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**Title:** The transmissional and functional context of the lexical lists from Hattusha and from the contemporaneous traditions in Late-Bronze-Age Syria

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## **PART B: Descriptive analysis**

### **Chapter 5: Paleography and paleographic date**

Since the paleographic investigation of the corpus provides the broad chronological framework for further investigations, regarding the Ḫattuša lists as well as the parallel corpus from Emar, the descriptive part of the study discusses this issue before treating the archaeological and archival context of the manuscripts. Questions regarding individual scribes' handwriting and the general inscriptional practice, are discussed in chapter 8.

1. [General characterization] The vast majority of the lexical tablets found in Ḫattuša appear inscribed with Hittite cuneiform, i.e., manuscripts show the typically-Hittite ductus with typically Hittite sign forms that mark most documents produced in the Hittite chancelleries. This uniformity is particularly notable, since the other group of manuscripts with originally Mesopotamian compositions, i.e., the group of Mesopotamian literary, religious, and medical texts, involves at least three additional paleographic styles.<sup>1</sup>

Some unilingual Sumerian lexical lists cannot be clearly assigned to a specific style, since they frequently contain rarely used logograms, for which potential, specifically Hittite sign forms, cannot be differentiated from their Non-Hittite variants. Yet, in all of these unilingual texts one can also isolate signs which are specifically Hittite (e.g., <KU>, <KI>, <NI>, or <ḪAR>; cf. Urro Bo. 1A = KBo. 26, 5). Manuscripts with elements of definitely Non-Hittite paleographic traditions are very rare and only involve Lu Bo. Ba = KBo. 26, 36 and Unid Bo. 2-1 = KBo. 26, 51 (see sect. 3).

The consistent use of Hittite paleography makes it possible to provide paleographic dates for large parts of the corpus. The importance of this fact cannot be overstated since: the archival and archaeological context is insufficiently documented for principally the whole corpus (cf. chapter 6, sect. 1.), Hittite scribes did not pursue the practice of dating manuscripts, and there are no historical synchronisms that can be established – there is only a single scribe mentioning himself in a colophon and he is without a reliable prosopographic link.

2.1. [Paleographic date – general note] The method of paleographic dating involves the investigation of both the general ductus of the writing and of the shape of certain 'diagnostic signs'.<sup>2</sup> Having resisted initial criticisms, the system has been continually developed and elaborated upon

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1 Fincke forthc. The group includes a MB, a (14<sup>th</sup>-century) MA, as well as the so-called Assyro-Mittanian style. About 60% of the manuscripts of the group, however, still appear in local paleography. Individual pieces additionally show a Mittanian and a North-Syrian ductus.

2 As for the basic methodological framework and a short history of research, cf. Starke 1985 and Heinhold-Krahmer et al 1979. As for a detailed history of research see van den Hout 2009.

in recent decades, and in its present state allows for the differentiation of several paleographic periods.<sup>3</sup> Although there is hardly any doubt about the validity of the method itself, the dating systems used by individual scholars are not identical, which also involves the subperiodization (Feindatierung) of the NH period – the period most relevant for the present study. Very few scholars have exposed their method in detail, among them F. Starke (1985: 21-27) and, offering a further refinement of Starke's account, J. Klinger (1996: 32-39) are the most prominent to mention. Their studies form the basis of the system developed in the following paragraph.

The periodization of Old Hittite (OH) / old script (OS), Middle Hittite (MH) / middle script (MS), and Neo Hittite (NH) / new script (NS),<sup>4</sup> especially the differentiation between OS and MS, as well as the subperiodization of these two phases have recently been questioned;<sup>5</sup> yet, since none of the manuscripts within the present study appear to date earlier than Late-MH, the discussion is without relevance here. For practical reasons, the hitherto accepted distinction in three MS subperiods will be maintained, the Late-MS texts labeled Hatt-IIc in the following. As to the NH phase, the present study follows Klinger 1996, using a system of three subperiods (Hatt-IIIa, Hatt-IIIb, Hatt-IIIc).<sup>6</sup>

**2.2.1.** [Paleographic date – the system used – MS and NS] The difference between the periods Hatt-IIc and Hatt-IIIa in the classical perspective is mainly characterized by the height of the vertical wedges. This initially concerns signs which show one or more verticals inscribed over two parallel horizontals (e.g., <ŠA>, <GA>, <E>, <LAM>, <SAG>); while the heads of these verticals remain below the upper horizontal before the shift to the NH period, they have the tendency to surpass it in the NH period. A second group involves signs that contain (three or more) originally stepped verticals (<RU>, <SIKIL>), and that show these formerly stepped heads on one line in the NH period. MS and NS can further be kept apart according to the distinct forms used regarding the signs <TAR> (7/B-C)<sup>7</sup> and <DU> (128/A-B).

**2.2.2.** [Paleographic date – the system used – the NS subperiods] As per the sub-periodization of the NS, there are some 'hard facts' which do not leave much room for discussion, involving the

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3 The most important 'milestones' to be mentioned in this respect are Rüter 1972, Rüter / Neu 1975, and again Starke 1985,

4 Note that these terms are used here exclusively to denote paleographic periods, and not historical or linguistic periods, although there appear to be certain consistencies between these three levels.

5 Cf. van den Hout 2009: 28ff., giving further references.

6 In fact, the periods Hatt-IIIb and Hatt-IIIc result from Klinger's further specification of Starke's (1985) period IIIb. Th. van den Hout (1995) also distinguishes three NH phases, S. Košak (2008) works with two of them, with the criteria for this periodization not made explicit. It is clear from closer observation that all these systems are not fully congruent.

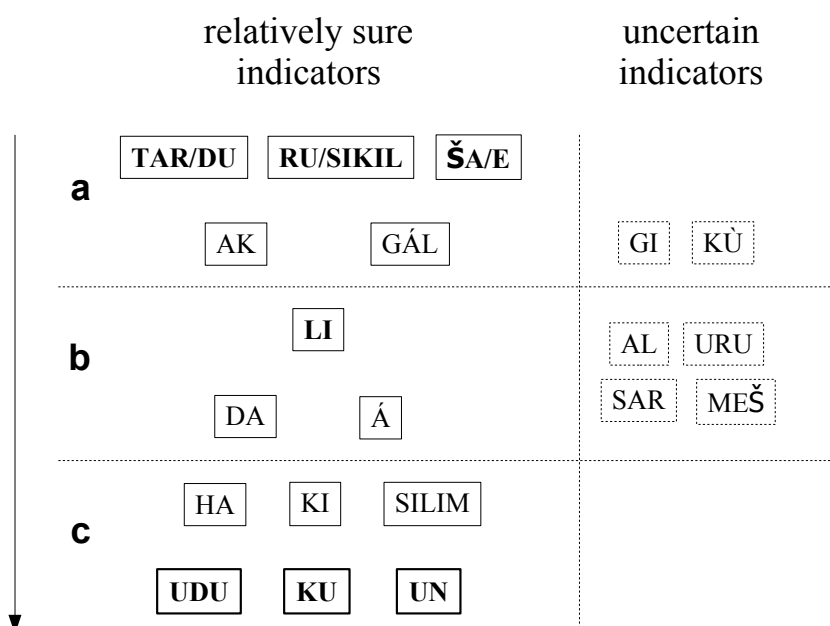
7 The numbers refer to the sequence of signs given in Rüter / Neu 1989.

sign <LI>, and the group <KU>/<UDU>/<UN>. It is broadly accepted that the appearance of the new variants of these signs mark the major cuts within the periodization, i.e., new <LI> (343/B) as a clear indication for period Hatt-IIIb, new <KU> (206/8), <UDU> (210/11), and <UN> (197/8) for Hatt-IIIc. There are a number of additional signs that are frequently adduced for dating; however, with varying interpretations about the exact subperiod they indicate. According to the relative frequency of their attestation in the present corpus they can be largely assigned to two groups, involving <AK>, <IG>, <DA>, <IT>, <ĤA>, <KI>/<DI>, and <UN> in group I, and less frequently-attested <GI>, <AL>, <URU>, <MEŠ>, <KÙ> <SAR>, <EN> in group II.

As to group I, note the following remarks: The introduction of new <ĤA> (367/B), <KI>/<DI> (313/19; 312/8) is clearly later than that of new <LI> (343/B), but the new forms of these signs seem to be introduced earlier than <KU> (206/8), <UDU> (210/11) and <UN> (197/8). The introduction of <DA>/<Á> (214f./C) seems to be later than that of new <LI> (343/B), but earlier than that of new <ĤA> (367/B) and <KI>/<DI> (313/19, 312/8). The new forms of <AK> (81/B) and <IG> (67/B) apparently spread into manuscripts at an earlier point of time than new <LI> (343/B), but probably later than new <TAR> (7/B-C) and the new forms of the <E>/<ŠA> and <RU>/<SIKIL> groups.

The position of the signs of group II is not entirely clear. It is generally held that new <AL> (183/B), <URU> (229/B), <MEŠ> (360/B), and <SAR> (353/12) are indicative for Hatt-IIIb, whereas the introduction of new <GI> (30/B) and <KÙ> (69/B) may have been somewhat earlier. New <EN> (40/C) is commonly assigned to Hatt-IIIc.

**2.2.3.** [Paleographic date – the system used – summary] As a result one arrives at the following relative sequence of indicative signs as delimiting MS and NS as well as the subperiods of NS:

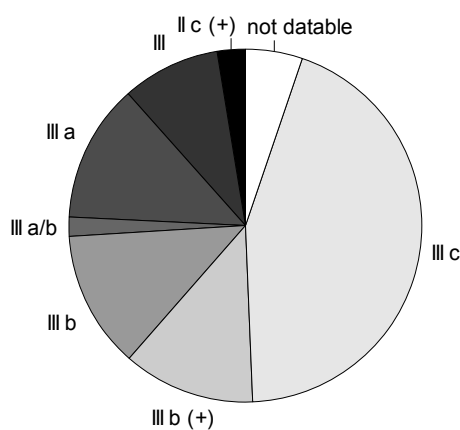


As for the delimitation of the periods Hatt-IIIb and Hatt-IIIc, the investigation follows J. Klinger (1996) regarding <ḪA> and <KI>/<DI> as indicative for Hatt-IIIc, and not S. Košak (2008), who apparently considers this group equal with <LI>. Assessing absolute chronological dates for the individual periods is not easy because of the limited number of absolutely datable documents. Again according to Klinger's analysis of datable documents (1996), Hatt-IIIa may cover the reign of Muršili II, Hatt-IIIb that of Muwatalli, Ḫattušili III and that of early Tudḫaliya IV; whereas Hatt-IIIc, would be simultaneous with the late reign of Tudḫaliya IV and that of Šuppiluliyama II.

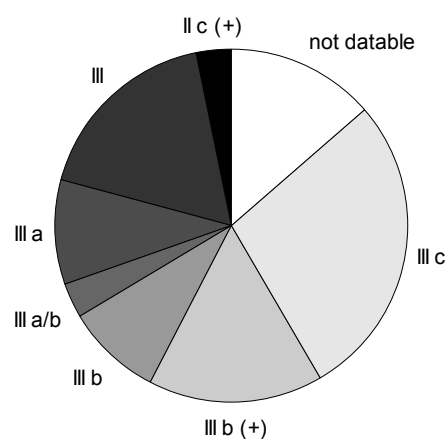
It finally has to be stressed that the concept of serial paleographic 'periods' may not fully reflect the real historical situation. These periods rather, are to be conceived of as largely appearing in a certain chronological sequence, yet showing more or less considerable overlap with one another.

**2.3.** [Paleographic date – quantitative distribution of manuscripts] That the method of paleographic dating only provides *termini post quem* must be stressed. Every date provided in the following in fact, has to bear the additional label 'or later'. Nonetheless, the symbol '(+)' will be reserved for only those manuscripts that, small in size, contain few signs that are relevant for dating; the symbol is not appended in case manuscripts show frequent and consistent features of a certain paleographic period. Some manuscripts may only be specified as to whether or not they show NS; these appear without specification of the sub-period. In some rare instances, it is impossible at all to provide a date through paleographic observations.

According to these criteria, the chronological distribution of the 130 lexical manuscripts is as follows:



according to the amount of entries

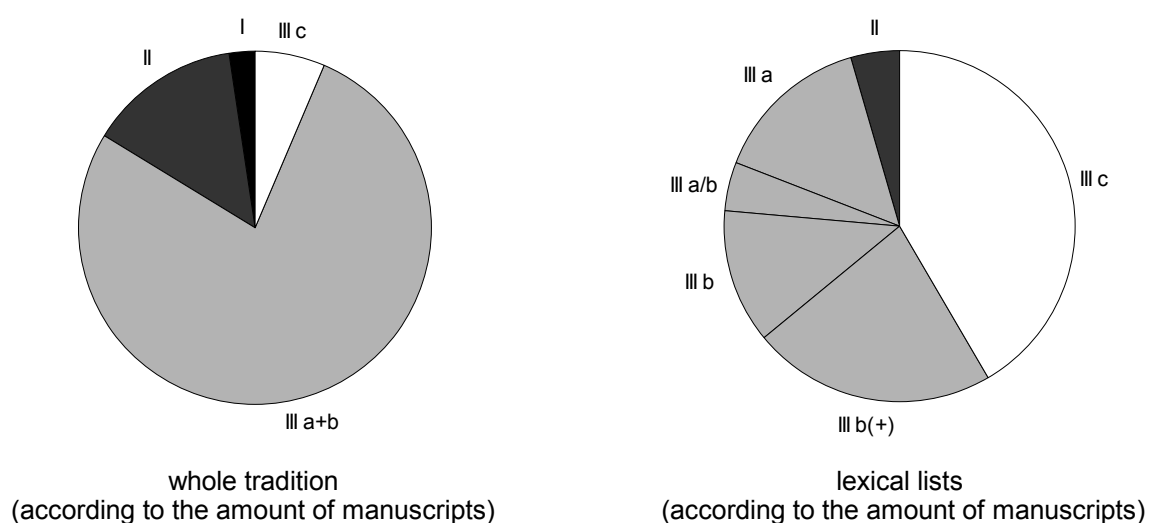


according to the amount of manuscripts

Thus, disregarding the non-datable and the not-exactly-datable fragments, about 75% of the material was written down in the 13<sup>th</sup> century (Hatt-IIIb and Hatt-IIIc), and almost two thirds of this 75% are manuscripts of the last 30 years of the 13<sup>th</sup> century (Hatt-IIIc). Thus, the scribal activities leading to the production of lexical lists were maintained up until the archives' abandonment.

Altogether, the corpus covers a period of more than 150 years, which, despite its paleographic homogeneity, besets treating it as (too) uniform. The long time span moreover forms a notable contrast with lexical tablets of the OB period (cf. chapter 2, sect. 4.2.), which were supposedly not made to be preserved; scribes apparently recycled them soon after their production. Whether or not the long period of attestation is the result of the systematic shelving of lexical tablets; however, cannot be said with certainty due to the poor stratigraphic documentation of the corpus (see chapter 6, sect. 1.): Manuscripts of periods IIc and IIIa could have been discarded earlier, their final find spot being secondary. As will be seen, the period of attestation of lexical lists from Ugarit – and probably also of those stemming from Emar – is a bit shorter (see sects. 5.1. & 5.2.).

**2.4.** [Paleographic date – comparison with the whole Hittite textual tradition] A comparison with the general chronological assessments done by J. Klinger (2006: 12-14) with regard to the four important archives Temple I (Hatt-T.I), Haus am Hang (Hatt-HaH), Büyükkale A and K (Hatt-BkA & Hatt-BkK), yields a striking contrast between the chronological proportions of the corpus of lexical lists and the whole cuneiform tradition as attested by these archives:<sup>8</sup>



Even taking certain statistical inaccuracies into account, and even if the texts labeled Hatt-IIIb(+) are ascribed to Hatt-IIIb (as is the case in the diagram), the differences are striking: On the one hand, the share of MS and particularly of OS material is much lower within the corpus of lexical lists than with regard to the whole textual tradition; on the other hand, the share of LNH lexical tablets is by far higher than the general share of manuscripts dating to that period.

<sup>8</sup> The paleographic system used in Klinger's study is chiefly identical with the one used in the present study, so the data is principally compatible. Also note that with the exception of one piece, all lexical tablets equally stem from these four archives (cf. chapter 6).

It is notable that at least with regard to the NH subperiods, the chronological proportions within the corpus of lexical lists are more in accord with what can be expected for a ‘living’ archive than is the case for the general tradition; for, the greater part of the lexical texts (note that Hatt-IIIa and Hatt-IIIb cover more than twice the period of time as Hatt-IIIc) was written down in the period that ultimately precedes the abandonment of the archive.

This indicates that the scribal activities linked to the lexical lists were apparently not – or not to the same degree – affected by the processes that led to the remarkable overall decrease of cuneiform manuscripts in LNH paleography. Whatever the reasons for these processes – be it the continuous reduction of the cultural activities linked with the archives during the period preceding the downfall of the city (a period which apparently was one of general decline), or be it the evacuation of parts of the archive along with the evacuation of the site<sup>9</sup> – they apparently did not affect the production and storage of lexical texts, at least not to the same degree.

**3.1.** [Mixed paleography – general concepts] ‘Mixed paleography’ denotes a combination of elements from different paleographic traditions in one and the same manuscript. The (two) respective paleographic traditions involved may either be genetically distinct – representing two, often geographically-remote traditions – or represent chronologically distinct stages of the same tradition. In theory, a combination of elements from two traditions may have two origins: (1) They may result from an accident during the copying of a tablet; the scribe lacking concentration or being not wholly proficient in the specific paleographic style of the *vorlage*, thus mixing in some sign forms which are not a part of the *vorlage*, but which belong to their own standard inventory. Or (2), one of the scribes involved in the textual tradition of the respective manuscript had a permanently hybridized writing style – whatever the source; i.e., he regularly wrote in a combination of two or more concurring paleographic styles.

The identification of the origin of a manuscript’s mixed paleography seems mostly to depend on the grade of deviation and or remoteness between the paleographic styles that have been specifically mixed. The probability that scribes integrated elements of distinct styles permanently into their individual handwriting, seemingly increases the more the two styles are graphically similar. I.e., the less they are discriminable the more frequently they appear side-by-side in the respective archive, thus the more they are ‘genetically’ related.

In the present study, mixed paleography as evidence is relevant for identifying potential intermediaries in the process of long-distance transmission and for the potential use of *vorlagen* in the process of short-distance transmission. The aforementioned differentiation in accidental and

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<sup>9</sup> There are strong indications, foremost the complete lack of interior in the destroyed buildings, that Hattuša had been abandoned before its final destruction; cf. Seeher 2001.

permanent hybrid styles in this respect is very important, since one can be sure that only in cases of demonstrably accidentally mixed paleographies, the scribe really copied from a written *vorlage*.

**3.2.** [Mixed paleography – combinations of genetically-distinct traditions] A manuscript that definitely combines sign forms of Hittite with sign forms of Non-Hittite paleography is Lu Bo. Ba = KBo. 26,36. The signs <RU> (with additional oblique stroke at the top of the verticals) and <TÚL = LAGABxU> (with ‘closed’ <LGAGB>), probably also <DUMU> (forming two clear ‘peaks’ to the right) appear Babylonian. Other signs like <RU> (with four verticals) or <BUR> (sometimes even with five verticals) show a form which is not principally incompatible with Hittite paleography, but which is at least most uncustomary.<sup>10</sup> The stepped verticals of <BUR>, the drawn-in horizontal in <AH> or the missing inscription in <NI> nonetheless betray the hand of a Hittite scribe.

A second instance of a tablet with Non-Hittite sign forms (however, along with the majority of signs in the usual Hittite form as well), is Unid Bo. 2-1 = KBo. 26,51. This manuscript is still peculiar with regard to other features; it is questionable whether it is at all a regular part of the lexical tradition (see introductory remarks in part D). Apart from that, Erim Bo. B = KBo. 1,36+ shows one instance of the sign <ŠA> written in its Babylonian form (with two additional horizontals); all other signs on this tablet (including further instances of <ŠA>) are written in the regular Hittite ductus.

The source of the foreign sign forms included into these manuscripts is not entirely clear. With regard to the theoretical argument in the previous section; however, it seems likely that these mixed paleographic hands are a unique, accidental formation; brought about by a scribe who was unpracticed in one of the two styles and therefore mixed in elements from the other. This moreover suggests that the tablets, at least Lu Bo. Ba = KBo. 26,36, were copied from a *vorlage*. The specific characteristics or the origin of this *vorlage* however, remain unclear.

**3.3.** [Mixed paleography – combinations of distinct diachronic stages of the same tradition] Manuscripts that combine signs of concurring diachronic stages of the local paleography are frequently preserved in Hattuša. They are usually considered as the (inaccurate) copies of manuscripts that had been produced some paleographic periods earlier (thus e.g., a NS copy of a *vorlage* in OS), and therefore they point to the practice of copying from a *vorlage*.

Among the manuscripts of the present corpus, there are virtually no instances of a paleographic style that combines diachronic stages with a larger chronological gap in-between. Vacillation only involves diachronic stages that are chronologically close (e.g., Hatt-IIIa and Hatt-IIIb). According to the theoretical argumentation in sect. 3.1., these mixed paleographies can by all means be assumed

<sup>10</sup> Already noted by H.G. Güterbock (apud Civil 1969: 78), who suggests that the tablet “possibly did not originate in Boghazköy.”

to represent the permanent paleographic styles of individual scribes; at least, they cannot be claimed to represent the opposite, i.e., accidental formations.

An exception is exemplified by the manuscripts OBLu Bo. A = KBo. 1,30 and B = KBo. 1,39, which are likely a part of the same tablet. They both contain two chronologically distinct variants of the sign <KU>, a later example with two vertical wedges (indicating Hatt-IIIc) and an earlier one lacking the initial vertical wedge (indicative for all periods preceding Hatt-IIIc), which is extremely similar to and in many contexts even indiscriminable from the sign <MA>. What makes the manuscripts exceptional is the fact that the distribution of these two sign forms is not random: While all instances of the earlier forms are confined to the Syllabic-Sumerian column, the later forms can occur in all three of the Syllabic-Sumerian, Akkadian, or Hittite columns (there is no instance of the sign at all in the Orthographic-Sumerian column). In the Syllabic-Sumerian column, four instances of the earlier form stand against a single instance of the later form. Occurring in the later form, <KU> refers to OrthSum. gú, an item frequently used as a logogram in Hittite writing; whereas in the earlier form it is twice referred to as OrthSum. ku<sub>4</sub>, (a syllabic value of Sum. TU, which is completely uncommon in Hittite writing), and twice referred to as OrthSum. /ku/ in *tuku*, (a frequently occurring term, which however appears in the bound spelling SyllSum. (-u)d-ku in the manuscript). This evokes the impression that the scribe, copying the *vorlage*, replaced the earlier forms of the sign by the contemporary ones except in those cases he was not sure whether the sign was to be identified as <KU> or as <MA>, i.e., in the case of difficult Syllabic-Sumerian transcriptions. In these cases, he simply left the original, graphically ambiguous form unchanged. This pattern apparently proves that the manuscripts trace back to a written *vorlage*.

**4.1.** [The parallel corpora – Ugarit] Contrary to the Ḫattuša corpus, lexical lists in Ugarit – although mostly preserved in local paleography (Ug-loc) – appear in at least two additional paleographic styles. The first of these two alien styles is quite different from Ug-loc and clearly appears as MB (Ug-Bab); manuscripts in this paleography are however limited to one of the five larger archives, the so-called ‘Lamaštu archive’ (Ug-Lam).<sup>11</sup> The second is represented by a small group of manuscripts only, and it is unclear if it genuinely reflects a consistent paleographic tradition. It is largely compatible with Ug-loc, yet differs in a number of sign forms (<ŠA>, <RU>, and <DA>), which resemble the corresponding sign forms of the Syro-Hittite style in Emar (Em-SH) as well as that of Hatt-IIIb and Hatt-IIIc. It is provisionally labeled an ‘alternative North-Syrian’ style (Ug-NS). It appears in two archives: in the house of Rap’ānu (Ug-Rap) and predominantly, in the house of Urtēnu (Ug-Urt).

<sup>11</sup> As for the description of archives, generally see chapter 6, sect. 5.1.

In detail, the distribution of manuscripts is as follows:

Archive	loc.	loc. <sup>2</sup>	Non-Bab.	North-Syrian	non-loc.	Bab.	mixed
<b>Ug-Rap</b>	16	4	6	2	-	-	1
<b>Ug-MT</b>	10	-	4	-	-	-	-
<b>Ug-Urt</b>	5	-	10	4	1	-	1
<b>Ug-Lam</b>	4	-	-	-	1	8	1
<b>Ug-GP</b>	6	1	3	-	-	-	1

There are no indications of a chronological differentiation of the three main paleographic traditions. It is clear from the datable ephemeral documents that at least Ug-Rap, Ug-MT, and Ug-Urt were simultaneously in use during the last 60 years of archival activities in Ugarit. (cf. chapter 6, sect. 5.1.3.).<sup>12</sup>

A limited number of manuscripts show a mixed local Babylonian ductus, with local features dominating. Like the genuinely local style, it is not limited to any of the larger archives.<sup>13</sup> Since mixed paleographic handwritings of this kind also appear in economic records;<sup>14</sup> it is suggestive that they represent the permanent writing style of individual scribes and were not accidental copies of originally Babylonian-styled manuscripts by scribes who actually wrote in the local style (also see the theoretical considerations in sect. 3.1.).

For further details, see the comparative table in sect. 5.1.

**4.2.** [The parallel corpora – Emar] Emar lexical tablets are preserved in the two main paleographic styles that also mark the paleography of the ephemeral documents, i.e., the ‘Syrian’ style (Em-Syr) and the ‘Syro-Hittite’ style (Em-SH).<sup>15</sup> Originally established for the ephemeral documents only, the distinction between the two traditions proved also to apply to the lexical lists as part of the larger group of scholarly tablets.<sup>16</sup> As it is the case in regards to the ephemeral documents, lexical manuscripts belonging to Em-SH by far outnumber those that belong to Em-Syr (with 118 of the 261 published manuscripts assignable to one of the two traditions):

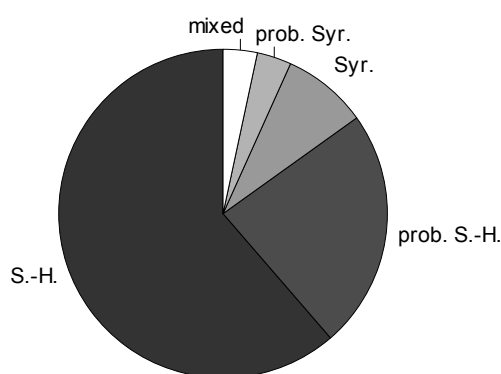
<sup>12</sup> In contrast to Hattuša, there are no diachronic investigations of the local paleography available which would provide a grid for dating the manuscripts

<sup>13</sup> The group involves RSGT Ug. RS 25.459A+, Urra Ug. 11A = RS 20.32, Izi Ug 2A = RS 2.13, OBLu Ug. A = RS 86.2228+.

<sup>14</sup> Pers. comm. W.H. van Soldt (2010).

<sup>15</sup> Wilcke 1992, also including a table of crucial distinctive signs. The signs taken as distinctive in the present study involve <AH>/<A’>, <HAR>, <LI>, <GÁL>, <AG>, <GI>, <IL>, and <AL>.

<sup>16</sup> Cohen 2009.



Paleography of Emar lexical tablets  
(according to the number of manuscripts)

Only a few manuscripts show a combination of both styles; these manuscripts, including SVo Em. 603A, SaV Em. 537C+, Urra 1 Em. 541A+, and possibly Urra 7a 548-9W basically follow Em-Syr, with features of Em-SH in the minority. In SaV Em. 537C and Urra 1 Em. 541A+ the features of Em-SH are moreover restricted to the colophon, while the actual text appears complete in Em-Syr. This distribution suggests that the scribes who have produced the manuscript (Rībi-Dagan and Išma'-Dagan) were able to write in both paleographic traditions. There are two scenarios potentially explaining the switch: Either (1) the scribes actually were Syro-Hittite, but copied a Syrian *vorlage* and did thus very exactly, or (2) they were originally Syrian but used the more modern paleography in the colophon for the intended ease of future use. Since Rībi-Dagan is also the scribe of the completely Syrian manuscript Urra 3 Em 543-5A+, and since the manuscripts in mixed paleography also show completely Syrian tablet layouts and Syrian-type colophons (further see chapter 8, sects. 2.4. & 4.4.2.), the second explanation eventually appears more plausible (also see chapter 7, sect. 3.2.3.).

As demonstrated by Y. Cohen / L. d'Alfonso (2008) by means of prosopography, the two paleographic traditions, though being chronologically serial in principle, show a certain period of overlap, e.g., Em-SH (ca. 1270-1180 BCE) eventually replacing Em-Syr (ca. 1330-1240 BCE). This not only allows for assigning the lexical manuscripts a relative paleographic date, but also for determining the overall period covered by the lexical manuscripts within, at minimum, 70 years. Synchronisms between individual scribes and high officials suggest that this time span covered at least 80-100 years (cf. chapter 7, sect. 3.2.4.).

**4.3.** [The parallel corpora – the smaller corpora] The smaller corpora of lexical lists do not contain sufficient material, thus disabling the observer to extract specific paleographic traditions within them. It is still possible, however, to compare and relate the paleographies in which the individual manuscripts appear with the paleographic styles established for the larger corpora.

The manuscripts stemming from Alalaḫ either show a paleography that is very similar to that

of Em-Syr or to that of Em-SH (for details, see introductory remarks to the manuscripts). The paleographic observations confirm the proposed archaeological date. In contrast to the bulk of epigraphic finds in Alalah, the lexical tablets were not produced in the 15<sup>th</sup>/14<sup>th</sup>, but later in the 13<sup>th</sup> century. Manuscripts from El-Amarna and Ortaköy show the paleographic characteristics to be expected with regard to their historical date. The sign forms are roughly equivalent to those established for the pre-NH phase in Hatt.

**5.1.** [Comparison – a comparative table of sign forms] The following table comprises a sample of sign forms that are distinctive among the individual paleographic traditions. Yet, note that the specific sign forms given are prototypical. The table does not include all variants that can be found in the manuscripts.

	Hatt-IIIa	Hatt-IIIb	Hatt-IIIc	Em-Syr	Em-SH	Ug-loc	Ug-Bab	Ug-NS
ŠA								
RU								
TAR								
TI								
AG								
AL								
IL								
GI								
DA								
AH								
ĤAR								
LI								
ĤA								
KU								
UDU								
KI								
IG								



**5.2.** [Comparison – the individual paleographic strata] The genesis of the individual paleographic traditions that are manifest in the corpora of the present study very probably was a complicated process which can not be retraced in all detail – neither in this study nor generally.<sup>17</sup> The model as represented by the colored zones in the previous-section table proposes two major waves of innovative sign forms (as for the terminology of the underlying interferential model, cf. chapter 4): The ‘Later-Syrian stratum’, indicated by the red-colored fields, ‘reaches’ the LBA peripheral west at the beginning of the 13<sup>th</sup> century BCE, partially transforming the ‘Earlier-Syrian stratum’ (orange-colored fields) and its side branch, the ‘Hittite stratum’ (yellow), which probably evolved from a common predecessor and which in turn causes some feedback on the Later-Syrian stratum (yellow fields in Ug-NS). The origin of the innovative material the Later-Syrian strata brings along is not quite clear, many sign forms, yet, are similar or identical with (Middle) Assyrian sign forms.

The ‘Babylonian stratum’ as represented by the blue-colored fields enters the area in the second half of the 13<sup>th</sup> century and partially transforms the ‘Later-Syrian stratum’. The magenta-colored fields in Ug-loc represent characteristic sign forms that can be found in this local tradition only; like the Hittite stratum they probably represent (remnants of) a side branch of the Earlier-Syrian stratum. As for the individual paleographic traditions note the following details:

(1) The Hittite tradition resists the innovations of the Later-Syrian stratum with regard to quite a number of signs, as for which it retains the original forms. Also note that, contrarily to the simplifying table, the older sign forms are still in use besides the innovative ones in periods IIIb and IIIc (also see sect. 2.), which points to a prolonged process of interference between both strata. Strikingly, genuinely Hittite sign forms also appear in Ug-NS, which testifies the expansive power of the Hittite scribal tradition during the 13<sup>th</sup> century. Its relative resistance against paleographic innovations, thus, may be on account of a certain secondary centrality rather than on a strong peripherality.

(2) Among the three paleographic traditions attested by the Ugarit corpus, Ug-Bab appears as a direct import from Babylonia, since it clearly is the most innovative tradition of the whole area and there are no paleographic traditions found between Ugarit and Babylonia which could bridge this high grade of innovation. Also Ug-NS comprises alienate material, including some signs of Hatt and lacking the typically Ugaritic forms of Ug-loc (<ŠA> and <RU>).

(3) Em-Syr, apart from the respective traces in contemporaneous Hatt-IIIa, is the only tradition to attest the Earlier-Syrian stratum. Traces of the latter have completely disappeared in Em-SH, which instead attests innovations not only of the Later-Syrian, but also of the Babylonian stratum. Among the traditions which are not directly imported from Babylonia, Em-SH shows the highest

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<sup>17</sup> This particularly concerns the nature and grade of influence which the Mittani scribal traditions displayed on the Syrian and Anatolian paleography, which can not be assessed yet.

grade of innovation. Strikingly, there is hardly any interference between Em-Syr and Em-SH. Apart from some occasional cases of mixed paleography (see sect. 5.2.), Em-Syr shows no imprints of the Later-Syrian stratum.

**5.3.** [Comparison – a summarizing chronological map] The findings of the two preceding sections can be summarized in the following chronological map:

