The handle http://hdl.handle.net/1887/19986 holds various files of this Leiden University dissertation.

Author: Scheucher, Tobias Simon
Title: The transmissional and functional context of the lexical lists from Hattusha and from the contemporaneous traditions in Late-Bronze-Age Syria
Issue Date: 2012-10-18
Chapter 8: Tablet types, physical characteristics, and colophons

The present chapter deals with all non-linguistic and non-textual internal features of the manuscripts. They comprise aspects of the tablet types (sect. 1), aspects of the manuscripts’ physical characteristics, such as tablet formatting (sect. 2), aspects of the inscripational practice, such as size and quality of the script (sect. 3), as well as aspects of the colophon practice (sect. 4.). As will be seen, the features collected are of great importance for reconstructing both the functional and the transmissional context of the manuscripts. A short recapitulation of the most important points in this respect is given in sect. 5. The chapter concludes with a (re-)edition of the elaborated colophons as preserved in the Ḫattuša corpus (sect. 6.)

1.1.1. [Tablet types – full text tablets vs. excerpt tablets – distinctive features and the types found in the Ḫattuša corpus] During the entire period of their attestation, lexical lists are inscribed on basically two different types of tablets, on full text tablets and excerpt tablets.1 Full text tablets, as the term suggests, contain the whole or an essential part of a given composition, while the excerpt tablets only present smaller portions of it, usually 10-30 lines. Full text tablets are always large, usually multi-columned tablets, and in some cases assuming the shape of prisms (see sect. 1.3.). Excerpt tablets are preserved in various shapes in the individual periods of their attestation.2 They are usually smaller than full text tables. The script found on them is mostly larger (with wider line spacing) and of inferior quality.

The Ḫattuša corpus does not contain a single manuscript that can be identified as (a part of) an excerpt tablet. There are no lenticular shaped tablets among them, no tablets that combine two different (a teacher’s and a pupil’s) handwriting or that combine two different compositions on obverse and reverse – which are formats typical for excerpt tablets. The script is mostly regular, often minute in size.3

1.1.2. [Tablet types – full text tablets vs. excerpt tablets – comparison to the parallel corpora] Except with the Ḫattuša corpus, excerpt tablets are a part of all larger pre-canonical corpora of lexical lists. Following the progression from the OB to the LBA peripheral parallel traditions of Ugarit and Emar; however, the quantitative proportions between full text tablets and excerpt tablets apparently undergo considerable changes, as demonstrated by the following table:4

---

1 As for the following, also cf. the typology in Civil 1995. Type I established there corresponds to present full text tablets; the other types (II-VII) represent the different kinds of excerpt tablets.

2 As for an overview according to the individual historical periods, cf. Civil 1995.

3 Contrary to the suggestion by J. Klinger (2005: 111), Urra Bo. 6B = KBo. 1,32 is definitely not an excerpt tablet; see introductory remarks in part D.

4 Full text tablets of the OB traditions including tablet type I and prisms; excerpt tablets of the OB traditions
Thus, the quantitative proportions between full text tablets and excerpt tablets in OB Nippur seem to be almost exactly the opposite of those obtained for the lexical tablets from Ugarit and Emar. The proportions found in the latter two corpora moreover, are almost identical. Their identity possibly indicates that similar scribal practices formed the context of both of these corpora.

As for the Emar tradition, the share of excerpt tablets is virtually identical for both Em-SH and Em-Syr. In Ugarit, the share varies among the five larger archives: Ug-Rap and Ug-GP show shares around the average share. In Ug-Urt, excerpt tablets assume more than 50% of the total number of manuscripts, which is still considerably low compared with the shares known from OB Nippur. Ug-MT (one case) and Ug-Lam (no case) virtually lack excerpt tablets.

**1.1.3. [Tablet types – full text tablets vs. excerpt tablets – some conclusions]** Assumed that when studying lexical lists, apprentice scribes first copied compositions on excerpt tablets until they had memorized individual chunks and could reproduce whole composition on a full text tablet. An average length of 300 entries per composition and an average size of 25-30 lines per excerpt tablet would require a number of 10-12 tablets in order to study a given composition at full length by means of excerpts, not taking into account those tablets which had to be written more than once until achieving mastery of the respective passage.

The proportions exhibited by the OB tradition, though not fully matching the proportions of 10-12:1 as expected, show this to be a likely educational procedure. The proportions obtained for the corpora in Ugarit and Emar, which are almost exactly the opposite to those obtained for OB Nippur; however, either show a change of the role excerpt tablets played in the educational process or a change of the archival exposure to the individual tablet types. I.e., either excerpt tablets were

<table>
<thead>
<tr>
<th></th>
<th>full text tablets</th>
<th>excerpt tablets</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OB Nippur according to database in Veldhuis 1997</strong></td>
<td>281</td>
<td>1711</td>
</tr>
<tr>
<td></td>
<td>14,1%</td>
<td>85,9%</td>
</tr>
<tr>
<td><strong>OB manuscripts of the composition Ea according to Civil 1979</strong></td>
<td>18</td>
<td>202</td>
</tr>
<tr>
<td></td>
<td>8,4%</td>
<td>91,6%</td>
</tr>
<tr>
<td><strong>OB manuscripts of the composition Ezzi according to Civil 1971</strong></td>
<td>14</td>
<td>62</td>
</tr>
<tr>
<td></td>
<td>18,5%</td>
<td>81,5%</td>
</tr>
<tr>
<td><strong>Ugarit according to van Soldt 1995</strong></td>
<td>255</td>
<td>38</td>
</tr>
<tr>
<td></td>
<td>87,0%</td>
<td>13,0%</td>
</tr>
<tr>
<td><strong>Emar according to Gantzert 2008</strong></td>
<td>94</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>88,7%</td>
<td>11,3%</td>
</tr>
</tbody>
</table>

including tablet types II-IV; see note 1.

The inventory given in van Soldt 1995, as used in the table, includes three categories of manuscripts, (1) manuscripts explicitly marked as excerpt tablets, (2) manuscripts denoted as fragments (‘frg.’), and (3) the remaining manuscripts (without further marks). The category ‘full text tablets’ as used in the tablet includes the manuscripts of this third group. Manuscripts of group 2 are disregarded.

The inventory given in Gantzert 2008, as used in the table, marks the excerpt tablets explicitly only. In the table, the category of full text tablets includes those manuscripts only which can definitely not be excerpt tablets, i.e., manuscripts that definitely are multi-columned and/or bear a colophon.
only occasionally used in scribal education in these LBA traditions, e.g., for difficult passages that required more intense study, or full text tablets were kept for longer periods than the excerpt tablets.

The same potential explanations must be adduced to account for the total lack of excerpt tablets in the Ḫattuša corpus as well as for that in Ug-Lam. This lack cannot simply be explained by the deviating archaeological context of the tablets – the manuscripts were probably not found at their in-situ find spots: If all of the excerpt tablets were simply discarded, then some full text tablets obviously survived on the shelves; and if excerpt tablets did not exist at all, the scribal practices connected to lexical lists must have been fundamentally different from those which the OB sources represent.

1.2. [Tablet types – *sammeltafeln*] A variant type of full text tablets is represented by so-called *sammeltafeln*, i.e., manuscripts that contain more than one composition. There is no trace of this type of tablet within the Ḫattuša corpus of lexical lists; however, the corpus of Sumerian and Babylonian religious, medical, and literary texts contains some *sammeltafeln*, as do the parallel corpora from Emar and Ugarit. *Sammeltafeln* with lexical lists are of particular importance for the reconstruction of the supposed curricular order of these compositions. The Emar corpus involves two pieces:

1. **543-5A+, Urra 3 - Akkadian incantation; sequence is assured since the incantation is on the left edge**
2. **602M+, Lu 2 - Izi; sequence is assured since Izi is on the left edge**

*Sammeltafeln* of the Ugarit corpus involve the following pieces:

3. **RS 20.123+ SaV - WeidG; sequence is assured since SaV is on both sides**
4. **RS 20.125+ Tu - SAI; sequence is assured by colophon that follows SAI**
5. **RS 20.139 SAI - SaS - unid. (poss. Tu); sequence is assured since SaS is on both sides**
6. **RS 20.155 SAI - Tu (- unid.)?; sequence is not assured**
7. **RS 22.220+ SAI - SaS; sequence is assured since SaS is on both sides**
8. **RS 22.225 Alph. Ugaritic comp. - Tu - unid. (poss PN’s); sequence is not assured**
9. **RS 23.80 Urra 15 - Lu 1; sequence is assured**
10. **RS 25.438B SAI - SaS; sequence is assured, since both compositions are on the same side and SAI is first**

In the cases of (2), (4), and (9), the respective sequence of compositions is in accord with the curricular order that is known from the OB period. From (1) and (8) however, it is clear that the sequence

---

5  Cf. Fincke forthc.
6  Note that if this identification is correct, *Tu* was definitely inscribed after SAI and SaS.
7  The third composition occupying the single column after SAI, according to the initial DIŠ-markers, either represents *Tu* or SaS. In the first case the sequence must be reconstructed as SAI - *Tu* (!); in the second case, the tablet could only have contained the beginning of SaS.
expressed by the *sammeltafel* does not necessarily reflect the traditional sequence without gaps (further see chapter 11, sect. 1.2.).

An additional, though fragmentarily preserved *sammeltafel* can be found in the small corpus from El-Amarna:

(11) EA 350    SaS - SAI; sequence is not assured

### 1.3. **Tablet types – clay tablets, clay prisms, wax tablets**

A large part of the Ḫattuša corpus is preserved in the shape of clay tablets. Three additional manuscripts use four-sided clay prisms as *schriftträger*. Clay prisms are rare among the remains of the Ḫattuša cuneiform tradition; altogether there are ten exemplars that can be verified:

<table>
<thead>
<tr>
<th>Publ.-Nr.</th>
<th>Find spot</th>
<th>Contents</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>KBo. 19, 98</td>
<td>Hatt-BkA</td>
<td>Narām-Sin legend</td>
<td>II c</td>
</tr>
<tr>
<td>KBo. 19, 99</td>
<td>Hatt-T.I</td>
<td>Narām-Sin legend</td>
<td>II b/c</td>
</tr>
<tr>
<td>KBo. 36, 72</td>
<td>Hatt-T.I'</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>KUB 4, 39</td>
<td>unknown</td>
<td><em>Eduba</em>-narrative (Sum.-Akk.)</td>
<td>II c'</td>
</tr>
<tr>
<td>KUB 4, 40</td>
<td>unknown</td>
<td>Akkadian Proverbs</td>
<td>II c</td>
</tr>
<tr>
<td>KUB 4, 41</td>
<td>unknown</td>
<td>Sum.-Akk. fragment</td>
<td>II c (+)</td>
</tr>
<tr>
<td>KBo. 26, 2</td>
<td>Hatt-T.I</td>
<td>GodL Bo. A (unidentified god list)</td>
<td>III c</td>
</tr>
<tr>
<td>KBo. 26, 4</td>
<td>Hatt-T.I</td>
<td>Them A (unidentified thematic list)</td>
<td>III a</td>
</tr>
<tr>
<td>KBo. 26, 5 (+)</td>
<td>Hatt-T.I</td>
<td>Urra 1A</td>
<td>III a'</td>
</tr>
<tr>
<td>KBo. 26, 56</td>
<td>Lower City</td>
<td>(Graphically) inversive listing of signs</td>
<td>-</td>
</tr>
</tbody>
</table>

The compositions found on the prisms, i.e., lexical lists, sign lists, and traditional Sumerian and Babylonian literature, are all associated with scribal education as known from Mesopotamian sources. There are no pieces attested with typical Hittite compositions or even Hittite language preserved – the lexical prisms are strikingly unilingual Sumerian and do not contain Hittite translations. According to the paleographic dates, prisms were preferably used in the 14th century; only two pieces, GodL Bo. A = KBo. 26,1 and possibly also the *Eduba* text KUB 4,39, were produced in the 13th century (paleographic period IIIc). With regard to the whole lexical corpus, this distribution is disproportionate (cf. the general proportions given in chapter 5, sect. 2.3. & 2.4.). Among the other LBA scholarly traditions, prisms are not attested with the exception of a single, badly preserved piece from Tell Aphek; however, 14th-century manuscripts, i.e., manuscripts roughly contemporaneous to most of the prisms from Ḫattuša, make up only a very small section of the parallel corpora.

From secondary evidence (clay bullae and secondary literary attestations) it is known that Hittite scribes also made broad use of wooden-boarded wax tablets. Due to the perishable material these

---

tablets were made of, no remnants have survived, so it is impossible to know if tablets made of wax were inscribed with cuneiform lexical lists and – if so – in which amounts.

2.1. [Physical characteristics – tablet size and state of preservation] There are no completely preserved exemplars among the tablets of the Ḫattuša corpus. The original size can be reconstructed for two pieces, for Izi Bo. A = KBo. 1,42 (six-columned) with approximate measurements of 27 x 22 cm, and for Erim Bo. Aa = KBo. 1,44+ (four-columned) with 27 x 21 cm. Presuming an original number of four columns per side, it is additionally possible to reconstruct the approximate original width of Urra Bo. 4A = KBo. 1,57+ with 24 cm. The width of Them Bo. B = KBo. 1,51 (two columns per side); accordingly, must have been approximately 19 cm.

A comparison with the average dimensions of non-ephemeral tablets assessed by W. Waal (forthc.), with average measurements of 26.9 x 18.7 for NH four-column and 26.5 x 21.4 for NH six-column tablets, demonstrates that lexical tablets do by no means form an exception within the contemporaneous tablet collections. Lexical tablets from Ugarit, in contrast, appear to be a bit smaller; with the height varying between 17.0 and 25.0, and the width between 11.0 and 16.0 cm, and with no notable contrasts among the individual local archives. This is also true for the lexical tablets from Emar, with 15.0 to 25.0 cm in height and 11.0 to 21.0 in width and with no obtainable differences between tablets from Em-Syr and tablets from Em-SH.

Notably, among the evidently older manuscripts within the corpora from Ugarit and Emar, there are many well preserved pieces. This is particularly the case for manuscripts of Em-Syr, from Ug-GP, and the early manuscript Urra Ug. 11A = RS 20.32 from Ug-Rap. Fragmentary material from the earlier periods – in contrast to the later ones – is rare. This state of preservation suggests that the older manuscripts that have survived were maintained with extra care within the tablet collections.

2.2.1. [Physical characteristics – columns and subcolumns – the individual levels of column organization] The written surfaces of lexical lists, like all kinds of cuneiform tablets, are usually organized in columns. The list-like organization of lexical texts, with their multilinguality and grapho-analytic character, result in a more complex column organization. In this respect one must distinguish three hierarchical levels: main columns (level I), linguistic subcolumns (level II), and grapho-analytic subcolumns (level III).

---

9 As exemplified by SVo Ug. B = RS 22.222 with ca. 25 x 16 cm, SAI Ug. D = RS 34.62 with ca. 17 x 11 cm; an exceptionally large exemplar is Urra Ug. 2B = RS 2.23+ with ca. 30 x 18 cm.

10 As exemplified by Urra 7a Em. = 548-9D+ with ca. 25 x 13.5 cm, SaP Em. = 538F+ with ca. 24 x 21 cm, or SVo. Em. = 603A with 15.5 x 11.5 cm.
Superordinate level I involves the kind of columns that are also found on tablets of other textual genres. These main columns are a mere device of the writing surface, i.e., a device of extra-textual organization. Similar to the pages in modern books, they divide the textual flow into a number of serial parts and arrange these side-to-side on the writing surface. In contrast, the two subordinate levels are innate to lexical lists only being devices of intra-textual organization; for the units they contain are mutually interrelated. Linguistic subcolumns (level II) organize the individual units of linguistic information that make up an individual entry: the key word, the phonetic transcription, and/or the translation(s) into other languages. Grapho-analytic subcolumns (level-III) further organize the level-II columns, providing slots for the individual (groups of) cuneiform signs that make up the entries:

The number of linguistic subcolumns an individual manuscript contains naturally depends on the specific linguistic format that the recension follows (see chapter 11, sect. 2.). Grapho-analytic subcolumuns are a regularly applied device in manuscripts of the pre-canonical lexical tradition,

---

11 Terminological note: If linguistically specified, the level-II columns are simply denoted as ‘Sumerian column’, ‘Akkadian column’, etc.

12 Unilingual Sumerian manuscripts thus do not show a differentiation at level II.
Chapter 8 - Tablet types, physical characteristics, and colophons

concerning an estimated 80-90% of the manuscripts. The standard number of grapho-analytic sub-columns for the Sumerian column is three, but may also count two, and in some cases four columns. The Akkadian column is not necessarily subdivided. If and when it is, the standard number of subcolumns is two, sometimes three. In the Sumerian column, the three individual slots evolving from the subdivisioning usually do not have equal width: the initial slot providing space for one, the final slot for two, and the middle slot for three or more cuneiform signs (the proportions, thus, approximately are 1 : 3/4 : 2). Notably, Sumerian items consisting of a single sign are placed into the final slot of the grid; two-sign items cover the initial and the final slot (see the schematic example above).\textsuperscript{13}

\subsection*{2.2.2. [Physical characteristics – columns and subcolumns – main columns]} Altogether there are six manuscripts preserved within the Ḫattuša corpus that enable the reconstruction of the exact number of columns, and furthermore four additional manuscripts which at least leave a minimum number of main columns restorable to the observer:

<table>
<thead>
<tr>
<th>Izi Bo. F = KBo. 26, 48</th>
<th>Main columns per side: 4+</th>
<th>Ling. subcols. per col: 1</th>
<th>Ling. subcols. in total: 8+</th>
<th>Format: 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urra Bo. 4A = KBo. 1, 57+</td>
<td>4+</td>
<td>3</td>
<td>24+</td>
<td>2 - 1 - 4</td>
</tr>
<tr>
<td>Lu Bo. Ba = KBo. 26, 36</td>
<td>3+</td>
<td>2</td>
<td>12+</td>
<td>2 - 4</td>
</tr>
<tr>
<td>An Bo. A = KBo. 26, 1+</td>
<td>3</td>
<td>2</td>
<td>12</td>
<td>2 - 2/4</td>
</tr>
<tr>
<td>Izi Bo. A = KBo. 1, 42</td>
<td>3</td>
<td>3</td>
<td>18</td>
<td>2 - 4 - 5</td>
</tr>
<tr>
<td>Erim Bo. Aa = KBo. 1, 44+</td>
<td>2</td>
<td>3</td>
<td>12</td>
<td>2 - 4 - 5</td>
</tr>
<tr>
<td>SaV Bo. A = KBo. 26, 34</td>
<td>2</td>
<td>4</td>
<td>16</td>
<td>2 - 1 - 4 - 5</td>
</tr>
<tr>
<td>Them Bo. B = KBo. 1, 51</td>
<td>2</td>
<td>2</td>
<td>8</td>
<td>4 - 5</td>
</tr>
<tr>
<td>Them Bo. A = KBo. 26, 4 (prism)</td>
<td>3+</td>
<td>1</td>
<td>12+ (prism)</td>
<td>2</td>
</tr>
<tr>
<td>Urra Bo. 1A = KBo. 26, 5+ (prism)</td>
<td>3</td>
<td>1</td>
<td>12 (prism)</td>
<td>2</td>
</tr>
</tbody>
</table>

Notably, tablets with three or more columns per side have a maximum of three linguistic sub-columns per column. I.e., there is no tablet attested in format \textless 2 - 1 - 4 - 5 \textgreater that has more than two columns per side; tablets with three or more columns per side involve the formats \textless 2 \textgreater, \textless 2 - 4 \textgreater, \textless 2 - 1 - 4 \textgreater, or \textless 2 - 4 - 5 \textgreater.

\textsuperscript{13} This peculiar distribution, by the way, can give some insights in the emic conception of compound signs and grammatical morphemes. The series RSGT, preserved in various manuscripts in Ugarit, contains some interesting entries in this respect: In the entries Sum. a-\textasciinewline
ni “his” (11), Sum. ţm “is” (A-AN; 47f.), Sum. e-meš “they” (241), Sum. āi-a [plural marker] (243) Sum. u-r-da “(the day) when” (251ff.), and Sum. ěr “lament” (A-IGI, 255), the two signs making up the entry are both placed invariably in the third grapho-analytic subcolumn (also in the duplicates). Scribes apparently conceived of these terms as inseparable graphic or morphemic entities. The same is true for Sum. tag-ga in the phrase uḫ-tag-ga “sorcery” (238f.), which is also placed in the third column, and for Sum. te-en-te-en “(to be) cold” (249) with the two halves placed in the first and third subcolumn respectively. Notably, the three components of the compound sign sēd (A-MUŠ-DI) “winter” (248) in contrast, each appear placed in one subcolumn.
As demonstrated by W. Waal (forthc.), four-columned tablets are quite unique in the Ḫattuša tradition; with one exception, all exemplars contain administrative lists. This suggests a certain formal closeness between administrative lists and lexical lists, despite the big differences in content and function of these genres (also see sect. 2.5.1.).

2.2.3. [Physical characteristics – columns and subcolumns – linguistic subcolumns] Sumerian, Akkadian, or Hittite words show differences as to their average length, i.e., as to the number of the graphic units they contain. Orthographic-Sumerian words, as a consequence of their logographic character, are rarely longer than three signs and often count a single sign only. Words in Akkadian and Syllabic Sumerian make up two to five signs on the average, whereas Hittite words can be considerably longer. In the manuscripts of the Ḫattuša corpus, these proportions are well reflected in the physical size of the linguistic subcolumns:

<table>
<thead>
<tr>
<th></th>
<th>1.00-1.49 cm</th>
<th>1.50-1.99 cm</th>
<th>2.00-2.49 cm</th>
<th>2.50-2.99 cm</th>
<th>3.00-3.49 cm</th>
<th>3.50-4.00 cm</th>
<th>&gt; 4.00 cm</th>
</tr>
</thead>
<tbody>
<tr>
<td>OrthSum.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SyllSum.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Akk.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hitt.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The size of individual linguistic subcolumns is not necessarily constant in all columns of a given tablet; in Izi Bo. A = KBo. 1,42 e.g., the size of the Akkadian subcolumn varies from 2.25 cm to 3.0 cm, which is apparently not due to the specific contents of the columns.

2.2.4. [Physical characteristics – columns and subcolumns – grapho-analytic subcolumns] Lexical manuscripts from Ḫattuša only rarely show the subdivisioning of the (Orthographic-)Sumerian column, and they entirely lack grapho-analytic subcolumns in the Akkadian and Hittite columns. A strict divisioning of the Orthographic-Sumerian column, visually marked by vertical rulings, is thereby only found in the manuscripts Kagal Bo. A = KBo. 1,59, Bb = KBo. 26,40, and E = KBo. 26,41, probably fragments that all belong to the same tablet. Furthermore, a small group of manuscripts (SaV Bo. A = KBo. 26,34, Izi. Bo. A = KBo. 1,42, Erim Bo. Aac = KUB 37,147+, B = KBo. 1,36+, C = KBo. 1,50+, E = KBo. 26,27, Acro Bo. B = KUB 3,104) apparently reflects some remnants of the original inscriptional rules, but lacks any strict and visually marked subdivisioning: The signs of some two-sign items are

14 This section only deals with the physical characteristics of the linguistic columns. Questions of the linguistic format are part of chapter 11.
often placed at the beginning and end of the column respectively; although not placed at the end of the column, single-sign items appear at least indented, with some spacing to the left margin. However this practice is rarely followed consistently, with single-sign and double-sign items often appearing left-aligned and without further spacing between the individual component signs.

This broad lack of grapho-analytic subdivisioning is quite remarkable since the device so regularly shapes the manuscripts of the parallel traditions (see sect. 2.2.5.). Those manuscripts that show occasional fragmentary preservation of the original grapho-analytic subdivisioning moreover have some impact on the question of the transmissional context of the lists: It appears suggestive that the strangely mixed layout of these manuscripts evolved during the copying from vorlagen on which the original layout was preserved. The copying scribes – for some reason, possibly on account of their supervisors’ disposition – disregarded this original layout; however retaining it rudimentarily in some entries and probably by mistake. Writing a composition from memory, in contrast, is expected to result in a higher consistency of the layout. The grade of fragmentation on the preserved manuscripts furthermore suggests that the vorlagen from which the scribes copied the original layout were already corrupted. It suggests that this corruption was a gradual and step-wise process extending over a series of several copies. In this respect, it appears to prove that individual lexical compositions underwent longer cycles of writing-based reproduction.

2.2.5. [Physical characteristics – columns and subcolumns – the parallel corpora] As noted in the previous section, grapho-analytic subcolumns very regularly are a part of the lexical lists of all LBA parallel traditions.

Regarding the number of main columns, the lexical manuscripts from Emar, Ugarit, and Alalāḫ are largely in agreement with the layout of the Ḫattuša manuscripts. The following table lists the individual scribal traditions according to their supposed relative degree of innovation (further see chapter 13, sect. 1.).

<table>
<thead>
<tr>
<th></th>
<th>Standard number of columns in unilingual manuscripts</th>
<th>Standard number of columns in bilingual manuscripts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alal</td>
<td>4</td>
<td>-</td>
</tr>
<tr>
<td>Em-Syr</td>
<td>4-5</td>
<td>-</td>
</tr>
<tr>
<td>Ug-loc</td>
<td>3-4</td>
<td>2-3</td>
</tr>
<tr>
<td>Em-SH</td>
<td>3-4</td>
<td>2-4</td>
</tr>
<tr>
<td>Ug-Bab</td>
<td>2-3</td>
<td>2-3</td>
</tr>
</tbody>
</table>

15 The corpora from Emar and Ugarit also contain manuscripts with number of columns deviating from the standard number. Usually, manuscripts with lower number of columns contain exceptionally short compositions, like WeidG or SAI/SV0, while manuscript with higher number of columns contain compositions with exceptionally short horizontal entries, such as SaS or SaP. Also see Gantzert 2008: III, 123.
The comparison of the individual traditions apparently attests to a gradual diachronic reduction in the number of columns.

2.3.1. [Physical characteristics – formal column divisioning – general description] Scribes employ a set of physical devices to visually mark off the columns and subcolumns of an individual tablet: They either use blank space, gloss wedges, or vertical rulings. Vertical rulings, the device most prominently employed in Ḫattuša and the parallel LBA lexical traditions, are attested in three different shapes: as single rulings, as (narrow) double rulings, and as spaced double rulings (with ca. 1-2 cm of spacing between the two rulings). The hierarchy among the three levels of column divisioning (see sect. 2.2.1.) as well as the hierarchy between the individual linguistic columns is often expressed by alternating visual devices.

The hierarchy of visual marking devices employed proves to be almost the same in all LBA traditions, ordering the visually more distinctive devices prior to the less distinctive ones, thus double rulings (narrow or spaced) superordinate to single rulings, superordinate to gloss wedges, and superordinate to zones of blank space. Only in some Emar manuscripts (as for which see sect. 2.3.4.), notably, are the actual hierarchical relations between level-II and level-III subcolumns not consistently reflected in the physical layout.

2.3.2. [Physical characteristics – formal column divisioning – main columns] Main columns appear visually marked off as follows in the manuscripts of the Ḫattuša corpus and of the three parallel LBA corpora from Emar, Ugarit, and Alalāḫ:

<table>
<thead>
<tr>
<th></th>
<th>blank space</th>
<th>single</th>
<th>double narrow</th>
<th>double spaced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ḫattuša</td>
<td>0</td>
<td>0,0 %</td>
<td>34</td>
<td>91,9 %</td>
</tr>
<tr>
<td>Emar</td>
<td>8</td>
<td>8,2 %</td>
<td>89</td>
<td>90,8 %</td>
</tr>
<tr>
<td>Ugarit</td>
<td>1</td>
<td>1,3 %</td>
<td>10</td>
<td>13,0 %</td>
</tr>
<tr>
<td>Alalāḫ</td>
<td>2</td>
<td>66,7 %</td>
<td>1</td>
<td>33,3 %</td>
</tr>
</tbody>
</table>

Thus, similar to the Emar lists, the main device of separating columns in the Ḫattuša lexical tradition is the single vertical ruling. Double rulings (always spaced) as column division are exceptional in lexical lists (3 cases; SaV Bo. H = KUB 3,105, Unid Bo. 8-2 = KBo. 13,4, and possibly SaV Bo. L = KBo. 1,53). This is remarkable, since double-spaced columns are actually the standard device for column divisioning in the Ḫattuša cuneiform tradition. Yet, as shown by W. Waal (forthc.), single-column divisions are also common among other genres of lists.

16 Deviations from this scheme are rare and can mostly be explained as mistakes; cf. the formats listed in note 18.
Manuscripts with double-spaced rulings also appear in the lexical lists from Ugarit, strongly coinciding with the specific paleographic and archival context, however: Four out of the six pieces stem from Ug-Lam (Urra Ug. 10B = RS 25.415(+), SSGl Ug. A = RS 25.459+, Diri Ug. 1A = RS 25.434+, Erim Ug. 1A = RS 26.139A); the paleography of these manuscripts is Babylonian and, according to an analysis of the handwriting, they probably stem from the same unnamed scribe’s hand (see sect. 3.3.2.). The fifth and sixth manuscript, Urra Ug. 10H = RS 34.166 and OB Lu Ug A = RS 86.2228+, in turn, show local and mixed Babylonian/local paleography, and they both stem from Ug-Urt. In contrast, manuscripts stemming from Lam that show local paleography, like the majority of the Ugarit manuscripts, either have single or narrow double rulings.

Double rulings are virtually absent in manuscripts of the Emar corpus, which, like the Ḫattuša lists, show a strong preference for single rulings. Notably, individual manuscripts from Emar, both of Em-Syr and Em-SH, also use blank space for marking off the individual main columns.¹⁷ Blank space at this level of column organization is not attested in the Ḫattuša manuscripts and only appears once in the corpus from Ugarit, in the exceptional OB-styled manuscript WeidG Ug. L = RS 20.121+.

Among the four manuscripts from Alalaḫ, two use blank space and two use single rulings. The manuscript from Ortaköy follows the Ḫattuša tradition in using single rulings; the same applies to the manuscripts from El-Amarna.

2.3.3. [Physical characteristics – formal column divisioning – linguistic and grapho-analytic sub-columns: Ḫattuša and Ugarit] Linguistic columns are almost without exception separated by single vertical rulings in the Ḫattuša corpus, regardless of the languages they contain. Two manuscripts contrast single rulings between the Orthographic-Sumerian and the Syllabic-Sumerian column with gloss wedges between the Syllabic-Sumerian and the Akkadian column (Kagal Bo. B = KUB 30,7+ and C = KBo. 16,87+ notably dating to Hatt-IIc/IIIa and showing the atypical find spot Hatt-BkA), reflecting a practice which is very common with regard to the lexical lists from Emar (see following section). Manuscript Unid Bo. 1-3 = KBo. 36,6 contrasts single rulings between Sumerian and Akkadian columns with blank space between Akkadian and Hittite columns, expressing respective hierarchical relations between these three linguistic subcolumns. Grapho-analytic columns – if indicated at all – are marked by single rulings in manuscripts with strict grapho-analytic divisioning, and by blank space in manuscripts with rudimentary retention of grapho-analytic divisioning (see sect. 2.2.4.).

Manuscripts of the parallel corpus from Ugarit have linguistic subcolumns separated by single or by double (then invariably narrow-spaced) vertical rulings. In agreement with the hierarchy described in sect. 2.3.1., single rulings between linguistic subcolumns occur in combination with both single or double rulings on the main column level, whereas double rulings are bound to double rulings on the main column level; i.e., there is no manuscript which combines single rulings between level-I columns with double rulings between level-II columns. In manuscripts with trilingual or quadrilingual formats or with bilingual formats extended by Syllabic-Sumerian transcriptions, the hierarchy among the individual linguistic columns is commonly expressed by a contrast between single and double rulings. E.g., quadrilingual SaV Ug. A\textsubscript{j} = RS 20.123+ uses single rulings between columns \textless 0\textgreater (DiŠ-marker), \textless 1\textgreater (Orthographic Sumerian), and \textless 4\textgreater (Akkadian), but double rulings between columns \textless 4\textgreater (Akkadian), \textless 5\textgreater (Hurrian), and \textless 6\textgreater (Ugaritic), with the resulting format \textless 0 - 1 - 4 - 5 - 6\textgreater .\textsuperscript{18} Grapho-analytic subcolumns are mostly separated by single rulings, very rarely by blank spaces (SaP Ug. I = RS 86.2222 and WeidG Ug. L = RS 20.121+), and in some erroneous instances also by double vertical rulings.\textsuperscript{19}

2.3.4. [Physical characteristics – formal column divisioning – interference between linguistic and grapho-analytic subcolumns: Emar] Manuscripts of the parallel corpus from Emar either use single vertical rulings or gloss wedges, and in some instances a combination of both devices or blank spaces for separating linguistic (in Emar, exclusively Sumerian and Akkadian) subcolumns. Note the following quantitative proportions:

<table>
<thead>
<tr>
<th>manuscripts</th>
<th>single</th>
<th>gloss wedges</th>
<th>single + gl. wedges</th>
<th>blank spaces</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>49</td>
<td>49</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

In eight additional manuscripts, the devices used apparently vary among individual parts of the manuscripts; Urra 3 Em. 543B e.g., uses gloss wedges on the obverse and single rulings on the reverse.\textsuperscript{20} Upon closer inspection; however, it can be observed that the mixed layout of some of

\textsuperscript{18} In this respect it underlines the actual bilingual character of multilingual lists: with additional Hittite, Hurrian, or Ugaritic columns being mere appendices to the Akkadian column; further see chapter 11, sect. 2.6.1.

\textsuperscript{19} RSGT Ug. C = RS 22.227A(+), with format \textless 2a -- 2b - 2c\textgreater in obv. i, and \textless 2a - 2b -- 2c\textgreater in obv. ii (with reverse hardly preserved) and Tu Ug. A / SAI Ug. B = RS 20.125+, with format \textless 2a -- 2b\textgreater in rev. ii and regular \textless 2a - 2b\textgreater in the remaining columns.

\textsuperscript{20} The other seven instances are:
- Urra 4 Em. 545C+ single ruls. vs. gloss wedges (in irregular distribution)
- Urra 5 Em. 546’Q’: single ruls. (in i-vii) vs. gloss wedges (in viii)
- Urra 10 Em. 553A+ single ruls. vs. single ruls.+goss wedges (in irregular distribution)
- Urra 13 Em. 556B single ruls. vs. single ruls.+gloss wedges (in irregular distribution)
- Urra 16 Em. 558B+ single ruls. (obv.) vs. blank space (rev.)
these manuscripts correlates with a variation in the number of grapho-analytic subcolumns. In the above quoted Urra 3 Em. 543B, e.g., the obverse with single rulings between the Sumerian and Akkadian column divides the Sumerian items into two grapho-analytic subcolumns (format <2a - 2b - 4>), while the Sumerian column on the reverse uses three of them, but has gloss wedges to mark off the Akkadian column (format <2a - 2b - 2c : 4>); the total number of subcolumns marked by vertical rulings; thus, remains constant throughout the whole manuscript, the specific variation involving the arrangement of the items among these (physical) columns.

Generally, the levels of the linguistic and the grapho-analytic subcolumns appear to be less emphasized and less strictly separated in the layout of many manuscripts of the Emar corpus than is the case for the parallel traditions. In many manuscripts, e.g., in the above-mentioned example, all main columns appear divided into three subcolumns by means of vertical rulings; the Sumerian item either occupying the first two or all three slots, the Akkadian item always placed into the third slot and – if the latter is partly occupied – additionally marked off by gloss wedges.21

Grapho-analytic subcolumns in turn, are marked off by single rulings or by blank space in the Emar lists. Manuscripts of the Syrian tradition thereby always use blank space; manuscripts of the Syro-Hittite tradition show a preferred use of rulings, individual pieces however using zones of blank space as well (e.g., Urra 7 Em. 548G or Urra 16b Em. 558B+). Structural interference between the linguistic and grapho-analytic subcolumns in the layout also occurs in connection with blank space; thus, manuscript Urra 7 Em. 548V has the format <2a 2b - 2c 4>, Urra 14 Em. 557A the format <2a - 2b 2c - 4>.

2.4.1. [Physical characteristics – horizontal tablet divisioning – general description] Columns and subcolumns as devices of vertical organization of the tablet surface (extra-textual) and of the text (intra-textual) are complemented by horizontal rulings. Thereby, one again has to distinguish between horizontal rulings as devices of extra-textual or intra-textual organization. As extra-textual devices they assume the shape of line-by-line auxiliary rulings drawn in column-wise and for every individual entry; the respective signs are usually placed not above or below, but exactly on top of these rulings.

In contrast, horizontal intersection rulings are drawn in between individual groups of entries. Being intra-textual devices, they mostly reflect the structural cuts between the specific sections that make up the list (as for possible functions of the rulings within the transmission process of the

---

Lu 1 Em. 602A+ single ruls.+gloss wedges (obv) vs. gloss wedges (rev.)
Izi 2 Em. 568'b' A+ single ruls. (obv.) vs. gloss wedges (rev.)

21 In addition to the manuscripts listed in the previous note, this group includes Urra 2 Em. 542A, Urra 3 Em. 543B, Urra 4 Em. 545D+, Urra 5 Em. 546A+, Lu 1 Em. 602D+. 
texts, cf. chapter 13, sect. 2.1.6.3.). Entries are usually not placed on top of, but above/below the rulings of this type. Auxiliary rulings shape the surfaces of the vast majority of OB lexical tablets. Intersection rulings seem to represent a later development, not appearing on lexical tablets before the Late-OB period.

Some manuscripts exhibit a kind of intermediate form between both devices. The horizontal rulings thereby appear as auxiliary rulings, still overwritten by the individual entries, but omitted below entries that are identical with the respectively preceding entry or repeat some essential parts of it.

2.4.2. [Physical characteristics – horizontal tablet divisioning – details] Manuscripts of the present corpus as well as that of the LBA parallel corpora usually employ one of the three modes of horizontal organization only; combinations of auxiliary rulings and intersection rulings are very rare.22

Within the corpus of Ḫattuša lexical lists, auxiliary rulings are confined to specific groups of manuscripts: (1) the great part of unilingual manuscripts that were produced before period Hatt-IIIb (i.e., in the 14th century); (2) the (bilingual) manuscripts found at Hatt-BkA (Kagal Bo. B = KUB 30,7+ and C = KBo. 16,87+; both produced in Hatt-IIc/IIIa); and (3) the (probably unilingual) manuscripts that show a strict subdivisioning into three grapho-analytic subcolumns (i.e., Kagal Bo. A = 1,59, Bb = KBo. 26,40, and E = KBo. 26,41, possibly all a part of the same tablet, Hatt-IIIb/c; see sect. 2.2.4.). Notably in the latter group, the entries are not written on top of the lines but are placed in-between them. Intersection rulings, consequently, can be found on all 14th-century bilingual and trilingual manuscripts except those found in Hatt-BkA, and on all manuscripts of the 13th century except the three Kagal manuscripts mentioned in the group (3) above.

This distribution notably coincides with the observations made for the Emar corpus: As far as they can be assigned to either the Syrian or the Syro-Hittite tradition, Emar manuscripts showing auxiliary rulings almost exclusively belong to (chronologically earlier) Em-Syr, regardless if they are unilingual or bilingual; the group also includes manuscripts with mixed paleography. The (chronologically later) manuscripts of Em-SH show the use of intersection rulings throughout.

Among the 110 manuscripts verifiable in Ugarit, only ten pieces have horizontal intersection rulings. These manuscripts betray some significant correlations with regard to their archival and paleographic context: Three pieces among them stem from the archives Rap-L, Rap-PC, and Rap-Ršp – archives with a generally marginal attestation of lexical lists. Among the other seven pieces, three stem from Ug-Urt and two each from Ug-Rap and Ug-Lam.23 The three manuscripts stemming from

22  Probably, manuscripts with intersection rulings dispense with auxiliary rulings, as the latter would blur the structuring effect of the former.

23  From L: Urra Ug. 8A = RS 17.40A+; PC: RSGT Ug. L = RS 12.47; from Ršp: SVo Ug. A = RS 17.41+; from
Rap and Ršp moreover belong to Ug-NS, which is a high amount compared to the general share of manuscripts reflecting this paleography.

The trilingual manuscript from Ortaköy in accordance with the Ḫattuša tradition shows intersection rulings. Lexical manuscripts from El-Amarna and Alalah use auxiliary rulings and the latter are unilingual throughout. The intermediate pattern mentioned in the previous section, with auxiliary rulings omitted for entries with repetitive contents, is known only for individual manuscripts from Emar, Ugarit, and El-Amarna. Manuscripts of this sort naturally contain lexical compositions with larger sections of (partly) repetitive entries, such as SVo, SaV, Diri, or RGST; in all other physical and paleographic aspects they conform with the group of manuscripts that use standard line-by-line auxiliary rulings.

2.5.1. [Physical characteristics – tablet margins and edges – randleisten] The randleiste, with a width of about 1 cm, is a typical feature of Hittite tablet layout. It is only found on manuscripts of the Ḫattuša corpus and it is usually impressed as a delimitation of the lower edge of both the obverse and reverse as well as of the upper edge of the reverse.

The following table includes all (seven) manuscripts which preserve the upper and/or lower edge and on which the obverse and reverse can be identified (according to the sequence of entries; with deviations from the standard scheme shown in bold letters):

<table>
<thead>
<tr>
<th>Manuscript</th>
<th>upper obv.</th>
<th>lower obv.</th>
<th>upper rev.</th>
<th>lower rev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Erim Bo. Aa = KBo. 1,44+</td>
<td>no</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>Izi Bo. A = KBo. 1,42</td>
<td>yes</td>
<td>broken</td>
<td>broken</td>
<td>broken</td>
</tr>
<tr>
<td>Izi Bo. Ab = KBo. 26,62</td>
<td>broken</td>
<td>yes</td>
<td>no</td>
<td>broken</td>
</tr>
<tr>
<td>Izi Bo. B = KBo. 1,31</td>
<td>broken</td>
<td>broken</td>
<td>yes</td>
<td>broken</td>
</tr>
<tr>
<td>Diri Bo. Ab = KBo. 26,9+</td>
<td>broken</td>
<td>no</td>
<td>no</td>
<td>broken</td>
</tr>
<tr>
<td>Diri Bo. E = KUB 3,103</td>
<td>broken</td>
<td>yes</td>
<td>yes</td>
<td>broken</td>
</tr>
<tr>
<td>Sag Bo. D = KBo. 1,38</td>
<td>possibly</td>
<td>broken</td>
<td>broken</td>
<td>yes</td>
</tr>
<tr>
<td>SSGIL Bo. E = KUB 3,94</td>
<td>no</td>
<td>broken</td>
<td>broken</td>
<td>broken</td>
</tr>
</tbody>
</table>

The identification of obverse vs. reverse of Izi Bo. Ab = KBo. 26,62 is not entirely clear, since it is based on a tentative restoration (see introductory remarks in part D); the upper zone of the obverse of Sag Bo. D = KBo. 1,38 shows some peculiarities, giving the impression that the randleiste was impressed later (also see introductory remarks).

Rap: SVo Ug. F = RS 20.11, Diri Ug. 2A = RS 17.154; from Lam: RSGT Ug. H =RS 25.442(+), SaP Ug. A = RS 14.128+; from Urt: Urra Ug. 10H = RS 34.166, Urra Ug. 14A = RS 92.2008, GodL Ug. A = RS 34.178.

Regarding Izi Bo. B = KBo. 1,31 and Sag Bo. D = KBo. 1,38, note that obverse and reverse are erroneously switched in the hand copy. The following manuscripts also preserve randleisten; however, the obverse and reverse cannot be distinguished with certainty:

161
Disregarding these two unclear cases, there remain two tablets that depart from the standard schema: Diri Bo. Ab = KBo. 26,9+ apparently has no *randleisten* at all, while Izi Bo. A = KBo. 1,42 shows a *randleiste* on top of the obverse. Unfortunately, the other edges of the latter manuscript are broken, so it cannot be said whether or not the peculiar layout is due to a mistake, e.g., due to an erroneous switch of obverse and reverse. As demonstrated by W. Waal (forthc.), among the tablets which show *randleisten* on top of the obverse, there are a remarkable number of lists (inventories, etc.). Layout features of non-lexical lists apparently coincide with the layout of the lexical lists as with regard to the vertical column divisioning (cf. sect. 2.3.2.), so Izi Bo. A = KBo. 1,42 is not necessarily an exception or due to error. Tablets without *randleisten* at all, like Diri Ab = KBo. 26,9+, seem to be very exceptional.25

Lexical tablets from the parallel traditions, as noted above, do not exhibit *randleisten*. Instead, some manuscripts from Ugarit occasionally show horizontal rulings as conclusions at the bottom of individual columns, sometimes on the lower edge. These rulings appear to be identical with the column final auxiliary ruling that was simply not overwritten by an entry. The phenomenon is therefore limited to manuscripts that use horizontal auxiliary rulings (18 of 34 verifiable cases).

2.5.2. [Physical characteristics – tablet margins and edges – edges] In agreement with the common cuneiform tradition, the right margins of the Ḫattuša manuscripts (14 cases preserved) are never marked by margin rulings. Yet, this absence of margin rulings mostly applies to the left margin, as well (10 cases with only one exception: SaV Bo. J = KBo. 13,3). The right edge is often used as a continuation of the most right-hand column of both the obverse and reverse. Also, the lower and upper edges are sometimes inscribed as continuations of the individual columns of the obverse and reverse respectively; the lower edge of Urra Bo. 6B = KBo. 1,32 possibly contains a colophon (cf. sect. 6.Col.E.). In case of overlength texts, scribes also use the left edges for inscriptive space, inscribing them lengthwise (cf. Izi Bo. D = KBo. 1,40, Unid Bo. 2-1 = KBo. 26,51 and Unid Bo. 2-2 = KBo. 36,4).

These inscriptive practices are in plain agreement with the practices evidenced by the lexical tablets from Emar and Ugarit. Manuscripts of these traditions; however, regularly show the left

---

25 If Diri Bo. Ab = KBo. 26,9+ reflects the influence of Non-Hittite scribal conventions cannot be said. In this respect note that the manuscripts show the peculiar linguistic format <2 1 3 - 4 - 5> (with logogram, pronunciation, and sign name listed in one column), i.e., the same linguistic format in which all manuscripts of the series *Diri* exceptionally appear in Ḫattuša.
margin delimited by a vertical ruling (50 out of 57 verifiable cases in Ugarit, 29 out of 41 cases in Emar); in Emar, the manuscripts that lack the left margin ruling almost wholly show Syrian or mixed paleography.\textsuperscript{26} Also, left edges appear inscribed more regularly in these corpora, sometimes additionally divided into a number of columns (cf. RSGT Ug. E = RS 2.7 or Nigga Em. 573’A’+ with left edge divided into two columns, or Urra Ug. 13A = RS 23.82+, with three columns) and often bearing the colophon.

2.6. [Physical characteristics – so-called firing holes] Individual tablets of the corpora from Emar and Ugarit show the surface perforated with small holes, a feature which is completely absent in the Ḫattuša corpus. Tablet perforations of this kind are relatively widespread within the cuneiform tradition, appearing in the OB period and being particularly prominent in the 1\textsuperscript{st} millennium. Their function is still a matter of dispute. At least for the 1\textsuperscript{st}-millennium traditions, it seems clear that they were not – as previously assumed – impressed in order to prevent the thin tablet slip from chipping off during the firing process. Rather scribes used them for ‘crossing out’ empty space, in order to restrain future scribes from adding any further signs, or for reasons unknown to us. In many cases, they had become integral parts of the actual texts, and scribes copying a text also reproduced the holes exactly in that position.\textsuperscript{27} For the 2\textsuperscript{nd}-millennium traditions, this function has not been verified as of yet. Be that as it may – both supposed functions, the protection against chipping-off during the firing and the protection against later additions, imply that the respective manuscripts were made persistent, hence were produced in order to be kept (at least for a while).

If this really was the case, manuscripts with firing holes are expected not to show specific features that mark them as exercises, since exercises supposedly, were recycled shortly after their completion. In fact, the respective manuscripts from both Emar (eleven pieces, involving manuscripts from Em-Syr as well as from Em-SH) and Ugarit (two pieces) all represent full text tablets. Manuscripts Urra Ug. 8A = RS 17.40A+, Urra 4 Em. 545D+, and Urra 10 Em. 553A+ make use of abbreviations via empty slots and MIN-marks (see sect. 3.4.1.); these abbreviations; however, only concern repetitive content (determinatives in the Sumerian and key-signs in the Akkadian column), i.e., content that can easily be deduced from the intra-textual context. Other than abbreviations with meta-textual context (as for the terminology, also see sect. 3.4.1.), they are at least tolerable in non-exercise environments, since they do not impair the explicitness of the contents.

\textsuperscript{26} Possible exceptions (provided the respective hand copies can be trusted) are Urra 16 Em. 558B+ and Lu 2 Em. 603M+.

\textsuperscript{27} Fincke pers. comm (2010); also see Fincke 2003/04: 126, n124 with additional references.
The two manuscripts from Ugarit, i.e., SVo Ug. A = RS 17.41+ and Urra Ug. 8A = RS 17.40A+. show additional peculiarities, foremost to be mentioned is the archival context: The archives Ug-Rṣp and Ug-L, in which they were found, show scarce attestation of lexical lists. This supports the hypothesized long-term storage of manuscripts with perforation holes, since lexical tablets usually appear in high amounts in a given archive; isolated pieces either suggest that they were transferred from another archive or that they are the (scarce) remains of a formerly more extensive production of lexical tablets. The two manuscripts further contrast with the rest of the corpus regarding the paleography, with RS 17.41+ definitely and RS 17.40 possibly inscribed in an ‘alternative North-Syrian’ ductus (Ug-NS), and regarding the otherwise unattested cryptic-colophon signature <MAN TIL GAM> (both manuscripts; see sect. 4.2.).

The long-term context supposed for the lexical manuscripts with firing holes, thus, is either supported (tablet types and archival context) or at least not contradicted (intra-textual abbreviations) by features of the physical layout and of the archival context.

3.1.1. [The inscriptional practice – the direction of inscription – the inscriptional order of the linguistic subcolumns] Lexical lists, with their column-wise organization and their loads of repetitive content, lack the kind of self-evident syntagmaticity and seriality innate to literary texts. Since (one of) their supposed function(s) moreover is scribal training, it is conceivable that the inscriptional practices for writing a lexical list deviated from the standard practices of inscribing common (literary) texts.

This first concerns the question as to which of the individual linguistic columns was inscribed first. There are two kinds of evidence crucial with regard to that: (1) textual-interference errors, (as for which see chapter 10, sect. 3.3.), i.e., errors in which an item produced shortly before affects the production of the following item to be erroneous, and which expectedly shows the direction of this inference in agreement with the general direction of inscription, and (2) the positions of overlength items, i.e., items that exceed the space delimited by the column rulings and that indicate the inscriptional space which was not yet occupied when the overlength parts were placed.

Altogether, there are not very many instances of textual interference from one linguistic subcolumn to an adjacent subcolumn (most cases occur within one and the same subcolumn). The extant instances are nonetheless telling: In SaV Bo. J = KBo. 13,3 1’ e.g., mistaken Akk. I-ú (instead of correct še-ú “barley”) must have been inferred from SyllSum. ša-i in the left-hand (Syllabic-Sumerian) subcolumn, and this is also the direction (i.e., from left to right) of inscription as
evidenced by the other examples. 28 The treatment of overlength entries is of relevance in case items are placed into the columns following or preceding the actually-assigned inscrptional slot. 29 In the vast number of instances in which overlength signs range into the right-hand linguistic subcolumn, the initial signs of the latter are respectively indented to the right, and there are no traces of erasures or the like. 30 The practice of placing the initial signs of a lengthy expression into the left-hand subcolumn is as well attested – without any physical collision of items; 31 thus it does not contradict the hypothesis arising from the other pieces of evidence, i.e., that the direction of inscription was from left to right with scribes first spotting the Sumerian and then – if provided in the linguistic format – the Akkadian and the Hittite item.

3.1.2. [The inscrptional practice – the direction of inscription – evidence for column-wise inscription and the placement of rulings] Manuscripts of the Ḫattuša corpus do not provide any evidence pointing to the column-wise inscrption of lexical tablets, i.e., indicating that scribes first filled in the Sumerian column for the complete or for great parts of the tablet and likewise proceeded with the Akkadian (and Hittite) column.

Yet, manuscripts from the parallel Ugarit corpus provide some evidence of this sort: 32 Manuscript Lu Ug. 1B = Urra Ug. 9A = RS 16.364 has its reverse provided with rulings and the determinatives placed into their slots, the remaining slots however left uninscribed. That determinatives were filled in for the whole or for large parts of a tablet before the remaining items were placed is also evidenced by finished, completely inscribed manuscripts on which (such as Urra Ug. 10A = RS 22.346+), the signs for the determinative and the signs for the rest of the entry do not appear exactly on the same line throughout large passages of text. Notably, respective contrasts between the Sumerian and the Akkadian parts of the entries cannot be observed.

28 E.g., Izi Bo. A = KBo. 1,42 i 18: Akk iš-ka-GAR (instead of iš-ka-ru) inferred by Sum. á-ĝeš-ĝar-ra; Erim Bo. Ab = KBo. 1,35 269: Akk ŠUR-ru-u (instead of bur-ru-u) inferred by SyllSum. šu; and a bit uncertain SaV Bo. A = KBo. 26,34 iv 7’: Akk. NAB-bu (instead of zap-pu) inferred by OrthSum. MUL.

29 Overlength items may also be placed on the right edge, vertically along the column ruling, or simply into the following line.

30 The most revealing examples are:

Izi Bo. D = KBo. 1,40 8’ + 12’ (OrthSum. into SyllSum. column; SyllSum. into Akk. column);
Sag Bo. B = KBo. 26,45 6’ (OrthSum. into SyllSum. column);
SaV Bo. B = KBo. 1,45 rev. 9’f. (Sign name from SyllSum. column into OrthSum column).

Only in Izi Bo. A = KBo. 1,42 i 20, it might be the case that the oversize item was partly written over the initial signs of the right-hand subcolumn. Yet, there is a textual interference error (No. 062) in the same manuscript which clearly points to a from left-to-right direction of inscription.

31 Cf. Erim Bo. Ab = KBo. 1,35+ 8’ + 14’, SaV Bo. F = KBo.1,52 10’ (both Hittite into Akk. column);
SSgL Bo. D = KUB 3,113 ii 18 + 21 (Akkadian into Sum. column; Hittite into Akk. column).

32 Manuscripts form Emar cannot be used in this respect, since they are largely published as hand copies only.

165
From quite a number of Ugarit manuscripts it is also clear that the horizontal auxiliary rulings were not incised over the whole width of the tablet, but column-wise, possibly because of the curving of the tablet or in order not to blur the vertical rulings too strongly. As a result, columns of the same manuscript may – and in fact often do – show an unequal number of lines, with in some manuscripts considerable variance (sometimes involving 15-20 lines; cf. Urra Ug. 11A = RS 20.32, with the obverse columns i-iv counting 74, 82, 71, 65, the reverse columns being more regular with around 62 lines each).

3.2. [The inscriptional practice – size and quality of the script] In general, the handwriting found on the Ḫattuša manuscripts is regular, which corresponds to the general impression products of the Hittite chancellery leave to the observer’s eye. Unid Bo. 4-8 = KBo. 13,7 and Diri Bo. Ac = KBo. 26,10 are the best representations for what may be termed a ‘sketchy hand’; altogether, the number of such instances is very low, and there is actually no example of a tablet showing what may be expected with regard to school exercises: a truly clumsy handwriting. Quite in the opposite, a good deal of the exemplars is written in very fine, elaborate, and beautiful script (cf. e.g., Diri Bo. Ab = KBo. 26,9+ or Erim Bo. Aae = KBo. 26,22).

This tendency is also reflected in the size of the script. In some manuscripts, the individual cuneiform characters take up minute space, i.e., less than 3 mm in height. And, as it is obtainable from the chart below, the size of the script gradually increases from the 14th until the end of the 13th century; however, it is generally smaller than 5 mm:

<table>
<thead>
<tr>
<th></th>
<th>6 mm</th>
<th>5 mm</th>
<th>4 mm</th>
<th>3 mm</th>
<th>&lt; 3 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ḫatt-He (++)</td>
<td></td>
<td></td>
<td></td>
<td>⬤</td>
<td></td>
</tr>
<tr>
<td>Ḫatt-IIIa</td>
<td>⬤</td>
<td>⬤</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ḫatt-IIIb</td>
<td></td>
<td></td>
<td>⬤</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ḫatt-IIIc</td>
<td>⬤</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ḫatt total</td>
<td>⬤</td>
<td>⬤</td>
<td>⬤</td>
<td>⬤</td>
<td></td>
</tr>
<tr>
<td>Ugarit full-t.</td>
<td>⬤</td>
<td>⬤</td>
<td>⬤</td>
<td>⬤</td>
<td></td>
</tr>
<tr>
<td>Ugarit excerpt</td>
<td>⬤</td>
<td>⬤</td>
<td>⬤</td>
<td>⬤</td>
<td></td>
</tr>
</tbody>
</table>

As demonstrated by the same table, the size of script found on full text tablets from the parallel corpus of Ugarit\(^\text{33}\) is roughly equal to that of the Ḫattuša manuscripts. In detail, it best corresponds

\(^{33}\) Manuscripts from Emar cannot be used in this respect, since they are largely published as hand copies only.
to the average size extracted from the manuscripts from paleographic period Hatt-IIIa. In contrast, excerpt tablets preserved from Ugarit show an obviously higher script. In most cases, the script on these manuscripts also appears sketchier than on full text manuscripts.

3.3.1. [The inscriptional practice – individual scribes’ handwriting – the parameters used] There is no systematic methodological investigation published in Assyriology about the identification of individual cuneiform scribes’ handwritings. It has not been yet assessed to what degree specific physical features of the script are coined by the writing habits of individual scribes, nor to which degree they are determined by external factors such as: the size of the tablet (in relation to the length of the composition to be inscribed), the consistency of the clay, the specific form of the reed stylus used, not to mention the state of preservation of the manuscript, or – not least of all – by the camera angle and the brightness/contrast of the documenting photography.

An obvious and important indicator for individual scribe’s handwritings of course is the specific characteristic formation of individual cuneiform signs. Apart from that, one may in principle use the following parameters:

1. Spacing between lines
2. Deepness of impression
3. Intersecting angle of verticals and horizontal
4. Proportions between height and length of signs
5. Heaviness (breadth) of verticals
6. Inclination of heads of the verticals (as reflected by the top margin of the heads)
7. Proportions of height among and distance between succeeding verticals
8. Distance between two succeeding verticals
9. Length of horizontal
10. Relation between two horizontal standing on top of each other
11. Direction of peak of oblique stroke

The identification of individual scribes’ handwriting moreover depends on (1) the amount of textual material available, on (2) the accessibility of the original tablets and the availability of photographs, and (3) the grade to which scribes identify themselves by name in colophons. Especially regarding points (1) and (3), the Ḫattuša corpus is not very convenient for an investigation; the same is true for the corpus of Emar lists (point 2). Only manuscripts from Ugarit can be used for a more extensive survey.

3.3.2. [The inscriptional practice – individual scribes’ writing hands – details] For the aforementioned reasons, it is possible to assign only a few manuscripts to specific scribes’ hands within the Ḫattuša corpus, involving the two couples: Erım Bo. Ab = KBo. 1,35+ and Erım Bo. B = KBo. 1,36+;
and SaV Bo. D = KBo. 1,34 and SaV Bo. L = KBo. 1,53 with a characteristically long, drawn-out, and tenuous script. Respectively, both couple’s manuscripts may simply be a part of the same tablets, however The situation is more favorable with regard to Ugarit; in a sketchy survey it was possible to clearly identify at least two individual handwritings: that of the scribe Yanḥāna and that of an unnamed scribe who worked in Ug-Lam.

The scribe Yanḥāna is known to have signed at least seven manuscripts, three among which are published. The handwriting exposed by these manuscripts is quite characteristic, particularly with regard to the heads of the verticals, which show a strong inclination to the right with the top margin noticeably curved. In a series of two or more verticals, the final wedge is slightly taller and heavier. The horizontals are relatively thin, and the lower edge of their heads appear to be predrawn. The altogether appearance is balanced, but not rectangular. According to these criteria, it is possible to tentatively assign nine additional manuscripts to this scribe. They all show local paleography. If the assignation is correct, the group also includes an excerpt tablet (SAI Ug. C = RS 20.215, with a pointedly sketchy hand) and, through Urra Ug. 12D = RS 25.419, demonstrates that Yanḥāna not only worked in Ug-Rap and Ug-MT, as evidenced by colophons, but also in Ug-Lam. A comparison of the size of script exhibited by the manuscripts (varying from 3 mm in RSGT Ug. A = RS 20.230 to 4 mm in Mea Ug. B = RS 21.10+) validates that this parameter is apparently not linked to an individual scribe’s handwriting; rather, the size of the script seems to depends on the space available on the respective tablet.

A number of manuscripts found in Ug-Lam stand out with extraordinarily heavy, deeply impressed, and uninclined verticals, which appear almost equilateral and which, if directly following each other, are very narrowly spaced. The oblique strokes in these manuscripts often point slightly upwards (in opposition to the great majority of manuscripts within the Ugarit corpus) and the overall ductus appears compact and bold. None of the eight manuscripts tentatively assigned

---

34 This results in a total of 16 manuscripts being assignable to Yanḥāna. One may distribute them among four groups: (1) published and (2) unpublished manuscripts signed by the scribe in the colophons, (3) manuscripts very clearly exhibiting the paleographic characteristics of the signed manuscripts, and (4) manuscripts which also share these criteria; however, not distinctively, and therefore can only be ascribed to Yanḥāna with caution:

(1) RS 20.160N+ Mea Ug. A           (2) RS 20.165B+ Urra 5
RS 20.201A+ Urra Ug. 12C1           RS 20.245 Urra 2
RS 20.230 RSGT Ug. A                RS 21.08A Urra 9
(3) RS 20.135+ SaS Ug. B1           (4) RS 20.167 Urra Ug. 11B
RS 20.186,1 Urra Ug. 12B            RS 21.10+ Mea Ug. B
RS 20.201,1+ Urra Ug. 12C2          RS 22.215 SVo. Ug. C
RS 20.214A RSGT Ug. J               RS 25.419 Urra Ug. 12D
RS 20.215 SAI Ug. C

35 There are five manuscripts assignable to his hand with high certainty (group 1); in following three manuscripts (group 2), the verticals do not appear to be that heavy (possibly due to the use of a different reed stylus), but the overall
to that group preserve a colophon, therefore the name of the scribe remains unknown. Seven pieces definitely – and the eighth one: RSGT Ug. H = RS 25.442+, very probably – show Babylonian paleography. As far as preservation goes, and in contrast to the remaining manuscripts found in the archive, the column divisioning is invariably formed by spaced double vertical rulings (also see sect. 2.3.2.); the bilingual manuscripts within the group strikingly show the linguistic subcolumns to be separated by single vertical rulings, which is also in contrast to most of the remaining bilingual manuscripts of the archive. These shared and characteristic physical features confirm the assumption that the manuscripts were produced by the same scribe.

3.4.1. [The inscriptional practice – MIN-marks and empty slots – general description] Lexical lists in general and individual lexical compositions like *Urra* or *Diri* in particular, are built up by large amounts of repetitive content. As for individual tablets of the series *Urra*, the first determinative that introduces the entries may be constant throughout the whole composition, and individual key signs following the determinative may recur throughout larger sections of the compositions. In *Diri*, there are often numerous Akkadian translations given to the same Sumerian item, which may thus remain constant for whole sections.

Scribes use different kinds of abbreviations to deal with repetitive content, involving empty slots and specific meta-textual marks. The textual mark used most frequently is the MIN-mark, appearing in three variants: as simple <MIN>, as double <MIN MIN>, and in the combination <KI MIN>. Empty slots and MIN-marks mainly function as substitutes for repetitive content in the vertical succession of entries; i.e., instead of repeating an item that occurs in the same syntagmatic position in the preceding entries, scribes may place a MIN-mark or simply leave the respective slot empty. The items which MIN-marks and empty slots used this way are substitutes for, can thus

ductus strongly resembles that of group (1):

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>RS 25.415+ Urra Ug. 10B</td>
<td>RS 25.438C WeidG Ug. G</td>
</tr>
<tr>
<td>RS 25.425 Erim Ug. 2A</td>
<td>RS 25.442+ RSGT Ug. H</td>
</tr>
<tr>
<td>RS 25.434+ Diri Ug. 1A</td>
<td>RS 26.160 RSGT Ug. M</td>
</tr>
<tr>
<td>RS 25.459+ SSgL Ug. A</td>
<td></td>
</tr>
<tr>
<td>RS 26.139A Erim Ug. 1A</td>
<td></td>
</tr>
</tbody>
</table>


38 Meta-textual marks are very similar in use to meta-linguistic terms (as for which see chapter 9, sect. 6.). While meta-linguistic expressions; however, refer to the semantic or syntagmatic inner-linguistic context of individual items, meta-textual marks refer to the coordination of the items on the physical writing surface.
be easily decoded from the intra-textual vertical context. The MIN-marks and empty slots serve as intra-textual abbreviations. Apart from this central function, empty slots and MIN-marks are occasionally used as meta-textual abbreviations, which are then substitutes for items that are not directly deducible from the intra-textual context. The items abbreviated this way instead require additional knowledge about the specific structure of the respective composition or advanced linguistic knowledge for decoding them correctly. Scribes apparently use MIN-marks and empty slots in this fashion in order to abbreviate items that to them appeared to be self-evident, and/or which they had already memorized. This deviant, meta-textual function is apparently limited to lexical lists, and therein mostly occurs in the Akkadian column.

Apart from MIN-marks, lists may also contain the more rarely occurring ŠU-marks. Denoting the horizontal identity of two items, their occurrence is confined to the Akkadian column. ŠU-marks almost invariably substitute for the Akkadian translations of respectively homophonic Akkadian loan words in the Sumerian column or for proper names that are identical in both languages.39

The compound sign lists Dirı and the pseudo-sign list SV o have standardized empty slots in their format as the specific means of intra-textual abbreviation, regardless of the lexical tradition: In several sections with multifarious Akkadian translations for the same logogram and pronunciation (polysemic variation), the logogram and pronunciation are regularly given in the first line of the section only, and the respective slots of the Orthographic-Sumerian and Syllabic-Sumerian column are left empty in the remaining lines. In the series SaV, empty slots are commonly standardized for the Syllabic-Sumerian column only, and Orthographic-Sumerian logograms are written out in cases of their repetitive occurrence.

3.4.2. [The inscriptional practice – MIN-marks and empty slots – details] Hattuša lexical lists show the empty slot formats of the series SaV extended to some sign-list type passages in manuscripts of the acrographic series Izi (Izi Bo. B = KBo. 1,31 and Izi Bo. E = KBo. 26,49). Apart from that, manuscripts of the corpus do not use this device, neither in the Sumerian, in Akkadian, nor Hittite columns. MIN-marks are used regularly in all linguistic subcolumns to substitute for whole entries as well as parts of entries, and invariably as a means of intra-textual abbreviation. Extant variants are single <MIN> and <KI.MIN>; the distribution between both being without meaningful interrelation to other features of the manuscripts, e.g., to their find spot, tablet format, or paleographic date. ŠU-marks only appear in one manuscript: An Bo. A = KBo. 26, 1+.

39 E.g., Sum./Akk. "a-ba-áš-mu = ŠU (Urra Ug. 10B = RS 25.415+ iii 15) or SyllSum./OrthSum./Akk. ḫe-eš = UD.NUNkl = ŠU "(the city) Heš" (Diri Ug. 1A = RS 25.434+ ii 42). ŠU-marks actually unite meta-textual and meta-linguistic functions and therefore may also count as meta-linguistic terms (see previous note). In Urra Ug. 10A = RS 22.346+; however, MIN-marks and ŠU-marks are erroneously switched throughout the whole manuscript, which demonstrates their closeness in status.
In contrast, lexical lists from Emar show empty slots also employed in the Sumerian column of a number of manuscripts of series *Urra*. In the Sumerian column, they mostly substitute for determinatives (sometimes also for key signs), which are often identical for large parts or for the whole of a composition in this series; in the altogether 21 manuscripts in this group, the determinative is usually given in the first entry of each column, with the slot left empty in the succeeding entries.\(^{40}\) In the Akkadian column empty slots are found as: intra-textual abbreviations, then as substitutes for repetitive key-words as part of longer translations, and as meta-textual abbreviations, then only on exercise tablets. MIN-marks (always single <MIN>, only in Unid Em. 597 as <KI.MIN>) regularly appear as substitutes for key-signs/key-words both in the Sumerian and the Akkadian column. In some rare cases they substitute for determinatives and thus occupy the function held by empty slots. Notably, all of these phenomena regarding abbreviations occur in full text tablets of the Syro-Hittite tradition only, never in excerpt tablets or in Syrian-style manuscripts. There is no evidence of ŠU-marks found in the Emar corpus.

Empty slots occur less frequently in manuscripts from Ugarit, and they invariably function as intra-textual abbreviations. In the Sumerian column they only appear in *Urra* Ug. 8A = RS 17.40A+, found in Ug-L, where they substitute for determinatives in the same shape as described for the Emar manuscripts; in the Akkadian column they substitute for whole translations in RSGT Ug. B = RS 20.165C+ and RSGT Ug. D = RS 20.148+, and assume the function of ŠU-marks in *Urra* Ug. 13A = RS 23.82+. MIN-marks are used more regularly: Substituting for recurring determinatives and key-signs in the Sumerian column, they are notably found in manuscripts from Ug-GP (Urra Ug. 3D = RS 2.16 and Lu Ug. 1A = RS 3.339) and Ug-Urt (Urra 10H = RS 34.166 and Urra Ug 14A = RS 92.2008) only. In RSGT Ug. H = RS 25.442+ from Ug-Lam, they rarely substitute for complete entries. In the Akkadian column they can replace parts of entries and complete entries, assuming the shape of single <MIN> or double <MIN MIN>\(^{41}\), or, in *Urra* Ug. 10F = RS 20.218 exceptionally, of <KI.MIN>. Excerpt tablets from Ug-Urt show inflationary use of MIN-marks as meta-textual abbreviations. ŠU-marks occur in six manuscripts,\(^{42}\) independent of archival or paleographic context.

Compared to their counterparts from Emar and Ugarit, thus, lexical lists from Ḥattuša appear more ‘conservative’ regarding empty slots and MIN-marks; avoiding empty slots beyond the standardized formats and limiting both devices exclusively to function as intra-textual abbreviations.

\(^{40}\) Also see Gantzert 2008: III, 142.

\(^{41}\) The genesis of double <MIN MIN> is apparently related to entries consisting of two components, e.g., from expressions with initial determinative or from substantive-attribute constructions. Later, the variant came into use to refer to single-component expressions. Also in cases where the Akkadian column was arranged in two grapho-analytic sub-columns, scribes would use doubled <MIN>, one mark for each subcolumn, regardless of the length or of the number of components in the entries.

\(^{42}\) Foremost to be mentioned is *Urra* Ug. 10A = RS 22.346+, with multiple attestations and frequent confusions between ŠU-marks and MIN-marks.
3.5. [The inscriptional practice – PAP-marks] PAP-marks, represented by single <PAP> or double <PAP PAP> and corresponding to Hitt. ḫarran “broken, destroyed”, form the regular Hittite counterpart to the ḫepi-marks (Akk. ḫepi “broken”) of the Mesopotamian cuneiform tradition. They indicate that the copying scribe found the respective passage obliterated on the *vorlage* and was not able to adequately restore the wording. Within the Ḥattuša corpus, PAP-marks occur in two manuscripts, in SaV Bo. C = HT 42 with multiple attestations, and in Erim Bo. Aa = KBo. 1.44+ with a single attestation only; both manuscripts are documented in Hatt-IIIc. In SaV Bo. C = HT 42, the scribe evidently tried – more or less successfully – to restore parts of the broken Hittite passage by translating it back from the Akkadian (see introductory remarks in part D).

The occurrence of the PAP-marks forms compulsory evidence for the existence of *vorlagen* and thus for the writing-based storage and transmission of texts. To be sure, tablets could be copied for the purpose of memorization (and not for the purpose of long-term storage). However, it seems unlikely that scribes who were instructed to memorize a piece of text were then directed to do so from a deficient *vorlage*, or that they tried to restore some lost material during exercises, or lesser still, that they marked items which they could not reproduce from memory by PAP-marks during rehearsal. The occurrence of the marks not only demonstrates that the respective tablets were copied, but that they were copied in order to reproduce the written storage.

The parallel corpora from Emar and Ugarit lack any equivalent attestation of PAP-marks.

4.1. [Colophons and catchlines – general description] In order to conclude full text tablets, scribes usually make use of (1) a cryptic colophon, i.e., two or more (usually four) horizontal rulings overwritten with certain (‘cryptic’) combinations of cuneiform signs (called ‘signatures’ in the following), of (2) two or more (rarely individually) catchlines, i.e., entries that anticipate the beginning of the subsequent composition, as well as (3) that of an elaborated colophon which usually includes: the scribe’s name, in many cases also his genealogy, the name and genealogy of his teacher, a doxology, and specific editorial remarks. The sequence of these three devices is invariably cryptic colophon - catchline(s) - elaborated colophon. Their occurrence is limited to full text tablets; excerpt tablets contain neither catchlines nor a cryptic or an elaborated colophon. On *sammeltafeln*, scribes insert cryptic colophons in order to mark the breaks between the individual compositions.43

While the inclusion of catchlines is optional, cryptic and elaborated colophons appear to be (almost) mandatory components of the regular tablet conclusion. In general, observations on the presence or absence of the individual components, as carried out in the following, depend on the

---

43 M. Gantzert (2008: III, 152f.), presuming the conclusion of compositions to be the sole function of the cryptic colophons, proposes the term ‘end-of-text-unit marker’ instead, however neglecting the possible function of indicating the scribe’s association with a specific scribal school; see below.
state of preservation of the final parts of the individual tablets/recensions. However, since the elaborated colophon in particular, rarely follows the end of a composition directly, but is rather placed after some space – or completely cropped, on the left edge – it is often impossible to verify manuscripts which definitely lack this component.

Apart from one uncertain case, SSgL Bo. D = KUB 3,113, the Ḫattuša corpus includes four manuscripts that definitely preserve the final part of the composition: Izi Bo. A = KBo. 1,42, Diri Bo. Ac = KBo. 26,10, SSgL Bo. C = KBo. 13,6, Unid Bo. 4-1 = KBo. 13,2. The parallel corpus from Emar includes 21 manuscripts that definitely preserve the final part of the composition and three additional uncertain cases. The number of respective manuscripts attested in Ugarit is 23 (all cases sure).

4.2. [Colophons and catchlines – cryptic colophons] All four manuscripts definitely preserving the final part of a composition within the Ḫattuša corpus show double horizontal rulings as conclusions. In two cases (Izi Bo. A = KBo. 1,42 and Diri Bo. Ac = KBo. 26,10), the rulings are extended to a cryptic colophon by the sign combination <U U U> (with only the last part preserved in Diri Bo. Ac). In the other two cases, the double rulings remain without signature (Erim Bo. Aa = KBo. 1,44+ and Izi Bo. H = KBo. 26,47). The cryptic combination <U U U> is identical to the signature that is also used for concluding customary Hittite long-term documents.44

On Emar lexical lists, cryptic colophons are regular components of the tablet conclusion. Among the 21 manuscripts that definitely preserve the end of the composition, only two, SVo Em. 603A and SaP Em. 538F+, do not show a cryptic colophon (though they both have an elaborated colophon). Among the 19 remaining manuscripts, the cryptic sign combination is fully preserved in 15 pieces: Four pieces have the combination <MAN MAN MAN>,45 and eleven pieces the combination <MAN TIL MAN>.46 Three manuscripts among the first group belong to the Syrian paleographic tradition (Urra 1 Em. 541D and Sag Em. 575) or show mixed, but basically Syrian paleography (Urra 1 Em. 541A+). The fourth manuscript, Urra 10 Em. 553A+, like all manuscripts of the second group, belongs with the later Syro-Hittite tradition.

Among the Ugarit lexical lists only a single manuscript, Mea Ug. A RS 20.160N+, definitely lacks a cryptic colophon (probably due to a lack of space), although it has an elaborated colophon. The other manuscripts altogether attest to three sign combinations, with quantitative proportions as follows:

44 Cf. W. Waal (forthc.), who yet refrains from regarding these devices as real cryptic colophons.
45 Shortened to <MAN MAN> in Urra 12 Em. 555A+ and Nigga Em. 573’A’+.
46 Extended to <MAN TIL MAN TIL MAN> in Urra 1 Em. 541B+ and Urra 4 Em. 545D+. 
Among the manuscripts using <MAN MAN MAN>, the first one, WeidG Ug. L = RS 20.121+, is an isolated manuscript with OB paleography, while among the remaining three, Izi Ug. 2A = RS 2.13 and Urra Ug. 11A = RS 20.32, belong to the small group of tablets that show mixed local/Babylonian paleography; the archival date (Izi Ug. 2A found in Ug-GP; further see chapter 6, sect. 5.1.3.) and synchronisms with historically-datable documents (Urra Ug. 11A; further see chapter 7, sect. 3.3.3.) suggest that both of these manuscripts belong to an earlier stratum of the corpus (to be situated before or around 1300 BCE). The fourth manuscript with signature <MAN MAN MAN>, Mea Ug. C = RS 20.14, is paleographically indeterminate. In contrast, as far as the paleography can be exactly specified, manuscripts with the colophon <GAM GAM GAM> always show local paleography (Ug-loc). The pieces with cryptic colophon <MAN TIL GAM> are notably the only two manuscripts that show surface perforations (cf. sect. 2.6.); SVo Ug. A = RS 17.41+ is thereby definite, and Urra Ug. 8A = RS 17.40A+ is possibly written in an alternative North-Syrian ductus (Ug-NS).

Thus, the cryptic sign combinations demonstrably correlate with paleographic and other physical features (also see the summarizing table in sect. 5.2.). Although it cannot be said with certainty whether scribes used cryptic colophons intentionally, i.e., as a kind of signature that indicated their scribal school; in the end this seems likely. In any case, the signatures serve as clear indicators for the modern observer. Accordingly, the lexical manuscripts from Ugarit with signature <MAN MAN MAN> would be traditionally interrelated with the Syrian-style manuscripts from Emar. This connection would conform with the relatively early dates of production obtained for the Ugarit manuscripts.

4.3. [Colophons and catchlines – catchlines] Lexical lists from Ḫattuša do not give any attestations of catchlines, which is not surprising. Among the four manuscripts that definitely preserve the final part of a composition, only two contain compositions (Izi Bo. A = KBo. 1,42 and Diri Bo. Ac = KBo. 26,10), which are known to have had a more or less fixed position within a standardized curriculum in other lexical traditions.

In contrast, manuscripts with catchlines are known from the parallel corpora of Emar and, in particular, of Ugarit. The number of manuscripts with and without catchlines and the number of catchlines specifically preserved can be obtained from the following table:

<table>
<thead>
<tr>
<th></th>
<th>definitely lacking catchlines</th>
<th>definitely having catchlines</th>
<th>1 c.l.</th>
<th>2 c.l.</th>
<th>3 c.l.</th>
<th>4+ c.l.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emar</td>
<td>13</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Ugarit</td>
<td>12</td>
<td>9</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>
The two manuscripts from Emar that definitely lack catchlines notably belong to Em-Syr (Urra 1 Em. 541D) or show mixed, but basically Syrian paleography (Urra 1 Em. 541D+ with Syro-Hittite styled <AG>), thus they belong to the earlier stratum of manuscripts. Manuscripts with catchlines from Ugarit all stem from larger archives Ug-Rap, Ug-MT, and Ug-GP; they invariably show local or, (in two cases), mixed but basically local paleography (Urra Ug. 11A = RS 20.32 and Izi Ug. 2A = RS 2.13, both with Babylonian styled <TI>).

The catchline of RSGT Ug. A = RS 20.230 notably refers to the incipit of a composition which is otherwise not attested, neither in Ugarit nor in any other tradition of lexical lists.

4.4.1. [Colophons and catchlines – elaborated colophons – Ḫattuša] All four manuscripts of the Ḫattuša corpus that preserve the final part of the composition, either definitely (Col. A-C; see edition in sect. 6.) or very probably (Col. D-F) also contain an elaborated colophon. The three ensured colophons stand entirely in the Hittite tradition; they are characterized by the typical brevity that generally marks the difference between the Hittite colophons and their contemporaneous Syrian and Mesopotamian counterparts. All three instances include some pieces of editorial information, such as completion marks (Col. B and C), tablet pagination and the name of the series (Col. A, possibly also Col. B). Only Col. A adds the name of the scribe, yet without filiations or doxology, elements which are typical for the Syrian parallel traditions; in contrast, colophons from Emar or Ugarit lexical lists never include a tablet pagination or mention the title of the lexical composition.

Two further but uncertain cases, Col. D and E, if they are in fact colophons (see description in sect. 6.), are atypical and possibly follow a Mesopotamian composition pattern. Both apparently enumerate a longer list of deities, possibly as parts of doxologies. Among the Ḫattuša manuscripts, a similar colophon can only be found on the MH ‘Narām-Sîn prism’, which is clearly influenced by Mesopotamian scribal practice (see to Col. D in sect. 6.).

4.4.2. [Colophons and catchlines – elaborated colophons – Emar] The 24 colophons preserved in the lexical manuscripts from Emar, can according to the two main paleographic traditions, be distinguished into a Syrian type and a Syro-Hittite type. The two types are distinct regarding their specific contents as well as their sequence of components.

The Syrian-type colophons found on four manuscripts, include the following elements:

47 See the collection in Gantzert 2008: III, 144, which includes transliterations and translations of 23 colophons. The 24th colophon is found on manuscript Urra 1 Em. 541M in very fragmentary preservation. None of the 21 manuscripts that preserve the final part of the composition definitely lack an elaborated colophon.
1. editorial information
   (a) Akk. AL.TIL “completed”
   (b) Akk. IGI.KÁR “collated”
   (c) Akk. ŠU.NIGIN xy MU.BI “altogether xy lines”

2. autobiographical information
   (d) name of the scribe (Akk. ŠU PN “hand of PN”)
   (e) title of the scribe (Akk. İ.ZU “scribe” or İ.ZU.TUR.TUR “apprentice scribe”)
   (f) ‘doxology’ (Akk. ĖR GN “servant of GN”)

There are no deviations from this sequence, and with the exception of the scribe's title, which is absent in Urra 1 Em. 541A+, all components listed appear to be obligatory. In contrast to the Syrian type, Syro-Hittite-type colophons exclusively list autobiographical information. They differ from the Syrian counterparts moreover by their regular inclusion of the filiation and the frequent mentioning of the teacher. Also, the titles given in both types are different.\textsuperscript{48} Cf. the following prototypical structure.

(a) name of the scribe (Akk. ŠU PN “hand of PN”)
(b) filiation of the scribe (Akk. DUMU PN [DUMU.DUMU PN] “son of PN [grandson of PN]”)
(c) title(s) of the father/grandfather named in the filiation (Akk. DUB.SAR “scribe”, Akk. ḤAL ša DINGIR.MEŠ ša \[Emar “diviner of the gods of Emar”\])\textsuperscript{49}
(d) ‘doxology’ (Akk. ĖR GN “servant of GN”)
(e) name of the teacher (Akk. kabzuzu ša PN “pupil of PN”)

Apart from the name of the scribe, all components are optional; Syro-Hittite colophons, however, very regularly include at least the filiation and the titles of the father. There are also rarely ever deviations from the sequence; only Urra 4 Em. 545U+ inverts the position of the name of the teacher and of the doxology, moreover omitting the filiation. Further exceptions are SaV Em. 537A+, omitting the filiation and inserting Akk. tuppi “tablet” in front of the name of the scribe, as well as SaV Em. 537B, which at the beginning inserts the editorial remark Akk. NU.TIL “unfinished”.

Two colophons take a kind of intermediary position between the two main types. They are found on two manuscripts, the first showing Syrian (SaV Em. 537C+), the second mixed, but basically Syrian (SVo Em. 603A) paleography. Both colophons attest to the influence of the Syro-Hittite type, though they are not identical with it. Thus, SaV Em. 537C+ gives the name of the scribe, the doxology – and at the end – the date of production, which is the sole attestation of this component in the Emar corpus. SVo. Em. 603A gives the name of the scribe, the title and the doxology; however, the title follows the Syrian-type (Akk. İ.ZU.TUR.TUR) and moreover refers to the scribe

\textsuperscript{48} Cf. the discussion in chapter 7, sect. 3.2.

\textsuperscript{49} The titles given probably do not belong to the scribe himself, but refer to his father/grandfather. See the discussion in chapter 7, sect. 3.2.2.
himself and not to his father. As for a discussion of the historical implications of these two colophons, see chapter 7, sect. 3.2.3.

4.4.3. [Colophons and catchlines – elaborated colophons – Ugarit] Among the lexical manuscripts found in Ugarit, 40 are known to have a colophon preserved, with 31 colophons published.\(^{50}\) Among the 24 full text tablets that preserve the final part of the composition, there is only one piece, Diri Ug. 2A = RS 17.154, which very likely was not provided with an elaborated colophon (as opposed to 16 of the 24 which definitely or very probably had one, with the remaining seven pieces being unclear as the left edges of the manuscripts are broken).

The colophons consist of a series of optional autobiographical and editorial remarks:

1. autobiographical information
   (a) name of the scribe (Akk. ŠU PN “hand of PN”)
   (b) filiation of the scribe (Akk. DUMU PN [DUMU.DUMU PN] “son of PN [grandson of PN]”)
   (c) title of the scribe (Akk. DUB.SAR or Akk. A.BA “scribe”)
   (d) name of the teacher (Akk. kabuzu ša PN “pupil of PN”)
   (e) filiation of the teacher (Akk. DUMU PN “son of PN”)
   (f) title of the teacher (e.g., Akk. SUKKA.L.(MUNUS).LUGAL “vezir of the king/queen”)
   (g) ‘doxology’ (Akk. ĖR GN “servant of GN”)

2. editorial information
   (h) Akk. MU.BI “its lines”
   (i) Akk. AL.TIL “completed”
   (j) Akk. IGI.KÁR “collated”
   (k) date (Akk. ina MN “in the month of MN”)
   (l) dedication (e.g., Akk. ina ŠU LUGAL “to the hand of the king”)
   (m) Akk. altaṭar / iltaṭar “he / I wrote it”

3. prayer/blessings

Deviations from this sequence are exceptional.\(^{51}\) The scribe’s name is the only component that is present in all colophons. Frequently included are the name of the teacher and the doxology, which in most cases names the gods of scribal craft, Nābū and Nisaba, in some cases also Ea and other deities. In WeidG Ug. A = RS 79.24+ and Urra 3 Ug. RS 22.217A+, the respective scribes call themselves the servant of another person. Five colophons completely lack editorial information.\(^{52}\)

\(^{50}\) 23 colophons are attested to in published manuscripts, and a further eight colophons have been published in van Soldt 1988. The remaining nine pieces are indicated in the list of manuscripts in van Soldt 1995, and apart from the scribe’s name, the details are unpublished.

\(^{51}\) Thus, in Urra Ug. 10A = RS 22.346+, doxology and the name of the teacher precede the filiation, since the scribe and the teacher both are brothers and their filiation therefore is identical. In the partially-broken manuscripts Tu Ug. B = RS 25.446+ and Urra 8A = RS 17.40A+, the doxology precedes the filiation.

\(^{52}\) Including Urra Ug. 8A = RS 17.40A+, SVo A = Ug. RS 17.41+, Mea Ug. A = RS 20.160N+, RSGT Ug. A = RS 20.230, and Urra 5 Ug. RS 22.437B.
Altogether, there are no specific recurring types discernible. Also, the presence and absence of individual components is apparently not bound to archival, paleographic, formal, or textual contexts. Even colophons styled by one and the same scribe, although revealing a preference for specific components, are never identical in their specific compositions.53

4.5.1. [Colophons and catchlines – functional interpretation – theoretical considerations] An interpretation of the contents of the colophons is a part of chapter 7, which specifically deals with the scribes of the tablets. The functional interpretation of the colophons and their individual components as undertaken here is of relevance for the reconstruction of the functional and transmissional context of the manuscripts. Such an interpretation; however, presupposes that the colophons were at all functional at the primary level, i.e., that they fulfilled specific meta-textual functions such as identification of the composition or identification of the scribe.

This primary functionality is almost impossible to prove for the colophons investigated due to the possible ‘exercise character’ of the manuscripts. Presumed that lexical tablets generally were a means of practicing, this exercise character may apply to the colophons as well. They may have been appended to the lists not in order to fulfill a specific meta-textual function, but simply as a regular part of the practicing, i.e., as a regular component of the material to be practiced.54 To accept the primary functionality of the colophons, i.e., to accept that scribes really appended them in order to provide additional biographical and editorial information, still has considerable consequences regarding the reconstruction of the transmissional and functional background of the tablets.

4.5.2. [Colophons and catchlines – functional interpretation – details] If the addition of the colophons was immediately functional in the lexical tablets investigated, scribes must have added their names – as it is found in Col. A = KBo. 1,42 as well as in all colophons from Ugarit and Emar – in order to make the tablet assignable to its producer in cases of later inspection. This does not mean that the tablet was re-read after its completion, but it proves that the scribe provided for this possibility; it can therefore be taken as an indication that the respective tablets were designed to be kept – at least for a while.

As for colophons of the corpora from Emar and Ugarit, the editorial information given is relatively sparse, and in case of Syro-Hittite manuscripts from Emar it is nil. Scribes never mention the title of the composition in these colophons and other editorial information is limited to mere completion marks and only occasionally includes the date of production (in Emar it is incredibly

53 Thus, Yanḥāna, known as the author of seven colophons, never mentions his own or his teacher’s filiation. Apart from his own name, there is no component which is present in all five instances.

54 The concept that colophons are a part of the text is reflected in the scribal practice of including the original colophon in a copy when reproducing a tablet, as it is often encountered in āattuša; cf. Waal forthc. A text duplicated together with its colophons may even be provided with a second, new colophon; cf. Hunger 1980-83: 187a.
exceptional, e.g., in manuscript SaV Em. 537C+). This practice accordingly suggests that if a tablet was again inspected, quick access to the name of the scribe who had written the tablet was deemed more important in these traditions than quick access to the contents of the tablet. In keeping with this argument, one may conclude that if scribes shelved lexical tablets in Emar and Ugarit, they did so rather in order to fulfill biographical needs than in order to keep the contents of the tablets for later reference. This interpretation is in concordance with the fact that colophons were also inscribed on tablets that contained low-ranking, elementary lexical compositions such as Tu or SVo, compositions which could have been identified from the tablet at a glance.55

As for Ḫattuša, the preferences appear to be slightly different, since tablet pagination and the name of the series are either present or must be restored in two of the three ascertained colophons (see sect. 4.4.1); editorial information apparently ranked higher than autobiographical information. If this ranking really reflects functional needs, it attests to a stronger focus on the content of the respective tablets than on their specific producers.

5.1. [Some conclusions – specifics of the Ḫattuša tradition] The observations made about the physical characteristics of the Ḫattuša manuscripts underline what has already been observed about their paleographic and archival context: They appear fully integrated into the local Hittite cuneiform tradition. Manuscripts show the same general dimensions, the same general main-column formatting (four-columned or six-columned formats), the same tendency towards an elaborate script and towards the consistent use of horizontal intersection rulings, and the same style of elaborated colophons which is also exhibited by other long-term products of the contemporaneous Hittite scriptoria. Features which deviate from this schema, such as the little use made of spaced double rulings as column markers, the occasional higher number of main columns (in manuscripts with unilingual linguistic formats), or the use of randleisten at the top of the obverse of the tablets, can mostly be explained by the list-like character of the genre; these deviant features run parallel to other local list-like compositions, such as inventories.

Only the occasional use of prisms, the use of horizontal auxiliary rulings, as well as the possible occurrence of Babylonian-style colophons portray the potential influence of an external tradition. Thereby, prisms are bound to a unilingual linguistic format and mostly occur within 14th-century manuscripts only; horizontal auxiliary rulings can also, mostly, be found in 14th-century manuscripts, with unilingual formats (also on the prisms), and sometimes with bilingual formats. As will be seen (see chapter 9, sect. 1. & chapter 11, sect. 1.3. & 2.2.), regarding the linguistics

---

55 Thus, respective colophons are found on Tu Ug. B RS 25.446+, SAI Ug A = RS 25.133, SVo Ug. A = RS 17.41+, SaS Ug. C1 = RS 20.177+, and SaP Ug. I RS 86.2222 (Ugarit), as well as on SVo Em. 603A and SaP Em. 538F+ (Emar).
formats and the individual lexical compositions, it is useful in this respect to divide the corpus in two chronologically overlapping main branches: a 14th-century tradition, consisting of manuscripts of the periods Hatt-IIc and Hatt-IIIa; and a 13th-century tradition, including the majority of manuscripts, i.e., the manuscripts which date to periods Hatt-IIIb and Hatt-IIIc, in parts also to period Hatt-IIIa (which is the period of overlap between both traditions).

5.2. [Some conclusions – aspects of the long-distance transmissional context] Relating both the specifics of the physical tablet layout and of the colophons of the manuscripts to the individual textual (paleographic) traditions reconstructed for the LBA peripheral west produces some interesting congruencies. The following table has the individual traditions ordered not according to their geographic origin, but according to their presumed chronological sequence (anticipating chapter 11, sect. 2.2., the table also includes the linguistic format):

<table>
<thead>
<tr>
<th>Tradition</th>
<th>Linguistic format</th>
<th>Hor. aux. rulings</th>
<th>Vert. ruls. main cols.</th>
<th>Catch-lines</th>
<th>Cryptic-colophon signature</th>
<th>Elaborated colophons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alal</td>
<td>Unilingual</td>
<td>Yes</td>
<td>Single / blank space</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>El-Amarna</td>
<td>Mostly unilingual</td>
<td>Yes</td>
<td>Single</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Hatt-IIc/IIIa</td>
<td>Mostly unilingual</td>
<td>Yes</td>
<td>Single</td>
<td>-</td>
<td>MAN MAN MAN</td>
<td>Editorial before autobiographic information</td>
</tr>
<tr>
<td>Em-Syr</td>
<td>Mostly unilingual</td>
<td>Yes</td>
<td>Single / blank space</td>
<td>Yes</td>
<td>MAN MAN MAN</td>
<td>Editorial before autobiographic information</td>
</tr>
<tr>
<td>Ug-loc</td>
<td>Various formats</td>
<td>Yes</td>
<td>Mostly double</td>
<td>Yes</td>
<td>GAM GAM GAM / MAN MAN MAN</td>
<td>Autobiographic before editorial information</td>
</tr>
<tr>
<td>Hatt-IIIb/c</td>
<td>Mostly bil./tril.</td>
<td>No</td>
<td>Mostly single</td>
<td>No</td>
<td>U U U U U U U U U U U U</td>
<td>Editorial, sometimes autobiographic information</td>
</tr>
<tr>
<td>Em-SH</td>
<td>Mostly bilingual</td>
<td>No</td>
<td>Mostly single</td>
<td>No</td>
<td>MAN TIL MAN</td>
<td>Only autobiographic information</td>
</tr>
<tr>
<td>Ug-NS</td>
<td>Mostly bilingual</td>
<td>Often no</td>
<td>Mostly single</td>
<td>No</td>
<td>GAM TIL MAN</td>
<td>Autobiographic before editorial information</td>
</tr>
<tr>
<td>Ug-Bab</td>
<td>Bilingual</td>
<td>Yes</td>
<td>Double / d. spaced</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

It is clear from the table that individual geographically distinct traditions often share more than just individual features, in fact whole patterns of features. The correlations making up the patterns of the individual traditions are thus apparently not local in their development, but instead reflect transregional transformations: (1) The use of vertical rulings instead of blank spaces, (2) the use of intersection rulings instead of line-by-line auxiliary rulings, and (3) the omission of catchlines appear as specifically innovative features.56

56 As for the specific terminology used, see chapter 4, which introduces the respective theoretical framework.
The usage of auxiliary rulings in the manuscripts of Ug-Bab is notable in this respect. It may either indicate that, as already suggested in other places of this study, this tradition was imported directly from Babylonia at a point of time which substantially preceded the abandonment of the archive and the site, and/or that the spread of intersection rulings is a local, LBA peripheral feature, pointing to a certain degree of secondary centrality particularly of the Ḫattuša cuneiform tradition, where intersection rulings are also a common feature of pre-NH manuscripts.

5.3. [Some conclusions – aspects of the functional and short-distance transmissional context] The present chapter also includes various findings which are of relevance for the functional and short-distance transmissional context of the manuscripts, and which therefore are summarized here in short:

1) The underrepresented share of excerpt tablets against full text tablets; which is particularly emphasized in the Ḫattuša corpus, but which is no less evident in the parallel corpora; either suggests that compared to the OB period, the modes of practicing lexical lists had changed or, that full text tablets were more or less systematically shelved for later use (see sect. 1.1.3.). This is confirmed by the often refined script that most manuscripts exhibit (at least those from Ḫattuša and Ugarit, which are accessible through photographs; see sect. 3.2.); these manuscripts, at least physically, cannot be verified to represent exercises.

2) In contrast, the MIN-marks and empty slots used as meta-textual abbreviations, i.e., not as abbreviations of items that are deducible from the immediate textual context, but as abbreviations that follow the scribes’ personal idiosyncrasies, demonstrate that the respective tablets were produced for the purpose of practicing (see sect. 3.4.). Manuscripts of this kind involve excerpt tablets from Ugarit (mostly from Ug-Urt) and also a number of full text tablets following the Syro-Hittite tradition in Emar. Among the Ḫattuša tablets; however, there is apparently no attestation.

3) PAP-marks, as found on two manuscripts of the Ḫattuša corpus, form almost unquestionable evidence that tablets were copied from written vorlagen for the purpose of reproducing them as storage (see sect. 3.5.). That individual manuscripts of the corpus must moreover be the products of longer cycles of literate reproduction is shown by their fragmentary retention of the original grapho-analytic subcolumns (see sect. 2.2.4.).

4) The so-called firing holes found on some manuscripts of the corpus from Ugarit and Emar – if they are really to be interpreted as protection against flaking during firing and/or as protection against later additions (see sect. 2.6.) – suggest that these tablets were produced in order to be shelved.

5) The contents of the elaborated colophons – if they really reflect meta-textual needs – apparently attest to a high interest in the ability to later identify the scribe (Emar and Ugarit) and easily assign the contents (Ḫattuša). Thus if taken seriously, the practice of providing the lexical
lists with autobiographical and editorial information at the very least reflects an interest in the later use of the respective manuscripts, for autobiographical reference and/or for reference of content (see sect. 3.5.).

6. [Edition of the elaborated colophons of the Ḫatuša lexical lists]

**Col.A.** (Izi Bo. A = KBo. 1,42 vi 1f.)

\[\text{ʕ}X\text{ʕ}^1 \text{ʕ} K\text{AM}^1 \ [\text{x x (x)}]\]

ŠU $^{=}Ša-bu-ḫa-za$

**Col.B.** (Diri Bo. Ac = KBo. 26,10 iv 13’)

[ ] Dirî(SI.A) NU.TIL

**Col.C.** (Erim Bo. Aa = KBo. 1,44+ iv 50’)

NU(AŠ)$^1$ qa-ti

**Col.D.** (Kagal Bo. A = KBo. 1,59 rev. 1’-4’)

[ ] $^{=}\text{x}^1$-NIR $^D$[ ]

[ ] $^{=}\text{x}^1$ A-A-A

[ E]MÉDU $^D$[ ]

[ ] $^{=}\text{x}^3$ DALKHAMUN$_4$

**Col.E.** (Urra Bo. 6B = KBo. 1,32 lo.ed. 1’-5’) [ DI]NGIR DING[IR ]

[ ] $^{=}\text{x}^x^3$ AR ŠI D[U ]

[ ] $^{=}\text{D}x^3$ $^D$ŠE- $^{=}\text{x}^1$ [ ]

[ ] $^D$En-lîl $^{=}\text{x}^1$

[ ] $^{=}\text{x}^1$

**Col.F.** (Izi Bo. H = KBo. 26,47 rev. 2’)

\[\text{ʕ}x^3[-] \]

**Col.A.** is the only colophon mentioning the name of the scribe who wrote the tablet: $^{=}Ša-bu-ḫa-za$. It has been connected with the name $^{=}Ša-mu-ḫa-LÚ$ by R. Lebrun (1978: 10). The variant $Ša-bu-ḫa-LÚ$-iš, which was later found as the name of a scribe in an oracular report that dates to Hatt-IIIa,$^{57}$ indeed suggests a connection between both spellings. A certain $Ša-mu-ḫa-LÚ$

---

$^{57}$ KUB 50,33 (R. Lebrun Hethitica 12 44:6); there are no significant signs which would necessitate dating the text later than period Hatt-IIIa (early forms of $<$LI$>$, $<$URU$>$, $<$DA$>$ and $<$IT$>$, as well as of $<$KHA$>$ and $<$KI$>$).
is attested to as a plaintiff in a juridic document concerning a case about lost animals,\(^5\) which also dates to period Hatt-IIIa. Evidence of this name which is contemporaneous to the present colophon involves the DUB.SAR Ša-mu-ḫa-LÚ which is mentioned in the letter from Taki-Šarruma to the Hittite king;\(^5\) the text identifies him as a resident of a city – the spelling of which unfortunately is unclear (transcribed \(\text{URU!BÀD'}-\text{ni-ya}'\) in Hagenbuchner 1989: 20f.) – but which obviously doesn’t denote Ḫattuša. Thus, it can neither be disproved nor confirmed that the Ša-mu-ḫa-LÚ of this letter is to be identified with the Ša-bu-ḫa-za who wrote Izi Bo. A = KBo. 1,42.\(^6\)

Furthermore, the colophon is remarkable for its tablet pagination. The respective passage is not fully preserved (the upper parts of the line being broken away). While the rear part of the passage very likely represents <KAM>, a reading of the preceding sequence as <DUB.X> is not possible (collated). The only reading which is in agreement with the traces is DUB.KAM, which – mistaken as it appears – is not further paralleled. The remainder of the line, providing space for about three signs, may have contained the name of the series or a completion mark.

**Col.B.** is the only colophon preserving the name of a lexical series. *Diri* is solely called by its unilingual Sumerian incipit; a practice that is in accordance with the OB and not with the 1st-millennium tradition; which quotes lexical lists according to their bilingual incipits. The lacuna before the sign name very likely contained the numbering of the tablet. The completion mark NU.TIL is quite common among Hittite colophons. A second line mentioning the scribe does not exist.

**Col.C.** is not so much remarkable for its brevity – colophons only consisting of a completion mark are not rare in Ḫattuša –; rather, it is significant due to the form of the completion mark. While the Akkadographic variants *QATI* and *ŪL QATI* of Sumerographic TIL and NU.TIL are common in Ḫattuša, the present colophon is the only instance which combines Sumerographic and Akkadographic spellings.\(^6\)

Another peculiarity is the fact that, although the tablet is not fully inscribed (only columns i-iii and the upper part of iv are), the text is marked as ‘not completed’. This suggests that the scribe followed a relatively strict subdivision of the composition, either in following a traditional break (like between OB Izi 1 and Izi 2) or in strictly copying the divisioning of a *vorlage*.

\(^{5}\) KBo 16,61 obv. 1 and rev. 4' (R. Werner StBoT 4 60ff.).

\(^{5}\) KUB 57,123 obv. 4 and 6 (Hagenbuchner 1989: 20f.).


\(^{6}\) Fischer 2007: 15. <NU> moreover mistakenly appears as <AŠ>; the reading *INA QA-TI* must be excluded for formal reasons, since there is no name of a scribe following, and since scribes’ names are invariably introduced by ŠU.
Col.D. There are actually no elements preserved which would make the interpretation inevitable that Col.D. is a colophon; i.e., there is no tablet pagination, no title of a series, no completion mark, and no name of a scribe or his filiation. There is only an enumeration of deities, probably of Babylonian origin (\(^{0}A\)-\(-A\)-\(-A\) > \(^{0}A\)-\(-a\))\(^{62}\), but also of some of Hittite/Hurrian origin (\(^{0}\)Hé-pát is the only sensible restoration in 3'\(^{63}\)), respectively preceded by Sumerian terms that pose some difficulties in interpretation.

Since the series Kagal preeminently deals with temple names, H.G. Güterbock (apud Civil 1971: 153) interpreted the lines as specifications to sanctuaries. This view; however, disregards a number of facts: (1) that sanctuaries of Hittite/Hurrian deities are not part of the Mesopotamian lists; (2) that the obverse with the regular text is unilingual, thus does not include commentary; (3) that the obverse with the regular text shows horizontal rulings after every single entry, (which are missing in the present passages); (4) that the interpretation of the terms which precede the deities are not very compelling in terms of architecture;\(^{62}\) and (5) most strikingly in this respect, that the signs are not posited between the vertical rulings but written over them (the vertical rulings are collated and are not visible on the hand copy).

Usage of the term Sum. emédu herein (3') – which usually denotes a personal servant – as well as the elaborate circular arrangement of the sign <DALHAMUN>\(^{64}\) may instead point to a colophon. Yet, there is only a single assured colophon attested to in Ḫattuša which contains a doxology mentioning deities as masters or protectors of a scribe: Although he equally mentions Hittite/Hurrian deities like Ḫepat beside Babylonian deities, the scribe who documented the MH ‘Narām-Sîn prism’,\(^{65}\) apparently emphasizes his association with the Babylonian tradition by choosing this specific type of colophon.\(^{64}\) The same holds true for the present colophon if one accepts its identification (also cf. Col.E.).

Col.E. The identification of Col.E. as a colophon relies on similar factors as that of Col.D. Besides some unclear sign sequences – probably resulting in an Akkadian term in l. 2 – it lists a number of deities which cannot be suitably interpreted on the foil of the actual contents of the tablet (the Urra list of foodstuffs), and which hence may be interpreted as a part of a doxology. Moreover, the position on the lower edge of the tablet rather supports than contradicts the interpretation as a colophon.

\(^{62}\) The first signs in l. 1' are read 'x\(^{1}\) U\(^{2}\)NIR, which would yield “ziqqurat”. The first sign; however, is definitely not <U\(^{2}\)>\(^{6}\). Also, the term in l.3 cannot be explained in terms of a building; the sequence <AMA-A-TU> rather yields EMÉDU, which denotes a kind of personal servant.


\(^{64}\) Yet, the scribe bears the Anatolian name Ḫanikuili, and although he mentions his father by the Akkadian name \(^{0}\)Anu-šar-ilāni, this does not necessarily prove that – as suggested by G. Beckman (1983: 103-106) – the family originates in Babylonia. Babylonian names in Non-Babylonian scribal families are not implausible; actually, one would expected them to turn up particularly in this milieu.
The deities given in l.3 can perhaps be restored as $^{\text{D}^3\text{AG}}\text{D}^3\text{NIDA[BA]}$ “Nābū (and) Nisaba”, which are the deities typically enumerated in the colophons from Emar and Ugarit. If the identification as colophon and the restoration of these deities is correct; thus, the scribe followed a Non-Hittite, possibly Syrian tradition in his colophon practice.

**Col.F.** Although there is only the trace of a single sign, it is very likely that this sign forms the beginning of a colophon. It follows after a double horizontal ruling, which usually marks the end of a composition or of a substantial part of it, and after approximately three lines of blank space.