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‘Firing Holes’ in Literary Tablets from Ashurbanipal’s Library: Punctuation and Performance

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Abstract: This paper aims to shed light on the so-called ‘firing holes’ in cuneiform tablets by combining analysis of their position with poetics. The holes are found in almost every genre of Mesopotamian scholarship, from literature to rituals to omens to medical and lexical texts. They occur especially often in tablets that were part of ancient libraries, in particular the collection known as ‘Ashurbanipal’s library’ assembled by the Assyrian king in the seventh century BC in Nineveh, northern Iraq. Yet despite the frequency of these holes, they are usually overlooked and their meaning remains a mystery. The paper analyses the placement of the holes in relation to the text and its meaning, applying the methodology of close reading to three poems: the *Babylonian Theodicy*, *Poem of the Righteous Sufferer*, and *Ninurta’s Exploits*. It is argued that the holes represent a form of punctuation that can either indicate pauses in performance, act as commas on a page, or serve as visual markers to draw attention to sections like a form of highlighting. Different manuscripts employ the holes in different ways, which is consistent with other punctuating practices cross-culturally. This has implications for our understanding of the performance of Mesopotamian poetry and its metrical structure, the interpretations of individual scribes, questions of emphasis, and the history of punctuation.

Keywords: ancient punctuation, firing holes, Mesopotamian literature, *Babylonian Theodicy*, *Ludlul bēl nēmeqi*, *Lugal-e*

Did Mesopotamian literature use punctuation? This paper approaches that question through a new take on a problem that has remained unsolved for the last 150 years: what is the purpose of the holes that perforate so many cuneiform tablets? The holes are found in scholarly tablets in almost every genre, from literature to rituals to omens to medical and lexical texts. The earliest examples may date to the Old Babylonian period (c. 2000–1600 BC), though they become more frequent from the Middle Babylonian period on (c. 1600–1000 BC), and are common in Neo-Assyrian texts (c. 1000–600 BC).[1] They occur especially often in tablets that were part of ancient libraries, in particular the collection known as 'Ashurbanipal's library' assembled by the Assyrian king in the seventh century BC in Nineveh, northern Iraq. Yet despite the prevalence of these holes, they are usually overlooked and their meaning remains a mystery.

The so-called 'firing holes' are usually ignored in Assyriological publications. Historically they have not even always been included in line-drawings of tablets, and while modern editions usually do now include them, they typically only do so in the copies of the manuscripts. A few notable exceptions mark them in the editions of the text itself, and have begun to speculate that they may have some meaning in relation to it (Wagensonner 2008; Panayotov 2013; Heeßel 2016; Wasserman 2016: 206–23; Da Riva 2017), though none of these studies present firm conclusions. Consequently, few scholars have taken them into account when analyzing the texts, and one can quite easily be unaware that they even exist when reading editions and translations. When viewing the tablets, however, they immediately stand out and demand our attention.

This paper investigates the meaning of the 'firing holes' in a specific selection of texts, three works of literature whose manuscripts were part of Ashurbanipal's library. I employ a new method of analysis, that is close reading, to pay attention to the position of the holes in relation to the text to interpret their meaning from a literary perspective. This necessarily requires a tight focus on individual manuscripts, as opposed to the large-scale pattern-seeking undertaken by the LIBER project in Venice, which is using AI to work across a whole corpus, and so may produce different yet complementary results. The outcome is a series of case studies that show just how differently individual scribes make use of holes, which vary both according to the type of composition and the choices of each copyist.

[1] See Corò and Ermidoro (2020: 304). None of the Old Babylonian examples so far identified can be dated to this period with certainty, so the phenomenon may take off only in the Middle Babylonian period (c. 1600–1000 BC). The holes are rarer again in Neo- and Late Babylonian tablets (1000 BC onwards in the south of Iraq).

What are 'firing holes'?

Early in the history of Assyriology it was suggested that the holes are 'firing holes', made so that the clay would not be damaged in the process of kiln firing,[2] much like pricking a baked potato prevents it from exploding in the oven. This idea has since proved to be false, since not all fired tablets contain these holes. Some very large tablets from the third millennium BC, for example, were baked, but do not have any holes, which shows it can be done perfectly well without them (Walker 1987: 24). At the same time, we now know that the majority of tablets were not in fact fired in antiquity, including those with holes (Taylor 2011: 16). Nevertheless, the name 'firing holes' has stuck thanks to the lack of a more definitive term.

Various other ideas have been proposed, but none are entirely satisfactory. Walker proposed that the holes might be decorative, and that they became part of the tradition of copying tablets, appearing in the same place on successive manuscripts (Walker 1987: 24).[3] However, this has now been disproved: the LIBER project claims to have found many duplicates with holes in completely different places from each other (Corò and Ermidoro 2020: 308), which I have also found in my study.[4] Another theory that has since been refuted is the idea that the holes are there to hold supports for the tablet while it was being written (Litke 1998: 17), which as Corò notes cannot be correct since there are no signs of distortion that would result from the supports being put into holes in wet clay (Corò and Ermidoro 2020: 310).[5]

Perhaps the most enduring theory is one proposed in 1880, suggesting that the holes are there to fill empty spaces (Pinches 1880). This is not often reiterated in print, since the holes themselves are so neglected in publications, but one hears it regularly in conversation between Assyriologists and it seems to have become part of the received wisdom of the discipline. Yet this theory cannot be correct either: there are plenty of blank spaces on the tablets where holes could have been made but have not, while conversely we also find holes in lines that are crammed full of text where they must have been squeezed in (cf. Marzahn 2017: 198; Corò and Ermidoro 2020: 309). It follows from this that the holes cannot be there

[2] Sayce (1885: 96; 1887: 9). Earlier Pinches had suggested they are there to help the clay dry faster (1880), which is probably unnecessary in the climate of Iraq (Panayotov 2016).

[3] An idea that was echoed by Nemet-Nejat (2002: 54); Fincke (2003: 126 n. 124); Robson (2008: 198).

[4] Panayotov (2016) has excluded the decoration theory, since there is nothing inherently aesthetic about the holes or their patterns, though this is a subjective judgement. Marzahn notes that they are not found in regular patterns, which is a further argument against the idea they are there to aid firing or drying (2017: 197).

[5] Most recently Panayotov has found traces of substances inserted into holes in the sides of amulets and suggested that they could have held magical plants, especially since the amulets mention such plants in the text itself (2018: 195, 204). However, he specifically states these are not to be confused with firing holes, and sees them as a different phenomenon.

to prevent interpolation in the empty space, as has also been suggested.[6]

The holes most likely were made with the other end of the stylus used to write the text, pushed deep into the clay (Walker 1987: 24; Cammarosano 2014: 70; Panayotov 2016; Marzahn 2017). The most common shape is round, but occasionally they can also be triangular, trapezoidal or oval, varying with the type of stylus used by the scribe (Taylor 2011: 14–15; Panayotov 2016; Marzahn 2017 for a triangular example). The diameter of the holes is approximately equal to the size of the head of the cuneiform wedge, implying they were both made by the same instrument, and making them aesthetically in proportion with the lines of text. They were punched in after the cuneiform signs were written, as is evident from several examples from the *An-gin*$_7$ manuscripts where the holes interrupt long horizontal wedges (as in Fig. 1 and Fig. 2). This shows that the making of the holes was part of the process of writing the text, at least in the case of *An-gin*$_7$, as opposed to being made first as aids to laying out the text (as suggested by Da Riva 2017: 86).[7] They were also made after the rulings were drawn, as can be seen in Fig. 3 where the central hole in the row of three has distorted the line immediately above it, pushing it slightly upwards, and in Fig. 4 where the hole is directly over the line. One exception comes in manuscript e of *An-gin*$_7$ where the hole was made first and then squashed when the 'nu' sign was impressed (Fig. 5).

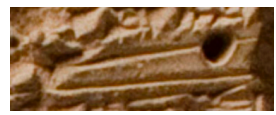

Fig. 1: Rm 117, manuscript h, obverse, line 179. From the Cuneiform Digital Library Initiative. © The Trustees of the British Museum.

Fig. 2: Rm 126, manuscript d, obverse, lines 76–7. From the Cuneiform Digital Library Initiative. © The Trustees of the British Museum. Modified by Yegor Grebnev.

There are four different types of holes found in tablets: holes around the edge, holes found in the spaces between columns on multicolumn tablets, holes found among the words of the text itself, and holes found in colophons, which are written not within the text but between

[6] Jeyes (2000: 371); Fincke (2003: 126 n. 124). See also Corò and Ermidoro (2020: 309) for a critique. For a full history of theories concerning firing holes see Corò and Ermidoro (2020: 305–11).

[7] Panayotov also notes that the holes must have been made afterwards in his publication 'A Ritual for a Flourishing Bordello' (Panayotov 2013: 287 n. 20).

Fig. 3: 1879–07–08, 290, manuscript g, reverse, line 202. From the Cuneiform Digital Library Initiative © The Trustees of the British Museum.

Fig. 4: K 38, manuscript e, reverse, line 8 on tablet, line 139 in *An-gin*$_7$. From the British Museum. © The Trustees of the British Museum.

lines. Doubtless all four have different purposes. I suggest that instead of referring to any of these holes as 'firing holes' we should designate them as 'edge holes', 'column holes', 'text holes', and 'colophon holes'. This terminology distinguishes between the different types of holes and describes them accurately without making any assumptions about their purpose.[8]

Fig. 5: K 38, manuscript e, obverse, line 13. From the British Museum. © The Trustees of the British Museum.

[8] Panayotov has already rejected the term 'firing holes' in favour of 'decoration holes' (2013: 287, 2016: §1), but since this purpose is not proved I suggest the description should be more neutral.

A new take: punctuation and performance

This study focuses on text holes only. My argument is that they can be both a form of punctuation and a means of highlighting that draw attention to specific parts of the text. These holes may represent pauses in the text, much like a modern comma, emphasizing the words they follow. This may be especially useful in recitation, since a dramatic pause enables the audience to linger on what has just been said, but it does not require performance, since the same indications also help those reading silently.[9]

A pause is by its nature emphatic, and so also has the function of drawing attention to important words.[10] As we will see, pauses can be used quite precisely to mark words and phrases that are thematically important, such as when one speaker in a dialogue responds to an argument made by the interlocutor, or when the trajectory of a poem is marked out by the words emphasized by holes in the opening lines.

Multiple adjacent holes might signal either a longer pause or extra importance.[11] Where multiple holes are found, or single holes are sparsely distributed, they can visually highlight important lines or cluster in a way that signals the beginning of sections that are not otherwise marked.[12] These holes can be especially helpful in locating specific passages on a tablet.

Two more functions are that text holes can be used to mark abbreviations, much like a full stop in modern English, and to help disambiguate two signs that look the same but have different readings. These usages are found in one bilingual manuscript in both the Sumerian and Akkadian lines in addition to marking pauses and highlighting. One scribal mark can thus have multiple meanings, depending on context and the choices of the scribe.

The three compositions I have chosen are the *Babylonian Theodicy*, *Ludlul bel nēmeqi* (otherwise known as the *Babylonian Poem of the Righteous Sufferer*), and *An-gin*$_7$ (or *Ninurta's Return to Nippur*). The reason for choosing them is simple practicality: while many works of literature are written on manuscripts with holes, those manuscripts happen not to be well preserved. There are many fragments of the *Epic of Creation* that have the odd hole, for

[9] Both silent reading and reading aloud are attested in Mesopotamia (e.g. Oppenheim 1952: 133 n. 6; Charpin 2010: 41–2). The idea that silent reading was an innovation connected to the introduction of word division in the Medieval period has been disproved, though this has not always reached scholars outside of Classics (see McCutcheon 2015 for a thorough account). For example, Grayson (2000) provides ample evidence for reading out loud, but his conclusions do not preclude silent reading as a separate process. A thorough study by Worthington suggests that the lack of spacing and punctuation in cuneiform manuscripts would have made them more difficult for ancient scribes to read than written material is for us today, but that this did not necessarily require vocalization (2012: 261–4).

[10] For an analysis of emphatic pauses in relation to poetic metre see Wisnom (2015).

[11] Punctuation in the European Middle Ages was commonly used to mark the length of pauses, see Pohl (2016: 184).

[12] For Chinese comparisons on punctuation indicating sectioning and highlighting see Krijgsman (2023: 113); Meyer (2021: 204–35); Foster (2023); Meyer and Schwartz (forthcoming).

instance, but one isolated hole in one tablet piece cannot tell us where the scribe would have chosen to put the holes elsewhere in the composition. Since the comparison of manuscripts of *An-gin*$_7$ shows that individual scribes tend to be idiosyncratic in their use of holes, it would be methodologically unsound to try to create a composite text in this way. As we will see, each poem and each scribe puts them to different uses, and yet in most cases reading the hole as a pause produces a coherent literary meaning.

A lack of consistency might seem odd to us, but when the comparative history of punctuation is taken into account, it is exactly what we should expect. Before the sixth century AD, punctuation of European manuscripts was not prescribed by the author, but was supplied by readers and copyists of the texts, in the classical world particularly by school-teachers instructing their pupils on how the text should be interpreted (Parkes 1992: 9–12), and they might not necessarily all interpret them the same way. Punctuation in classical texts is sporadic (Gallo, Falivene, and March 1986: 90), and very often two manuscripts preserving the same passage punctuate it differently (Turner and Parsons 1987: 11–12). The scribes of early medieval manuscripts apply punctuation according to their own needs, and so it varies between different copies of the same text (Parkes 1992: 19). Ancient Chinese manuscripts, too, punctuate inconsistently, which could indicate either that we as modern readers have anachronistic expectations, or 'selective engagement' on the part of the original scribes (Krijgsman 2023: 111). In the western tradition punctuation was not fully standardized until the invention of the printing press (Parkes 1992: 87). An individual approach to punctuation in cuneiform manuscripts, then, fits well with what we see elsewhere. It is also consistent with other trends in cuneiform orthography and spelling, which was not standardized but varied between scribes.[13]

I only analyze literary manuscripts here, but the holes appear in many other types of text. The catalogue of incipits published by Wasserman (2016: 206–23) is not a text that was intended to be recited, but perhaps the holes were copied from their placement in the first lines of the original poems, where they did signal pauses. It is likely that different genres employ the holes in different ways. For instance, the omen text published by Heeßel (2016), which includes the holes in the hand copy, places them between the protasis and the apodosis in almost every case. The commentary on *Ludlul Bēl nēmeqi*, NinNACom1 (K 3291) (Lenzi 2015), places two consecutive holes in two different lines (*Ludlul* 4, h+1 and i+16), both of which mark place names—the only two to be mentioned in the extant lines of Tablet four (*Ludlul* 4. 30–1, 36–7). These may be more likely to be visual markers rather than pauses, though in other cases the distinction is not clear-cut. We might think that pauses would be less likely to be marked in lexical texts, since as lists of words they were not intended to be performed, but on the other hand they may have been recited as part

[13] See Worthington (2012), for example, on the choice of when scribes wrote *ša*$_1$ versus *ša*$_2$, the Assyrian scribe Akullanu makes the opposite choice from the neo-Babylonian scribe of *Enuma Eliš* 4 manuscript a (2012: 271–80).

of the process of memorization that we know was a key part of scribal education (Veldhuis 1997; Delnero 2012), and pauses could still have been useful here. In any case, holes could also mark particularly important points, or changes in sections in these texts, as in others. Some ritual texts, like the anti-witchcraft ceremony known as *Maqlû* (for example, tablet K 43 + K 142 + K 2601 + Sm 1433 which corresponds to Schwemer's manuscript B; Schwemer 2017: 45), have a very large number of holes, often many per line, and use numerous grids. It is in cases such as these where the large-scale pattern analysis employed by the LIBER project will prove especially useful.

It might be asked why one particular marking can come to have varied meanings—if one hole can mark, as I suggest, either a pause, emphasis, disambiguation or an abbreviation, then why did the ancient scribes not develop more numerous signs to distinguish between these uses? Here the particularities of the medium are relevant. The way that the holes penetrate the clay mean that they are immediately visible as not belonging to the script, and can be easily differentiated from the text.[14] This could be especially useful as aids to reading, especially as aids to reading out loud. Furthermore, it is characteristic of the cuneiform script that one sign can be read in different ways. Having one symbol with multiple related functions is therefore entirely consistent with the workings of the writing system. Nor is it even so strange from a modern point of view.[15] A full stop in modern European typography can indicate either the end of a sentence (and hence a pause) or be used to mark abbreviations, while three in a row forms an even longer pause (the ellipsis), just as I am suggesting was the case in cuneiform.

Other scribal marks made up of cuneiform wedges do exist, such as the sign for '10' that marks every tenth line in some manuscripts, correction marks added by later collators or the check marks that occur in administrative texts (Fincke 2021: 59–70).[16] However, all of these stand in the margins, and so are not at risk of blending into the text itself. One mark that does occur within the lines is the Glossenkeil, made up of one to four small diagonal wedges. As I am suggesting for the text holes, the Glossenkeil has more than one function: it can indicate variant versions of a text, separate Akkadian and Sumerian text when translations are given within the same line, or indicate line endings when the lineation on one manuscript does not follow that of the original it was copied from (Krecher 1966: 431–9).[17]

[14] In this respect it is more similar to modern punctuation which distinguishes between alphanumeric and non-alphanumeric signs, rather than some other ancient cultures such as China (Richter 2023: 165). In cuneiform texts of the fourth and third millennia BC holes represent the number 10 and so are clearly part of the text, but it is in the second and first millennia BC when this usage has long gone that the text holes appear interspersed as discussed here.

[15] That punctuation marks often have multiple functions, in both ancient and modern scripts, is pointed out by Richter (2023: 173); see also Foster (2023) for a Chinese example.

[16] Firing holes have been compared with check marks by Tenney (2026: sec. 4.5.6.2).

[17] For some examples see Cooper (1969: 65); Beaulieu (2007: 35, column 1, section A, lines 11, 12, 16); Geller and Wiggermann (2008: 157–58, line 13), where it could also indicate missing signs. These are the functions that the Glossenkeil

In commentaries the Glossenkeil could be used to separate an obscure word and its lexical equivalent (Gabbay 2016: 85). This is in fact how the text holes were interpreted by the editor of the commentary on *Ludlul*, who transcribed them in the edition with a colon as is normal for Glossenkeile in one of the lines but not the other (Lenzi 2023: 357, line 37). This commentary is full of Glossenkeile, and yet has only four text holes. Therefore, their function cannot be the same as the Glossenkeile, even though the holes fall in the same place as these other marks in other lines but are used for emphasis instead. The many uses that this one mark was put to, then, provides a neat parallel for the differing but related functions of the text holes, yet the two marks do not overlap.

My reading is necessarily subjective, and as with any literary interpretation, cannot be 'proved' definitively. The inconsistency of the patterns is naturally frustrating to the scholar looking for absolute rules. However, since the holes were used inconsistently by the original scribes themselves, proving a pattern is impossible by its very nature. All we can do is pay close attention to the context in which they were used, with a sensitivity to the nuances of the texts themselves, and the proclivities of individual copyists. While the majority of holes in this study do make good sense as punctuation marks, the logic of others is not so clear. Yet we should not be surprised if the ancient scribes emphasized different words or passages from those we would expect, and should not project our modern expectations onto pre-modern manuscripts. It is often the case in medieval European texts that punctuation marks fall in places that seem odd to modern readers, and individual manuscripts do not even follow the principles set forth by contemporary theorists (Parkes 1992: 4). Furthermore, it is in the nature of poetry to play with expectations and disrupt normal patterns of language, so any emphasis that seems unnatural to us may in fact have been intended. This means that the hypothesis cannot be disproved either, but the same will be true for any other theory advanced on this topic, and we simply have to look for what is most coherent overall. Other meanings could also be suggested—do the holes represent musical interventions, such as the banging of a drum or the ringing of a bell? Some ritual texts specify the use of percussive musical instruments to be used in their performance.[18] Two or three holes could thus indicate two or three strikes. We can be open to other possibilities while also advancing specific hypotheses and must bear in

has in Assyria and Babylonia, but in peripheral areas it was used differently again. Pisaniello (2020: 125–26) lists ten different functions for the mark in Hittite; see also von Dassow (2012) for a study of its different uses in the fifteenth-century Alalah tablets, where she also highlights the multi-functionality of the Glossenkeil. Among these uses is 'to emphasise or highlight particular words for a variety of reasons' (von Dassow 2012: 212), as I propose for the text holes, though the focus of her study is both chronologically and geographically distant from the Ashurbanipal libraries. As she states, the practice of using glosses originated in the peripheral areas before spreading back to cuneiform's homeland and further beyond (2012: 204), and so their uses vary with time and place.

[18] See Panayotov (2013), though Simons argues that the instrument (the *nigkalagû*) is in fact a gong (2023). For the drum see for example Gabbay (2014) on the *balag* instrument and its role in the cult of ancient Mesopotamia. These instruments were thought to scare away demons (e.g. Maul 1994: 124; Ambos 2004: 81).

mind that the meaning likely varied in antiquity also.

As a comparison, the standardization of punctuation in Medieval Latin manuscripts only began at the end of the sixth century AD and was connected with the perceived importance of the 'correct' interpretation of the Bible, both as read out in church and as transmitted in the manuscripts (Parkes 1992: 19–20). Although cuneiform literature and scholarship was carefully preserved by copying manuscripts for centuries, in the case of *An-gin*$_7$ for more than a thousand years, they are very different types of text from the Bible and it does not seem that their interpretation had to be fixed in the same way.[19] None of the oldest manuscripts of *An-gin*$_7$, of which there are 28 dating to the Old Babylonian period (approximately twentieth to sixteenth centuries BC), have holes in them, and so their insertion must have been a later interpretation. The context also matters, since these earliest manuscripts are all school tablets, produced by young scribes learning their craft and then thrown away, versus the elegant library tablets we have considered that were intended to last within a more permanent collection. That holes were not considered an important part of teaching these texts is interesting and may further point to a performative function.

The *Babylonian Theodicy*

The *Babylonian Theodicy* is a poem comprising a dialogue between two friends, one who rails against the injustices of the world, while the other attempts to reconcile him with the workings of the gods. At its heart it is a debate about whether there is any benefit in worshipping the gods and whether they truly reward piety. The sufferer who begins the dialogue has endured a litany of woes even though he has done his best to honour the gods, while he complains that the wicked prosper in spite of their negligence. His friend however argues that human beings cannot understand the mind of the gods, that the ill-gotten gains of the impious are fleeting and they will get their comeuppance in the end, and that it is imperative to give the gods their due with rituals, prayers and offerings.[20]

The poem is composed of 27 stanzas each with 11 lines, with 297 lines in total. With each new stanza comes a switch in speaker. This is clearly marked on many of the manuscripts, which have rulings in between stanzas. But the stanzas are identifiable in another way:

[19] See for example Rochberg-Halton (1984, especially p. 128), who stresses that only formal aspects of the texts were standardized, 'resulting in only a relative stabilisation of the wording'. Zgoll has recently argued for the existence of 'sacred texts' in Mesopotamia (2022), and *An-gin*$_7$ was thought to be divinely revealed as it was authored by the god Ea according to the *Catalogue of Texts and Authors* (Mitto 2022a: ll. 3–4). But even so these texts were not treated in the same way as the Bible was in later Christian culture, and holes are found across the spectrum of cuneiform scholarship where the definition does not apply. The *Babylonian Theodicy* and *Ludlul,* for instance, were written by human authors.

[20] See Oshima (2014: 130–43) for discussion.

each line of the same stanza begins with the same cuneiform sign. By taking the first sign of each stanza, an acrostic can be read: 'I, Saggil-kīnam-ubbib, the exorcist, worship the gods and king'. The acrostic is distinctive in writing, as each sign at the beginning of the line lines up perfectly with the others in the stanza (see Fig. 8), but it would also be noticeable in performance. Each time the speaker switches, and articulates a new set of thoughts, the identical first sound of each of their lines gives a coherent character to their speech, so that the back-and-forth of the dialogue is reflected in the aural dimension. The poem is also remarkable for its metrical layout, since four manuscripts from Babylon (BM 34773, BM 35405, BM 7745, BM 68589) have rulings in between metrical feet, so that the whole tablet is patterned in a grid. This was a key piece of evidence for working out the structure of Akkadian verse, since it was easy to see how words were grouped within each foot on these tablets.[21] These features of the tablet can be seen to point to a very 'written' context where the appearance of the text in writing was important, but at the same time they have audible effects that would enhance an oral recitation.[22] This is also true for the placement of pauses, which I argue is the function of the holes in this text.

The edition used here is from the electronic Babylonian Library website (Heinrich 2022), though the print edition and commentary of Oshima (2014) has also been consulted. The earliest manuscripts of the poem are neo-Assyrian and come from the library of Ashurbanipal (reigned 669–31 BC), though the poem was probably originally composed in the eleventh century BC.[23] Of the 21 manuscripts only one has text holes, K 9290 + K 9297, a neo-Assyrian tablet from the aforementioned library. This tablet preserves portions of lines 48–80, 125–43, 176–91 and 235–69. Because of its fragmentary nature only three stanzas are complete, and only one of those has a single text hole. Nevertheless, there are text holes preserved in eight stanzas in this tablet, and there are enough to give us some indications of their effects.

What is striking is that most of the extant holes can be interpreted as pauses for rhetorical effect. They are placed at key syntactic junctures where pausing would be especially em-

[21] Zimmern (1893, 1895). Metrical feet in Akkadian poetry are defined according to syntax rather than stress pattern; see Buccellati (1990: 109–11) for a summary.

[22] Piccin suggests the acrostic could also have been an aid to memorization (2021: 93 n. 446), which can also be enhanced by recitation, as in the way that schoolchildren today are made to chant their times tables (I thank Stephanie Dalley for this point).

[23] The dating is based on equating the name of the sufferer spelt out in the acrostic with those listed in a Hellenistic composition known as the *Uruk List of Kings and Sages*. The *Uruk List* states that two scholars with similar sounding names were scholars to Babylonian kings in the eleventh century BC: 'In the time of Adad-apla-iddina Esagil-kīnī-ubba was scholar / in the time of Nebuchadnezzar (I) Esagil-kī-nī-ubbalu was scholar' (Lenzi 2008: 141–2, lines 17–18). Modern scholars usually equate these with the author of the *Babylonian Theodicy*, Saggil-kīnam-ubbib (see Oshima 2014: 121–4, with further literature). The other piece of evidence that is usually invoked is the *Catalogue of Texts and Authors* (Lambert 1962: 66–7, line V 2), which more directly lists the name of our author along with the title of the *Theodicy*, but new fragments have proved that the restoration of the name he is paired with is not Adad-apla-iddina, but Asarluhi-Mansum (see Mitto 2022b: 117, line d+4–5; for discussion, see p. 127).

phatic to create suspense or otherwise insist upon attention, or where after the pause the meaning of the sentence may turn out differently from how the audience expects. This can be illustrated by a close reading of the text (Fig. 6). The first set of holes appears in stanza five (Fig. 7).

Fig. 6: *The Babylonian Theodicy*, K 9290 + K 9297, obverse (left) and reverse (right) pictured. From the Cuneiform Digital Library Initiative. © The Trustees of the British Museum.

Fig. 7: Text holes in stanza five of K 9290 + K 9297. From the Cuneiform Digital Library Initiative. © The Trustees of the British Museum.

The sufferer's friend has just accused him of not being rational (*Theodicy* 36) and insisted that the gods will relent if properly appeased (*Theodicy* 39–40, 43–4). Now the sufferer replies:

48 [*a*]*kkānu serrēmu ša itpupu šumuḫ šamm*[*i*]

49 *ak-kabtî pakki ili • uzunšu ibši*
50 *aggu lābu ša ītakkalu • dumuq šīri*
51 *ak-kimilti iltî šupṭuri ubil maṣḫassu*
52 *ak-kabti bēl pāni ša uṣṣubūšu • naḫāšu*
53 *aqrâ ṣārira • iḫīṭ ana māmi*

48 The onager, the wild ass, that had its fill of lush grasses—
49 To the weighty wisdom of the god • did it pay attention?
50 The savage lion who fed himself • on fine meat—
51 In order to appease the wrath of the goddess, did he bring his flour?
52 As for the rich magnate who keeps increasing • his prosperity—[24]
53 Precious gold • did he weigh (it) out to the mother goddess?

In line 49 the phrase 'to the weighty wisdom of the god' comes first in the sentence, foregrounding the theme that the friend himself has been stressing, but after the pause we learn that the wild ass had no care for it. In the following line the pause comes after the word 'fed himself', which places the emphasis on the lion's self-sufficiency rather than his reliance on the gods to provide for him. In line 52 we hear about the rich man who is getting even richer, with the pause after the crucial verb 'keeps increasing', which emphasizes the ever-escalating fortunes of those who do not necessarily deserve it, as we discover in the next line. The first two words of line 53, 'precious gold', with a dramatic pause afterwards, at first seem as if they are a description of the rich man's wealth. However, after the pause we find the question 'Did he weigh (it) out to the mother goddess?' (*Theodicy* 54) which emphasizes all the more the fact that he keeps it for himself. The pauses thus form a sequence of challenges to the arguments of the friend.

In stanza six the friend replies. There are only two holes in the stanza, although two lines are too broken to tell whether they would have held any (Fig. 8). However, the first hole comes in the very first line of the response after the phrase which is a compliment describing the sufferer:

56 *gišimmaru iṣ mašrê • aḫī aqr*[*u*]

56 O date palm, tree of wealth • my precious brother

The pause comes after the word for wealth, which is exactly what the sufferer has been resentfully decrying. The sufferer has been contrasting the fate of the wealthy who do not

[24] I have turned around the syntax from the literal construction 'whose prosperity keeps increasing' for this to make more sense in English in this format.

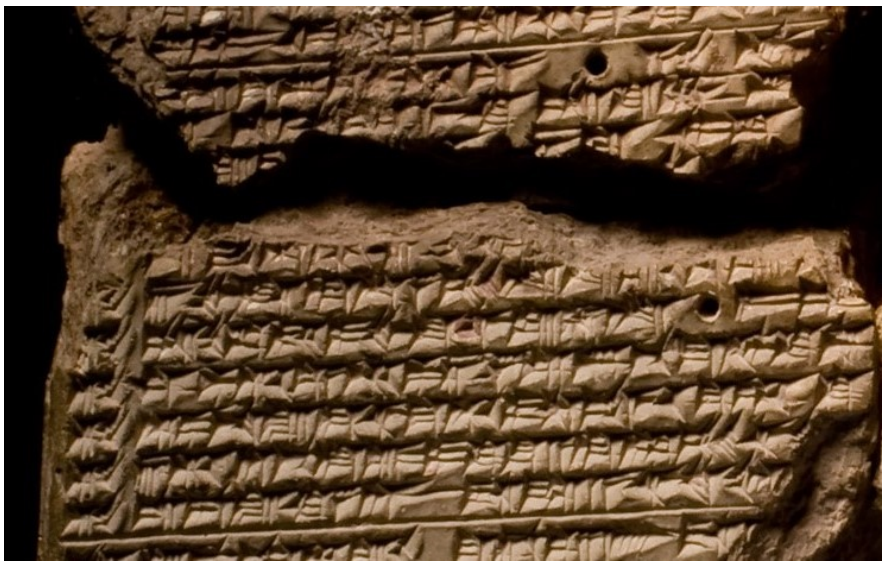

Fig. 8: Text holes in stanza six of K 9290 + K 9297. From the Cuneiform Digital Library Initiative. © The Trustees of the British Museum.

honour the gods with his own fate as someone who does. A pause after this phrase that describes the sufferer himself as being a wealth-giving tree emphasizes that he does in fact have wealth, only of a different, more metaphorical kind.

The second hole in stanza six comes while the friend is describing the fates that will be met by the various creatures that the sufferer has described.

> 61 *gēr būli lāba ša taḫsusu gana bitr*[*i*]
> 62 *gillat nēšu īpušu petâssu* • *ḫaštu*
>
> 61 The livestock's bane—the lion you were thinking of—come, contemplate it:
> 62 For the atrocities the lion committed, opens up for him • a pit.

The word order in this translation reflects the order of the Akkadian to show how the hole keeps the audience in suspense. Theoretically anything could open up for the lion, something good or bad. Delaying the object until the very end of the line, after the pause, keeps the audience in suspense to find out what will happen.[25] Stanza seven has a slightly differ-

[25] This is the second example in the sequence of this rhetoric, as the previous couplet has already said that the wild ass will end up shot by an arrow (59–60). We might expect the first pause to come here before the first reversal of expectations, but this line is unfortunately broken.

ent patterning of holes (Fig. 9).

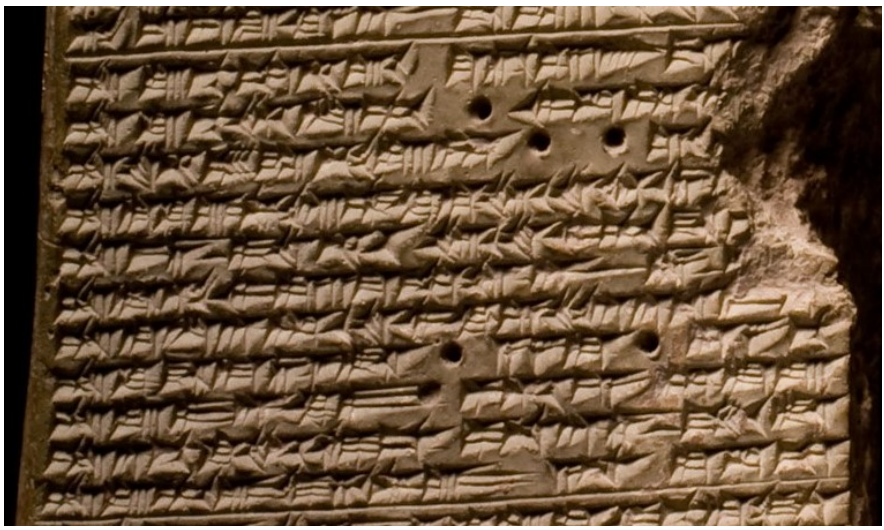

Fig. 9: Text holes in stanza seven of K 9290 + K 9297. From the Cuneiform Digital Library Initiative © The Trustees of the British Museum.

The sufferer begins, as his friend had done in the previous stanza, by praising his friend:

67 *iltānu ṭēmka manīt nišī ṭā*[*bu*]
68 *illu nussuqu* ● *milikka d*[*amqu*]
69 *iltēn zikra muttaka* ● ● *lutt*[*ir*]

67 Your reasoning is a cool wind, a sweet breeze for humankind;
68 Most particular friend ● your counsel is [fine].
69 One matter before you ● ● let me [add]

The hole is in the same place metrically as it was in line 56 where his friend had placed it, halfway through the line at the caesura, after the words that describe the friend himself ('O date palm tree of wealth ●'). So already the sufferer is paralleling the strategy of his friend.

The word translated 'most particular' (following the electronic Babylonian Library project for this phrase) can mean 'choicest' as in something that has been highly selected, as well as referring to the friend himself as being highly selective. The sufferer's opening gambit is therefore to emphasize how much he values the one he is arguing with.

In the next line however he emphasizes that there is just one thing that the friend has not selected to mention in his argument: *iltēn zikra muttaka* ● ● *lutt*[*ir*], 'one matter before you ● ● let me [add]' (*Theodicy* 69).[26] Two holes might indicate a longer pause before the word for 'add', emphasizing that there is something this selective friend has left out.

The sufferer goes on to say that those who do not worship the gods can end up with a good life, while those who do can end up destitute (*Theodicy* 70–1), and then states that he himself heeded the will of his personal god and did indeed pray to his personal goddess.

The next hole comes in what follows, the result of all this worship, 'I dragged a yoke of profitless servitude'.

74 *ilka ša lā nēmeli* ● *ašâṭ* ● *abšāna*

74 Servitude without profit ● I dragged ● (as) a yoke

Here we have two holes around the word 'I dragged', emphasizing the labour and heaviness of all this pointless work. The outcry continues in the next line, '(my) god established (for me) poverty instead of riches':

75 *iltakan ilu kī* ● *mašrê katûta*

75 Established the god instead of ● riches poverty

Here, unusually, the hole does not come in a space between a metrical division but in the middle of one. According to the rules of Babylonian scansion, prepositions are grouped with the word that they follow within the same metrical foot (Buccellati 1990: 110). Placing a pause in between them serves to emphasize the word 'instead of', highlighting that the sufferer has obtained the opposite result from what would be expected according to the logic of his friend.

The next few holes come within some more fragmentary passages and so we will pass them over in favour of those where the context is more secure.[27] Let us now turn to line 259,

[26] The last word is restored, but only the final sign is broken.

[27] Line 131, '*uptēq an* ● [...]', 'She has gone into crisis ●', rest of line broken; 137–8, '*birta lullik* ● *nesâti lūḫuz*', 'The road I will take, distant places ● I will learn my way around' and '*bēra lupti* ● *ag*[*â*] *lumaššir*', 'A well I will open ● flood I will let loose', which is coherent in itself but the lines before and after are not all complete. Between 179 and 180 it looks like there is a hole but it is unusual in being between lines (it is after '*māt*[*a*] *naṭlākū-ma*', 'I look upon' with the rest of 179 broken); although the text of 181 is not preserved on this tablet, from the length of the line it can be presumed that the hole would fall '*mār šarri ḫalip* ● *...*', 'the son of a king is clad ●'—in what we are not told, though the editors restore '[in rags?]', which would follow the pattern of subverting expectations we have already seen.

Fig. 10: Reverse of K 9290 + K 9297. Stanza 24 is pictured left in the third set of rulings. From the Cuneiform Digital Library Initiative. © The Trustees of the British Museum.

which is in stanza 24. It contains the only hole in the whole stanza and follows two stanzas without any holes at all (Fig. 10). In the context of its couplet it reads:

258 *lipit qāt aruru mitḫāriš napišti*
259 *lillidu minsu* • *kalîš lā murri*

258 Among all living creatures, the handiwork of the birth goddess,
259 The offspring, why • does he pay no attention at all?[28]

The hole comes after the word ‘why’, which can easily be imagined as an emphatic one, often drawn out in our own everyday speech when we want to labour a point. However,

[28] This follows the interpretation of Oshima (2014: 367). The word *murrû* is rare, and as explained in a synonym list *malku* = *šarru* as meaning *qâ*[*lu*] *ša aw*[*āti*], ‘heeding of the word’. The verb *qâlu* can mean both ‘to be silent’ or ‘to pay attention’. It is the latter sense that I take to be used here.

this is not uttered by the sufferer but by the friend—it is not the injustice that is being stressed here, but rather the friend's impatience with the inability to see how the gods operate.

The final hole preserved in this manuscript comes in the first line of stanza 25, where the sufferer responds to his friend: *utaqqâm-ma ibrī* • *limad šibqīy*[*a*], 'wait, my friend • learn my (next) trick' (*Theodicy* 265). This is a clear case of where a dramatic pause will emphasize the need to listen to what follows, as it comes after a plea to pay attention.

In summary, the manuscripts of the *Babylonian Theodicy* show a tendency for holes to follow moments that make sense as emphatic, particularly pleas for the other person to listen, and often pick up on themes that the speaker wishes to respond to from the previous speech. Only once is there more than one hole directly next to another, so this shows a simpler pattern than what we will find in some other compositions.

Ludlul bēl nēmeqi

Ludlul bēl nēmeqi is a Babylonian poem often dubbed 'The poem of the righteous sufferer' in modern times.[29] Written in the first person, it is a monologue of a man who has endured great suffering, but does not know what he has done to deserve these punishments from the gods. Similarly to the sufferer in the *Babylonian Theodicy*, he believes he has revered the gods and lived piously, and yet in spite of this he is inexplicably struck by a litany of miseries, from numerous physical diseases to alienation from his friends and family. In the Mesopotamian worldview, this could only mean that he had offended the gods, even if he does not know how. Halfway through the composition in Tablet three, the sufferer has a dream when he saw an exorcist who had been sent by the god Marduk to heal him. And the next day, all of his ailments were lifted. The poem is thus an extended form of praise to the god Marduk, extolling his merciful nature and his power to save life, while acknowledging his ability to inflict terrible punishment. Again, like the *Babylonian Theodicy*, the oldest manuscripts are from Ashurbanipal's library and date to the seventh century BC, but the poem was most likely composed in the second half of the second millennium BC (for discussion see Oshima 2014: 5, 14–17; Lenzi 2023: 5–7).

Only one manuscript has a substantial number of holes—NinNA3, from Ashurbanipal's library, which has 30 holes distributed over 70 lines of text. Five others had them, one other from Ashurbanipal's library (NinNA4, though they are in a part of the tablet where the text is broken away meaning we cannot be absolutely sure where they fell), one from Sippar

[29] The most recent edition is Hätinen (2022), which is available on the electronic Babylonian Library website: https://www.ebl.lmu.de/corpus/L/2/2 (accessed 26 September 2025). Other recent editions, with commentary, include Oshima (2014) and Lenzi (2023).

(SipNB2a), and two from Babylon (BabNB1a and BabNB1b, both small fragments with five and three holes respectively). In addition, one commentary on the poem contains holes (NinNACom1).

Many of the same patterns we saw in the *Theodicy* can also be seen in *Ludlul*: pauses for emphasis and rhetorical effect, including holes either side of a single word. In addition, there are more instances of multiple holes, perhaps to indicate longer pauses, or to draw attention visually to certain parts.

These uses can all be illustrated by a reading of the manuscript NinNA3. The manuscript has been reconstructed from three separate pieces (K 3972 + K 9973 + DT 151), holding lines 1–48 on the obverse and 98–120 on the reverse, a good 70 lines of text in all. K 3972 contains most of the holes—K 9973 is a fragment containing holes in the colophon, but not in the small number of lines preserved on the obverse, and DT 151 has just a single hole in its second line, along with three colophon holes on the reverse. Nevertheless, these were all part of the same tablet, and will be discussed as such. The tablet is a witness to Tablet two of the composition, where the sufferer lists all the misfortunes that have befallen him.

The first pattern to note is the position of the holes vis-à-vis the metrical structure. Of the 21 lines that contain holes, 13 of them place the hole before the final metrical foot (*Ludlul* 2.28, 29, 31, 35, 39, 41, 102, 108, 109, 112, 115, 116, 120). Three lines place it after the first metrical foot, that is the first metrical word (*Ludlul* 2.2, 45, 119), and three others place it in the caesura after the second (*Ludlul* 2.25, 27, 114). Two lines have a hole after the first foot and after the second, both of which are three-foot lines (*Ludlul* 2.44, 106).

Tab. 1: Position of holes in relation to metrical structure.

Location of Holes	**Number of Lines**
Before final metrical foot	13
After first metrical foot	3
In the caesura (after second metrical foot)	3
After *both* the first and second feet	2

This manuscript does not mark the caesura by writing the text in columns, as is common in other poetic manuscripts. We may consider that the holes here have some sort of metrical function, and it is very interesting that the most common placement is not in the middle

(after all, writing each half of the text in columns would be the easiest way to mark that), but three-quarters of the way through the line. We may have here a more sophisticated way of modulating pauses than the more obvious one of simply marking the caesura.

As concerns the number of holes, the most common pattern is a single hole per line, though lines 44 and 106 have single holes in two different places. Two lines use two adjacent holes (*Ludlul* 2.31, 112), and another two lines use three next to each other (*Ludlul* 2.108, 109).

The effect may best be seen by a close reading of the text, where we can consider them in particular lines. The first hole comes in line 2 (on tablet DT 151) where it is placed after the first word in the sentence, and is a beautiful example of where a pause would be emphatic:

> II 1 *šattam-ma ana balāṭ adannu ītiq*
> II 2 *assaḫḫar-ma • lemun lemun-ma*
>
> II 1 One whole year to the next, the expected time passed by,
> II 2 I turned round about me • there was evil, there was evil!

This line consists of three metrical feet rather than four as is the norm in Akkadian, which are presumed to be emphatic (e.g. George 2003: 162–3, who considers them to slow down the tempo of the line). This can also be seen in the repetition of *lemun*, and the twice-repeated emphatic particle '*-ma*', meaning that the line is already emphatic in three different ways. The text hole adds yet another emphasis. A pause after this word would stress the sufferer's constant search for the cause of his suffering, and that everywhere he turns he experiences more and more misfortunes.

Fig. 11: Lines 44 and 45, with the first hole between the lines. K 3972, obverse. From the Cuneiform Digital Library Initiative. © The Trustees of the British Museum.

The next three-foot lines to have holes are 44 and 45, where the hole seems to be in between the lines, thus applying to them both (Fig. 11). The context is a passage describing how mortals are at the mercy of the whims of the gods. After three rhetorical questions asking who could fathom the ways of the gods, a series of contraries is kicked off with a line with three consecutive holes, which transitions to a passage that illustrates the vagaries of the fortunes that the gods bestow:[30]

[30] On rhetorical questions see Piccin (2021: 93–94, 248 relating to this passage, and *passim*).

II 36 *ayyu ṭēm ili qereb šamê ilammad*
II 37 *milikša anzanunzê iḫakkim mannu*
II 38 *ēkâ-ma ilmadā alakti ili apâtu*
II 39 *ša ina amšat ibluṭu* ● ● ● *imūt ūdiš*
II 40 *surriš uštādir zamar uḫtabbar*
II 41 *ina ṣibit appi izammur* ● *elēla*
II 42 *ina pīt purīdi uṣarrap lallariš*
II 43 *kī petê u katāmi ṭēmšina šitni*
II 44 *immuṣā-ma* ● *immâ* ● *šalamtiš*
II 45 *išebbâ-ma* ● *išannanā* ● *ilašin*

II 36 Who could learn the intention of a god, the centre of heaven?
II 37 Her plan [i.e. a goddess] is the abyss, who could understand it?[31]
II 38 Where could human beings have learned the ways of the gods?
II 39 He who was alive yesterday[32] ● ● ● died today,
II 40 In an instant he is gloomy, immediately he grows cheerful;
II 41 In a pinch he sings ● a joyful song,
II 42 In a stride he roars like a mourner;
II 43 Like the blinking of an eye their (the people's) fate changes;
II 44 They hunger ● and become ● like corpses,
II 45 They grow full ● and vie with their gods;

The first line in the sequence has the longest pause, lingering over the positive state of being alive one day, before we plunge into the negative of dying the next. The next hole in line 41 may play with our expectations in the opposite way: we do not know whether the song he is going to sing will be joyful or miserable—the previous two lines might lead us to expect that we are going to start with the more negative states, but actually it begins with a positive one, which illustrates the point that human beings find it difficult to predict what the gods are going to do next.[33] This hole is also directly underneath the set of three above and is exactly aligned with the central hole, forming a T shape, which is also visually distinctive.

The next couplet, 44–5, has the same structure in each line, both of which contain three metrical feet, with emphatic pause after the first word, which, as was the case in line two, is marked with an emphatic particle '*-ma*' as well. In this case the pause serves to emphasize the contrary states that the gods so frequently flip people between. But the first half of this

[31] Following the understanding of Jiménez (2019: 79–81).
[32] Alternatively, reading *am-mat* for *am-šat* (as von Soden 1990: 123 n. 39a) would translate 'he who lived strong ● ● ● died today'. See Lenzi for commentary (2023: 122).
[33] For punctuation marking reversals of expectations in Chinese manuscripts see Krijgsman (2023: 119).

couplet has two holes, meaning that each poetic foot is marked out. This slows down the line and savours it, driving its meaning home, which in turn accentuates the rapid change in state that occurs in the next line, when the starvation is over and people are at their best.

There is one other instance of two holes in the same line either side of a single word, and that is line 106:

> II 106 *ina rubṣīya ● abīt ● kīma alpi*
>
> II 106 In my dung ● I spent the night ● like an ox

The holes enclose the word *abīt*, 'I spent the night,' which might emphasize the duration of time spent—a whole night is a long time to be sitting in one's own excrement. It can be compared with the holes around the word 'I dragged' in the *Babylonian Theodicy* (line 74). This instance also comes two lines before our next major pattern, the grid of six.

Lines 108 and 109 form a couplet with three consecutive holes in each line, directly aligned above each other:

> II 108 *sakikkîya išḫuṭ ● ● ● mašmaššu*
> II 109 *u têrētīya bārû ● ● ● ūtešši*
>
> II 108 From my symptoms recoiled ● ● ● the exorcist,
> II 109 And my omens the diviner ● ● ● confused.
>
> = 'The exorcist recoiled from my symptoms,
> And my omens confused the diviner.'

From the point of view of pauses, in the first half of line 108 we do not yet know who is so horrified by the sufferer's physical afflictions. It could be anyone—friends, family—but perhaps the person who should recoil the least is the one who does, the exorcist, whose job it is to diagnose the spiritual causes of disease and to do something about it. In the next line we are introduced to another professional from whom the sufferer may hope to derive some comfort, the diviner, who ought to understand the omens. But after the pause we are told that he is no more enlightened, only confused. There will be no contrary in this couplet, only a double dose of professional helplessness.

But there is more. The placing of these holes creates a visually striking grid which draws attention to itself on the tablet (Fig. 12). Here is another argument against the theory that

Fig. 12: Grid of six holes in lines 108 and 109 from Tablet two of *Ludlul bel nēmeqi*. K 3972, reverse. From the Cuneiform Digital Library Initiative. © The Trustees of the British Museum.

the holes are for firing, since it would not be logical to cluster them so closely if this was their purpose. But anyone glancing at this tablet would immediately spot the grid, which also serves as a visual marker of this part of the text.[34] Why might these lines be marked out as special? In fact, they are especially relevant to the milieu of this poem's composition, that of the exorcists and their trainees.

It is well established that this poem uses a lot of technical vocabulary specific to medical and incantation literature, which suggests that it may have been used as a teaching tool for apprentices of the spiritual medical specialist (i.e. the exorcist).[35] As Alan Lenzi puts it, the poem narrativizes many of the symptoms that the exorcist would be looking for in his attempt to diagnose a patient who was the victim of witchcraft, demonic attack or abandonment by the gods (Lenzi 2023: 239). In this poem, both the exorcist and the diviner fail to diagnose the sufferer's trouble, and this couplet is where that statement is definitively made. Lenzi has also argued that professional failure is one of the central themes of the poem—what does it mean when the exorcist is not able to diagnose symptoms, or when the diviner is unable to understand the omens? Does it mean that these professionals have failed in their duty, that they are not good enough at their craft (Lenzi 2012; 2023: 279–99)?

It is a question of central importance for those who are studying to be exorcists, one they would have to confront in their professional lives. But Lenzi argues that they should draw the opposite message: the poem shows that whether the exorcist succeeds or fails is not due to their own lack of efficacy, but it is all down to the will of Marduk, the god on whom their power depends. The way the exorcists worked was to reconcile the patient with the gods, to try to persuade Marduk to relent in his anger. If Marduk remains angry in spite of their efforts, he is perfectly entitled to be if he so chooses. The patient in *Ludlul* cannot be cured at first because Marduk is angry no matter what the exorcists do, but he eventually recovers because Marduk's wrath abates. This emphatic two-by-three grid of text holes in

[34] On other tablets, Corò and Ermidoro (2020: 315) notes that grids can reach large sizes, consisting of up to 50 holes.
[35] E.g. Böck (2003: 11–12); Beaulieu (2007: 9); Annus and Lenzi (2010, xviii, xxvii). For a recent thorough study of the vocabulary see Lenzi (2023: 241–78). For a list and analysis of the exercise tablets of *Ludlul* see Lenzi (2023: 187–209).

this couplet is a distinctive pattern immediately recognizable upon looking at the tablet and draws attention to one of the central themes in the poem, one that might have been of most pressing concern for those who produced it.

The anger of Marduk upon which the whole poem turns is emphasized by the first three text holes that are extant in a different manuscript of Tablet one, SipNB2a, a Neo-Babylonian tablet from Sippar that bears the first 15 lines of the composition. It is a small piece in the middle of the tablet and does not preserve the beginnings or ends of lines. This tablet is laid out in two columns, the standard format for marking the poetic's caesura in Babylonian poetry. The fragment has three holes, and all of them are in the caesura between columns, in Tablet one, lines 9, 13 and 18:

I 9 *ša nakbat qātīšu* • *lā inaššû šamāʾū*
I 10 *rittuššu rabbat ukašša mīta*
I 11 *marduk ša nakbat qātīšu lā inaššû šamāʾū*
I 12 *rabbat rittašu ukašša mīta*
I 13 *ina libbātīšu* • *uptattâ qabrātu*
I 14 *īnuššu ina karašê ušatbi maqta*
I 15 *ikkelemmū-ma*‡ *inessû lamassu u šēdu*
I 16 *ippallas-ma ana ša iskipūšu ilšu isaḫḫuršu*
I 17 *akṣat ana surri ennettašu kabittu*
I 18 *ikkarriṭ-ma zamar-ma* • *itâr ālittuš*

I 9 The weight of whose hand • the skies cannot bear,
I 10 Whose gentle hand holds back the dying man (from death);
I 11 Marduk, the weight of whose hand the skies cannot bear,
I 12 Whose gentle grasp holds back the dying man (from death):
I 13 In his wrath • graves are opened,
I 14 At his glance, he raises the fallen from catastrophe;
I 15 He frowns, and protective spirits withdraw,
I 16 He regards (with favour), and he whose god has pushed him away—(his god) returns to him.
I 17 Terrible in an instant is his weighty punishment,
I 18 He shows mercy, and immediately • turns motherly.

If we look at the patterns of where the holes selectively appear within this passage, we see a developing theme. The holes fall after the word *qātīšu*, 'whose hand' (line 9), 'the weight of whose hand • the skies cannot bear'; *libbātīšu*, 'his wrath' (line 13), 'In his wrath • graves are opened'; and *zamar* 'immediately' (line 18). The first word, for hand, *qātu*, is

used in the technical terms to describe divinely inflicted illness, e.g. 'Hand of Marduk' *qāt Marduk*, would be a term employed by the exorcist to diagnose Marduk's wrath as the cause of a medical condition.[36] We thus have two words denoting Marduk's anger, followed by an adverb which emphasizes the speed of his relenting. Anger, more anger, followed by mercy, is the overall trajectory that this poem takes, and this manuscript picks it out at the very start. But it is even more specific than that: there are many words for anger in this opening passage, but marking out the 'hand' of Marduk may hint at the medical manifestation of his rage, while the emphasis given to line 13 may hint that the sufferer will be brought almost to the brink of death, but finally when Marduk does relent, it is indeed swift, as marked in line 18.

In support of this, we may note that the 'hand of Marduk' is referred to twice more in the poem, once in *Ludlul* 1.33, 'as his hand is heavy, his heart is compassionate', and at the start of *Ludlul* 3 (line 1), which explicitly states 'his hand was heavy, I was not able to bear it', which is followed by a reference to the illness in line 5. This directly attributes the speaker's suffering to the hand of Marduk and uses the same language as *Ludlul* 1.9 at the beginning of the poem (Lenzi 2023: 257). Similarly, the word for 'grave' occurs twice more in the whole composition, and at the very end once the sufferer has been saved from Marduk's anger: 'I who returned from the grave came back through the gate of [Sunrise]' (*Ludlul* 5.41) and 'Marduk is able to restore to life from the grave' (*Ludlul* 5.75). Thus, at the end of the poem the sufferer tells us that what was presaged at the start did come to pass—Marduk relented.[37]

Holes in our manuscript of Tablet two also pick up on these themes. In line 112 we find two consecutive holes after the word *qātī*, 'my hand', in the line 'my god did not rush to my rescue, my hand • • he did not take'. This is a use of the word in a different sense, a taking by the hand that would be a gesture of rescue in contrast to the angry metaphorical slap that we find at the beginning of Tablet one. Two lines later in 114 we find a hole after the word for grave in the line 'opened was my grave • my funerary goods set out'. This may hark back to that first hole in *Ludlul* 1.13, which stated that in the brunt of Marduk's anger, graves are opened. The word used for 'opened' is the same in both lines (*petû*), whereas the word for grave is different (*qabrātu* in *Ludlul* 1.13; *kimaḫḫu* in *Ludlul* 2.114), but the meaning

[36] See Lenzi (2023: 257). For the hand of the gods in general see Heeßel (2007, 2018). The hand of Marduk was both a general cause of disease, as in the case of this poem, but also had very specific symptoms, including chest pain (Scurlock 2014: 240, tablet 33, lines 108–9; Scurlock and Andersen 2005: 456, 459), yellow lesions on the face (Scurlock and Andersen 2005: 457), sores that made it difficult to walk (Scurlock and Andersen 2005: 460), bleeding from the nose, mouth or eyes (Heeßel 2000: 254, no. 22, line 35; Scurlock and Andersen 2005: 486) and fever (Heeßel 2000: 16, line 15; 173). These symptoms do not overlap precisely with those listed in the poem, but if they had, the problem would not have been difficult for the exorcist to diagnose. For the hand of Marduk specifically see Heeßel (2000: 16, line 15; 22, line 35; 173; 254 and *passim*), and Scurlock and Andersen (2005: 355–56, 456–57, 459–60, 486).

[37] This also follows a common pattern for the structuring of Babylonian poems, where the beginning points to what happens at the end. For example, on this poem see also Moran (1983: 258a); Piccin and Worthington (2015: 116).

is clearly equivalent. This again is exactly what Tablet one had predicted.

This begins a series of holes continuing in almost every line until the end of the tablet (*Ludlul* 2.115, 116, 119, 120). All of these lines emphasize the dark state of affairs that the sufferer has reached, with holes marking the words 'weeping' (*bikītī*), 'how wretched' (*kī ḫabil*), 'the day grew dark' (*īṭi ūmu*) and 'their sun ● was clouded' (*šamassun ● īrim*). The only two lines not marked in this way describe the joy felt by the speaker's enemies on hearing of his situation (*Ludlul* 2.117–18). In this way the utterly wretched condition of the sufferer is emphasized:[38]

II 115 *adi lā mītūtī-ma bikītī ● gamrat*
II 116 *kal mātīya kī ḫabil ● iqbûni*
II 117 *išmē-ma ḫādûʾa immerū pānūšu*
II 118 *ḫādītī ubassirū kabattaša ippardu*
II 119 *īṭi ūmu ● ša gimir kimtīya*
II 120 *ša qerbi mūdê šamassun ● īrim*

II 115 Before I had died, weeping ● for me was finished.[39]
II 116 All my country, 'How wretched he was!' ● They declared
II 117 When my ill-wisher heard, his face lit up,
II 118 When the news reached my ill-wisher, her mood brightened.
II 119 The day grew dark ● for my whole family,
II 120 Of those close and who knew me, their sun ● was clouded.

One last pattern worth mentioning is the series of holes found between lines 25–35 that seem to mark a section concerned with piety to the gods and good behaviour towards the king (*Ludlul* 2). Line 25 reads 'the day of revering the god ● was a joy to my heart', '*ūm palāḫ ili ● ṭūb libbīya*', with the hole coming in the poetic caesura after the word for 'god'. The next line, which forms a parallelism saying a similar thing but switching the subject to 'goddess', is unmarked. This is exactly what we see in the couplet 112–13, where the opening line concerning the god is marked but the following one concerning the goddess is not. Moreover, just as in that case there was a series of three lines each with one hole in it, so we have the same here, with a hole in lines 27, 28 and 29. In these lines they occur after the words 'king', 'favourable' and 'god'. Line 30 is unmarked presumably because it is a parallelism with 29, with an equivalent measure for a goddess. Line 31 proclaims 'I made the praise of the king like a god's' (lit. 'The praise of a king, to (that of a) god ● ● I

[38] Most of these holes fall before the last word in the sentence, except in line 119 where it falls in the poetic caesura after the word 'day'.
[39] Literally 'my weeping' with the hole following the whole word.

made equal,' *tanadāt šarri iliš* ● ● *umaššil*). The fact that there are two holes here draws special attention to this line. Perhaps it was thought to be an example of especially excessive effort. But there is another explanation. This tablet belongs to Ashurbanipal's library and bears a colophon of the type that claims he wrote the tablets himself.[40] If this tablet was of special interest to the king, it is no wonder that the section concerned with the importance of praying for the king and praising him is marked out.

II 25 *ūm palāḫ ili* ● *ṭūb libbīya*
II 26 *ūm rēdûti ištari nēmelu tattūru*
II 27 *ikrib šarri* ● *šī ḫidûtī*
II 28 *u nigûtašu ana damiqti* ● *šumma*
II 29 *ušāri ana mātīya mê ili* ● *naṣāra*
II 30 *šumi ištari šūqura nišīya uštāḫiz*
II 31 *tanadāt šarri iliš* ● ● *umaššil*
II 32 *u puluḫti ēkalli ummāna ušalmid*
II 33 *lū īde kī itti ili itamgurā annâtī*
II 34 *ša damqat ramānuš ana ili gullultu*
II 35 *ša ina libbīšu mussukat eli ilīšu damqat*

II 25 The day of revering the god ● was a joy to my heart
II 26 The day of serving the goddess was my profit and return
II 27 Praying for the king ● that was my joy
II 28 And his fanfare was as if for a good ● omen
II 29 I taught my land to observe the god's ● rites
II 30 I instructed my people to revere the goddess's name
II 31 The praise of a king, to (that of a) god ● ● I made equal
II 32 And taught the masses reverence for the palace
II 33 if only I knew that these things were always acceptable to a god!
II 34 What is good to oneself may be sacrilege to a god
II 35 What is wretched in one's heart may be good to one's god

One last example where holes are used to highlight particular locations is the comment-

[40] *ne*$_2$*-me-eq* ^{d}AG [*ti-kip sa-an-tak-ki ma-la ba-aš*$_2$*-mu*] / *ina* DUB.MEŠ *aš*$_2$*-t*[*ur as-niq ab-re-e-ma* / *a-na ta-mar-*[*ti ši-ta-as-si-ia*] / *qe*$_2$*-reb* E$_2$.GA[L-*ia u*$_2$*-kin*], 'the wisdom of Nabu, as many cuneiform signs as there are, I have written on tablets, checked and collated, and deposited in my palace for my reading and reading out' (Hätinen 2020: 247, lines 30'–33'; Hunger 1968: 97–8, number 319, lines 6–8). Whether or not Ashurbanipal really did write out himself is another matter (see Livingstone 2007 for a discussion), but nevertheless the statement marks out this tablet as one of special interest to the king. One of Ashurbanipal's scholars alluded to *Ludlul* 2.32 in a petition to the king, casting himself as the righteous sufferer, which would require the king to be familiar with the poem for the point to be effective (Hurowitz 2002: 130 n. 4; Lenzi 2023: 397), and Lenzi further argues that the king himself alluded to *Ludlul* in a personal lament of his own (K 891, Lenzi 2023: 413–24).

ary text NinNACom1 (K 3291) (Lenzi 2015; also published in Lenzi 2023: 349–58). Like the manuscript of Tablet two we have considered, this neo-Assyrian tablet also comes from Ashurbanipal's library, and it is a commentary on *Ludlul*, picking out obscure words from different points in the poem and explaining their meaning. It has only four holes in two lines, making them visually striking (Fig. 13). The commentary quotes a line from the original, then underneath selects a word to explain with a synonym. The lines marked with holes are *Ludlul* 4, lines h+1 and i+16.

Fig. 13: Lines 31 and 37 of Tablet four, displaying four holes with increased exposure for higher visibility. K 3291, reverse. From the Cuneiform Digital Library Initiative. © The Trustees of the British Museum. Modified by Yegor Grebnev.

IV 30 *i-na i-te-e* ^{d}ID$_2$ *a-šar de-en* UN-MEŠ *ib-bi-ru*
IV 30 On the bank of the (divine) river, where people's judgment is decided,

IV 31 *i-te-e* ^{d}ID$_2$ ● ● *ḫur-ša$_2$-an*
IV 31 Bank of the river ● ● (means) ordeal.

IV 36 [*ku-nu-uš*]-ʳ*kad$_3$*ˡ-*ru i-na pi-*ʳ*šer$_3$-ti*ˡ *a-ba-*ʾ*a*
IV 36 I walked along (the street) Kunush-kadru released.

IV 37 [*ku*]-ʳ*nu*ˡ-*uš-kad$_3$-ru* ● ● *su$_2$-qi$_2$ qat-nu*
IV 37 Kunush-kadru ● ● (means) narrow street.

In both cases the holes are in the text of the commentary rather than the lines that are quoted, and they separate the selected word from the synonym that explains it—a useful visual marker to divide the original from the commentary. But this is likely not its only function since even on this tablet such divisions are usually made with a different symbol, the Glossenkeil. Secondly, why would it be marked only in these two lines, and not in every line of the commentary? What these two lines have in common is that they both name specific places. Though Tablet four is very fragmentary, these are the only places mentioned in the surviving text. We may speculate, then, that they might have been picked out for this reason.

Looking at the patterns overall we can make the following observations. Certain patterns are very distinctive visually, such as the grid of six and the T-shape, which immediately stand out and draw attention to specific lines. These and other patterns are useful orientation points for readers looking to locate specific parts of the text. They can be compared to the grid patterns found in the Ashurbanipal colophons, which make it immediately obvious whether one is looking at the obverse or the reverse of the tablet. So here, if one is looking for these key passages, they are immediately identifiable. Any Assyriologist working with tablets finds that the text holes do become useful points of reference for finding our place in the text. The same may well have been true for ancient readers also.[41] If you are looking for the lines where the exorcist and diviner are both at a loss, you do not even need to know the line numbers or read any of the text to spot immediately the grid of six holes that shows you exactly where it is.

Two sections show similar patterns that are of interest: *Ludlul* 2.25–35 and 112–20. Both these passages begin with couplets that show a parallel structure, but in each case only the first line is marked. This is then followed by a series of three holes in quick succession that emphasize particular aspects. In *Ludlul* 2.27–31, positive aspects are stressed: the king, a favourable omen and the rites of the god. Two lines later there is a double emphasis on the line that compares praises of the king to being like praises of god (*Ludlul* 2.31). In the case of *Ludlul* 2.114–16, it is words for 'gloom' that are marked, whereas words for 'joy' are ignored, resuming again after another break of two lines with two more holes with the same emphasis in *Ludlul* 2.119–20. Thus, a very similar sequence unfolds in both cases, though the content they are concerned with is different.

Other thematic markings can be seen in the opening lines of Tablet one on the Babylonian manuscript from Sippar, which picks out words that together encompass the trajectory of the plot of the poem. The Nineveh witness seems to concur, since it picks out thematically connected words later on in Tablet two, even though Tablet one of this manuscript is not preserved. Finally, the holes may be important for the metrics, since the most common

[41] I thank Frank Simons for this observation.

pattern is to place them three-quarters of the way through the line.

Ninurta's Return to Nippur (*An-gin*$_7$)

We turn now to a different and more complex case, bilingual manuscripts in Sumerian and Akkadian of the Sumerian poem *An-gin*$_7$, or *Ninurta's Return to Nippur* (edition Cooper 1978). The poem is a hymn of praise to Ninurta, a prominent Mesopotamian warrior god. This poem may have been composed in the third millennium BC, although the oldest manuscripts date to the first half of the second millennium BC (Cooper 1978: 2). The poem had a long transmission history, with the latest manuscripts currently known dating to the neo-Assyrian period (911–612 BC), more than a thousand years after it was first composed. By this time, the Sumerian text was always accompanied by an interlinear Akkadian translation, since Sumerian was by now long dead. It is these late copies that contain the holes, and which will be the focus of our study.

The poem describes Ninurta returning from his victories in the mountains to the city of Nippur, where he goes to the temple of the chief god Enlil (who is also his father) and demands to be recognized for his feats. It ends with Ninurta being given his due acknowledgement, taking up residence in his own temple and pronouncing a blessing for the king. It has been suggested that this royal blessing may be one of the reasons the poem was of interest to the Assyrian kings who collected it in the library at Nineveh, and that it may have been used in Assyrian Royal rituals (Annus 2002: 123). Thirteen manuscripts were found on the royal citadel, eight of them with holes. Of these, two are intact enough for a thorough study—K 8531 (Cooper's manuscript c) and K 38 (Cooper's manuscript e), while three other fragments show interesting patterns that can be compared with these, Rm 126, 79-7-8 290, and Rm 117 (Cooper's manuscripts d, g and h, with g and h being likely to belong to the same tablet).

Each manuscript is idiosyncratic in its use of the holes. In manuscript h the holes are only in the Sumerian text, while the others put them in both the Akkadian and the Sumerian lines. One manuscript (e) sometimes puts holes in the middle of the line between the Sumerian and the Akkadian, but only at points where the same word appears in the same place in both languages. Furthermore, we see different patterns of hole distribution between manuscripts. For instance, manuscript e uses holes to mark key abbreviations, such as the abbreviation of Sumerian verbal forms, and drawing attention to the Akkadian ditto sign. A particularly striking pattern is that employed by manuscript h$_1$, which uses grids of holes to signal transitions between different sections of the narrative. One pattern that can be seen across all three manuscripts is a tendency to use holes after names or epithets, which is the most consistent pattern of all.

We will begin with manuscript c. K 8531 is an almost complete tablet with 22 holes distributed over 13 lines (Fig. 14). Six of these lines contain only a single hole, while seven have more than one. In six lines the holes occur only in the Sumerian (*An-gin*$_7$ 69, 72, 74, 77, 83, 84), in five they are only in the Akkadian (*An-gin*$_7$ 75, 88, 89, 92, 94), and in two they are in both (*An-gin*$_7$ 79, 87). Some examples follow to illustrate.

Fig. 14: K 8531, manuscript c, obverse (left) and reverse (right). From the Cuneiform Digital Library Initiative © The Trustees of the British Museum.

Two holes after epithets

Two lines have two holes directly next to each other, while one line has three. The two holes next to each other come directly after epithets describing the protagonist of the poem, the god Ninurta (lines 69 and 72):

69 pirig̃ abzu-ta • • me ŋuš šu-ti-a[42]

[42] This paper does not attempt to render Sumerian in accordance with the values proposed by Attinger (Mittermayer 2006; Attinger 2023) because they are based on Old Babylonian sources. However a special case is that I do render nasalised g̃ because despite some evidence to the contrary, it appears that this was known to at least some scholars in the first millennium. For example, Neo-Babylonian texts that spell Sumerian syllabically sometimes write nasalized g̃ signs with signs for the hard g, such as gin$_3$ for g̃en (Krecher 1968: 264–5), which implies that they did not always make a distinction between these two consonants, but on the other hand, the Esagil Commentary, BTT 5 does preserve it (Bennett 2021: 132—I thank Martin Worthington for this observation). Krecher shows that the sign 'mu' meaning 'my' was read as g̃u$_{10}$ in the first millennium, based on one of these syllabic readings (1968: 268—I thank Sam Mirelman

69 The lion from the Abzu ● ● who received the fearsome powers
= 'the lion who received the fearsome powers from the Abzu'[43]

72 lugal a-ma$_2$-ru$_{10}$ ● ● ba-ur$_3$-ta
72 The king, the deluge ● ● as he swept on
= 'As the king swept on (like) the deluge'

We also find holes in the simile describing Ninurta in line 74, after Ninurta's name itself in line 79, and after the ditto sign standing for the name of Enlil in the Akkadian line 88. All of these make sense as pauses, since the composition is a hymn, and so pausing after the name of a deity or a description of them would be a suitable place for the reader or listener to stop and linger on the name or quality being addressed.

Hole position in Sumerian vs Akkadian

Six of the Sumerian lines place the hole after the first two words (*An-gin*$_7$ 69, 72, 74, 77, 79, 84) as just illustrated, and two have the holes after the first word (*An-gin*$_7$ 83, 87). In the Akkadian lines, in three out of seven instances the preference seems to be to put the hole before the final verb (*An-gin*$_7$ 87, 88, 89):

87 *a-ʳbaˡ-ka ina šub-ti-šu*$_2$ ● *la tu-gal-lat*
88 ^{d}MIN *ina šub-ti-šu*$_2$ ● *la tu-gal-lat*
89 ^{d}*a-nun-na-ki ina šu-bat* MIN ● *la tu-ra-ar*

87 Your father in his residence ● do not frighten (him)!
88 Enlil in his residence ● do not frighten (him)!
89 The Anunna in the residence Ubšuʾukkina, ● do not panic (them)!

In all instances the hole comes before the verb 'do not frighten', 'do not frighten', and 'do not panic', and after a list of subjects who should not be alarmed, emphasizing each in turn before repeating the same or a similar verb. This draws attention to the repetitive structure of the text and can be compared with the pattern we saw in *Ludlul* where the hole also comes before the final metrical word of the line.

for this reference). Nasalised g̃ is therefore rendered here since it will be relevant to my argument on disambiguation (see pp. 148–9).

[43] Sumerian translations broadly follow Cooper (1978) with modifications.

Differences between languages in the same line

In the two lines that contain holes in both Akkadian and Sumerian the placement of holes is not identical. In line 87 the hole comes after the first word in the Sumerian, but in the Akkadian it is after the second:

87 a-a-zu ● ki-tuš-a-ni nam-bi$_2$-in-ḫu-luḫ-ḫa-me-en
87 Your father ● in his residence do not frighten him!

87 *a-ba-ka ina sub-ti-šu* ● *la tu-gal-lat*
87 Your father in his residence ● do not frighten (him)!

In line 79 the Sumerian has two holes, but the Akkadian only one, missing out the hole after the name of the deity:

79 en ^{d}ninurta-ra ● silim-ma ● mu-un-na-ab-be$_2$
79 To the lord Ninurta ● (in?) well-being ● he speaks (it?) (i.e. greeted)

79 *ana be-li* ^{d}MIN *šul-ma* ● *i-qab-bi*
79 To the lord Ninurta well-being ● he speaks

The hole in the Akkadian does however parallel its placement in the Sumerian, meaning that one of the pauses is in the same place. At this point in the narrative, Ninurta is approaching Enlil's temple, the chief god of the pantheon. Enlil's vizier comes out to meet Ninurta. The pause after 'lord Ninurta' would emphasize the respect accorded to this god with such a title, and the pause after the word for 'well-being' emphasizes the friendly nature of the greeting.[44]

Differences between manuscripts: Sumerian vs Akkadian

In a rare case of overlap, the extant hole-containing text of manuscript c overlaps with that of manuscript d (Rm 126, Fig. 15) in lines 77, 79, 87 and 88 (*An-gin*$_7$), so we can see where two different tablets place the holes. We might expect them to match, but they do not. It is important to note the large amounts of empty space available in the first three lines on this tablet, which we might expect to contain holes if their purpose really was to fill in blanks.

Manuscript c places the hole after the second word in the Sumerian:

[44] The manuscript also has a hole in the corresponding Akkadian line which appears to be after the word for 'well-being'. The photograph is difficult to read and needs collation.

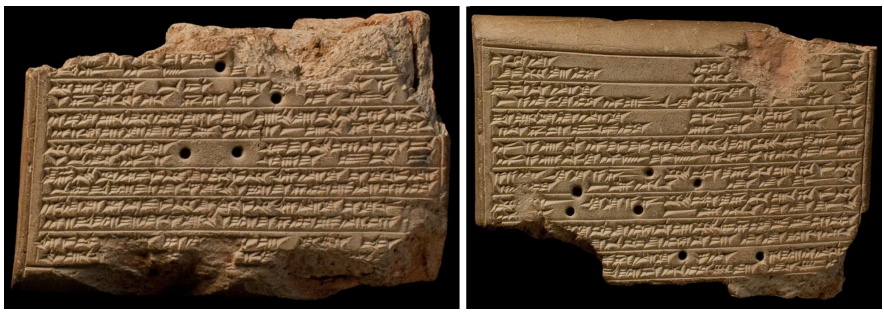

Fig. 15: Rm 126, manuscript d, obverse (left) and reverse (right). From the Cuneiform Digital Library Initiative. © The Trustees of the British Museum.

77 nibru^{ki}-še$_3$ bad-ra$_2$ • li-bi$_2$-in-te-a-da
77 To Nippur from afar • that he might not approach

Manuscript d has a hole in the corresponding place in the Akkadian translation:

77 *ana ni-pu$_2$-ri ne$_2$-si-iš • la ṭe$_4$-ḫe-e*
77 To Nippur from afar • that he might not approach

Semantically it is the same phrase being marked, but the scribe has chosen to mark it in the second language rather than the first.

Differences between manuscripts: one hole instead of two

In line 79 manuscript c has a hole after the first two words in the Sumerian and a second one after the third word.

79 en ^{d}ninurta-ra • silim-ma • mu-un-na-ab-be$_2$
79 To the lord Ninurta • (in?) well-being • he speaks (it?) (i.e. greets)

Manuscript d, however, has two holes next to each other, placed between the Sumerian and the Akkadian lines, implying they apply to both, and does not have a hole after the word for well-being (Fig. 16).

79 en ^{d}ninurta-ra • silim-ma mu-un-na-ab-be$_2$
79 To the lord Ninurta • (in?) well-being he speaks (it?) (i.e. greets)

Fig. 16: Rm 126, manuscript d, reverse, line 79. From the Cuneiform Digital Library Initiative. © The Trustees of the British Museum.

79 *ana be-li* ^{d}MIN ● *šul-ma i-qab-bi*
79 To the lord DITTO ● well-being he speaks

Differences between manuscripts: positions reversed

The two manuscripts can also be compared on lines 87 and 88. Here they show the same pattern reversed with respect to the placement in the Sumerian and Akkadian lines.

In line 87 manuscript c has the hole after the first word in the Sumerian but before the last word in the Akkadian:

87 a-a-zu ● ki-tuš-a-ni nam-bi$_2$-in-ḫu-luḫ-ḫa-me-en
87 Your father ● in his residence do not frighten him!

87 *a-ba-ka ina sub-ti-šu* ● *la tu-gal-lat*
87 Your father in his residence ● do not frighten (him)!

Manuscript d swaps these around, and has the hole after the second word in the Sumerian and the first in the Akkadian, and also adds another hole in the Akkadian:

87 a-a-zu ki-tuš-a-ni ● nam-bi$_2$-in-ḫu-luḫ-ḫa-me-en
87 Your father in his residence ● do not frighten him!

87 *a-ba-ka* ● *ina sub-ti-šu* ● *la tu-gal-lat*
87 Your father ● in his residence ● do not frighten (him)!

A pause after the word for father may be seen as a call for respect—Ninurta should not frighten his own father, least of all in his own house, which would explain the second hole in the Akkadian of this line.

Differences between manuscripts: extra lines with holes

Unfortunately, this is where our overlaps come to an end, but manuscript d also had a hole in line 76 where manuscript c did not. Interestingly, it was in the same position as the pattern shown by manuscript c thus far, after the first two words of the line, though this time in the Akkadian:

76 *qar-rad* DINGIR.MEŠ ● *ma-a-ta ina sa-pa-ni*
76 The warrior of the gods ● when he was levelling the land

Again, the pause emphasizes the epithet given to the god before it describes his activities. This makes sense given that the poem is fundamentally a hymn of praise to Ninurta—lingering over his epithets, titles and descriptions is consistent with the hymnic function of listing a god's attributes in order to praise him.

Multiple consecutive holes

Finally in manuscript c, we note three holes next to each other in line 83:

83 ^{ĝiš}gigir-zu ●●● gu_3-de_2 ur_5-$ša_4$-bi
83 Your chariot ●●● sounding its roar

This may signal the start of Ninurta's approach to the temple, since the next line also describes this:

84 $ĝir_3$ ĝin-na-zu-$še_2$ ● an ki-a ● tuk_4-tuk_4
84 At your approaching step ● heaven and earth ● tremble

A pause makes the audience anticipate what will happen when the god approaches, and whatever it is will encompass all heaven and earth, emphasized by the pause after this as well. The extra holes in line 83 may indicate a longer pause, or a more distinctive way to draw attention to this line.

In summary, no patterns are absolutely consistent, but there does seem to be a tendency to put the holes after names, epithets or descriptions of deities, which is appropriate for the hymnic format of the text. Different manuscripts of the same lines mark holes differently, whether that is in the choice to put them in the Sumerian or Akkadian text, the number of the holes or the position of the holes. This points to the idiosyncratic choice of the scribe, and what they decide is the best place to put the emphasis in the line.

Manuscript e

We turn now to our second substantial manuscript, manuscript e, which has the tablet number K 38 (Fig. 17). This manuscript shows very interesting patterns, using holes to mark abbreviations, as disambiguating features and to emphasize names or descriptions, similarly to what has just been shown in manuscript c. Note again that in the top left corner of the obverse there are two lines with plenty of empty space that has not been filled.

Fig. 17: K 38, manuscript e, obverse (left) and reverse (right). Photo from the British Museum. © The Trustees of the British Museum.

On the obverse we find holes in the beginning of a long passage of 23 lines that list different weapons that the god Ninurta is carrying into battle with him (129–52). There are holes in every one of these lines on the obverse (the first eight of the passage as a whole), and yet in none of the preceding ones, meaning that they visually draw attention to this section and could have been used to locate it on the tablet. On the reverse it tapers off, and there are only four lines with holes in the remaining 12 lines. Nevertheless, on the obverse, the location of the holes is clear (Fig. 18).

Some general patterns within these lines can be observed, mainly concerning the marking of names and the holes before the verb which come at the end of the line in every instance. In each case, a dramatic pause again makes literary sense. The first eight lines read:

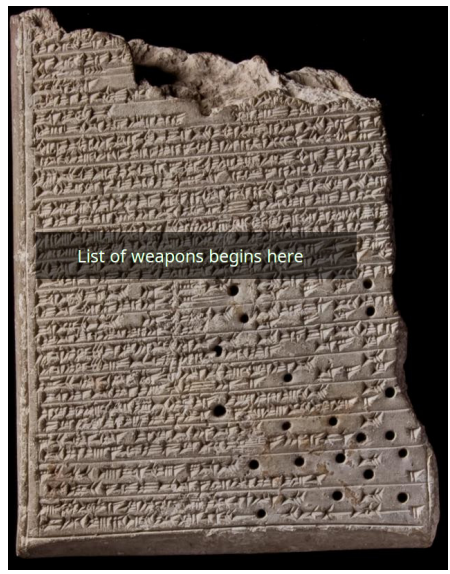

Fig. 18: List of weapons marked by the insertion of holes. K 38, obverse. Annotations by author. Modified by Yegor Grebnev. Photo from the British Museum. © The Trustees of the British Museum.

129 a_2 zi-da-ĝu$_{10}$ ^{d}šar$_2$-ur$_3$-ĝu$_{10}$ ● mu-e-da-ĝal$_2$-la-am$_3$
129 On my right arm Šar-ur ● I bear[45]

129 *i-na im-ni-a* ^{d}*šar$_2$-ur$_4$* ● *na-ša$_2$-ku* ● [*-ma*]
129 On my right arm Šar-ur ● I bear

130 a_2 gub$_3$-bu-ĝu$_{10}$ ^{d}šar$_2$-gaz-ĝu$_{10}$(MU) ● mu-e-da-ĝal$_2$-la-am$_3$
130 On my left arm my Šar-gaz ● I bear

130 *i-na šu-me-li-ia* ^{d}*šar$_2$-gaz* ● *na-ša$_2$-ku* ● -ˈ*ma*ˀ
130 On my left Šar-gaz ● I bear

131 ^{d}ud-zu-ninnu ^{ĝiš}middu nam-an-na-ĝu$_{10}$ mu-e-da-ĝal$_2$-la-a[m$_3$]
131 Udzuninnu, mace of my An-ship, I bear

131 ^{d}*ud-zu$_2$-ninnu miṭ-ṭi* ^{d}*a-nu-●-ti-ia na-ša$_2$-ku-*ˈ*ma*ˀ
131 Udzuninnu, mace of my Anu-●-ship I bear

[45] Literally: ‘is there’, but with the same sense as the Akkadian.

132 mes kur gul-gul ^{d}ud-ba-nu-iɬ$_2$-la-ĝu$_{10}$ mu-
132 The youth who destroys the mountains, my Udbanuila, (abbreviated verb).

132 *eṭ-la mu-ab-bit* KUR-*i* ^{d}MIN ● *na-ša$_2$-ku-*[*m*]*a*
132 The youth who destroys the mountains, DITTO ● I bear.

133 ^{ĝiš}tukul ušumgal-gin$_7$ ad$_x$ gu$_7$-e aga-silig-ga-ĝu$_{10}$ mu-●
133 The weapon which like a dragon eats corpses, my agasiliga axe (abbreviated ● verb)

133 *kak-ku ša$_2$ ki-ma u$_2$-šum-gal-li* ● *ša$_2$-lam-ta ik-ka-lu* MIN ●
133 The weapon which like a dragon ● eats corpses DITTO (Sumerian: agasilig-axe) ●

134 niĝ$_2$ kur gul-gul ^{ĝiš}tukul idim an-na-ĝu$_{10}$(MU) ● ● mu-
134 The destroyer of the mountains, my heavy weapon of heaven ● ● (abbreviated verb)

134 *mu-ab-bit ša$_2$-di-i kak-ku kab-tum ša$_2$ ^{d}a-nim* ● ● MIN
134 The destroyer of the mountains, heavy weapon of heaven ● ● DITTO

135 niĝ$_2$ kur gur$_2$-gur$_2$ nun a$_2$-tir-imin-na-ĝu$_{10}$ ● ● ● mu- ●
135 The one that makes the mountains bow down my seven–bladed cutlass(?) ● ● ● (abbreviated verb) ●

135 *mu-kan-niš ša$_2$-di-i nu-na ša$_2$ se-ba ab-ra-šu$_2$* ● MIN
135 The one that makes the mountains bow down, seven–winged cutlass(?) ● DITTO

136 šilam me$_3$-a ki-bal-a ^{sa}al-ḫab-ba-ĝu$_{10}$ ● mu- ●
136 The cow of battle in rebellious lands, my *alluḫappu*-net ● (abbreviated verb) ●

136 *lit-ti ta-ḫa-zi al-lu-ḫap-pu* ● KUR *nu-kur$_2$-tim* MIN
136 The cow of battle, *alluḫappu*-net ● in rebellious lands (abbreviated verb)

The first four lines all give the names of the weapons, and all four have holes in them. In three of them the holes come directly after the name, which may lend itself to an emphatic

pause.[46] The outlier is line 131, where the hole comes in the middle of the word for 'Anu-ship', but here again the hole comes after the name of the deity, and before the grammatical element turning it into an abstract noun. The god Anu is the sky-god and the term 'Anu-ship' usually designates a high position of power, so what is being emphasized here is the high status of the mace.[47] A similar phrase occurs in line 134 where the Akkadian describes the mace as '*ša* ^{d}*a-nim*', 'of Anu', followed by two holes, perhaps displaying a similar pattern. After this, the list continues, but the weapons are no longer named, simply described. The next proper name comes in line 141 which is given to a 50-headed mace, 'deluge of battle', a name which is also followed by a hole in both Sumerian and Akkadian.[48]

Three more proper names appear in lines 145, 146 and 149. Here the pattern is slightly different, with the hole coming before the name, but after the description of it, which fits with the pattern we saw in manuscript c that likes to emphasize epithets.[49]

Thus, all but one of the proper names in this passage (*An-gin*$_7$ 129–49) are followed or preceded by a hole to emphasize them.[50] Those instances where the hole comes before the name also come after a notable description which would also be worthy of lingering on. Another pattern to note is that in the first eight lines (*An-gin*$_7$ 129–36) the hole comes before the verb at the end of the line (including the holes that mark abbreviations of the verb as we will shortly see). Since the verb is the same in every case, a pause before it emphasizes the repetitive structure of the passage. This was the case also in manuscript c in lines 87–9.

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[46] Lines 129 and 130 in both Sumerian and Akkadian, line 132 has the hole only after the Akkadian name which is written '^{d}DITTO'.

[47] See Krul (2018: 141–42); Gabbay (2018: 42–43 n. 182). Cooper translates the phrase as 'heavenly mace', since An/Anu is the sky god (1969: 79). Other maces connected to An include one mentioned in the *Death of Ur-Namma* 92, i-mi-tum piriğ an-na, 'lion(-headed) imitum-mace of An' (Flückiger-Hawker 1999: 117), Gudea cylinder B (7.24) mi-tum-an-na-ke$_4$ 'mace of An' (Edzard 1997: 92), and *Lugalbanda and the Mountain Cave*, where the sun god is described as šita$_3$ ku$_3$ an-na-ke$_4$ 'holy mace of An' (Vanstiphout 2003: 130–1, line A 486).

[48] That this is a name and not just an epithet is supported by *Lugal-e* 82, which comes in a passage when Ninurta is arming himself for battle, and reads:

> 82 ma$_2$-ru$_{10}$ še-ba mu-un-de$_3$-gub
> 82 He set the deluge on his *arm*
>
> 82 *a-bu-bu ina kit-tab-ri-šu*$_2$ *iz-za-az-zu*
> 82 The deluges stand on his arm (van Dijk 1983: 62)

Here, too, the weapon is not described, but simply given a name. For discussion of this line see Wisnom (2020: 138–39), where I suggest it is a quiver. However, it may also refer to a mace in *Lugal-e*, since the context here might explain why 'deluges' is plural in the Akkadian: it may refer to the plurality of heads on the 50-headed mace.

[49] The same pattern occurs in line 133 in both the Sumerian and the Akkadian, where the hole comes after the simile describing the weapon. See above for quotation.

[50] Manuscript g also shows this pattern, for example in line 202: ^{d}ninurta ● dumu ^{d}en-lil$_2$-la$_2$ / ^{d} ● MIN mar ^{d} ● MIN, 'Ninurta ● son of Enlil' in Sumerian and '{divine determinative} ● MIN (i.e. Ninurta) son of {divine determinative} ● MIN (i.e. Enlil).

Holes between languages

Further features are worthy of attention. Firstly, some holes are placed not in the Sumerian or the Akkadian but between them. For example, line 129 places a hole on the border of the line rather than in one language or the other. This is likely because it falls after exactly the same word in both languages, though the Akkadian has an extra one at the end of the sentence as well (Fig. 19).

Fig. 19: K 38, obverse, line 129. Hole (left) placed between the two languages. From the British Museum © The Trustees of the British Museum.

129 a_2 zi-da-ĝu$_{10}$ ^{d}šar$_2$-ur$_3$-ĝu$_{10}$ ● mu-e-da-ĝal$_2$-la-am$_3$
129 On my right arm my Šar-ur ● I bear

129 *i-na im-ni-a* ^{d}*šar$_2$-ur$_4$* ● *na-ša$_2$-ku* ● [*-ma*]
129 On my right arm Šar-ur ● I bear ●

The same phenomenon occurs in line 130, which is parallel in content as well as form with the placement of holes.

Abbreviations

The holes have another use too: this manuscript also uses them to mark abbreviations. Abbreviations are common in repetitive passages in other bilingual manuscripts; elsewhere scribes write only the first half of the line in either language, or even omit an Akkadian translation altogether (Cooper 1969: 106, 112–13).[51] Since this is a list of weapons, the verb is identical at the end of each line: mu-e-da-ĝal$_2$-la-am$_3$ / *na-ša$_2$-ku* / 'I bear'. However, this is only spelled-out the first three times (*An-gin$_7$* 129–31). After this, the Sumerian tends to write simply the first sign, 'mu' for the next 16 lines (*An-gin$_7$* 132–46), while the Akkadian writes 'ditto' (MIN). The second time this abbreviation occurs (interestingly not the first), there is a hole between the Sumerian and Akkadian lines, occurring after this first 'mu' sign and after the Akkadian ditto (*An-gin$_7$* 133).

133 ^{ĝiš}tukul ušumgal-gin$_7$ ad$_x$ gu$_7$-e aga-silig-ga-ĝu$_{10}$ mu-●
133 The weapon which like a dragon eats corpses, my agasiliga axe ●

[51] For a survey of abbreviated writings in cuneiform texts in general see Worthington (2020b), though markings of this type are not discussed.

133 *kak-ku* $\check{s}a_2$ *ki-ma* u_2*-šum-gal-li* ● $\check{s}a_2$*-lam-ta ik-ka-lu* MIN ●
133 The weapon which like a dragon ● eats corpses DITTO (Sumerian: agasiliga-axe) ●

After this, holes after abbreviations occur twice more in quick succession, occupying the same position in the Sumerian lines of 135 and 136, but now the Akkadians lines have their own holes before the ditto.[52] The illustration below shows where the verbs are written out in full (underlined in red), where the abbreviating holes occur after the 'mu' sign (circled in red), and the holes before the Akkadian ditto (circled in blue).

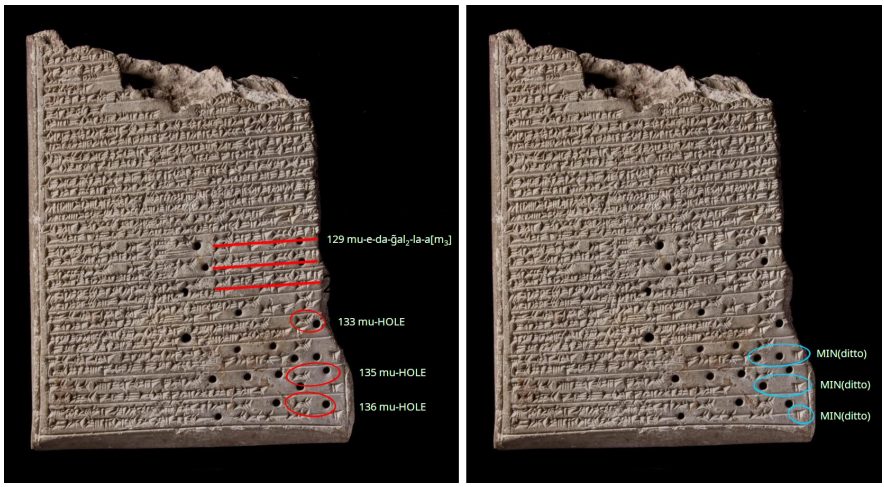

Fig. 20: K. 38, manuscript c, obverse. Holes marking abbreviated verbs in the Sumerian pictured left. Holes in relation to the ditto sign in Akkadian pictured right. Annotations by author. Modified by Yegor Grebnev. Photo from the British Museum. © The Trustees of the British Museum.

Then on the other side of the tablet even though the abbreviations carry on for another 10 lines, they are not marked in the same way. This may simply be because once the pattern was established there was no need to carry on. As a comparison, there are Chinese manuscripts that start off by introducing a convention for marking something, but do not do so consistently—after the first few instances, the reader is supposed to get the idea (Krijgsman 2023: 116).

[52] Manuscript g also places a hole before the Akkadian ditto sign in line 202: ^{d}ninurta ● dumu ^{d}en-lil$_2$-la$_2$ / ^{d} ● MIN mar ^{d} ● MIN, 'Ninurta ● son of Enlil' in Sumerian and '{divine determinative} ● MIN (i.e. Ninurta) son of {divine determinative} ● MIN (i.e. Enlil)' in Akkadian.

Disambiguating holes

The second pattern relating to the sign mu and the holes is that holes are very often found between two mu signs of adjacent words. This might be a way of marking the end of one word and beginning of another, which could be especially useful given that Sumerian was a dead language when this manuscript was copied. We find this feature six times, in lines 129, 130, 134, 135, 136 and 141, illustrated below. In each case we have mu at the end of a word followed by a hole (or multiple holes) and then the mu of the next word (Fig. 21).

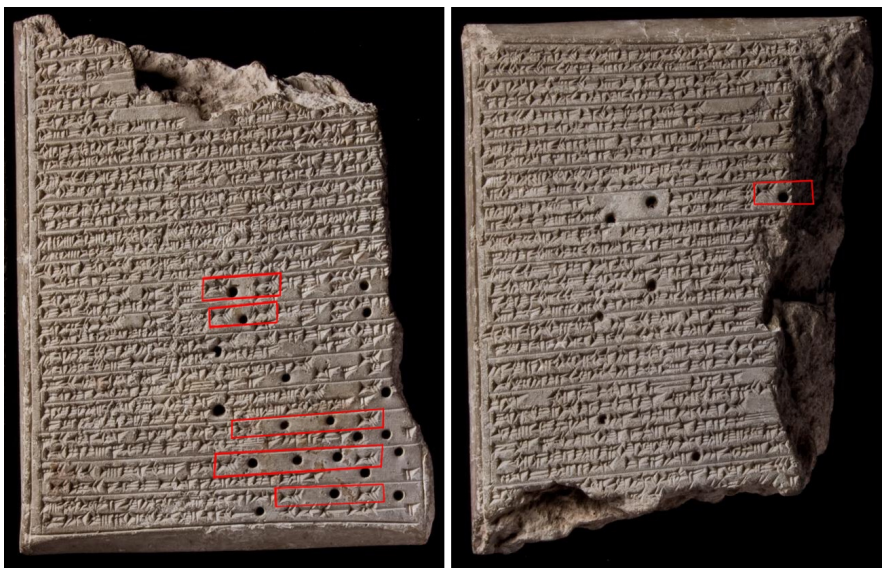

Fig. 21: K. 38, manuscript c, obverse (left) and reverse (right). 'mu' signs belonging to different words separated by holes. Annotations by author. Photo from the British Museum. © The Trustees of the British Museum.

Looking at the text, we see that the two mu signs would have been pronounced differently:

129 a_2 zi-da-ĝu$_{10}$ ^{d}šar$_2$-ur$_3$-ĝu$_{10}$(MU) • mu-e-da-ĝal$_2$-la-am$_3$
129 On my right arm my Šar-ur • I bear

129 *i-na im-ni-a* ^{d}*šar$_2$-ur$_4$* • *na-ša$_2$-ku* • [*-ma*]
129 On my right arm Šar-ur • I bear •

The sign that means 'my' tacked onto the end of the name of the weapon Šar-ur is writ-

ten with the 'mu' sign but was originally pronounced ĝu.[53] This might have tripped up the ancient scribes, hence perhaps a disambiguating signal might have been useful.[54] By this time Sumerian had not been spoken as a first language by anyone for over a thousand years, and the Assyrians scribes who wrote this manuscript might have been helped by these extra aids. However proficient they were in Sumerian, the presence of two consecutive 'mu' signs may still have been a stumbling block. Worthington has shown that cuneiform scribes in the first millennium use a variety of strategies to aid the readers in disambiguating different sign readings even when writing Akkadian, including plene spellings and consistency in using different homophonous signs for different purposes (2012: 266–82). Using text holes for disambiguation would then be yet another strategy to add to this list.

Two 'mu' signs are found next to each other in lines 131 and 132, so it is not entirely clear why they have not been marked here. But again this follows a similar pattern to the previous phenomenon, where the hole marks the abbreviated 'mu' three times before stopping, skipping two lines in the process. Here, we also have a skipped two lines before the pattern makes itself clear, three times in quick succession, then stopping for five lines, before occurring once more, perhaps as a reminder.

Grids for transitions

Finally, let us turn to manuscript h, a small fragment preserving eight lines on the obverse and another eight on the reverse. Despite its small size, both obverse and reverse contain grids of holes, a different type of pattern from what we have seen so far.

The obverse displays a grid of eight holes, two per line over four successive lines, 177–80. These lines are relatively short compared to the following ones, which may invite the suggestion that the purpose of the holes is 'decorative' or to fill space. It is true that the last three lines on the tablet are crammed full of signs all very close together, with no space for holes in them. However, if the holes are decorative, what exactly do they decorate? I suggest that here they are a visual marker of a change in section (Fig. 22).

The previous 63 lines consisted of a speech of the god Ninurta, listing his various weapons (as detailed above), then exhorting the gods to honour him and praising his own powers. The grid marks the end of the speech and the transition to the next part of the text, where Ninurta leaves his father's temple and is addressed by another deity, the goddess Ninkarnunna, who beseeches him to look favourably upon his city and bless the king. The holes come in the middle of the lines starting from Ninurta's exit from the temple and introducing the deity who is about to speak:

[53] The number 'ten' is a modern convention to differentiate the sign from other homophones.

[54] Comparisons can be found in ancient China, where manuscripts are marked 'to alert a reciter to a potential stumbling block in the text' (Richter 2023: 181).

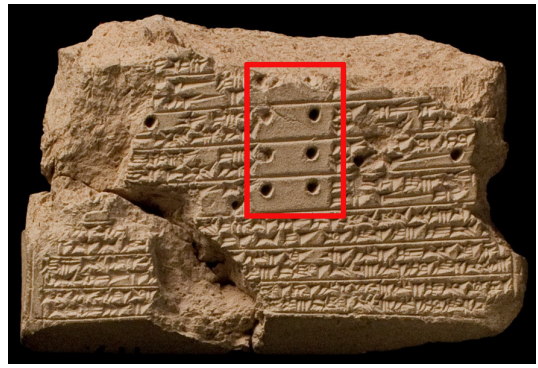

Fig. 22: Grid of eight holes pictured. Rm 117, manuscript h, reverse. Annotations by author. From the Cuneiform Digital Library Initiative. © The Trustees of the British Museum.

177 e_2 ^{d}en-lil$_2$-la$_2$-ta ● ● [e_3-a-ni]
177 From Enlil’s temple ● ● [as he went]

178 [saĝ-ki] ● zalag$_2$-ga ● ● ur-saĝ-ĝa$_2$ [ ]
178 Brow ● bright ● ● of the warrior (i.e. ‘the bright-browed one among warriors’)[55]

179 [inim] sa$_6$-ga ● ● ^{d}ninurta-ka-k[e$_4$]
179 The favourable word ● ● of Ninurta

180 [^{d}]nin-kar-nun-na ● ● ĝiš bi$_2$-in-tuk-˹a¹-[ta]
180 Ninkarnunna ● ● after she heard

I.e., ‘as he went from Enlil's temple / the bright-browed one among warriors / Ninkarnunna, having heard / Ninurta's favourable speech’

Having introduced the deity who was about to speak, the text goes on to quote her speech. The grid is therefore an immediately recognisable marker of a turning point in the narrative. The lines themselves are not particularly interesting, which supports the idea that the grid marks a section rather than these lines being important in their own right.

During the speech, more holes occur, specifically marking names just as we saw in the section on weapons in manuscript e. In line 186, the goddess Ninkarnunna tells Ninurta to

[55] Though this translation is difficult to integrate in the text, that given in brackets seems to be how it was understood it as it accords with the Akkadian translation [*zi-m*]*e nam-ru-ti ša*$_2$ *qar-ra-d*[*i*] ‘the bright face of the warriors’.

speak to his wife, and we find a hole immediately after the word that describes her as a 'young woman' (ki-sikil in Sumerian, *ar-da-ti* in Akkadian) and before her name in both the Sumerian and Akkadian (Ninnibru in Sumerian, the ditto sign in Akkadian). The same pattern occurs in line 189, where the holes appear before the names of the prince and the goddess Ninkarnunna (and ditto in Akkadian).

Shortly after she finishes speaking, we find another grid, this time a horizontal one of six with three consecutive holes in each line over two lines (Fig. 23).

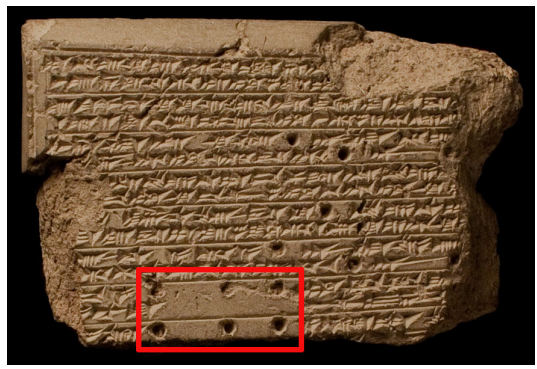

Fig. 23: Grid of six holes pictured. Rm 117, manuscript h, obverse. Annotations by author. From the Cuneiform Digital Library Initiative. © The Trustees of the British Museum.

190 u_4-bi-a ● ● ● ka $siskur_x$-ra-ke_4
190 At that time ● ● ● with prayerful words

191 $ša_3$ kadra ● ● ● a $šed_7$-de_3 sud-a
191 The heart (i.e., Ninurta's) with an offering ● ● ● cool water he sprinkled

= 'At that time, with prayerful words, / (Ninkarnunna) sprinkled (Ninurta's) heart with an offering of cool water'

Why might this be visually emphasized? We have reached another key transition point in the narrative, when Ninurta proceeds to his own temple, the Ešumeša in Nippur. This is the climax of the whole poem, when the god takes up residence in his own shrine. The grid comes just before this, and it might be suggested that the goddess sprinkling Ninurta with water is a key ritual action marking the importance of this event.

Conclusion

In conclusion, I hope to have demonstrated that reading the text holes as pauses makes good literary sense in almost every case, and that they sometimes have other meanings as well. In summary I suggest that text holes can represent:

1. A pause, like a modern comma in English. Pauses by their nature are also emphatic.
2. A highlight, to draw attention to a phrase, line or section.
3. A mark of an abbreviation, like a modern full stop.
4. A disambiguating mark, to distinguish between different readings of identical adjacent signs.

The first two are the most common, while three and four are so far only seen on one manuscript. Further study of other bilingual manuscripts would be instructive to determine whether this is a broader principle or simply the decision of one scribe. The functions of pauses and other markers sometimes overlap, as they signal importance in both auditory and visual ways. But not every manuscript puts them in the same place, and different scribes choose to emphasize different things.

If the holes represent pauses as I have argued, this would give us significant information about the text's performance or recital. The performance of Babylonian poems is a contentious issue: there is internal evidence for some of the epics being sung, but the *Theodicy* and *Ludlul* are not usually counted among them, and nothing is known of what the performance would have been like.[56] Nevertheless, the format of these texts lend themselves to it—the *Theodicy* is in the format of a razor-sharp back-and-forth between two friends, *Ludlul* begins with a 40-line hymn to Marduk, and *An-gin*$_7$ is also a hymn to the god Ninurta. Hymns are intended to be sung, at least when they are first composed. Any performance of a written text would not rattle straight through it but would pause at appropriate moments.[57] The holes give useful indications of where these could fall.

A further piece of evidence for the texts being read out loud comes from the colophon to the manuscript of *Ludlul* 2 that we have analyzed. It includes an explicit statement 'I deposited

[56] For a summary of the evidence see Wisnom (2023: 113). See West (1997) for some theoretical reconstructions of metre in performance, where pauses are considered key. Performative indications are given on many tablets of a different corpus of texts, that is cultic lamentations, indicating pitch, melismata and length of the sounds (Mirelman 2010; Gabbay and Mirelman 2011), but these tablets are all much later in date than those considered here, stemming from the Hellenistic period. Note however Reiner's proposal that plene spellings in the Assyrian elegy, which is contemporary with our manuscripts, may be clues to tenor or intonation (1985: 90–1).

[57] For a comparison see the reconstruction of a recitation of ancient Egyptian poetry in Parkinson (2009: 41–68). See also Parkinson (2002: 117), stating that forms of punctuation on literary manuscripts, as well as the fact they are written in verse, show that the texts were intended to be recited. For the same view of Medieval Latin manuscripts see Pohl (2016: 184).

it in my palace for reading and reading out', *a-na ta-mar-*[*ti ši-ta-as-si-ia*] *qe$_2$-reb* E$_2$.GA[L-*ia u$_2$-kin*] (32'–3'). This is a standard colophon that appears on many other texts in the library, containing both a verb that must apply to silent reading (*ta-mar-ti*, literally 'viewing' from the verb *amāru* 'to see') and one referring to reading out loud (*ši-ta-as-si-ia*, derived from the verb *šasû*, 'to call out').[58] Oral recitation in one form or another is, then, extremely likely, whether performative, or as part of the act of reading. Yet even so, the texts need not have been voiced in order for pauses to be heard. In our own system of punctuation, a comma is a pause in the mind, whether or not the text is read out loud, and pauses are useful aids to interpretation in silent reading also.[59]

Given that text holes are common not only in literary works but in many other genres, these findings are relevant to all types of Mesopotamian scholarship. We can read ritual, magical, lexical, omen, medical and commentary texts with these principles in mind to see if holes mark important words, passages or moments, where a pause or emphasis would draw special attention. Considering that ancient scribes may have emphasized different things to what we expect, this can be an opportunity for us to consider in what way the marked places might be special, which may lead us to spot important aspects that have so far gone unnoticed. In the case of multiple holes in patterns or grids, we can also ask how does locating this passage on the tablet help readers find their way around the texts? In performative texts such as rituals they may have a practical function in helping to orientate the exorcist in what happens when, assisting performance in a different way from recital instructions. The meanings can be many, yet one thing is certain: the holes are not random and do not only fill empty space as is so often assumed. They must have a meaning, even if it varies, and such variation is entirely consistent both with the workings of the cuneiform script and the comparative history of punctuation. This history can now be extended into Mesopotamia, giving further comparative material to this field and raising further questions about how Mesopotamian scribes contributed to its development.

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[58] Hunger (1968: 97–98, number 319, lines 6–8). See also Charpin (2010: 42).

[59] Cf. Ben Zvi (2000: 22), on silent reading as inaudible but mentally vocalized. See Worthington (2020a: 250–52) for the importance of mental vocalization and how it can significantly affect interpretation.

for research assistance. Any remaining errors are my responsibility.

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