicht zu einem Kampf zwischen körperlich gleich Starken eskaliert sein, eher ist an ein Schlagen im Zorn zu denken, etwa als eine Reaktion auf einen vom Kind verübten Unfug oder verursachten Schaden. Zu erwägen wäre aber auch, ob das Kind nicht durch übermäßige Züchtigung oder Quälerei zu Tode kam: Daß gerade Fälle von Mißhandlung von Untergebenen in den überlieferten mesopotamischen Rechtssätzen aus früheren Jahrhunderten behandelt werden, muß mißtrauisch stimmen. Diese betreffen sowohl recht- oder unrechtmäßig gepfändete Familienangehörige als auch Sklaven und Diener.[8]

In neubabylonischer Zeit ist die Verpfändung von Familienangehörigen nicht allzu oft urkundlich belegt; die meisten Fälle betreffen Kinder.[9] Da Kinder ab etwa dem sechsten Lebensjahr für arbeitsfähig erachtet wurden,[10] wäre es durchaus denkbar, daß sich

5 CAD M/1, 71 *s.v. maḫāṣu* 1; zum selben Problem bei Verwendung von *dâkum, nêrum, šakāšum* s. Wilcke, Xenia 32, 53.

6 Vgl. Wilcke, Xenia 32, 53: „Zwischen »Töten«, Totschlag und Mord wird begrifflich nicht unterschieden."

7 Man hätte dies anders formuliert. Im Kodex Hammurapi, § 206f. (Roth, *Law Collections*, 122) wird der Sonderfall des Schlagens im Streit behandelt; der Täter muß explizit schwören, daß der Schlag nicht beabsichtigt war (*ina idû lā amḫaṣu*).

8 Kodex Ešnunna §23–24 (Roth, *Law Collections*, 62): Wenn eine zu Unrecht gepfändete Sklavin stirbt, muß ihr Wert doppelt ersetzt werden, kamen gar Frau oder Kind des Schuldners zu Tode, wird Kapitalstrafe auferlegt. Kodex Hammurapi § 116 (Roth, *ibid.* 103) stipuliert Talion, wenn ein gepfändeter Sohn des Schuldners an den Folgen von körperlicher Mißhandlung stirbt.

9 Dandamaev, *Slavery*, 164–167 hat entsprechende Fälle gesammelt.

10 Dies geht aus Musterungslisten, wie sie die Tempelverwaltungen erstellten, hervor (Jursa, *Landwirtschaft*, 8ff., mit Verweis auf Waetzoldt, AoF 15, 40 für denselben Befund während der Ur III-Zeit. Unpublizierte Musterungslisten aus dem Egibi-Archiv erwähnen Kinder von drei, vier und fünf Jahren. Auch dies impliziert Diensttauglichkeit ab dem sechsten Lebensjahr.

Marduk-šarrānus Sohn zum Abarbeiten von Schulden oder als Mietling in Kīnajas Gewahrsam befand.[11] Es wäre aber auch an ein Lehrverhältnis zu denken. Von Schlagen als üblicher Disziplinarmaßnahme bei der Schreiberausbildung weiß die Edubba-Literatur zu berichten,[12] in anderen Berufen wird es kaum anders gewesen sein.

Die Verfahrensweise

Marduk-šarrānu ist davon überzeugt, daß Kīnaja den Tod seines Sohnes verursacht hat. Wie ist zu verfahren?

Die aus dem 3. und 2. Jahrtausend überlieferten Gesetzesbestimmungen sagen über praktische Aspekte nichts aus. Zwar geben sie für verschiedene Fälle, in denen ein Mensch durch Verschulden oder aktives Zutun eines anderen zu Tode gekommen ist, das Strafmaß vor,[13] wie jedoch ermittelt, die Strafe festgesetzt und schließlich vollstreckt wurde, entzieht sich unserer Kenntnis. Offenbar bestand bei Totschlag, fahrlässiger Tötung und Körperverletzung gewisser Spielraum, eine angedrohte Todes- oder Körperstrafe durch eine Kompensationszahlung abzulösen. Inwieweit deren Höhe verhandelbar war oder durch offizielle Stellen reguliert wurde, läßt sich kaum nachweisen.[14]

Urkunden aus neuassyrischer Zeit, die Forderungen über *dāmu* „Blut(schuld)" zum Gegenstand haben, wurden von M.T. Roth untersucht und lassen sie den folgenden Ablauf vermuten:[15] Nach Bestätigung, daß die Tat wirklich stattgefunden hat, muß die Identität des Täters festgestellt und dieser gefaßt werden. Diese Aufgabe fiel den Angehörigen des Opfers, so solche vorhanden waren, zu. Dadurch wurde gleichzeitig deren Recht auf Selbsthilfe und Blutrache eingeschränkt. Wenn der Täter die Schuld eingestand und sich zur Wiedergutmachung verpflichtete, mußte die entsprechende Forderung in einer offiziellen Urkunde dokumentiert werden. Die Höhe war nicht unbedingt vorab fixiert, sondern konnte unter Aufsicht offizieller Stellen verhandelt werden. Kam der Täter seinen Verpflichtungen nicht nach, stand der Familie des Opfers das Recht auf Rache zu.

Vor diesem Hintergrund, der als öffentliche Regulierung einer im Grunde traditionell privaten Angelegenheit charakterisiert worden ist,[16] kann auch die uns vorliegende Urkunde BM 46660 gesehen werden. Die Partei des Opfers hat den Täter offiziell (d.h. vor Zeugen) benannt und beschuldigt; er stellt Bürgen. Diese haften jedoch nur dann für die Zahlung einer Kompensation, wenn der Täter entfliehen sollte: Er hat noch kein Schuldeingeständnis abgelegt, erst seine Flucht würde als solches gewertet. Zunächst sind die Beteiligten nur übereingekommen, vor Gericht zu gehen. Dessen Aufgabe würde es

11 Dies muß nicht heißen, Kīnaja sei der Gläubiger gewesen, das Kind mag ihm lediglich unterstellt gewesen sein.

12 Dazu K. Volk, Saeculum 47, 196–200.

13 Für eine Zusammenstellung der angesprochenen Fälle samt ihren strafrechtlichen Konsequenzen vgl. z.B. die Übersichtstabelle bei Sick, *Tötung*. Die Strafen sind z.T. entsprechend dem Status von Opfer und Täter gestaffelt.

14 Dazu Westbrook, RB 26, Kapitel II, besonders 49–55, sowie unten S. 361.

15 Roth, *Homicide*, 362f. R. Jas faßt in SAAS 5 zu Nr. 41–43 zusammen: „In all murder texts the murderer has to pay blood money to the family of the victim, which seems to be the usual way of settling homicides in this period."

16 Roth, *Homicide*, 363: „…public authority controls customary and traditionally private matters."

sein, den Fall zu untersuchen, die Schuld zu klären und die Ansprüche festzulegen. Die geschädigte Partei hat auf Selbstjustiz verzichtet und ist an einer Kompensationsleistung interessiert.

Hier lohnt es sich, einen Blick auf die Urkunde Nbk 365 zu werfen, in der es um einen getöteten Sklaven geht. Der Text lautet:

> „Am 5. Kislīm wird PN seine Zeugen in Piqūdu beibringen und dem PN_2 nachweisen, daß PN_2 zu PN (eine Nachricht) geschickt hat, folgendermaßen: ‚einen Rechtsstreit über deinen Sklaven, der getötet wurde (*šá di-i-ki*), führe nicht mit mir, (denn) ich werde dir (Kompensation für) das Leben deines Sklaven leisten.' Wenn er (es) ihm beweist, wird eine Mine Silber, den Kauf(preis) seines Sklaven, PN_2 an PN zahlen. Wenn er es ihm nicht beweist, [geht er frei aus[17]]."

Die Umstände sind nicht identisch, aber vergleichbar. Ein Sklave ist getötet worden; der geschädigte Eigentümer beschuldigt einen Verdächtigten, der streitet aber offenbar ab, obwohl er angeblich bereits angeboten hatte, eine Kompensationsleistung zu zahlen. Damit hätte er *de facto* ein Schuldeingeständnis geleistet; kann ihm dies der Geschädigte durch Zeugen nachweisen, kommt er um die Zahlung nicht umhin. Wichtig ist, daß in diesem Falle durch die Kompensationszahlung ein Rechtsstreit ganz vermieden werden sollte.

Die Formulierung *napšāti šullumu*, „ein Leben zu ersetzen" ist dieselbe, die auch in BM 46660 gebraucht wird und die sich, allerdings mit dem Verb *mullû* verbunden, in älteren Bestimmungen findet, die den Verlust eines ungeborenen Kindes betreffen, wenn durch Schlagen oder Stoßen der Schwangeren eine Fehlgeburt verursacht worden ist.
Während die Höhe der Zahlung im Falle des Sklaven genannt ist und mit der runden Summe von einer Mine Silber etwa dem Kaufpreis eines Sklaven entspricht, bleibt die Entschädigung für Marduk-šarrānus Sohn unbeziffert. Hier könnte, etwa unter der Androhung, andernfalls den Sohn des Täters zu töten oder zu versklaven, die Höhe entsprechend Stellung und Vermögen der Parteien verhandelbar sein.

Zumindest die Umwandlung einer Körperstrafe in eine — sehr teure — Kompensationszahlung an die geschädigte Seite ist aus neubabylonischer Zeit überliefert:[18] Ein vermögender Mann mit guten Verbindungen zum Ebabbar-Tempel und zum überregionalen Establishment schuldet sieben Personen insgesamt 16⅔ Minen Silber als Gegenwert für das Nicht-Abhacken seiner Hand und 21 Hiebe. Was er sich hat zuschulden kommen lassen, wird nicht angegeben. Obwohl die Urkunde im Archivkontext überliefert ist, lassen sich die Hintergründe nicht rekonstruieren. Das Abhacken der Hand spricht gegen einen simplen Diebstahl (der mit dem Dreißigfachen geahndet würde), die Tatsache, daß die Kompensation an Privatpersonen zu zahlen ist, gegen einen „normalen" Korruptionsfall, bei dem die Interessen einer Institution, also Tempel oder Palast, betroffen wären. Die sieben Personen müssen mehr als nur finanziellen Schaden genommen haben. Unabhängig von diesen Unsicherheiten ist die rechtsgeschichtliche Bedeutung des Falles nicht zu unterschätzen.

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17 ⌜*za-ki*⌝ (kollationiert); die Ergänzung „ist [er frei]" findet sich schon bei Peiser, BRL 1, 31.

18 Caroline Waerzeggers hat mich auf diesen Fall aufmerksam gemacht, wofür ich ihr sehr herzlich danke. Die Urkunden wurden in ihrer Dissertation über das Archiv des Marduk-rēmanni bearbeitet; die Publikation soll demnächst erfolgen. Einer der Texte wurde von Budge in ZA 3, 224 publiziert und ist in CAD B, 162 *s.v. batāqu* 1a zitiert, den zugehörigen und erheblich bedeutsameren Verpflichtungsschein BM 74529 hat C. Waerzeggers identifiziert.

Das Gericht

An wen haben sich Marduk-šarrānu und Kīnaja gewandt? Wenn unsere Ergänzung in Z. 1′ stimmt, dann zunächst an die *mār banê*, an eine Gruppe „ehrenwerter Bürger" ihres Ortes. Häufig werden vor diesen *mār banê* Aussagen zu Protokoll genommen, die später vor Richtern zitiert werden oder als Grundlage einer außergerichtlichen Einigung dienen. Wir haben Grund zur Vermutung, daß der Fall danach an die „Richter des Königs" weitergeleitet und von diesen entschieden worden ist.[19] Zwar betreffen die meisten Prozeßurkunden, die Entscheidungen dieses Gremiums dokumentieren, reine Vermögensfragen, aber dies ist angesichts der Tatsache, daß die Urkunden im Kontext von Privatarchiven überliefert wurden, nicht weiter verwunderlich: In erster Linie wurden Besitztitel aufbewahrt. Mit BM 79049 gibt es jedoch einen Text, der die Zuständigkeit der königlichen Richter auch in anderen Belangen unterstreicht: Ein Babylonier aus gutem Hause wurde zur Zahlung einer halben Mine Silber verurteilt, weil er einen anderen geschlagen und schwer verletzt hatte.[20] Die Urkunde bedient sich eines üblichen Formulars, sie ist als Verpflichtungsschein stilisiert, hält die Forderung des Geschädigten gegenüber dem Täter fest und trägt die Abdrücke der Richtersiegel. Somit dürfte sich dieses Gremium auch mit dem Fall des beklagenswerten Sohnes des Marduk-šarrānu beschäftigt haben.

19 Zur Zusammensetzung dieses Gremiums und den betreffenden Urkunden vgl. Wunsch, *Fs Oelsner*.

20 Wunsch, AoF 24.

LITERATUR

Alster, B.
RlA 8 Lemma „Mord", RlA, Bd. 8/5–6 (1995), 377–382.

Budge, E.A.W.
ZA 3 „On Some Recently Acquired Babylonian Tablets", ZA 3 (1888), 211–230.

Dandamaev, M.A.
Slavery *Slavery in Babylonia from Nabopolassar to Alexander the Great (626–331 B C)*. De Kalb 1984.

Jas, R.
SAAS 5 *Neo-Assyrian Judicial Procedures* (SAAS 5). Helsinki 1996.

Joannès, F.
Rendre la justice „Les textes judiciaires néo-babyloniens", in F. Joannès (Hrsg.), *Rendre la justice en Mésopotamie*. Paris 2000 , 201–239.

Jursa, M.
Landwirtschaft *Die Landwirtschaft in Sippar in neubabylonischer Zeit* (AfO Beiheft 25). Wien 1995.
Fs Cagni „*ṭerdu*. Von Entführung in Babylon und Majestätsbeleidigung in Larsa", in S. Graziani (Hrsg.), *Studi sul Vicino Oriente Antico dedicati alla memoria di Luigi Cagni*, Napoli 2000, 497–514.

Ries, G.
RlA 6 Lemma „Körperverletzung", RlA, Bd 6 (1980–83), 173–178.

Peiser, F.E.
BRL *Aus dem babylonischen Rechtsleben*, Bd. 1–4. Leipzig 1890–98.

Renger, J.
JESHO 20 „Wrongdoing and Its Sanctions. On "Criminal" and "Civil" Law in the Old Babylonian Period", JESHO 20 (1977), 65–77.

Roth, M.T.
Homicide „Homicide in the Neo-Assyrian Period", in F. Rochberg-Halton, *Language, Literature, and History: Philological and Historical Studies Presented to Erica Reiner* (AOS 67). New Haven 1987, 351–365.
Law Collections *Law Collection from Mesopotamia and Asia Minor* (SBL Writings from the Ancient World 6). Atlanta 1995.

Sick, U.
Tötung *Die Tötung eines Menschen und ihre Ahndung in den keilschriftlichen Rechtssammlungen unter Berücksichtigung rechtsvergleichender Aspekte*. Dissertation im Selbstverlag, Ostfildern 1984.

Stamm, J.J. *Die akkadische Namengebung* (MVAeG 44). Leipzig 1939.

Volk, K.
Saeculum 47 Methoden altmesopotamischer Erziehung nach Quellen der altbabylonischen Zeit", Saeculum 1996, 178–216.

Waerzeggers, C.
Dissertation „Het archief van Marduk-rēmanni", Ph.D. Dissertation, Gent 2001.

Westbrook, R.
RB 26 *Studies in Biblical and Cuneiform Law* (Cahier de la Revue Biblique 26). Paris 1988.

Wilcke, C.
Xenia 32 „Diebe, Räuber und Mörder", in V. Haas (Hrsg.), *Außenseiter und Randgruppen. Beiträge zu einer Sozialgeschichte des Alten Orients* (Xenia 32). Konstanz 1992, 53–78.

Wunsch, C.
AoF 24 „Die Jugendsünden eines Babyloniers aus gutem Hause", AoF 24 (1997) [Festschrift für H. Klengel], 231–241.
CM 3 *Die Urkunden des babylonischen Geschäftsmannes Iddin-Marduk. Zum Handel mit Naturalien im 6. Jahrhundert v. Chr.* (Cuneiform Monographs 3a und b). Groningen 1993.
Fs Oelsner „Die Richter des Nabonid", in J. Marzahn und H. Neumann (Hrsg.), *Assyriologica et Semitica. Festschrift für Joachim Oelsner …* (AOAT 252). Münster 2000, 557–597.

Bibliography of Christopher B.F. Walker

Monographs

1. Cuneiform Texts from Babylonian Tablets in the British Museum. Index to Parts I–L. London 1974 [1975].
2. Cuneiform Texts from Babylonian Tablets in the British Museum. Part 52: Old Babylonian Letters. London 1976.
3. The Old Babylonian Tablets from Tell al Rimah. London 1976 [with S. Dalley and J.D. Hawkins].
4. Cuneiform Brick Inscriptions in the British Museum, the Ashmolean Museum, Oxford, the City of Birmingham Museums and Art Gallery, the City of Bristol Museum and Art Gallery. London 1981.
5. Halley's Comet in History. London 1985 [with H. Hunger, F.R. Stephenson and K.K.C. Yau].
6. Reading the Past: Cuneiform. London 1987.
7. Catalogue of the Babylonian Tablets in the British Museum. Vol VIII. Tablets from Sippar 3. London 1988 [with E. Leichty and J.J. Finkelstein].
8. Catalogue of the Babylonian Tablets in the British Museum. Vol II. London 1996 [with M. Sigrist and H.H. Figulla].
9. The Induction of the Cult Image in Ancient Mesopotamia. The Mesopotamian *Mīs Pî* Ritual (SAALT 1). Helsinki 2001 [with Michael Dick].

As editor

1. Cuneiform Texts from Babylonian Tablets in the British Museum. Part 51: Miscellaneous Texts. London 1972.
2. The Cambridge Ancient History. Second Edition. Vol. III, Part 2: The Assyrian and Babylonian Empires and other States of the Near East, from the Eighth to the Sixth Centuries B. C. Cambridge 1991 [with J. Boardman, J.E.S. Edwards, N.G.L. Hammond, E. Sollberger].
3. Beiträge zur Altorientalischen Archäologie und Altertumskunde. Festschrift für Bartel Hrouda zum 65. Geburstag. Wiesbaden 1994. [with P. Calmeyer, K. Hecker and L. Jakob-Rost]
4. Astronomy before the Telescope. London 1996.

Articles

1. A Foundation-Inscription from Tell al Rimah, Iraq 32 (1970), 27–30.
2. A New Inscription of Sîn-kāšid, AfO 23 (1970), 88–89.
3. A Recently Identified Fragment of the Cyrus Cylinder, Iran 10 (1972), 158–159.
4. Cuneiform Tablets in the Collection of Mr. E.M. Dring, AfO 24 (1973), 120–122, Tf. XVI (no. 2 and 3) and XIX (no. 1).
5. Cuneiform Tablets in the County Museum and Art Gallery, Truro, Cornwall, AfO 24 (1973), 122–127, Tf. XIX–XXIV.
6. Texts and Fragments 85–90, JCS 26 (1974), 66–70.
7. Die Grabung im Nordabschnitt N II (2. und 3. Kampagne). In: B. Hrouda (ed.), *Isin — Išān Baḥrīyāt I. Die Ergebnisse der Ausgrabungen 1973–1974* (BAW, phil.-hist. Kl., NF Heft 79). München 1977, 21–30 [with M.R. Hoh].
8. Zwölfmaldrei, MDOG 109 (1977 [1978]), 27–34 [with H. Hunger].
9. Isin. 4. Kampagne 1975: Die Texte, Sumer 34 (1978), 98.
10. Isin: Inscriptions, Sumer 34 (1978), 99–103.
11. Texts and Fragments, JCS 30 (1978 [1980]), 234–249.
12. Hormuzd Rassam's Excavations for the British Museum at Sippar in 1881–1882, in L. De Meyer (ed.), *Tell ed-Dēr. Soundings at Abū Ḥabbāh (Sippar). Vol. III*. Leuven 1980, 93–114 and Pl. 27–29 [with D. Collon].
13. Some Mesopotamian Inscribed Vessels, Iraq 42 (1980), 84–86.
14. Another Fragment from El-Amarna (EA 380), JCS 31 (1979 [1980]), 249.
15. Some Assyrians at Sippar in the Old Babylonian Period, AnSt 30 (1980), 15–22.
16. Elamite Inscriptions in the British Museum, Iran 18 (1980), 75–81 and Pl. Ia–b, IIa–c.
17. Preliminary report on the inscriptions autumn 1975, spring 1977, autumn 1978, in B. Hrouda (ed.), *Isin — Išān Baḥrīyāt II. Die Ergebnisse der Ausgrabungen 1975–1978* (BAW, phil.-hist. Kl., NF Heft 87). München 1981, 91–102 [with C. Wilcke].
18. Bericht über die 5. Kampagne in Isin / Išān Baḥrīyāt: Inschriften, Sumer 36 (1980 [1981]), 95–97 [with C. Wilcke].
19. Some Neo-Assyrian Royal Inscriptions, AfO 28 (1981–82), 113–122 [with J. E. Reade].
20. Babylonian Chronicle 25: A Chronicle of the Kassite and Isin II Dynasties, in G. van Driel et al. (eds.), *Zikir šumim*: Assyriological Studies Presented to F. R. Kraus on the Occasion of his Seventieth Birthday, Leiden 1982, 398–417.
21. A Duplicate Brick of Kurigalzu II., JCS 32 (1980 [1982]), 247f.
22. Nūr-Ajja, the copyist of Atrahasis, RA 76 (1982), 95–96.
23. Cuneiform Tablets in the Collection of Lord Binning, Iraq 44 (1982), 70–86 [with S. N. Kramer].
24. The Second Tablet of *ṭupšenna pitema*, an Old Babylonian Naram-Sin Legend? JCS 33 (1981 [1983]), 191–195.

25. Episodes in the History of Babylonian Astronomy, BCSMS 5 (1983), 10–26.
26. The Myth of Girra and Elamatum, AnSt 33 (1983), 145–152.
27. Another Babati Inscription, JCS 35 (1983 [1984]), 91–96.
28. Kepler's View of the Star of Bethlehem and the Babylonian Almanac for 7/6 B.C., Iraq 46 (1984), 43–55 [with A. Sachs].
29. The Šamšī-Adad I Inscription from Niniveh, ARRIM 2 (1984), 21.
30. Remarks on the Šandabakku Land-Purchase Texts from the Time of Nabû-šumu-libūr, RA 79 (1985), 72–74 [with J. A. Brinkman].
31. Halley's Comet in Babylonia, Nature 314/6012 (18 April 1985), 576–577.
32. Notes on the Venus Tablet of Ammiṣaduqa, JCS 36 (1984 [1985]), 64–66.
33. Hammu-rāpī à Mari et à Sippar, in J.-M. Durand and J.-R. Kupper (eds.), *Miscellanea Babyloniaca. Mélanges offerts à Maurice Birot*, Paris 1985, 257–264 [with E. Sollberger].
34. The Epigraphs, in P. Albenda, *The Palace of Sargon, King of Assyria*. Paris 1986, 107–114 (French translation pp. 271–278).
35. The Inscriptions, in D. Collon, *Catalogue of Western Asiatic Seals in the British Museum. Cylinder Seals. III: Isin-Larsa and Old Babylonian Periods*. London 1984, 15–19 with Indices 3.A–D, pp. 224–238.
36. Halley's Comet in Cuneiform. The First Recorded Observation in Babylonia, BCSMS 13 (1987), 1–20.
37. The Kouyunjik Collection of Cuneiform Texts. Formation, Problems, Prospects, in F.M. Fales and B.J. Hickey (eds.), *Austen Henry Layard, tra l'oriente e Venezia*, Rome 1987, 183–193.
38. A Babylonian Star-Catalogue: BM 78161, in E. Leichty et al. (eds.), *A Scientific Humanist. Studies im Memory of Abraham Sachs* (OPSNKF 9), Philadelphia 1988, 313–322 [with D. Pingree].
39. Further Notes on Assyrian Bronzeworking Centres of Western Asia, c. 1000–539 B.C., in J. Curtis (ed.), *Bronzeworking Centres of Western Asia, c. 1000–539 B.C.*, London—New York 1988, 111–118.
40. Some Sumerian Literary Texts in the British Museum, in H. Behrens et al. (eds.), *Studies in Honor of Åke W. Sjöberg* (OPSNKF 11), Philadelphia 1989, 7–19 [with B. Alster].
41. A New Sumerian "Law Code", in H. Behrens et al. (eds.), *Studies in Honor of Åke W. Sjöberg* (OPSNKF 11), Philadelphia 1989, 383–396 [with P. Michalowski].
42. Eclipse Seen at Ancient Ugarit, Nature 338 (1989), 204–205.
43. Bibliography of E. Sollberger, RA 84 (1990), 183–187.
44. Wissenschaft und Technik, in B. Hrouda, *Der Alte Orient. Geschichte und Kultur des Alten Vorderasien*, München 1991, 246–269.
45. A 4th Century Babylonian Model for Venus: BM 33552, Centaurus 34 (1991), 97–118) [with J. Britton].

46. Bibliography of Babylonian Astronomy and Astrology, in H. D. Galter (ed.), *Die Rolle der Astronomie in den Kulturen Mesopotamiens*. Graz 1993, 407–449 [with H.D. Galter, B. Scholz].
47. A Silver Bowl of Artaxerxes I, Iran 33 (1995), 149–153 [with J.E. Curtis and M.R. Cowell].
48. The Dalbanna text: A Mesopotamian star-list, WdO 26 (1995), 27–42.
49. Bibliographie des textes babyloniens d'El Amarna [1888–1993], in J.-G. Heintz, *Index documentaire d'El Amarna* (I.D.E.A. 2). Wiesbaden 1995, 213.
50. Astronomy and Astrology in Mesopotamia, in C.B.F. Walker (ed.), *Astronomy before the Telescope*, London 1996, 42–67 [with J. Britton].
51. Achaemenid Chronology and the Babylonian Sources, in J. Curtis (ed.), *Mesopotamia and Iran in the Persian Period: Conquest and Imperialism 539–331 BC*, London 1997, 17–25.
52. Another Seal of Kidin-Marduk, NABU 1998/136.
53. The Induction of the Cult Image in Ancient Mesopotamia: The Mesopotamian *mīs pî* Ritual, in M.B. Dick (ed.), *Born in Heaven, Made on Earth. The Making of the Cult Image in the Ancient Near East*, Winona Lake 1999, 55–121 [with M.B. Dick].
54. Babylonian Observations of Saturn during the Reign of Kandalanu, in N.M. Swerdlow (ed.), *Ancient Astronomy and Celestial Divination*, Cambridge, MA and London 1999, 61–76.
55. The Water Clock in Mesopotamia, AfO 46/47 (1999–2000), 130–148 [with D. Brown and J. Fermor].

Reviews

1. B. Landsberger and M. Civil, Materialien zum sumerischen Lexikon IX. The Series ḪAR-ra = *ḫubullu*, Tablet XV, and related texts, BiOr 26 (1969), 76–77.
2. M. Civil et al., Materials for the Sumerian Lexicon, XII. The Series lú = *ša* and Related Texts, BiOr 29 (1972 [1973]), 309–310.
3. A. Salonen, Die Ziegeleien im alten Mesopotamien, BSOAS 36 (1973), 639–640.
4. A. Salonen, Vögel und Vogelfang im alten Mesopotamien, BSOAS 38 (1975), 625.
5. H. Limet, Étude des documents de la période d'Agadé appartenant à l'Université de Liège, BSOAS 38 (1975), 422–423.
6. A. Salonen, Jagd und Jagdtiere im alten Mesopotamien, BSOAS 40 (1977), 595–596.
7. M. Stol, Letters from Yale (AbB 9), JSS 30 (1985 [1986]), 115–116.

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2. E. Sollberger, AfO 35 (1988 [1990]), 258–260.

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