

Cécile Michel

# Binding Cuneiform Tablets in One Unit

**Abstract:** Cuneiform texts have survived in great majority in the Near East, written in 3D in negative on all sides of sun-dried clay tablets. This type of medium is not suitable *a priori* for binding. Nevertheless, there were several solutions to ‘bind’ together cuneiform clay tablets into one unit. Small quadrangular tablets were pierced to allow a string to pass through to attach them to an object, often a basket with tablets. Also, some texts, whether literary, mathematical or epistolary in nature, were not limited to the surface of a single tablet, however large it may be. These literary and mathematical tablets were not physically linked. However, in most cases, they were virtually bound through a colophon indicating their incipit and their number within a series. Letters, on the other hand, sometimes written on more than one tablet, had to reach their addressee in a single unit represented generally by an envelope. Several examples from the second and first millennia BCE have been identified as ‘second page’ of letters, this contribution envisages how these letters have reached their recipients in one unit.

## 1 Introduction

Cuneiform writing is a three dimensional script which was used for more than three millennia in a vast area from the Mediterranean to Iran, from the Persian Gulf to the Black Sea. Texts were written over a great variety of media: clay, wood and wax, stone, metal, shell, bone, etc. Most of those which survived and were excavated in Near Eastern sites used sun-dried clay tablets as a medium. Archaeologists also recovered quantities of cuneiform texts written on stone and on metal. The ancient texts refer to wooden tablets coated with wax as a common writing medium from the late third millennium BCE on; this organic material has not survived time. Only a few luxury samples made of ivory were unearthed in the ruins of the city of Kalhu.<sup>1</sup>

Clay tablets were usually covered with cuneiform signs on all sides (obverse, reverse, bottom and side edges), and such a medium does not seem, *a priori*, suitable for binding. Nevertheless, visible and non-visible elements on

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1 Michalowski 2021 and Michel 2021.

the clay tablets suggest that they could be linked to other written artefacts. Some tablets show, for example, holes for strings and were meant to be attached to something. Also, many texts from the ancient Near East, whether literary, scholarly or epistolary in nature, were not limited to the surface of a single tablet, however large it may be. Sometimes, a specific mention in the text itself helped to replace a specific tablet in its series. Two tablets could also form a single unit being bound together in an envelope.

Letters and contracts were wrapped in a clay envelope protecting the former during their transportation and giving some legal validity to the latter. When a letter or a legal text was written over two clay tablets, these were wrapped together in a clay envelope or in another flexible material, in order to keep them together.

This chapter considers the different ways in which the ancient Mesopotamians linked or bound together cuneiform tablets, whether made of clay or wood, and the extent to which they formed a codicological unit. Material elements, such as holes prepared or carved in clay tablets or hinges on wooden tablets, were used to pass a string and to tie them to other written artefacts in the first instance, or to bind together tablets in the second instance. In the absence of such visible material elements, the link between cuneiform clay tablets could be made with a special mention within the text itself or the binding was done with another artefact such as an envelope. This is particularly the case for letters whose envelope served to keep the elements of a codicological unit together during their transport.

## 2 Written artefact tied to another or to a container of written artefacts

Some clay cuneiform artefacts presenting various shapes show holes through which a string could be passed to hang it on persons,<sup>2</sup> animals<sup>3</sup> and objects,<sup>4</sup> including other written artefacts. This is the case, for example, of small square

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<sup>2</sup> Barton 1918, 10 suggests that texts nos 78 and 79 would correspond to small sealed (un)loading dockets that the boatmen carried around their necks.

<sup>3</sup> André-Leicknam and Ziegler 1982, 214, show an Old Babylonian small cuneiform tablet or tag which was originally attached to the neck of a dead sheep. Dockets for sheep and goats are well attested for this period, see for example Rositani 2015.

<sup>4</sup> Durand 1979.

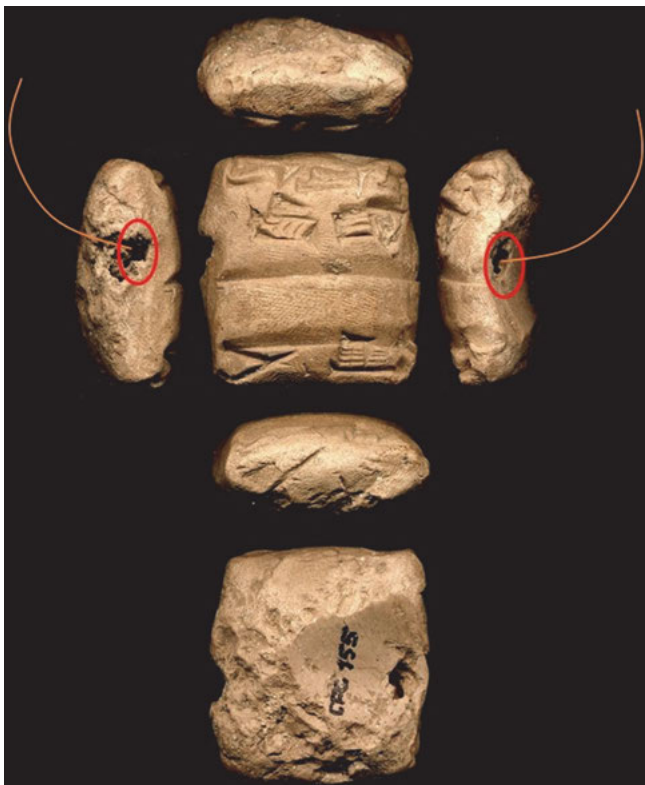
tablets used as tags for baskets of tablets and dating to the twenty-first century BCE. Some of these tablets could have a double hole on one of their side, often the left one, through which a string was passed and used to attached the tablet to a basket (Fig. 1a).<sup>5</sup> On other tablets, the hole through which the string was passed ran the full width of the tablet, entering on one side and coming out on the opposite side (Fig. 1b).<sup>6</sup>



**Fig. 1a:** Tablet used as a tag for a basket of tablets with accounts. Umma, Ur III, twenty-first century BCE, Oxford, Ashmolean Museum, Ashm 1911-0173; photo: CDLI, <https://cdli.ucla.edu/dl/photo/P142686.jpg>.

5 Tablet published by Grégoire 1996, pl. 21, no. 1911-173. Labels and *bullae* from the late third millennium have been studied in detail by Tsouparopoulou 2017.

6 Tablet published by Grégoire 1970, 208, and Nelson 1976, no. 272.



**Fig. 1b:** Tablet used as a tag for a basket of tablets belonging to Ur-eškuga, twenty-first century BCE, Paris, Collège de France, CFC 155; photo: CDLI, <https://cdli.ucla.edu/dl/photo/P100186.jpg>.

Such docketts, which may take different shapes, are attested all through the history of cuneiform writing. Other examples from the early second millennium BCE could be a little more explicit concerning the tablets preserved in the container. For example, an Assyrian triangular docket (or *bulla*) from the nineteenth century BCE found at Kültepe (Central Anatolia) was attached to a container in which ‘the memoranda with witnesses concerning the proceeds of Ušinalam’s wool’ were kept.<sup>7</sup> Another *bulla*, from this site and bearing a seal imprint, has a short text identifying the tablet container as belonging to Aššur-

<sup>7</sup> KT 6a, 89, *ta-ah-sí-sà-tum, ša ší-be, ša ší-im, síg<sup>hi-a</sup>, ša Ú-ší-na-/lam*. This *bulla* has three string holes and the text is written on the broad side. For a photo see Kulakoğlu and Kangal 2010, 350, no. 463.

damiq.<sup>8</sup> Dockets with a Babylonian text dating to the eighteenth century BCE were also found in the royal palace of Mari (Middle Euphrates, Syria). Among these, one was for example fixed on a ‘basket of the tablets concerning the census of the district of Saggarātum’.<sup>9</sup>

In some instances, it is possible to identify the material of the tablet container, thanks to the imprint it left on the inner surface of the docket when the latter was applied directly on its surface and then secured with a string going through its hole attached with a string. For example, an Early Dynastic IIIb clay tag with a hole for a string was fixed on a woven reed basket of tablets dealing with wool.<sup>10</sup> An Old Assyrian *bullā* from Kültepe dating to the nineteenth century BCE shows a clear imprint of the textile bag on which it was fixed. The text indicates that it contained: ‘Letter(s) from Anina, son of Aššur-bēl-awātim, that he sent to Puzur-Ištar, son of Imdī-ilum, and me concerning lapis lazuli’.<sup>11</sup>

In all these examples, the text of the clay tag – which may take the form of a small quadrangular tablet – identifies the tablets gathered in a container to which it is attached, these tablets being linked together by a common point. These tablets were filed according to their genre, date, content or owner. They however do not form a codicological unit as they were not written in the same conditions of place and time.

There are a few cases where the normal size tablets themselves may show holes on one of its edges. Four tablets excavated in 1950 at Kültepe and belonging to the same archive have two holes on the left or the right edge. Either these tablets were stored suspended from a rope as suggested by their editor,<sup>12</sup> or some of them could also have been attached together. Three tablets contain claims related to caravans (Kt c/k 248, 260, 264), two of which being almost duplicates. The fourth tablet, with two holes on its right edge, is a house sale

<sup>8</sup> Özgüç and Tunca 2001, 344, pl. 122, Kt 93/k 807, *ṭup-pu-ú, ša A-šūr-sig*.

<sup>9</sup> Round tag in which the string ran the full width of the tablet, see Charpin 2008, 113. For an online photo of this Mari docket, see <https://books.openedition.org/cdf/docannexe/image/4176/img-8.jpg> (accessed on 12 May 2022).

<sup>10</sup> Paris, Musée du Louvre, AO 13233, c. 2500–2340 BCE; for a photo, see <https://cdli.ucla.edu/dl/photo/P220681.jpg> (accessed on 6 May 2022). The text is published by Allotte de la Fuyé 1912, no. 25. For an imprint of another type of basket, see Michel 2016, 180, Fig. 3.

<sup>11</sup> Ankara, Museum of Anatolian Civilisations, Kt 87/k 329, *na-áš-pār-tum, ša A-ni-na, dumu A-šūr-be-el-a-w[a-tim], ša a-na šé-er, Puzur-iš-tár dumu Im-di-dingir, ù i-a-ti, <sup>na</sup>za-gin, iš-pur-a-ni*. See Özgüç and Tunca 2001, 333, pl. 92 (no seal imprint), and the opening image of the video: <https://vimeo.com/558945596> (accessed on 10 May 2022).

<sup>12</sup> Dercksen 2015. This author notes that the ‘*hamuštum*-almanac’ Kt g/k 118, giving the names of the ‘weeks’ over one specific year, has also the remains of two holes visible on the left edge. For this text see Balkan 1965, 166–167, and Dercksen 2011.

contract (Kt c/k 361). There are no real clues as to how these holes were used for, but the presence of this pair of holes suggests that a string could pass through and that these tablets could be attached to something, or even between them like the two pages of a book. However, we do not know when these tablets were written and if one could have form the continuation of the other one.

A group of accounting tablets found in Mari also show holes in the corners through which a string could be passed. These texts would have been threaded on a single string in the chronological order of their writing, a system that facilitated the work of the scribe in charge of writing the monthly summaries of operations.<sup>13</sup>

### 3 Polyptychs of writing boards

The binding of two or more cuneiform tablets is attested for wax wooden tablets referred to in the texts as <sup>giš</sup>le-um or <sup>giš</sup>da in Sumerian, *lē'um* in Akkadian, meaning 'wooden board', but also *tuppum ša iskurim* 'wax tablet', in the Old Assyrian dialect.<sup>14</sup> Wooden boards filled with wax were a very common medium for writing in ancient Mesopotamia at least from the third millennium on.<sup>15</sup> These tablets made of wood were filled with a mixture of wax and an additive component which gave the wax plasticity and a yellow colour. These boards could be single, double or multiple, and then connected together with hinges. Diptychs are visible in the hand of a scribe on some Neo-Assyrian reliefs that were decorating rooms of the royal palaces (Fig. 2).<sup>16</sup>

At least one-third of Aššurbanipal's library likely consisted of such board-books. Wooden tablets were also used in the daily administration for running accounts and registers. A clay cuneiform tablet gives the inventory of more than twenty different types of administrative writing boards that were stored in reed boxes in the archive of the Eanna temple at Uruk under the reign of Nebuchadnezzar (604–562).<sup>17</sup> According to its editors, ten of the categorizations included

<sup>13</sup> Charpin 2021, 6–11.

<sup>14</sup> KT 5, 11:21–22, KT 6b, 468:12–13.

<sup>15</sup> Cammarosano et al. 2019, 129–136, Michalowski 2021, 77–82.

<sup>16</sup> See for example the panel from Tiglath-pileser III palace at Kalhu, dated to 728 BCE and preserved in the British Museum (BM 118882), <https://www.britishmuseum.org/collection/image/354504001> (accessed on 15 February 2022).

<sup>17</sup> Nielsen and Kozuh 2021.

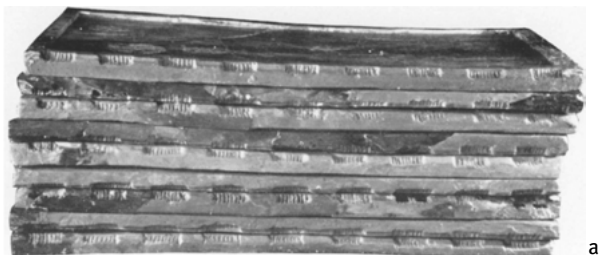
multiple boards, but we do not know how many wooden tablets were physically attached together in each case, whether two or more.<sup>18</sup>



**Fig. 2:** Two scribes at work, the one in the front holds a diptych made of two wooden boards and is writing in cuneiform and in Assyrian, the scribe on the back is writing on a flexible medium with ink using the Aramaic alphabet. These scribes count the booty during the campaign of Sennacherib against the Chaldeans in 700–699 BCE. South-West Palace at Nineveh. London, British Museum. Photo: [https://commons.wikimedia.org/wiki/File:Detail\\_Assyrian\\_military\\_campaign\\_in\\_southern\\_Iraq,\\_slabs\\_made\\_640-620\\_BCE.\\_British\\_Museum,\\_London.jpg](https://commons.wikimedia.org/wiki/File:Detail_Assyrian_military_campaign_in_southern_Iraq,_slabs_made_640-620_BCE._British_Museum,_London.jpg).

<sup>18</sup> Nielsen and Kozuh 2021, 143.

Unfortunately, wood is an organic material which rarely survive time. The most important samples that were found are luxury items made of ivory. Sixteen such ivory boards were found in 1953 by Max Mallowan in the North-West Palace of Kalhu, modern Nimrud, in Iraq.<sup>19</sup> They were forming a polyptych of boards coated with wax on both sides and hinged together as a concertina book (Fig. 3a–b).



**Fig. 3a–b:** The reconstructed ivory boards from the North-West Palace of Kalhu, photos published by Wiseman 1955, pl. II.

<sup>19</sup> These were found in a well together with remains of the same number of wooden boards, see Wiseman 1955. For a photo of two of these ivory panels, see [https://www.britishmuseum.org/collection/object/W\\_1954-1115-1](https://www.britishmuseum.org/collection/object/W_1954-1115-1) (accessed on 11 March 2022).



Each tablet measured  $33.8 \times 15.6$  cm, and their surface, inside the margins, were hatched with criss-cross lines in order to obtain a gripping surface for the wax.<sup>20</sup> The outer cover had a text of four lines incised directly on the ivory surface and giving the title of the astrological series *Enūma Anu Enlil*.<sup>21</sup> It also stipulates that this written artefact was ordered by King Sargon II (721–705 BCE) to be set up in his new palace at Khorsabad. This set of wax coated ivory writing boards, formerly bound together in the form of a polyptych, constitutes a codicological unit: they pertain to the same text written by one person using the same technique (except for the cover).

## 4 Texts written over several tablets

If writing boards were quite light and had straight edges easy to be joined one to another, this was certainly not the case of clay tablets. The size of the latter was shaped according to the length of the text they were to contain.<sup>22</sup> However, beyond a certain size the tablets became difficult to handle and also more fragile. Consequently, in some instances, the text was distributed over several tablets forming what we could call one codicological unit. Such a phenomenon is mainly attested for scholarly and literary texts. When this happened, the tablets were not physically linked, but indications could be given in a colophon specifying the place of a given tablet in a series.<sup>23</sup>

Many scholarly works were written over several tablets forming complete series. This concerns mathematical, medical, lexical, divinatory, astrological or astronomical texts. For example, the divinatory series gathering over ten thousand omens linked to daily life and starting as follows ‘If a city is situated on a height’ (*šumma ālu ina mēlê šakin*) counts more than 107 tablets.<sup>24</sup> The series of astrological omens ‘When (the gods) Anu and Enlil’ (*Enūma Anu Enlil*), includes

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<sup>20</sup> Howard 1955.

<sup>21</sup> For a photo of the cover, see [https://commons.wikimedia.org/wiki/File:Ivory\\_writing-board\\_from\\_Nimrud\\_Iraq\\_with\\_cuneiform\\_inscriptions\\_Iraq\\_Museum.jpg](https://commons.wikimedia.org/wiki/File:Ivory_writing-board_from_Nimrud_Iraq_with_cuneiform_inscriptions_Iraq_Museum.jpg) (accessed on 2 July 2022).

<sup>22</sup> For two tablets from the same period of very different sizes, see Michel 2021, 92, Fig. 1.

<sup>23</sup> Hunger 1968.

<sup>24</sup> Neo-Assyrian exemplars of tablets nos 5 and 6 were found at Nineveh and are preserved in the British Museum respectively as nos K 196 and K 45+198+12600. Hand copies were published as CT 38, pl. 10–13, no. 5 and CT 40, pl. 1–4, no. 6, and are edited by Freedman 1998, 87–108 (tablet 5) and 109–121 (tablet 6); photos: <https://cdli.ucla.edu/dl/photo/P237798.jpg> and <https://cdli.ucla.edu/dl/photo/P237769.jpg> (accessed both on 12 April 2022).

7,000 omens distributed over 70 tablets and derived from observations of the moon, the sun, Venus and atmospheric phenomena;<sup>25</sup> some mathematical tables, series and catalogues of problems are also written over a variable number of tablets.<sup>26</sup>

Such a phenomenon is also true for some literary compositions. The famous *Gilgamesh Epic*, in its canonical form, is written over twelve tablets,<sup>27</sup> and the *Babylonian Epic of Creation* (*Enūma eliš*), which tells of the creation of the gods, the world and mankind as well as the exploits of Marduk, the god of Babylon, comprises 1,100 verses spread over seven tablets.<sup>28</sup>

The tablets of such compositions and scholarly series were regularly copied by scribes. When canonised during the late second millennium, they formed codicological units, written at the same time and place by the same hand.

All these series of tablets were not physically bound, but linked to one another by their numbering within a series indicated in their colophon. These colophons, attested since the third millennium but especially well-known for the first millennium BCE texts, are kind of postscripts, written at the end of the text, or on an edge of the tablet. They give various data as for example the title of the work, the number of the tablet within the series and eventually the total number of tablets of the series, the name of the scribe who wrote the text, the one of the owner of the tablet, the place where the text was composed, the date, eventually the original manuscript copied, etc.<sup>29</sup> The number of tablet within the series,<sup>30</sup> or for some colophons the catch line, i.e. the incipit of the next tablet, facilitated the ordering of the tablets forming a series even though they were not physically bound. We can say that clay tablets could be arranged in series as pages would be in a book but not physically bound.

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**25** Reiner and Pingree 1975; Reiner and Pingree 1981; Reiner and Pingree 1998; Reiner and Pingree 2005; van Soldt 1995; Verderame 2003. For catalogues giving the incipits of many tablets of this series, see Rochberg 2018. This is the series which was written on the ivory writing boards of Nineveh, see Section 3 (Fig. 3a–b) above.

**26** Proust 2012.

**27** George 2003.

**28** Talon 2005; Lambert 2013, 3–144.

**29** Hunger 1968; Glassner 2009; Proust 2012.

**30** For example ki+n, the n<sup>th</sup> tablet, see Glassner 2009, 24–29.

## 5 Tablets and envelopes

Clay tablets could be encased in a clay envelope. This was the case, for instance, of some legal texts and letters. The envelope was protecting the confidentiality of the letter and the integrity of the tablet during its transport.<sup>31</sup> The writer of the letter had first to prepare his tablet, which size depended on the length of the text he wanted to write down. As they were meant to be transported, letters usually do not exceed the hand, more often they have the size of the palm of the hand or may be smaller containing only four or five lines.<sup>32</sup>

Once the tablet was written, it was covered with a thin layer of clay forming the envelope. The name of the letter recipient(s), as well as the indication ‘sealed by (the sender)’ were written on the envelope and the sender rolled his cylinder seal over the envelope several times. When the letter arrived at destination, the recipient had to break the envelope to read the letter.

### 5.1 Complement of the letter written on the envelope

However, it was often difficult to plan in advance the length of the text of a letter. For example, it was not unusual that, once the letter written on both sides and all edges, the sender had still something to add. This addendum – an oversight or information known after the envelope was closed –, consisting often of a sentence or two, could then be written on the surface of the envelope, after the names of the recipient and the sender. This can be observed for example on early second-millennium letters, either written in Assyrian or in Babylonian dialect.

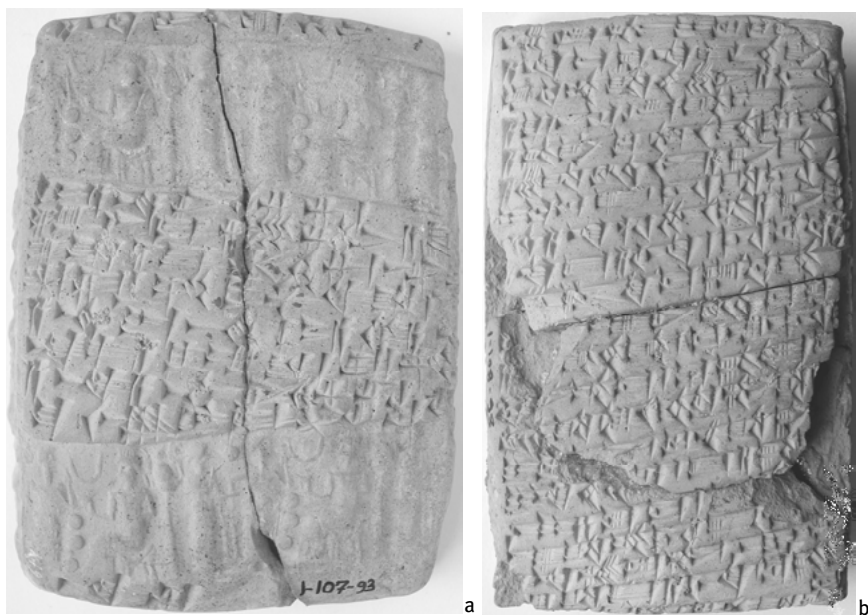
For example, a half envelope excavated at Kültepe in a house of the lower town belonged to an Old Assyrian letter sent by Lamassātum and her daughter Šāt-Adad to their brother and uncle Iddin-Suen, son of Aššur-nimrī (Fig. 4). After the names of the addressee and senders (first four lines) together with an imprint of a cylinder seal, the continuation of the letter is written on this envelope as follows: ‘Aššur-imittī, son of Amur-Aššur, is bringing you a belt sealed by Lamassātum. Šu-Ištar, son of Mannum-balum-Aššur, is bringing a belt sealed

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<sup>31</sup> Béranger 2018; Michel 2020a. For samples of envelopes from different sites, see for example the following P numbers in the CDLI database (<https://cdli.ucla.edu/>), P499198 (late third-millennium Sumerian letter found at Girsu), P347974 (Old Babylonian text from Alalah), or P297451 (Old Assyrian letter from Kültepe).

<sup>32</sup> Michel 2008.

by her to Aššur-nimri'.<sup>33</sup> The two belts have been presumably entrusted to two different travellers immediately after the letter was enclosed in its envelope.



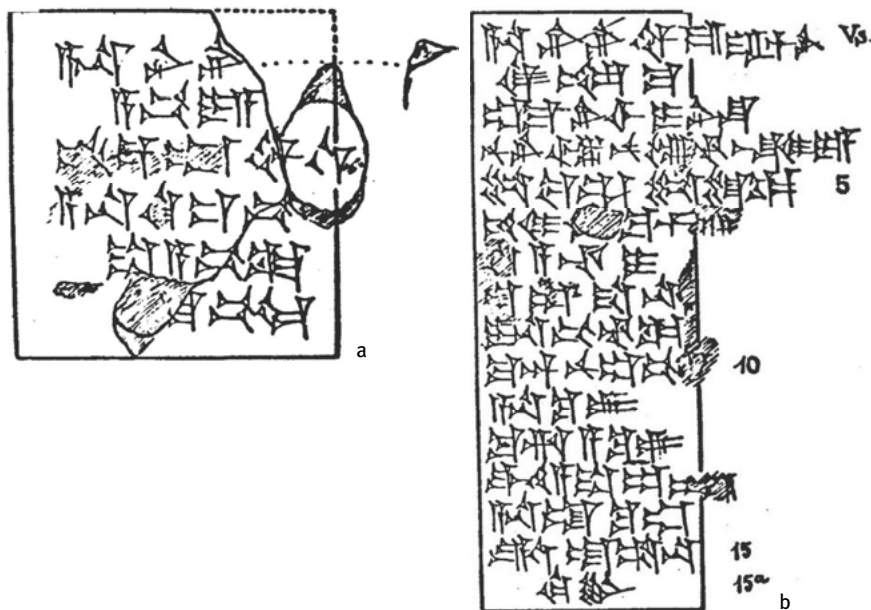
**Fig. 4a–b:** On the left, the letter envelope (a). The top line and the three first lines below the seal impression are the heading of the letter. The next five lines are the continuation of the text of the letter. On the right, the reverse of the letter (b). Kt 93/k 142 a–b, Kültepe, nineteenth century BCE. Ankara, Museum of Anatolian Civilisations; photos: Cécile Michel.

When the scribe was unable to complete a sentence on the tablet by lack of space, he could repeat on the envelope the first word of the sentence already written on the tablet and complete the sentence. For example, the last line of the tablet left edge ends with ‘their answer’ (*na-pá-al-ta-áš-nu*), and the word is

<sup>33</sup> Kt 93/k 142:6–12, *iš-ra-am ku-nu-ki ša Lá-ma-sà-t[im]*, *A-šur-i-mi-ti dumu A-mur-A-šur*, *na-áš-a-ku-um iš-ra-am ku-nu-k[i-ša]*, *a-na A-šur-ni-im-ri*, *Šu-Ištar dumu Ma-num-ba-lúm-a-šur*, (seal imprint A), *na-ši*. Another such example from the same site can be found on BIN 6, 10, on the envelope, the two first lines of text mention the correspondents of the letter: ‘to Šu-Bēlim and Kuzu; sealed by Suli’, then four lines are added: ‘Say to Kuzu: Here my mother gave birth to a boy’, *a-na Šu-Be-lim*, *ú Ku-zu kišib Sú-li*, *a-na Ku-zu qí-bi<sup>h</sup>-ma*, *a-na-kam um-mi-i [x]*, *za-ak-ra-am*, *ta-ar-ši-i*. Other mentions on the envelope ask the addressee to take careful note of the contents of the letter, as on ICK 1, 33a envelope, 6–9: *a-hu-ú-a : a-tù-nu*, *a-na a-wa-at*, (seal imprint), *ṭup-pi-im : ih-da*.

repeated on the envelope in the following complete sentence: ‘Return to me their answer, all they will answer you, whether or not (it is positive)’.<sup>34</sup>

Such a phenomenon is also observed in some Old Babylonian letters for which their envelope is partly preserved. For example, the envelope fragment of a letter sent to Ili-imaguranni by the woman Niši-īnišu contains only the name of the recipient: ‘To Ili-imaguranni, my father’. This short heading of two lines is followed by a request covering the next four lines: ‘Send me a bone for the (ancestors) funerary ritual of your father’.<sup>35</sup> In the letter, Niši-īnišu complains that she is starving and urges her correspondent to send her silver or wool (Figs 5a–b).



**Fig. 5a–b:** On the left, the copy of the letter envelope fragment (a), the two first lines correspond to the heading; on the right, the copy of the obverse and reverse of the letter (b); Schroeder 1917, no. 5.

<sup>34</sup> TPAK 1, 46 (tablet):39–40, *a-na ša ki-ma i-a-ti, qí-bi<sub>4</sub>-ma na-pá-al-ta-áš-nu*, and text no. 75 (envelope):1’–5’, *na-pá-al-ta-šu-nu, ma-lá e-pu-lu-ku-nu-ni, a-ni-tám, lá a-ni<sup>3</sup>(DÍ)-tám, ta-e-ra-nim*.

<sup>35</sup> Copy by Schroeder 1917, no. 5 and edited as AbB 6, 5, envelope: *a-na I-i-[im-gur-ra-an-ni], a-bi-ia, <sup>uzu</sup>e-se-em-tam, a-na ki-is-pi, ša a-bi-ka, šu-bi-lam*, see Béranger 2018 for other examples.

In both examples, the envelope which protects the letter is also used as a medium to receive the end of the text of the letter. The text of the letter is written on two surfaces that are tied together.

## 5.2 Tablets bound together in a clay envelope: The case of the Old Assyrian texts

More often, the additional text of a letter was written on a second tablet. In the Old Assyrian archives dating to the nineteenth century BCE, the supplement was regularly small, of oval shape, with one side flat and the other convex, and written only on one side. It usually measures between 2.5 to 3.5 cm in height and 3 to 5 cm in width, and its thickness is smaller than a centimetre. Such supplements contain between three and fifteen lines, with an average of seven lines (Fig. 6).<sup>36</sup>

The text on these supplement either starts a new sentence,<sup>37</sup> sometimes addressed in particular to one of the letter addressees,<sup>38</sup> or simply continue the sentence that was started on the left edge of the main tablet. In the following letter, the last sentence runs over the main tablet and its supplement: '(envelope:) I left to Abu-salim in Durhumit (tablet) your tablet concerning 7 minas minus 10 shekels under your seal (envelope:) and it is with him'.<sup>39</sup>

<sup>36</sup> For more photos of such supplements, see a supplement preserved in Oxford, Ashmolean Museum, Ashm 1933-1057e1, <https://cdli.ucla.edu/dl/photo/P368454.jpg> (accessed on 25 June 2022); a supplement preserved in the Edinburgh collection, <https://cdli.ucla.edu/dl/photo/P361616.jpg> (accessed on 25 June 2022), a supplement preserved in the British Museum, CCT 6, 27, <https://cdli.ucla.edu/dl/photo/P358947.jpg> (accessed on 12 June 2022); one of the supplements preserved in New Haven, CT, Yale Babylonian Collection, BIN 6, 45, <https://images.collections.yale.edu/iiif/2/ypm:1d6901af-50c6-4e1f-acd4-40ba3248509f/full/full/0/default.jpg> (accessed on 12 July 2022). The supplement ICK 1, 39c has three lines while KT 6e, 877 contains fifteen lines. Such supplements have to be distinguished from small but thicker tablets written on both sides.

<sup>37</sup> ICK 1, 17 (Michel 2020b, no. 235), the tablet ends by 'there is nobody to buy wood or barley for me'. And the supplement goes as follows: 'Barley is scarce, and there is no profit (to be made), and bread is snatched away from (our) hands! Send me the price of the textiles. Cheer me up!' See also for other examples, CCT 4, 45b or KT 6c, 648.

<sup>38</sup> ICK 1, 31a–c (nine lines), Dalley 1979, no. 14 (nine lines, CDLI P361616), KT 5, 33 (six lines), KT 8, 259 (nine lines).

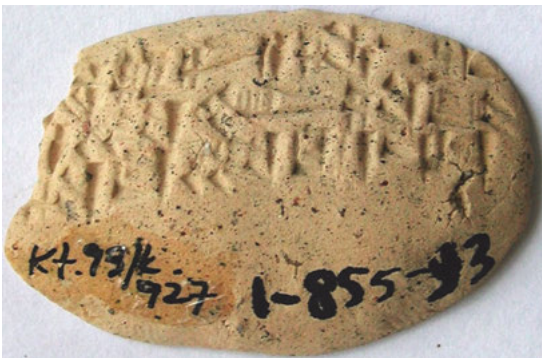
<sup>39</sup> Kt 93/k 211:32–33, *ṭup-pá-kà ša 7 ma-na lá 10 gín ša, ku-nu-ki-kà*, suppl.:1–4, *a-na A-bu-ša-/lim, i-Dur-hu-mi-it, e-zi-ib-ma, iš-ti-šu i-ba-ši*. See also CTMMA 1, 78: 'Buy a sheep', the verb is on the supplement and the direct object on the main tablet. A photo of this tablet, its supplement and its envelope is accessible online at <https://www.metmuseum.org/art/collection/search/326712> (accessed on 12 May 2022). See for other example Kt 93/k 240+55, Kt 93/k 56, Kt 93/k 211, KT 6b, 341, KT 6b, 363, KT 6e, 873, KT 6e, 875, BIN 6, 42–45 and 47.



a



b



c

**Fig. 6a–c:** Kt 93/k 55, Kt 93/k 56 and Kt 93/k 927, supplements of letters, Kültepe, nineteenth century BCE; Ankara, Museum of Anatolian Civilisation; photos: Cécile Michel.

Most of these supplements concern letters, however, they also exist for legal texts. A contract with witnesses was written on a main tablet of twenty-one lines plus a supplement of three lines which only bear a complementary dating: ‘from the week of Kurub-Ištar’.<sup>40</sup>

The small additional tablet was placed on the main tablet before being covered by the envelope; it was often placed on the reverse of the main tablet, and in the same reading direction. The envelope, made around the two tablets, followed the shape of this additional tablet, and the existence of the latter is sometimes marked in negative as a depression on the inside of some envelope fragments. There is usually no clue to match together the main tablet and the small supplement as the text was just continued on the second tablet. Once the envelope was open, the two tablets were separated and it is often difficult to reconstitute the two-pieces puzzle. The existence of envelope fragments may help such reconstitution (Fig. 7a).

In some instances, it is possible to read part of the content of the main tablet, its signs appearing as mirror impression on both the inner side of the supplement and the envelope (Fig. 7b). The main tablet and the additional tablet could be wrapped in a thin textile, such as gauze before being encased in their clay envelope in order to avoid both from sticking together or to the envelope: the surface of the tablet and of its supplement may show imprints of this textile (Fig. 7a).<sup>41</sup>

The envelopes of Old Assyrian letters or contracts enclosing a tablet and its supplement function in these instances as a physical device which kept bound together two tablets forming a codicological unit.

The supplementary small tablets bearing the end of the text are referred to as *šibat ṭuppim*, ‘additional tablet’.<sup>42</sup> However, there are very few references to these supplements in the texts. A letter, for which two copies have been found, includes instructions to the addressee. He is asked to enter the house of a merchant and open his archive in order to find a loan contract representing almost 25 kg of silver: ‘On the additional tablet, these men are recorded’.<sup>43</sup> The writer of a letter addressed to a group of individuals explains: ‘Everything you have to ask her, I

<sup>40</sup> ICK 1, 39c:1–3, *iš-tù, ha-mu-uš-tim, ša Kurub-Ištar*. Note that this dating element is also present on the envelope. The contract Kt c/k 1642, published by Albayrak 2007, has also a supplement. A photo of the tablet with its supplement is published in Kulakoğlu and Kangal 2010, nos 426–427.

<sup>41</sup> Andersson Strand et al. 2017, 97–98; Michel 2020a, 190.

<sup>42</sup> Note that the reference given in Veenhof 2010, 91–92 as ICK 1, 31a:13–16 relies on wrong restitutions, the text was to be read presumably [*a-hu-û-a*] *a-tù-nu*, [*a-na a-wa*]-at *ṭup-pi-im*, (seal imprint), [*iḥ-da*], a sentence often found on envelopes, as on ICK 1, 33a:6–9, Michel 2008.

<sup>43</sup> See the duplicates AKT 1, 25 and KTS 2, 9:9–11, *i-na, šī-ba-at ṭup-pi-im a-wi-lu a-ni-û-tum, wa-du-û*, a letter commented by Michel 1995, 25–26, n. 47.



have written down for you in the additional tablet'.<sup>44</sup> This sentence suggests that the supplement was big enough to record all the questions to be asked to the woman. A long memoranda ends with the mention: 'there is an additional tablet', in order to remember that the text does not end with this tablet.<sup>45</sup>



**Fig. 7a–b:** Kt 93/k 55+120+240+831, letter written over a main tablet and its supplement, both tablets could be joined thanks to the two pieces of envelopes (a); Kt 93/k 823+927, fragment of a letter envelope which could be linked to the tablet supplement (b); the main tablet has not yet been identified, Kültepe, nineteenth century BCE; photos: Cécile Michel.

A reference to a *šibat našpertim*, 'additional memorandum', indicates that this expression could apply to any text genre written on clay tablets. Moreover, in this instance, it refers to a full size second tablet. Indeed, a memorandum listing different debts is written over two tablets, both covered with cuneiform signs on all sides. The first tablet, Kt 88/k 117, has twenty-three lines and concerns a debt of 9 minas of silver (4,5 kg). The two last words of this first tablet belong to a

<sup>44</sup> CCT 5, 2b:19–20, *a-ma-lá : ta-ša-a-la-ši-ni : i-ši-ba-at, ṭup-pì-im : la-áp-ta-ku-nu-tí*.

<sup>45</sup> Larsen 2002, no. 156:43, *ši-ba-at* dub *i-ba-ši*.

sentence which continues on the second tablet, Kt 88/k 172, which has sixteen lines. On the latter, it is specified: ‘This memorandum, which is an additional (tablet to the) memorandum concerning 9 minas of silver, is a copy of the encased tablet concerning the debt of Abum-ili and Idi-Aššur’.<sup>46</sup> The ‘encased tablet’ refers to the corresponding legal text which was preserved in a sealed envelope.

### 5.3 Two-page letters without clay envelopes

Letters written on two full size tablets are widely attested during the second and the first millennia BCE. The Old Assyrian archives excavated at Kültepe include many letters which either end abruptly in the middle of a sentence,<sup>47</sup> or for which a heading is lacking, but clearly are part of a letter because of their syntax.<sup>48</sup> These are often full-size tablets, and have regularly been considered second pages of letters. It is worth mentioning that no clay envelope or envelope fragments have been associated to such full size letter ‘second page’, which suggests that they were sent, bound together with their corresponding letter ‘first page’ in another material.<sup>49</sup>

The existence of letters written over two full size tablets is attested in several other cuneiform collections of the second and first millennia BCE. Let us just mention here two examples. The first one dates to the fourteenth century BCE and was found in the archives of the Egyptian pharaoh Akhenaten in the site of El Amarna, ancient Akhetaten. At that time, cuneiform script and Akkadian language were the scripta and lingua franca of the Near East, and even the pharaoh had to use clay cuneiform tablets to exchange with the rulers of the other kingdoms. Several tablets found in his archives were identified as the ‘second page’ of a letter. These are for example the continuation of a letter sent

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<sup>46</sup> KT 7a, 39:8–16, *ši-ba-at, ta-ah-sí-is-tim, ša 9 ma-na kù-babbar, ta-ah-sí-is-tum, a-ni-tum me-eh-ra-at, ṭup-pi-im ha-ar<-mì>-im, ša hu-bu-ul, A-bu-um-dingir, ú I-dí-A-šur*. The size of the second tablet could indeed vary.

<sup>47</sup> See among many examples Larsen 2002, no. 69, Veenhof 2015, 274, no. 3, Michel 2020b, texts nos 70, 156 and 304. These were presumably continued on a small supplement or a full size tablet that had the status of a second page.

<sup>48</sup> See among many examples CCT 5, 22c, CCT 5, 27b, ICK 1, 183, KT 6e, 874, KT 8, 181, etc. Veenhof 2003, 91, Larsen 2021, 1–2.

<sup>49</sup> Klaas R. Veenhof (2003, 91 and 2010, 91–92) has suggested that the ‘second page’ was probably sent in a separate envelope. However, sending separately the two pages of a letter in two different envelopes would have not been the most secure way to deliver both tablets to the recipient at the same time.

by Rib-Hadda, king of Byblos,<sup>50</sup> or the second page of a letter from Biridiya, the ruler of Megiddo.<sup>51</sup> No clay envelope has been found in the archives of the pharaoh and one must suppose that the two tablets were sent together to Egypt, physically bound in a way or the other.

The second example concerns a letter which was sent to the Assyrian king Esarhaddon (680–669) from a scholar of his court, the exorcist Adad-šum-ušur; it dates to the seventh century and was discovered at Nineveh. As it is often the case, there is no indication, on the first tablet, that the letter continues on a second tablet. However, the second tablet starts with a sentence which specifies: ‘This is a continuation of the words of the previous letter’.<sup>52</sup> Both tablets are 8 to 10 cm long and 3 to 4 cm wide, and they are relatively thick (Figs 8a–b). Clay envelopes are exceptional for the Neo-Assyrian period, which implies that the two-page letters were otherwise bound together and protected during their transport.<sup>53</sup>

For these both examples, as well as for letters written over two full size tablets from the other corpora, it seems very unlikely that such two-page letters were transported in clay envelopes. In fact, it would have required the making of particularly large and fragile envelopes. The shrinkage of the clay during drying would have posed a problem on the empty space between the two tablets all through the edges.<sup>54</sup> Since, because of technical reasons, this is very unlikely, we have to imagine that such letters have been transported wrapped in another material – i.e. leather, textile or reed mat – which did not survive time.

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<sup>50</sup> Letter EA 101, thirty-eight lines.

<sup>51</sup> Letter EA 245, forty-seven lines. There are several letters of this ruler but the exact first page of the letter has not been identified. See also the second page of a letter EA 251 for which both sender and addressee are unknown.

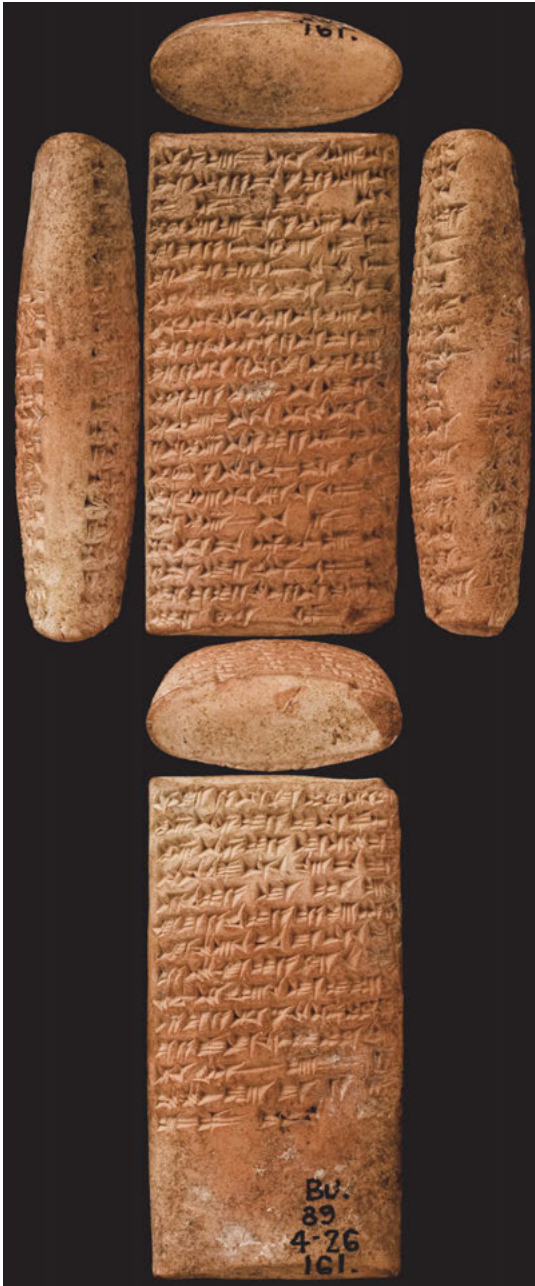
<sup>52</sup> SAA 10, 198:1–3, *an-ni-ú re-eh-ti, da-ba-a-bi šá e-gír-ti, pa-ni-it-ti*. The first page of this letter is SAA 10, 197.

<sup>53</sup> For a rare example of a clay envelope, see SAA 15, 289, which is the envelope of the letter SAA 15, 288.

<sup>54</sup> It might have been possible with exceptionally thin and flat tablets written on both sides, such as KT 6a, 215, which is the continuation of a letter (photos nos 32–36).



**Fig. 8a:** Tablet SAA 10, 197, Nineveh; London, British Museum, from <https://cdli.ucla.edu/dl/photo/P333959.jpg> (accessed on 10 July 2022).



**Fig. 8b:** Tablet SAA 10, 198, Nineveh; London, British Museum, from <https://cdli.ucla.edu/dl/photo/P334300.jpg> (accessed on 10 July 2022).

The use of these different perishable materials for the transport of clay tablets is attested by the Old Assyrian sources. Whether they had an envelope or not, the tablets could be wrapped in textiles. A merchant asks his representatives and wife, ‘All these tablets and their copies, on the day Laliya arrives, wrap them, pack them solidly in a *maškūnum*-textile of good quality and entrust them to a trustful recognised trader’; these tablets were to be brought to Aššur.<sup>55</sup> Two letters from the same archive indicate that encased tablets to be transported could also be wrapped in leather: ‘Take out the tablet with the seals of Aššur-ṭāb and Enna-Suen, wrap it solidly in leather, seal it and entrust it to Hašta’ili or to Šamaš-rē’i to bring it to me’.<sup>56</sup> A letter found in another archive concerns the will of a merchant which is kept in the town of Hurrama; the sender asks his correspondents to wrap this tablet ‘in reeds’ with great care and entrust it to a trustworthy merchant so that he brings it to him in Aššur.<sup>57</sup> The wrapping, in this case, was presumably a reed mat.

The binding of the two clay tablets forming a letter was not always made of clay, it could be done by a wrapping made in a flexible material which protected the tablets during their transport and kept them together. When the letter reached its addressee(s), it was unwrapped in order to be read, and the two tablets were separated. The wrapping itself was either thrown away or recycled.

## 6 Conclusion

Only a tiny percentage of the cuneiform texts produced in antiquity have survived time and have been unearthed. The inhabitants of the ancient Near East

55 In AKT 3, 82:21–27, *mì-ma ṭup-pé-e a-ni-ú-tim, ú me-eh-ri-šu-nu : i-na<sup>d</sup>utu<sup>si</sup>, ša Lá-li-a : e-ra-ba-ni, qí-ša-šu-nu : da-ni-na-šu-nu-ma, i-na maš-kà-nim sig<sub>5</sub> : šu-uk-na-ma, a-na dumu um-mì-a-nim, ke-nim : pì-iq-da-šu-nu-ma*. See the parallel mention in AKT 3, 88:42–47, *mì-ma ṭup-pì a-ni-ú-tim me-eh-ri-šu-nu, šu-ba-al-ki-it-ma ù šu-nu-tí : qí-ša-šu-nu-ma, i-na maš-kà-nim da-nim : šu-uk-na-ma, a-na dumu um-mì-a-nim ke-nim : ša ki-ma, qá-qí-dí-ku-nu : i-na igi ší-bé-e : pì-iq-da-ma, lu-ub-lam*.

56 AKT 3, 84:13–23, *ṭup-pá-am, ša ku-nu-uk : A-šur-du<sub>10</sub>, ú En-na-Sú-en<sub>6</sub>, šé-li-a-ma, i-na ma-áš-ki-im, qí-i-ša-šu-ma, dá-ni-na-ma, ku-un-kà-šu-ma, a-na Ha-áš-ta-i-li, ú-lá : a-na<sup>d</sup>utu-sipa, pì-iq-dá-šu-ma, lu-ub-lam*. See also AKT 3, 83:18–22, *ú ṭup-pá-am ha-ar-ma-am, ša ba-áb dingir ša A-šur-gal, dumu A-zu-a-a ú Puzūr-A-šūr, dumu I-ku-pì-a i-na, maš-ki-im qí-ša-šu-nu-ma*.

57 Gwaltney 1983, no. 19: 28–35, *ṭup-pu-um ša ší-ma-at, A-šūr-i-mì-tí i-na Hu-ra-ma, iš-tí Ša-lim-A-šūr dumu En-um-A-[šūr], i-ba-ší šu-up-ra-ma ṭup-pá-am, lu-ub-lu-ni-ku-nu-tí-ma, ṭup-pá-am i-na qá-nu-e lá-wi-a-ma, [da]-am-qí-iš a-na dumu um-mì-a-nim, [ke]-nim pì-iq-da-ma lu-ub-lam*.

used different writing media, producing inscriptions or manuscripts. The clay manuscripts were durable enough to be recovered, while the main other type of manuscripts, wooden board coated with wax, widely used in Ancient Mesopotamia from the third millennium on, disappeared, as many other organic materials. When a long text, whether a scientific or literary composition, or an administrative document were written on wax tablets, the tablets were held together by hinges on each side alternatively, thus forming a concertina.

Cuneiform clay tablets were rarely bound together because of their material, shape and weight. There are however many series of cuneiform tablets forming codicological units (scholarly, literary, epistolary, etc.) which were not physically tied together, but were linked with the help of a text written usually at the end of each unit, in a colophon, indicating the place of every tablet within the series.

Some other tablets show physical characteristics, like holes, suggesting that it was materially possible to attach such clay tablets together or to other artefacts, as baskets of tablets. These holes allowing the passage of a string were prepared before the tablet was dry, at the same time the text was written.

True devices allowing to bind two tablets (of different sizes) together are clay envelopes. A letter and its supplement could be wrapped into a thin layer of clay forming an envelope. However, this binding was supposed to be ephemeral because the recipient of the letter had to break the envelope to read the letter, and thus to unbind the two tablets. The two normal size tablets corresponding to two pages of a single letter were also most certainly bound together, but the materiality of this binding has disappeared.

## Abbreviations

- AbB 6 = Rintje Frankena, *Briefe aus dem Berliner Museum* (Altbabylonische Briefe in Umschrift und Übersetzung, 6), Leiden: Brill, 1974.
- AKT 1 = Emin Bilgiç, Hüseyin Sever, Cahit Günbattı and Sabahattin Bayram, *Ankara Kültepe Tabletleri*, 1 (Türk Tarih Kurumu Yayınları, 6/33), Ankara: Türk Tarih Kurumu Basımevi, 1990.
- AKT 3 = Emin Bilgiç and Cahit Günbattı, *Ankaraner Kültepe-Texte*, 3, Stuttgart: Steiner, 1995.
- BIN 6 = Ferris J. Stephens, *Old Assyrian Letters and Business Documents* (Babylonian Inscriptions in the Collection of J. B. Nies, 6), New Haven: Yale University Press, 1944.
- CCT 4 = Sidney Smith, *Cuneiform Texts from Cappadocian Tablets in the British Museum*, Part 4, London: The Trustees of the British Museum, 1927.
- CCT 5 = Sidney Smith and D. J. Wiseman, *Cuneiform Texts from Cappadocian Tablets in the British Museum*, Part 5, London: The Trustees of the British Museum, 1956.
- CCT 6 = Paul Garelli and Dominique Collon, *Cuneiform Texts from Cappadocian Tablets in the British Museum*, Part 6, London: The Trustees of the British Museum, 1975.

CDLI = Cuneiform Digital Library Initiative, <https://cdli.ucla.edu/>.

CT = Cuneiform texts from Babylonian tablets in the British Museum, copies made by L. W. King, T. G. Pinches, R. Campbell Thompson [et al.], London: Trustees of the British Museum, 1896–1990.

CTMMA 1 = Mogens T. Larsen, 'Old Assyrian Texts', in Ira Spar (ed.), *Tablets, Cones and Bricks of the Third and Second Millennia B.C.* (Cuneiform Texts in the Metropolitan Museum of Art, 1), New York: Metropolitan Museum of Art, 1988, 92–143, 177–192, Plates 66–109, 129–156.

EA = William L. Moran, *Les lettres d'El Amarna* (Littératures anciennes du Proche-Orient, 13), Paris: Éditions du Cerf, 1987.

ICK 1 = Bedřich Hrozný, *Inscriptions cunéiformes du Kültepe*, vol. 1 (Monografie Archivu Orientálního, 14), Prague: Státní pedagogické nakladatelství, 1952.

KT 5 = Veenhof 2010.

KT 6a = Mogens T. Larsen, *Kültepe Tabletleri*, 6a: *The Archive of the Šalim-Aššur Family*, vol. 1: *The First Two Generations* (Türk Tarih Kurumu Yayınları, 6/33d-a), Ankara: Türk Tarih Kurumu Basımevi, 2010.

KT 6b = Mogens T. Larsen, *Kültepe Tabletleri*, 6b: *The Archive of the Šalim-Aššur Family*, vol. 2: *Ennam-Aššur* (Türk Tarih Kurumu Yayınları, 6/33d-b), Ankara: Türk Tarih Kurumu Basımevi, 2013.

KT 6c = Mogens T. Larsen, *Kültepe Tabletleri*, 6c: *The Archive of the Šalim-Aššur Family*, vol. 3: *Ali-ahum* (Türk Tarih Kurumu Yayınları, 6/33d-c), Ankara: Türk Tarih Kurumu Basımevi, 2014.

KT 6e = Larsen 2021.

KT 7a = Sabahattin Bayram and Remzi Kuzuoğlu, *Kültepe Tabletleri*, 7a: *Aššur-rē'ī Ailesinin Arşivi. Aššur-rē'ī'nin Kendi Metinleri* (Türk Tarih Kurumu Yayınları, 6/33e-a), Ankara: Türk Tarih Kurumu Basımevi, 2014.

KT 8 = Klaas R. Veenhof, *Kültepe Tabletleri*, 8: *The Archive of Elamma, son of Iddin-Suen, and his Family (Kt 91/k 285-568 and Kt 92/k 94-187)* (Türk Tarih Kurumu Yayınları, 6/33f), Ankara: Türk Tarih Kurumu Basımevi, 2017.

Kt #/k = Tablet found during the 1948 Turkish excavations at Kültepe, in the lower town, and preserved in the Anadolu Medeniyetleri Müzesi (Ankara).

KTS 2 = Veysel Donbaz, *Keilschrifttexte in den Antiken-Museen zu Stambul 2* (Freiburger Orientalische Studien Beihefte, 2), Stuttgart: Franz Steiner, 1989.

SAA 10 = Simo Parpola, *Letters from Assyrian and Babylonian Scholars* (State Archives of Assyria, 10), Helsinki: Helsinki University Press, 1993.

SAA 15 = Andreas Fuchs and Simo Parpola, *The Correspondence of Sargon II*, Part 3: *Letters from Babylonia and the Eastern Provinces* (State Archives of Assyria, 15), Helsinki: Helsinki University Press, 2001.

TPAK 1 = Cécile Michel and Paul Garelli, *Tablettes paléo-assyriennes de Kültepe*, 1 (Kt 90/k), Istanbul: De Boccard, 1997.



## References

- Albayrak, İrfan (2007), 'Eine altassyrische Urkunde zum anatolischen Bodenrecht', *Altorientalische Forschungen*, 34: 219–224.
- Allotte de la Fuÿe, François M. (1912), *Documents présargoniques*, Paris: Geuthner.
- Andersson Strand, Eva, Catherine Breniquet and Cécile Michel (2017), 'Textile Imprints on *Bullae* from Kültepe', in Fikri Kulakoğlu and Gojko Barjamovic (eds), *Proceedings of the 2<sup>nd</sup> Kültepe International Meeting, Kültepe, 26–30 July 2015* (Kültepe International Meetings, 2; Subartu, 39), Turnhout: Brepols, 87–104.
- André-Leicknam, Béatrice and Christiane Ziegler (1982), *Naissance de l'écriture*, Paris: Éditions de la Réunion des musées nationaux.
- Balkan, Kemal (1965), 'The Old Assyrian week', in *Studies in Honor of Benno Landsberger on his Seventy-Fifth Birthday* (Assyriological Studies, 16), Chicago: University of Chicago Press, 159–174.
- Barton, George A. (1918), *Haverford Library Collection of Cuneiform Tablets or Documents from the Temple Archives of Telloh*, vol. 2, New Haven: Yale University Press.
- Béranger, Marine (2018), 'Fonctions et usages des enveloppes de lettres dans la Mésopotamie des III<sup>e</sup> et II<sup>e</sup> mil. av. J.-C. (2340–1595 av. J.-C.)', *Épistolaire*, 44: 25–46.
- Cammarosano, Michele, Katja Weirauch, Feline Maruhn, Gert Jendritzki and Patrick L. Kohl (2019), 'They Wrote on Wax. Wax Boards in the Ancient Near East', *Mesopotamia*, 54: 121–180.
- Charpin, Dominique (2008), *Lire et écrire à Babylone*, Paris: PUF.
- Charpin, Dominique (2021), 'Une technique méconnue d'archivage chronologique des tablettes comptables', in Ilya Arkhipov, Grégory Chambon and Nele Ziegler (eds), *Pratiques administratives et comptables au Proche-Orient à l'Âge du Bronze*, Leuven: Peeters, 3–21.
- Dalley, Stephanie (1979), *A Catalogue of the Akkadian Cuneiform Tablets in the Collections of the Royal Scottish Museum Edinburgh* (Art and Archaeology, 2), Edinburgh: Royal Scottish Museum.
- Dercksen, Jan Gerrit (2011), 'The *hamuštum*-almanac Kt g/k 118 from Kültepe', *Nouvelles Assyriologiques Brèves et Utilitaires*, 2011/4: 91–92 (= Note 76).
- Dercksen, Jan Gerrit (2015), 'The Archive of Ali-ahum (I). The Documents Excavated in N-O-P/20 in 1950', in Fikri Kulakoğlu and Cécile Michel (eds), *Proceedings of the 1<sup>st</sup> Kültepe International Meeting, Kültepe, 19–23 September, 2013* (Kültepe International Meetings, 1; SUB-ARTU 35), Turnhout: Brepols, 47–58.
- Durand, Jean-Marie (1979), 'Les "slave documents" de Merodach-Baladan', *Journal Asiatique*, 267: 245–260.
- Freedman, Sally M. (1998), *If a City is Set on a Height, The Akkadian Omen Series 'Šumma Alu Ina Mēlê Šakin'*, vol. 1: *Tablets 1–21*, Philadelphia: University of Pennsylvania Press.
- George, Andrew (2003), *The Babylonian Gilgamesh Epic, vol. I: Introduction, Critical Edition and Cuneiform Texts*, Oxford: Oxford University Press.
- Glassner, Jean-Jacques (2009), 'Écrire des livres à l'époque paléo-babylonienne: le traité d'extispicine', *Zeitschrift für Assyriologie und Vorderasiatische Archäologie*, 99: 1–81.
- Grégoire, Jean-Pierre (1970), *Archives administratives sumériennes*, Paris: Geuthner.
- Grégoire, Jean-Pierre (1996), *Archives administratives et inscriptions cunéiformes. Ashmolean Museum, Bodleian Collection*, 1/1, Paris: Geuthner.
- Gwaltney, Walter C. (1983), *The Pennsylvania Old Assyrian Texts* (Hebrew Union College Annual Supplement, 3), Cincinnati: Hebrew Union College Press.

- Hunger, Hermann (1968), *Babylonische und assyrische Kolophone* (Alter Orient und Altes Testament, 2), Kevelaer: Butzon & Bercker.
- Kulakoğlu, Fikri and Selmin Kangal (2010), *Anatolia's Prologue. Kültepe Kanesh Karum, Assyrians in Istanbul* (Kayseri Metropolitan Municipality Cultural Publication, 78), Istanbul: Avrupa Kültür Başkenti.
- Lambert, William G. (2013), *Babylonian Creation Myths*, Winona Lake: Eisenbrauns.
- Larsen, Mogens T. (2002), *The Aššur-nāḏā Archive* (Old Assyrian Archives, 1), Leiden: Nederlands Instituut voor het Nabije Oosten.
- Larsen, Mogens T. (2021), *Kültepe Tabletleri*, 6e: *The Archive of the Šalim-Aššur Family*, vol. 5: *Anonymous Texts and Fragments* (Türk Tarih Kurumu Yayınları, 6/33d-e), Ankara: Türk Tarih Kurumu Basımevi.
- Michalowski, Piotr (2021), 'They Wrote on Clay, Wax, and Stone: Some Thoughts on Early Mesopotamian Writing', in Quenzer 2021, 67–88.
- Michel, Cécile (1995), 'Validité et durée de vie des contrats et reconnaissances de dette paléo-assyriens', *Revue d'Assyriologie et d'Archéologie Orientale*, 89: 15–27.
- Michel, Cécile (2008), 'La correspondance des marchands assyriens du XIX<sup>e</sup> s. av. J.-C.: de l'archivage des lettres commerciales et privées', in Laure Pantalacci (ed.), *La lettre d'archive. Communication administrative et personnelle dans l'Antiquité proche-orientale et égyptienne* (Topoi Orient Occident, Supplément, 9; Bibliothèque Générale, 32), Cairo: IFAO, 117–140.
- Michel, Cécile (2016), 'Quelques remarques sur les bullae inscrites de la ville basse de Kültepe', in Bérengère Perello and Aline Tenu (eds), *Parcours d'Orient. Recueil de textes offert à Christine Kepinski*, Oxford: Archeopress, 175–184.
- Michel, Cécile (2020a), 'Old Assyrian Letter Envelope Making Clay Envelopes in the Old Assyrian Period', in Fikri Kulakoğlu, Cécile Michel and Güzel Öztürk (eds), *Integrative Approaches to the Archaeology and History of Kültepe-Kanesh, Kültepe, 4–7 August, 2017* (Kültepe International Meetings, 3; Subartu, 45), Turnhout: Brepols, 187–203.
- Michel, Cécile (2020b), *Women of Aššur and Kaneš: Texts from the Archives of Assyrian Merchants* (Writings from the Ancient World, 42), Atlanta: SBL Press.
- Michel, Cécile (2021), 'What about 3D Manuscripts? The Case of the Cuneiform Clay Tablets', in Quenzer 2021, 89–113.
- Nelson, Richard C. (1976), *Pisan-dub-ba Texts from the Sumerian Ur III Dynasty*, PhD dissertation, The University of Minnesota.
- Nielsen, John P. and Michael Kozuh (2021), '"Check the Writing Boards from the Time of Nebuchadnezzar": An Inventory of Administrative Writing Boards in the Spurlock Museum of World Cultures', *Revue d'Assyriologie et d'Archéologie Orientale*, 115: 143–158.
- Özgüç, Nimet and Önhân Tunca (2001), *Kültepe-Kaniš Sealed and Inscribed Clay Bullae*, Ankara: Türk Tarih Kurumu Basımevi.
- Proust, Christine (2012), 'Reading Colophons from Mesopotamian Clay-Tablets Dealing with Mathematics', *NTM Zeitschrift für Geschichte der Wissenschaften, Technik und Medizin*, 20: 123–156.
- Quenzer, Jörg (ed.) (2021), *Exploring Written Artefacts: Objects, Methods, and Concepts* (Studies in Manuscript Cultures, 25), Berlin: De Gruyter.
- Reiner, Erica and David Pingree (1975), *Babylonian Planetary Omens*, Part 1: *The Venus Tablets of Ammišaduqa* (Bibliotheca Mesopotamica, 2/1), Malibu: Undena.
- Reiner, Erica and David Pingree (1981), *Babylonian Planetary Omens*, Part 2: *Enuma Anu Enlil, Tablets 50–51* (Bibliotheca Mesopotamica, 2/2), Malibu: Undena.

- Reiner, Erica and David Pingree (1998), *Babylonian Planetary Omens*, Part 3 (Cuneiform Monographs, 11), Groningen: Styx Publications.
- Reiner, Erica and David Pingree (2005), *Babylonian Planetary Omens*, Part 4 (Cuneiform Monographs, 30), Leiden: Brill.
- Rochberg, Francesca (2018), 'The Catalogues of *Enūma Anu Enlil*', in Ulrike Steinert (ed.), *Assyrian and Babylonian Scholarly Text Catalogues: Medicine, Magic and Divination* (Die babylonisch-assyrische Medizin in Texten und Untersuchungen, 9), Berlin: De Gruyter, 121–136.
- Rositani, Annunziata (2015), 'Some Old-Babylonian Dockets Dealing with Sheep and Goats', *Kaskal*, 12: 1–30.
- Schroeder, Otto (1917), *Altbabylonische Briefe* (Vorderasiatische Schrift Denkmäler der Königlichen Museen zu Berlin, 16), Leipzig: J. C. Hinrichs.
- Tsouparopoulou, Christina (2017), '“Counter-Archaeology”: Putting the Ur III Drehem Archives Back in the Ground', in Yağmur Heffron, Adam Stone and Martin Worthington (eds), *At The Dawn of History. Ancient Near Eastern Studies in Honour of J. N. Postgate*, Winona Lake: Eisenbrauns, 611–629.
- Talon, Philippe (2005), *The Standard Babylonian Creation Myth Enūma Eliš* (State Archives of Assyria Cuneiform Texts, 4), Helsinki: Neo-Assyrian Text Corpus Project.
- van Soldt, Wilfred H. (1995), *Solar Omens of Enuma Anu Enlil: Tablets 23/24–29/30*, Leuven: Peeters.
- Veenhof, Klaas R. (2003), 'Archives of Old Assyrian Traders', in Maria Brosius (ed.), *Archives and Archival Tradition. Concepts of Record-Keeping in the Ancient World* (Oxford Studies in Ancient Documents), Oxford: Oxford University Press, 78–123.
- Veenhof, Klaas R. (2010), *Kultepe Tabletleri, 5: The Archive of Kuliya, son of Ali-abum (Kt 92/k 188-263)* (Türk Tarih Kurumu Yayınları, 6/33c), Ankara: Türk Tarih Kurumu Basımevi.
- Veenhof, Klaas R. (2015), 'Nuhšatum, the Wife of an Old Assyrian Trader. Her Status, Responsibilities and Worries (with two new letters)', in İrfan Albayrak, Hakan Erol and Murat Çayır (eds), *Cahit Günbattı'ya Armağan. Studies in Honour of Cahit Günbattı*, Ankara: Ankara Üniversitesi Basımevi, 271–288.
- Verderame, Lorenzo (2003), *Le Tavole I–VI della serie astrologica Enūma Anu Enlil* (Nisaba, 2), Messina: Di. Sc. A.M.
- Wiseman, Donald J. (1955), 'Assyrian Writing-Boards', *Iraq*, 17: 3–13.

