Valerio Pisaniello

Glossenkeil and Indentation on Hittite Tablets

Abstract: In this paper, I will address the issue of the use of the *Glossenkeil* as a mark of indented line in Hittite texts, based on a complete collection of the occurrences of this practice found in the texts published so far. After outlining the main functions of the *Glossenkeil* in Hittite texts and establishing a typology of line indentations, I will argue that the *Glossenkeil* should not be properly regarded as a mark of indentation, but as a mark of the beginning of the line, which pointed out that indentation was merely accidental, and should not have been reproduced in future copies of the text. Furthermore, the case of some Hittite words unexpectedly marked by the *Glossenkeil* will be reconsidered based on the non-lexical functions of this sign. Finally, I will show how the analysis of this scribal practice can be useful for the identification of the hands of the scribes, and, based on it, I will suggest that two manuscripts of the funerary ritual, KUB 30.24+ and KUB 39.7+, were drafted by the same scribe.

Keywords: *Glossenkeil*, indentation, Hittite palaeography, cuneiform, scribal practice

1 One Sign, Different Functions: the *Glossenkeil* in Hittite Texts

As is well known, the so-called *Glossenkeil*, consisting of one or two oblique wedges (HZL: 217 no. 248, transcribed in this paper as a colon, *:*), has several functions in Hittite texts, the marking of true glosses however being the rarest one. Indeed, despite the name usually given to this sign, we know very few cases in which the *Glossenkeil* marks the translation of a preceding word:[1] almost all the examples involve independent words.

Furthermore, it is a matter of fact that the great majority of the marked words belong to the Luwian language,[2] although it would be wrong to claim that the *Glossenkeil* specifically marked Luwian words, since words in other languages are also found, including Hittite.[3] For this reason, Schwartz (1938: 65) had already claimed that, in Hittite, the *Glossenkeil* "was a sign somewhat equivalent to the exclamation mark, or better,

---

1 Clear examples are Hurr. *:šinaḫila* 'second' in KBo. 3.3+ ii 7 (NS, CTH 63.A), which is the translation of Akk. [lú₂]*TARTENNUTTI=ŠUNU* preceding it in line 6, and some clauses found in the Akkadian medical text KUB 37.1 (LNS, CTH 808; Giusfredi 2012), e.g. obv. (5) … GIM *ra-bi-ki* (6) *ta-ra-ab<-bak> :ḫu-wa-ar-ti-in* GIM-*an za-nu-uz-zi*: (Akk.) 'You decoct (it) like an extract' = (Hitt.) 'One boils (it) like an extract' (transl. Yakubovich 2010: 371). According to Watkins (1997), followed by Puhvel (HED L: 99), a Hittite gloss explaining a Luwian word may be *:lapanan ḫūmandan :likin ḫūmandan* in Bo. 86/299 ii 10 (LNS, CTH 106.I.1): *liki-* 'salt-lick' is Hittite (cf. Melchert 1994: 255) and semantically matches Luw. *lapan(a)-*; therefore, the *Glossenkeil* before *likin* should be a true gloss-marking sign. Finally, two Akkadian glosses are found in KBo. 9.50 (CTH 812.3.B): DALLA₂ E₂.MAḪ *:ṣi₂-il₅-li-ma-aḫ-[ḫu]* (obv. 27′) and ŠEN.TAB.BA *:pa-a-šu* (obv. 31′).
2 For the Luwian *Glossenkeilwörter* see especially Rosenkranz (1950–1951; 1952: 18–26), Güterbock (1956), Melchert (2005), and van den Hout (2007). See also Görke (2013) for the *Glossenkeilwörter* in Hittite festivals.
3 For the Hurrian gloss *:šinaḫila* in KBo. 3.3+ ii 7 see fn. 1 above. Hittite examples include *:ermalaš* (KUB 1.1+ i 44), *:ḫūiyami* (KUB 1.1+ iv 10), possibly *:ḫūwaiš* (KBo. 3.4+ ii 31), *:ḫūwappi* (KUB 1.1+ i 40–41), *:padummazzi=ya* (KBo. 52.26 ii 40″), *:šākuwa=šše=ššan* (KUB 8.81+ ii 10′), and *:duwarnuman[zi]* (KUB 44.4+ i 23), for which different explanations have been suggested (cf. Melchert 2005: 445–446 and see also § 5 below). In the Kikkuli text, beside Hittite words, some Indic technical terms are marked (cf. Rosenkranz 1952: 20), and in one case also the Akkadian term *ZUDU* 'sweat' (KUB 1.11+ iii 5), possibly corresponding to the Hurrian word *šišḫau* found in a parallel passage (KBo. 3.2 obv.ˈ 26; note that in rev.ˈ 36 the entire expression *šišḫau arḫa uezzi* seems to have been replaced by a *Glossenkeil*!).

Valerio Pisaniello, University of Verona, Department of Cultures and Civilizations, Viale dell'Università 4, 37129, Verona, Italy, E-Mail: valerio.pisaniello@univr.it

to our *sic!*, and that [...] it was employed as a scribal mark of emphasis before a word when its position, use, form, or meaning was unusual or unknown".[4] This explanation has been accepted by Melchert (2005: 445) and van den Hout (2007: 239), who however emphasises the function of marking Luwian words.[5] Differently, through a semantical analysis of the marked words, Zorman (2007, 2010a, 2010b, 2016) suggested that the *Glossenkeil* pointed out words belonging to the taboo sphere.

The issue of the function of the *Glossenkeil* has been extensively revised by Yakubovich (2010: 368–396), who suggests a stylistic motivation for its use, i.e., with his words:

> Boğazköy scribes placed gloss marks in front of those words and expressions that they deemed stylistically inappropriate in a given context. In case of foreign insertions, they received a gloss mark if the scribes considered the embedded language to be less formal than the matrix language. The following hierarchy of formality was commonly accepted: Sumerian/Akkadian > Hittite > Luwian.[6]

According to Yakubovich, such an explanation would account for every marked word or expression in the Hittite texts, the real glosses being included, since they can be regarded as insertions in a less formal language.[7] Furthermore, this hypothesis would find a confirmation in the fact that Sumerian and Akkadian words (i.e. Sumerographic and Akkadographic writings) are never marked,[8] and that, sometimes, marked words are replaced by more common (i.e. stylistically appropriate) ones in the later copies of the texts.[9] Actually, the *Glossenkeil* would not just have been a mark of unusual features, as per Schwartz and Melchert, but a real editorial mark with a prescriptive goal, pointing at those forms that should be replaced.[10]

However, in a recent paper on the gloss marking in the Alalaḫ IV texts, Eva von Dassow (2012) offered a different interpretation, suggesting that, ultimately, the *Glossenkeil* can be regarded as a mark of foreign words, although she has to return to the idea of marking the (stylistically) unusual forms in order to explain the marked Hittite words:

> If the question 'foreign to what?' is answered not by 'Hittite' but by 'the language(s) of writing', then it becomes obvious why Sumerograms and Akkadograms would not be marked with the Glossenkeil in a Hittite context: they were used to write Hittite. In the context of cuneiform writing, Sumerian and Akkadian were not 'foreign'; the non-marking of Sumerian or Akkadian words is therefore no argument against the proposition that the Glossenkeil marks words foreign to the language the scribe is writing. Integrated loanwords would not be marked either, regardless of their linguistic origin. Further, given that Sumerian, Akkadian, and Hittite were the principal languages of cuneiform writing in Ḫatti, it is superfluous to impute to the Hittites the idea of ordering these languages according to a hierarchy of formality. [...] In occasional instances of marking syllabically-spelt Hittite words, the criterion may be that the spelling of the word was unconventional in the writing of Hittite. Accordingly, scribes flagged such words (or spellings) in drafting official texts, so their appropriateness could be evaluated in producing the final version. They could, then, similarly flag other words, not because they were foreign but for some other reason, whether stylistic or semantic. In other words, the scribes of Boğazköy – like those of Alalaḫ – used the Glossenkeil not to mark glosses, but to mark emphasis.[11]

---

4 Note that the *Glossenkeil* can also mark mistakes, as in *:nu-pat₂-za-ma :nu-mu-za* in KUB 6.7+ iv 14′ (LNS, CTH 572), where the second marked sequence corrects the first one, and *:ḫankilatar* for *zankilatar* in KUB 16.77 ii 47′ (NS, CTH 577.3). On these examples see Güterbock (1956: 119). We can wonder why the scribe who notices such mistakes chooses to mark them (and adds the correct form in the case of KUB 6.7+ iv 14′), instead of replacing the wrong forms.

5 According to van den Hout, the use of the *Glossenkeil* as a mark of Luwian words would point to native Luwian scribes, who sometimes were not able to avoid using their native language. Such a situation would be parallel to the one supposed for Qatna, where Hurrian words marked by the *Glossenkeil* in Akkadian texts are believed to reflect the language spoken by the local population.

6 Yakubovich (2010: 370).

7 Yakubovich (2010: 371).

8 See however fn. 3 above for marked Akk. *ZUDU* 'sweat' in KUB 1.11+ iii 5.

9 Cf. Yakubovich (2010: 378–386).

10 Cf. Yakubovich (2010: 386).

11 von Dassow (2012: 213). The use of the *Glossenkeil* in Alalaḫ IV texts (15th century BCE) is a good *comparandum* for the Hittite situation, since almost all the functions attested for the *Glossenkeil* in Hittite texts are also found in Alalaḫ (and, as in Hittite, its use as a mark of real glosses is very sporadic).

The origin of this practice is not fully clear: the use of marking glosses seems to have its origin in the Syrian area, spreading then to Mesopotamia, Anatolia, and Egypt.[12] Furthermore, it is sometimes assumed that the practice of marking independent words (i.e. not properly glosses) arose from ellipsis, according to the scenario suggested by Yakubovich (2010: 376–377):

> one can hypothesize that in those cases where a Canaanite scribe either could not immediately remember the Akkadian word, or was too lazy to write it, he could resort to the elliptical use a foreign (i.e. non-Akkadian) gloss without mentioning the word it clarifies. Such an ellipsis, however, was relatively circumscribed because Canaanite scribes could not be certain that their colleagues at the Egyptian court would also be of a Canaanite background. [...] the possible reason for the generalization of the elliptical construction is not difficult to find: the cuneiform documents found in Ugarit were largely written for the internal use of this city-state, and the scribes could be reasonably sure that their output would be read by another Ugaritic speaker. [...] Generalizing the elliptical use of marked forms represents the decisive innovation of Hittite scribes. [...] This innovation does not constitute a break in the tradition, but rather a choice in favor of one of the options that were already available in it. Once the glossed words were eliminated, the function of the Glossenkeil underwent reinterpretation along the lines presented above, and its scope was extended to certain Hittite forms occurring in Hittite texts.

However, as shown, the data presented by von Dassow (2012) about gloss marking in Alalaḫ IV texts, which is one of the earliest corpora to use the *Glossenkeil* on a large scale, seem to point to a different scenario, since the *Glossenkeil* is essentially a mark of emphasis and most of the marked words are not real glosses, but occur independently. In von Dassow's view, the practice of marking glosses, clearly secondary in Alalaḫ, was then generalised by Syro-Canaanite scribes, and we find this use in texts from Qatna (14th century BCE) and in the Canaanite Amarna letters.[13] Therefore, we can imagine that this custom only marginally reached the Hittites, since the very few examples of true gloss marking we find cannot represent a solid basis to explain the marking of independent words as an elliptical construction.

Despite these necessary introductory remarks, the lexical/stylistic marking of the *Glossenkeil* is beyond the scope of this paper, which concerns a particular paragraphemic use of the *Glossenkeil* in Hittite.[14] Indeed, at least the following non-lexical functions can be recognised for this sign:[15]

1. it can mark an indented line, as will be broadly shown below;
2. in rare cases, it marks the beginning of a line before the left column divider or on the left edge;[16]
3. sometimes, it seems to mark the beginning of a new paragraph;[17]

---

12 Cf. Yakubovich (2010: 369–370) and von Dassow (2012: 204–205).

13 Cf. von Dassow (2012: 212). In the texts found at Qaṭna, Hurrian words are often marked by the *Glossenkeil*, but only a few of them are translations of preceding Akkadian words (cf. Richter 2003: 173–174). On the Amarna glosses see also Artzi (1963), Izre'el (1995), van der Toorn (2000: 104–105), and von Dassow (2004).

14 For the purposes of this paper, I consider as paragraphemic every *Glossenkeil* that does not specifically mark a word (be it a real gloss or an independent word).

15 See also Forrer (1922: 215 and BoTU 1: 23 no. 328), Schwartz (1938: 65), Souček (1957–1971: 440), and Waal (2015: 80–81). I do not take into account the unusual three-wedges *Glossenkeil* in the inventory KUB 42.11 ii 5′–6′ (NS, CTH 241.7.A), for which see Burgin (2016: 17). Nor do I consider the ornamental use of wedges inside a double paragraph line (cf. Hunger 1968: 5 and HZL: 217 no. 248).

16 Cf. KUB 31.121+ ii 6′ (NH/NS, CTH 379; but E. Rieken et al. (ed.), hethiter.net/: CTH 379 (Expl. A, 29.08.2015) read **u**-*nu-wa*-x[), KUB 21.19 iv 14′ (LNS, CTH 383.1), and possibly also KBo. 48.221, 3′ (NS, CTH 832).

17 An assured case seems to be KBo. 5.6 i 37 (NH/LNS, CTH 40.IV.1.A), to which, in my view, it is possible to add also KBo. 5.4 obv. 43′, rev. 42, 56 (NH/NS, CTH 67), IBoT 1.36 i 69 (MS, CTH 262), KUB 23.72+ obv. 4 (MS, CTH 146), KUB 14.1+ obv. 3 (MS, CTH 147), KUB 42.106 obv. 14′ (NS, CTH 243.7), and KUB 7.51 rev. 20′ (NS, CTH 500.357), the latter occurring in the last paragraph of the tablet, so that the scribe could have chosen this strategy because the space available was insufficient (but this explanation does not seem to account for the other examples). In KUB 6.46 iii 30, 33, 36, 38, iv 14, 48 (NS, CTH 381.B), a long oblique wedge is used to separate midline what in the copy of the text, KUB 6.45+ ii 64, 68, 72, iii 1, 45, iv 49 (NS, CTH 381.A), respectively, is placed in a new paragraph, i.e. after a paragraph line (see also Justus 1981: 383 and 402 n. 7; on the relationship between the two manuscripts of the prayer, see Houwink ten Cate 1968). In KBo. 35.115+ rev. 23′ (MS, CTH 791), a *Glossenkeil* marks the beginning of a Hittite sentence at the end of a Hurrian section. In the ritual fragment KBo. 47.27 rev. 24′, 27′ (MS, CTH 470.1628), the *Glossenkeil* seems to be used as a punctuation mark (cf. Groddek 2011: 23 fn. 63). See possibly also the oracle text KUB 50.6+ iii 25 (NS, CTH 569.II.3.B), where a large *Glossenkeil* occurs at the end of a line "and may mark the transition to another topic of the enquiry" (van den Hout 1998: 186 fn. 23). Finally, in Bo. 3288+ rev. (LNS, CTH 495) the scribe seems to use two large vertical wedges as a mark of a new paragraph, maybe again for problems of space (see Miller 2012: 98–99). However, as shown by Miller (2012), this tablet, together with some others, show several unique

4. sporadically, it may mark secondary insertions;[18]
5. it can be used as a word-divider in Hurrian texts;[19]
6. in the Hattian catalogue of song refrains KUB 48.46 (NS, CTH 745), every line begins with a *Glossenkeil*;[20]
7. in the lexical lists, it is used as a divider: it sometimes separates the syllabic Sumerian spelling from its logographic writing inside the Sumerian column,[21] or it can be used to divide the Akkadian entry from the Sumerian one.[22] Also, it can set the Hittite translation apart from the Akkadian one, if the first begins in the Akkadian column (in this case, its function is analogous to that in point 2);[23]
8. the same use as a divider between two languages is also found in other non-lexical Sumerian-Akkadian bilingual texts.[24] Sporadically, we find this use also in the Akkadian medical text KUB 37.1 (see fn. 1 above), and we cannot clearly distinguish between the glossing and the dividing function in these cases;
9. when a word belonging to a line in the left column of the tablet crosses over into the right one, the *Glossenkeil* can be used to separate the two texts;[25]
10. finally, it can mark that one or more words belong to the preceding line. This use is also found in the lexical lists, where signs belonging to the same word can be put on a new line and marked by the *Glossenkeil*, if there is not enough space in the column. Sometimes, such a practice also involves indentation, although, as we will see, it cannot be considered the same phenomenon mentioned in point 1 of this list.

In what follows, I will analyse the two uses of the *Glossenkeil* combined with indentation, i.e. those listed in points 1 and 10 above. The latter will be only briefly dealt with, since it is found in several cuneiform traditions and is quite well-known among scholars. Conversely, the first one is less well-known and still lacks a specific analysis; therefore, the study will be more extensive and based on a complete collection of its occurrences. Finally, I will try to show to what extent taking into account this scribal practice can be useful in the study of Hittite texts.

2 Indentation on Hittite Tablets

Before turning to the use of the *Glossenkeil* as a mark of indentation, it is convenient to make some remarks about indented lines as such in Hittite, laying the foundation for their typological classification and giving

---

palaeographic features, which point to an origin outside Ḫattuša (probably from the city of Arušna). Indeed, to my knowledge, this is the only text in Boğazköy tablet collections showing a paragraphemic sign different from the *Glossenkeil*.

18 Cf. KUB 31.127+ iv 14, 17 (NS, CTH 372.A; see Schwemer 2015: 393).

19 Cf. e.g. KBo. 15.1 iv 5′–38′ (NS, CTH 779), KBo. 5.2 ii 22–26 (NS, CTH 471.A), KUB 32.28+ (NS, CTH 701.f.22), KUB 32.19+ (MS, CTH 777.8), KBo. 20.134+ obv. 1–9 (NS, CTH 777.9), KUB 32.21 (NS, CTH 778), KUB 32.26+ (MS(?), CTH 778.I.1.A), KUB 32.32+ (NS, CTH 778), KBo. 11.19+ rev. 2–23 (NS, CTH 788.2.A), KBo. 19.141, 9′–19′ (NS, CTH 788.3), KUB 32.27 (NS, CTH 791), KUB 32.30+ (NS, CTH 791). See also KBo. 32.14 i 2, 6, 11, 13, 43, 57, iv 10, 11, 16 (MS, CTH 789.?; cf. Neu 1996 for the *Glossenkeil* as a *Kolontrenner* or *Kolonmarkierung* in these lines) and HHCTO 14 rev. 12, 15 (MS, CTH 777). The same use as a word-divider is found also in Ugaritic (cf. Korpel 2005) and Old Assyrian tablets (where a small vertical wedge is used; cf. Hecker 1968: 12).

20 Cf. Schuster (1974: 21–22). See also the Hittite fragment KBo. 46.290 (NS, CTH 832).

21 Cf. e.g. KUB 3.94 ii 2, 3, 9, 12–14, 16, 25 (LNS, CTH 306.A), KBo. 13.1+ iii 14–16, iv 15–17 (LNS, CTH 301.a.1.A). See also KBo. 16.87+ iv 14′ (MS(?), CTH 304.7).

22 Cf. KBo. 16.87+ i 2′–7′ (MS(?), CTH 304.7; Scheucher 2012: 560) and KBo. 2.28+ (NS, CTH 304.6; Scheucher 2012: 548–558), where the *Glossenkeil* divides the Akkadian translation from the syllabic Sumerian spelling. In KBo. 1.30 ii 3′ (NS, CTH 305.II.1) the Akkadian translation begins left to the column divider and is separated from Sumerian by means of a *Glossenkeil*. In the same text, in ii 2′ the Akkadian entry crosses over into the Hittite column and is divided from the Hittite text by means of a *Glossenkeil* (see below for the use of the *Glossenkeil* in ii 5′ and 7′).

23 Cf. e.g. KBo. 1.35(+) iii 10′, 16′ (NS, CTH 301), KUB 3.94 ii 17, 18, 21 (LNS, CTH 306.A).

24 Cf. e.g. KUB 34.3 (NS, CTH 813), KUB 34.4 (NS, CTH 813), where however some words after the *Glossenkeil* are Sumerian instead of Akkadian, KUB 37.111 rev. 2′–3′ (NS, CTH 801.4). On these tablets see Cooper (1971: 10–11).

25 Cf. e.g. the Hurrian-Hittite bilingual KBo. 32.14+ i-ii 8, 10 (MS, CTH 789.?), where a Hurrian sentence ends in the Hittite column and is separated from the Hittite translation by means of a *Glossenkeil* (cf. Neu 1996: 75 fn. 1, 3). Other cases are KUB 44.60+ ii 18′ (NS, CTH 731.2; cf. Starke 1990: 293 fn. 998 a) and perhaps KUB 19.23 lo.e. 1 (= rev. 17′; NS, CTH 192), where the first two signs of the line possibly belong to the sentence in the left edge (see § 5 below). For KBo. 1.30 ii 2′ see fn. 22 above.

some examples for each type, without pretence at completeness. Note that, for the purposes of the present research, I provisionally consider centred texts to be a special case of indentation.

In my view, a first distinction is between deliberate and forced (or unavoidable) indentation: we can speak of deliberate indentation when there is no trivial motivation for moving forward the beginning of the line, i.e. when it is a choice of the scribe, with a specific function. Otherwise, when indentation is not a deliberate choice of the scribe and simply results from contingent facts, it should be considered as forced, and does not have a particular meaning.

Another parameter of classification concerns the relationship between the indented material and the preceding text: the indented part can be syntactically and semantically independent, representing a meaningful unit *per se*, somehow separated from the rest of the text, or instead it can be strongly related to what precedes it.

Based on these two parameters – the deliberateness of the indentation and the independence of the indented material in relation to the preceding text –, the following typology can be established:

	Deliberateness	Independence
Type I	+	+
Type II	+	–
Type III	–	+
Type IV	–	–

The clearest case of deliberate indentation involving an independent portion of text (Type I) is that of colophons, which are almost always indented. Sometimes, inside the colophons, final remarks such as (U_2-UL) QA-TI or the name of the scribe can show a wider indentation, or they can be indented even though the colophon is not.[26]

However, deliberate indentation of independent textual units is not restricted to colophons. I am listing here some other cases I found in the Hittite documentation:

1. in some festivals, the indications of the days are recorded in the end of the paragraph, separated from the rest of the text by wider spaces or, if in a new line, indented (and sometimes put in a separated paragraph);[27]
2. sometimes, the indication KI.MIN 'ditto' in a festival tablet is in a new line and indented or centred;[28]
3. In some letters, the opening formula, with the names of the sender and the addressee, is centred;[29]
4. in oracle texts, the response SIG₅/NU.SIG₅ could be highly indented, sometimes being almost at the end of the line;[30]
5. other specific cases, e.g. in the Ritual of Pittei, where the indication 2-*šu ḫukzi*, 'she conjures two times/ for the second time', at the end of the first ritual section is indented,[31] or in the inventory text DBH 46/2 158 (NS, CTH 242.11.A), where the indication ŠU PN 'the hand of PN', referring to the goldsmiths responsible for the metalworking, is sometimes indented (obv. 21′, 23′), etc.

A clear example of deliberate indentation of linguistic material that does not represent an independent meaningful unit (Type II) will be discussed in § 3. Other cases are more problematic, and we cannot really say what indentation means.[32]

---

26 Cf. e.g. KBo. 32.176 rev. 7′–12′ (MS, CTH 496.1), KBo. 33.181 rev. 9′ (NS, CTH 628.Tf06.C), VBoT 24 iv 32–39 (NS, CTH 393.A), VSNF 12.58+ iv 1′–9′ (LNS, CTH 495).
27 Cf. e.g. VSNF 12.1 rev. 16′, 18′, 20′, 22′, 26′, 28′ (LNS, CTH 604.G), KBo. 47.98 obv.? 7′ (NS, CTH 670.1974), KBo. 54.123+ iv 24′ (NS, CTH 638.Tg02).
28 Cf. e.g. KBo. 34.146 iii 4′, 8′ (NS, CTH 591.I.b.C), KBo. 38.64 i 15′ (MS, CTH 670.207).
29 Cf. e.g. KUB 19.23 obv. 1–2 (NS, CTH 192), KUB 23.85 rev.? 3′–4′ (NS, CTH 180).
30 Cf. e.g. KUB 18.21 ii 9 (NS, CTH 572), KBo. 2.2 i 25, 29, 40, 51, 57, ii 28, iii 4, iv 26 (NS, CTH 577.I), KBo. 63.61 i 16′ (LNS, CTH 575.8).
31 KUB 44.4 + KBo. 13.241 rev. 18 (LNS, CTH 520).
32 Cf. e.g. VBoT 120 ii 13′ (NS, CTH 780.II.Tf06.A), KBo. 38.92 r.c. 2′, 4′ (NS, CTH 670.149), KBo. 38.126, 9′ (MS, CTH 670.259), KBo. 45.11 iv? 4′ (NS, CTH 597), KBo. 47.52, 6′ (NS, CTH 500.287). In VSNF 12.20 vi 5′ (NS, CTH 750), the last word of the composition

Turning to forced indentation, in several cases it simply depends on the lack of space at the beginning of the line, and this often happens in the last line of a paragraph or a column.[33] Sometimes, the beginning of the line is occupied by the end of a word overflowing from the left column;[34] in other cases, an indentation results from a preceding erasure[35] or from other contingent facts.[36] Forced indentation typically does not involve independent linguistic material (Type IV), although this possibility (Type III) cannot be excluded (however, the degree of deliberateness of Type III could not be fully evaluated: indentation would be forced, but it could match the will of the scribe).[37]

3 *Glossenkeil* (and Indentation) in Hittite Lexical Lists

Beside its usual function as a divider, in Hittite lexical lists the *Glossenkeil* can also mark signs or words that belong to the preceding line. Indeed, it happens sometimes that the scribe does not have enough space at the end of the column and is forced to put in a new line something that is strongly related to the preceding text elements. In a lexical list, where each line usually corresponds to an entry, wrapping can generate confusion; therefore, the *Glossenkeil* comes to disambiguate.

In some cases, the marked elements are also indented,[38] thus making it visually clearer that they do not represent a separate entry. Considering the distinction sketched above between deliberate and forced indentation, we should regard this specific case of indentation as deliberate, since nothing prevents the scribe from writing at the beginning of the line. What is indented, however, is not something that can be separated from the rest of the text, but that is strongly related to the preceding linguistic material. According to the typology established in the preceding paragraph, this is a clear case of Type II.

This practice is not specifically Hittite, and we find it elsewhere in the cuneiform world, also outside the lexical lists (e.g. at Alalaḫ IV,[39] Amarna,[40] and Emar[41]). An example from the Hittite archives is found in the vocabulary from Ortaköy Or. 95/3 (Süel/Soysal 2003), which shows this twofold use of the *Glossenkeil*: in

---

(*pa-iz-zi*) is indented (centred), and we can possibly imagine a sort of conclusive value. Unfortunately, the two Luwian fragments KUB 35.129 (NS, CTH 770) and KUB 35.130 (NS, CTH 770) are too small to understand why some lines are indented and marked by the *Glossenkeil*.

33 Cf. e.g. KUB 9.3+ i 10′ (MS, CTH 638.2.A), KUB 10.89 i 39′ (LNS, CTH 591.III.A), KUB 30.36 iii 15′ (NS, CTH 401.1.A), KUB 33.105 iii 7′ (NS, CTH 348.I.1.D), KUB 34.16 ii 12′ (NS, CTH 533.6.B), KUB 35.45+ iii 25′ (MS(?), CTH 761.II.2.A), KUB 36.89 rev. 65′ (NS, CTH 671.1.A), KUB 38.1+ i 14′ (LNS, CTH 501), KUB 46.38 ii 25′ (LNS, CTH 495), KUB 47.3, 12′ (MS, CTH 361.II.4), KBo. 39.8 ii 12 (MS, CTH 404.1.I.A), KBo. 40.180 iii? 6′ (NS, CTH 670.229), KBo. 44.137+ iii 11′ (NS, CTH 666), KBo. 44.147 iv 6′ (LNS, CTH 670.568), KBo. 46.77 rev. 4′ (NS, CTH 494.F), KBo. 49.199 r.c. 6′ (LNS, CTH 495), KBo. 58.86+ iii 10′ (LNS, CTH 575.3), KBo. 63.78(+) ii 8′ (LNS, CTH 645). This may also occur on the upper and lower edge of the tablet, e.g. KBo. 38.57 lo.e. 12′, 13′ (MS, CTH 790).

34 Cf. e.g. KUB 7.54 ii 6 (LNS, CTH 425.1.A).

35 Cf. e.g. KBo. 29.199, 8′ (MS, CTH 771), KBo. 45.168+ i 31 (NS, CTH 691.1), KBo. 53.81 rev. 3′ (NS, CTH 470.1491).

36 Cf. e.g. KBo. 30.12 vi 4 (NS, CTH 627.1.h.D), where the beginning of the line is occupied by a paragraph line running too high.

37 KUB 56.59+ ii 20′ (NS, CTH 425.2) could seem like an example of Type III, since we found indented the indication QA-TI, referring to the end of the first day of the Ritual of Dandanku, and there is no space at the beginning of the line. However, the complete indication is U₄ᵏᵃᵐ-MU MAḪ-R[U-U₂] QA-TI, which starts in the preceding line; therefore, the indentation of QA-TI could be only due to problems of space, and it is by no means meaningful (Type IV).

38 See also Mabie (2004: 23), about Mesopotamian texts: "When such an overflow was unavoidable, the scribe would indicate such division by some combination of indenting, omission of the horizontal dividing line, and/or placing *only* the overflow signs on the following line."

39 Cf. e.g. AT 297 rev. 9 and AT 429 rev. 6 (cf. von Dassow 2012: 208). In other tablets from Alalaḫ IV, e.g. AT 181 rev. 19 and 21, full words are marked by the *Glossenkeil* and indented, although they are clearly related to something in the preceding line. In other words, in these cases the *Glossenkeil* would not mark indentation (as it does in Hittite), but material belonging to the preceding line.

40 Cf. e.g. EA 299, 20, where the oblique wedge is reversed, perhaps in order to distinguish it from the *Glossenkeil* with lexical function (see Izre'el 1977: 163–164, with fn. 17). See also Mabie (2004: 178–179).

41 Cf. e.g. BLT i 40–41, ii 15, 18, 30, 44, vi 48, vii 15, 39, often with indentation (see also Gantzert 2011, III: 100). In this tablet, the *Glossenkeil* is used as a divider between the Sumerian entry and the Akkadian translation only in i 19, whereas in vi 29 it marks an Akkadian entry put in the Sumerian column, in place of the missing Sumerian entry (the Akkadian translation in the preceding line is broken; hence no further analysis is possible).

obv.[?] i 13′, 14′, iii 14′ and rev.[?] iii 6′ it divides the Akkadian translation from the Sumerian entry (there is no separate column for the Akkadian), but in obv.[?] i 8′ it indicates, together with a slight indentation, that GUB.BA is not a new Sumerian entry, but belongs to the sign sequence in the preceding line, being part of the compound Sumerogram ᵘ²SULLIM.IM.NIG$_2$.RIN.NA.GUB.BA. Outside the lexical lists, an example occurs in the Akkadian treaty KUB 34.1+ lo.e. 22′ (CTH 26), where we find ᵘʳᵘ*Ki-iz-* / *:wa-ta-ni*, the second part of the word being in the following line, strongly indented, and marked by the *Glossenkeil*.

However, at least in the Hittite world, indentation does not seem to be an essential element: it can emphasise the connection with the preceding line, but the *Glossenkeil* alone is sufficient to do it, as shown e.g. by KUB 30.5 iii 7′ (MS(?), CTH 304.7),[42] where, despite the break, it is certain that Akk. *:ta-al-la-ak*, marked by the *Glossenkeil* and placed at the very beginning of a new line in the Akkadian section, belongs to the preceding line, being the translation of Sum. al-du.[43]

Other examples without indentation, but involving an entire line, are found in KBo. 1.30 ii 5′, 7′ (NS, CTH 305.II.1). As mentioned above (fn. 22), in this vocabulary the *Glossenkeil* is sometimes used as a divider both between Sumerian and Akkadian (ii 3′) and between Akkadian and Hittite (ii 2′). However, in ii 5′ and 7′ we have only the Hittite translations of ii 4′ and 6′, respectively (where the Hittite column is totally occupied by the Akkadian text), running throughout the columns of the tablet and marked by a *Glossenkeil* (broken in ii 5′, but partly visible in ii 7′). In these cases, it is clear that the *Glossenkeil* cannot have a dividing function; rather, it points out that the two Hittite translations belong to the preceding lines.

As we will see in the next paragraph, the combination of *Glossenkeil* and indentation with this specific function can also possibly be found in some non-lexical bilingual texts from Boğazköy.

4 *Glossenkeil* as a Mark of Indentation

We can now turn to indented lines outside the lexical lists, which, as mentioned, can sometimes be marked by a *Glossenkeil*. This may be a specifically Hittite use, since, to my knowledge, it does not occur in other cuneiform traditions (with the possible exception of Emar, see below).[44]

Previous literature on the *Glossenkeil* in Hittite only briefly mentions this particular use of the sign, quoting some relevant examples, but without providing an exhaustive analysis.[45] In order to fill this gap, in the following table I have collected all the examples I was able to find in the Hittite texts published so far.[46]

---

42 Conversely, in Mesopotamia, indentation is sufficient to mark overflow (cf. Mabie 2004: 23).

43 See the text, KUB 30.5 iii [⁶′] [a-ba-gin₇]-nam = (Syll. Sum.) a-pa-a-ki-nam = (Akk.) *ki-ma ma-an-*[*ni*] [⁷′] (Sum.) [a-ba-gin₇-nam al]-du = (Syll. Sum.) a-pa-a-ki-nam-al-du = (Akk.) *ki-ma m*[*a-an-ni*] / *:ta-al-la-ak* (cf. Scheucher 2012: 564).

44 Some antecedents could be possibly found at Alalaḫ IV, where words are sometimes put on a new line, indented, and marked by the *Glossenkeil*. However, this seems to affect words clearly referring to something in the preceding line (cf. fn. 39 above); therefore, it could represent the practice dealt with in § 3. By the way, I must stress that I did not see the photos of the Alalaḫ tablets, but only the handcopies; therefore, any conclusion remains provisional.

45 Cf. e.g. Forrer (1922: 215 and BoTU 1: 23 no. 328), Schwartz (1938: 65), Güterbock (1956: 136), Souček (1957–1971: 440), and Waal (2015: 81).

46 More specifically, the editions used include: KUB 1–60, KBo. 1–71, IBoT 1–4, ABoT 1–2, VBoT, HT, HKM, FHL, FHG, HFAC, HHCTO, DBH 46, CHDS2, CHDS3, VSNF 12, KuSa., UBT, and other minor editions published in journals. The dates of the manuscripts are those given on the *Hethitologie Portal Mainz* (the following abbreviations are used: MS = Middle Hittite Script; NS = New Hittite Script; LNS = Late New Hittite Script; Ass.-Mit. = Assyro-Mittanian Script). For each attestation, I indicate if the *Glossenkeil* consists of one or two oblique wedges. In the last column of the table, the find spots of fragments belonging to the same tablet are given between brackets, while an asterisk marks a supposed find spot based on different criteria (letters from A to N refers to the buildings on Büyükkale; consider also the following abbreviations: Bk. = Büyükkale; HaH = *Haus am Hang*; T.I = Temple I; T.XVI = Temple XVI). Information about the scribes of the texts, if available, is given in the footnotes.

Tab. 1: List of the indented lines marked by the *Glossenkeil*.

CTH	Composition	Attestation	Date	Wedges	Find spot
6	Testament of Ḫattušili I	KUB 1.16+ iii 73	NS	1	–
19.II.B	Edict of Telipinu	KUB 11.1+ iii 15′	MS(?)	2	T.I
61.II.6.A	Annals of Muršili II	KBo. 19.76 i 53′ (+) KUB 19.39+ iii 14′	NS	1	T.I
61.II.7.A	Annals of Muršili II	KBo. 5.8 rev. 42–43	NS	1	T.I*
67	Treaty between Muršili II and Targaššanalli of Ḫapalla	KBo. 5.4 obv. 46′	NS	1	T.I
76.B	Treaty between Muwattalli II and Alakšandu of Wiluša	KUB 21.5+ iii 70	NS	1	T.I
92	Treaty between Ḫattušili III and Bentešina of Amurru	KBo. 1.8+ obv. 33	NS	1	T.I
181	Tawagalawa text	KUB 14.3 ii 76 (?)	NS	1	–
186	King's letter to a vassal	HKM 17 l.e. 5–6[47]	MS	1	Maşat
190	Letter of a dignitary	HKM 60 lo.e. 37[48]	MS	1	Maşat
208	Akkadian letter fragment	KBo. 28.103, 8′	NS	2	A
208.3	Akkadian letter fragment	KUB 3.61 obv. 7′	?	1	–
225.B	Šaḫurunuwa deed	KBo. 22.59+ obv. 45	NS	1	T.I
275	Fragmentary instruction text	KUB 40.40 ii 16′	NS	1	–
284.Tf02	Kikkuli text	KBo. 3.5+ ii 71[49]	NS	1	–
284.Tf04	Kikkuli text	KBo. 3.2 obv.! 66[50]	NS	1	–
292.I.b.D	Hittite Laws, series II	KUB 29.34+ iv 21′	NS	2	A
295.6	Court protocol	KBo. 16.59 obv. 19′	MS	1	A
313	Hymn to Adad	KBo. 3.21 iii 28	MS	1	–
330.1.A[51]	The Storm-god of Kuliwišna	KUB 33.65+ ii 15′	NS	1	A
345.I.3.1.A	Song of Ullikummi	KUB 33.106+ iii 56′	NS	1	T.I
374.D	Prayer of a king to the Sun-deity	KBo. 53.8 ii 20′	NS	GAM (?)[52]	T.I
389.36	Prayer fragment	KBo. 56.8, 5′	NS	2	HaH
390.A[53]	Rituals of Ayatarša, Wattiti, and Šuššumaniga	KBo. 3.8+ ii 36′	NS	1	–

47 In the handcopy by Alp, the *Glossenkeil* at the beginning of line 5 is not drawn, but it is clearly visible in the 3D model available on the *Hethitologie Portal Mainz* (hethiter.net/:3DArchiv (Mst75-47); the photo is instead not available).

48 No photo available.

49 It is highly uncertain if the *Glossenkeil* also occurs in iii 76 (where we would expect it), because the sign that can be seen in the photo (not reproduced in the autograph) is probably just a break on the tablet.

50 It is likely that the *Glossenkeil* marks the indentation of the line here, not the word *u₂-wa-aḫ-nu-wa-ar-ma*. However, the use of this mark in the Kikkuli text is sometimes puzzling (see Rosenkranz 1942: 81–82 and especially Kammenhuber 1957: 81–83, with fn. 52).

51 Scribes: Šippaziti; Ziti, son of NU.ᵍⁱˢKIRI₆.

52 The sign is drawn as a single oblique wedge in the handcopy; however, based on the photo (hethiter.net/: fotarch N02108), it looks like a small GAM sign (see also Schwemer 2015: 373), although I would not exclude that it is rather a squeezed double oblique wedge *Glossenkeil*. Unlike other Cuneiform traditions, where the GAM sign is often employed as a *Glossenkeil*, in Hittite texts this use is apparently not found, so that the HZL does not record this variant for the *Glossenkeil* (no. 248). According to Schwemer (2015: 393), a GAM-like *Glossenkeil* is found also in KUB 31.127+ iv 14, 17 (NS, CTH 372.A), where it marks two secondary insertions. However, based on the photo (hethiter.net/: fotarch N11519), it seems to be instead a common Hittite *Glossenkeil* with the two oblique wedges almost overlapping to each other ("doppelte Winkelhaken" in the edition on the *Hethitologie Portal Mainz*, E. Rieken et al. (ed.), hethiter.net/: CTH 372 (Expl. A, 19.11.2017), fn. 88 and 90).

53 Scribe: Armaziti; supervisor: Anuwanza.

Tab. 1: (continued)

CTH	Composition	Attestation	Date	Wedges	Find spot
409.I.A[54]	Ritual of Tunnawiya	KUB 12.58+ ii 42' (= 67)	NS	1	–
433.4	Ritual for the tutelary deity of the hunting bag	KBo. 64.15+ iii 4'	NS	1	T.I
435.3	Ritual for the Sun-deity	KUB 31.147 ii 26'	NS	1	D
447.B	Ritual against underworld powers	KBo. 11.72+ ii 49'	MS(?)	1	A
449.4.C	Ritual mentioning the chthonic deities	KUB 39.99+ obv. 17' (?)[55]	MS	1	T.I (?)
450	Funerary ritual	KBo. 25.184 iii 74'	NS	1	T.I
450.I	Funerary ritual	KUB 30.24+ iii 40'–41'	LNS	2	A
450.Tg12/13	Funerary ritual	KUB 39.7+ ii 65', iii 64–65	LNS	2	A
458.113	Ritual fragment	KUB 60.157 i 20'	MS	1	–
461.Q	Medical text	KUB 44.64 iii 12'	NS	1	–
470.857	Ritual fragment	KBo. 38.253 obv. 6'	NS	1	A
470.1629	Ritual fragment	KBo. 71.17 l.c. 7a'	NS	1	M
474.4	Ritual of Kuwanni	KBo. 55.159, 5' (?)[56]	NS	1	T.I
476.A[57]	Birth ritual of Pabanegri	KBo. 5.1 ii 37, 57, iv 14	NS	1	–
485.3	Evocation ritual for Teššub, Ḫepat, and Šarruma	KUB 15.37 iii 7'	NS	1	–
489.A	Birth ritual	ABoT 1.21+ rev. 13'	MS	1	A
527.62	Cult inventory with descriptions of cult images	KUB 57.108+ ii 23'	NS	2	–
566	Oracle concerning the cult of the deity of Arušna	KUB 22.70 obv. 86, rev. 68	NS	1	–
568.A	Oracle concerning the celebration of various festivals	ABoT 1.14+ v 20'	NS	1	A
570	su oracle	KBo. 24.128 obv. 10'	NS	1	E
577	su, kin, and mušen oracle	KUB 18.41 obv. 26'	NS	2	–
600	New year's festival	KUB 36.97 iii 9'[58]	NS	1	M
627.I.b.A	ki.lam festival	KBo. 10.24 ii 28''	NS	1	K
628.Tf05.D	(ḫ)išuwa festival	KBo. 15.49(+) i 14'	NS	1	F (+K, D, A)
628.Var1	(ḫ)išuwa festival	DBH 46/2.141 obv. 27'	NS	1	–
631.6	Festival of the thunder	KBo. 17.75 iv 36'	MS(?)	1	A
641.1	Cult of Išḫara	KUB 40.2 obv. 41	NS	1	–
644.1.C	Festival mentioning Pirinkir	KUB 51.14 rev. 16'	NS	1	–
666	Cult of Arinna	KUB 10.15 iii 19'	NS	1	–
667.2.A	Cult of Zalpuwa	KBo. 64.48 obv.? 16', 21'	NS	1	T.I
670.327	Festival fragment	KBo. 31.200 iii 12'	NS	1	A
670.530	Festival fragment	KBo. 24.103 v 5'	MS	1	D
670.560	Festival fragment	KBo. 9.130 rev. 12'	NS	1	N

54 Scribe: Pikku.

55 The beginning of the line, preserved in the joining fragment KBo. 14.100, is unwritten, but traces of a sign are visible on the break at the beginning of KUB 39.99, before the *Glossenkeil*.

56 Quite uncertain. A small oblique wedge is visible in the photo (hethiter.net/: fotarch B0999j), although it could be erased, as in the autograph.

57 Scribe: Kuparabi.

58 No photo available.

Tab. 1: (continued)

CTH	Composition	Attestation	Date	Wedges	Find spot
670.666	Festival fragment	KBo. 14.79 ii 3'	NS	1	Bk.
670.858	Festival fragment	KBo. 12.124 iii 21'	NS	1	HaH
670.1177	Festival fragment	KBo. 53.204, 5'	NS	1	T.I
670.1388	Festival fragment	KBo. 59.98 rev.[?] 9'	NS	2	T.I
670.1941	Festival fragment	KUB 56.57 ii 8'	NS	1	–
692.7.B	Fragment of the *witaššiya* festival	KBo. 29.93 + KUB 32.126 i 18', ii 11'	MS	1	A
694	Fragment of the festival for Ḫuwaššanna	KBo. 29.129 i 9'	MS	1	A
701.a.A	Drink offerings for the Throne of Ḫepat	KUB 32.49a+ iii 27	MS	1	A
701.d.1	Drink offerings for the Throne of Ḫepat	KBo. 23.34+ i 18', 29'	MS	1	A (+T.I)
701.d.4	Drink offerings for the Throne of Ḫepat	KUB 12.11+ iii 31'	MS(?)	1	–
704.2.A	List of Hurrian deities	KUB 27.8 obv. 6', 18', rev. 11	NS	1	–
704	List of Hurrian deities	KBo. 7.44+ ii 16'	NS	1	G (+T.I)
706	Fragment of the festival for Teššub and Ḫepat	KBo. 24.59 iv 11'	NS	1	A
706.II	Fragment of the festival for Teššub and Ḫepat	KUB 25.41 v 15' (?)[59]	LNS	1	–
718.F2	Ritual for Ištar-Pirinkir	KUB 32.3 obv. 10'	NS	1	A
738.I.15.A	Festival for Teteshapi	KBo. 21.98 ii 28'	NS	1	Unterstadt K/20
751	Palaic ritual with bread offerings	KBo. 19.153+ iii 15'	NS	1	T.I
757.A	Ritual of Zarpiya	KUB 9.31 ii 64	NS	1	–
762	Fragment of the *šalli aniur*	KBo. 22.254 rev. 12'	NS	1	T.I
763	Ritual fragment with Luwianisms	KUB 9.7 rev. 13'	MS	1	–
764.II	The neglected deity	KUB 35.108, 8'	MS	1	A
772.3.A	Festival of Ištanuwa	KUB 32.123+ ii 37a, iii 27a	NS	1	A
774	Hurrian omens	KBo. 33.51 + KBo. 33.52, 4', 8', 12'	NS	2	A
776.1	Mythological account: Teššub and the rivers	KBo. 33.202 obv. 14'	MS(?)	1	D
777.Tf03	Mouth-washing ritual (*idgaḫi-*, *itkalzi-*)	KBo. 20.138, 8'	MS(?)	1	A
777	Mouth-washing ritual (*idgaḫi-*, *itkalzi-*)	HHCTO 14 rev. 16[60]	MS	1	Ortaköy
787.1	Hurrian offering list	KBo. 2.18 obv. 32	LNS	1	E
789.Tf04	Hurrian-Hittite "Song of release"	KBo. 32.27, 3'	MS	1	T.XVI
789.Tf05	Hurrian-Hittite "Song of release"	KBo. 32.15 ii 13', 25'[61]	MS	1	T.XVI
790	Hittite-Hurrian ritual fragment	KBo. 35.116 ii 11'	NS	1	M
791	Hurrian fragment	VBoT 69+ iii 10'	NS	1	A*
791	Hurrian fragment	Kp 05/226 obv. 24' (?)[62]	MS	1	Kayalıpınar
794	Sumerian-Akkadian hymn	KBo. 7.1+ obv. 14a	Ass.-Mit.	1	D
832	Hittite fragment	KBo. 8.77(+) obv. 10'	NS	1	A
832	Hittite fragment	KBo. 57.229, 5'	MS	1	T.I
832	Hittite fragment	IBoT 4.296, 5'	NS	1	–

59 Quite uncertain.

60 No photo available.

61 Not copied in the autograph; see the photo (hethiter.net/: fotarch Phb07314).

62 Uncertain because the *Glossenkeil* is used as a divider in other parts of the text (cf. the edition in Rieken 2009: 130–131).

What has never been stressed, to my knowledge, is that the practice of marking an indented line with a *Glossenkeil* seems to affect almost only forced indentations belonging to Type IV: all the examples attested so far and listed in **Table 1** above occur at the end of a paragraph or column, and nearly all of them concern indentations due to lack of a sufficiently large space at the beginning of the line, as in **fig. 1** below.[63]

Fig. 1.: An example of *Glossenkeil* marking indentation due to lack of space at the beginning of the line: KUB 12.11+ iii 31′ (photo: hethiter.net/: fotarch N00767).

This use seems to be consistent, as shown by the occurrences in CTH 61.II.6.A, CTH 61.II.7.A, CTH 186, CTH 450.I, CTH 450.Tg12/13, CTH 476.A, CTH 560.I, CTH 566, CTH 667.2.A, CTH 692.7.B, CTH 701.d.1, CTH 704.2.A, CTH 772.3.A, where, as far as can be seen, the *Glossenkeil* is used whenever a forced indentation occurs. Possible exceptions are KBo. 1.8+ (CTH 92), which shows a marked indented line in obv. 33, but an apparently unmarked one in obv. 3, and the tablets of the Kikkuli text, where the use of the *Glossenkeil* is, in general, quite inconsistent and not always completely clear.[64]

    This clarification can tell us something about the real function of the *Glossenkeil* in these contexts. As we have said, indentation, if deliberate, is always meaningful, and we could imagine that scribes wanted it to be distinguished from contingent and meaningless indentation. Based on this assumption, the use of the *Glossenkeil* could have represented a perfect strategy to do so. In my opinion, the *Glossenkeil* is not properly a mark of indentation; rather, it marks the beginning of the line – i.e. it stands for the left column divider, and, in lexical lists, e.g. when a Hittite translation begins in the Akkadian column – thus cancelling (or invalidating) the preceding, potentially meaningful blank space. In other words, the *Glossenkeil* points out that an indented line is not really indented. This solution also accounts for the fluctuating use of this mark: as a matter of fact, such an indication is often redundant, because it is self-evident, in many cases, that indentation simply resulted from the lack of space at the beginning of the line, and scribes were probably perfectly able to distinguish a meaningful indentation from a meaningless one. Furthermore, this explanation is also suitable for the interpretation of the *Glossenkeil* as an editorial mark: in these cases, the *Glossenkeil* may indicate that the line should not be indented in copying the text.

    There seem to be, however, some exceptions to the "rule" that the *Glossenkeil* marks forced indentation: in the MS Hurrian-Hittite bilingual "Song of release", we find two cases of strong indentation marked by the *Glossenkeil*, although there is abundant space at the beginning of the line: KBo. 32.15 ii 13′[65] and perhaps also 25′ (CTH 789.Tf05).[66] In both cases, the word(s) marked by the *Glossenkeil* and indented are on the fourth line

---

63 This aspect is not always accurately reproduced in the autographs of the tablets.

64 Another exception may be CTH 181, which in ii 54 does not mark the indented line with a *Glossenkeil*. However, the presence of a *Glossenkeil* before the indentation in ii 76 is highly uncertain, so that it might not be a counterexample.

65 See Neu (1996: 291 fn. 5): "Ein Keilchen (vor DINGIR-*uš* über Rasur geschrieben) markiert Zeileneinrückung." That the *Glossenkeil* should be somehow related to the indentation of the line and does not have lexical function seems to be shown by the occurrence of the same sequence AN UŠ UN (the interpretation as DINGIR-*uš* UN is quite uncertain, but see Rizza 2008: 67–77) at the end of the last line of the following paragraph (KBo. 32.15 ii 17′), without wrapping, indentation, and gloss-marking.

66 The latter is not drawn in the autography, but a wedge seems to be visible in the photo (hethiter.net/: fotarch Phb07314). The same phenomenon possibly occurs also in KBo. 32.27, 3′ (CTH 789.Tf04), but it is a very small fragment and the beginning of the line is not preserved.

of a Hittite paragraph matching a three-line Hurrian one. As Rizza (2008: 55–56) suggested, since in this text we observe, in general, a tendency to have in the Hittite version the same number of lines as the Hurrian one, we can imagine that the scribe chose to use such a layout in order to suggest that the material belongs to the preceding line. In other terms, indentation is a deliberate choice of the scribe, while wrapping is not: he was forced to start a new line due to the lack of space at the end of the preceding one. The situation would thus be analogous to that of vocabulary entries dealt with in § 3 above, exemplifying another case of Type II indentation. However, we should note that other paragraphs of the same tablet (ii 14′–17′, 26′–29′, iii 1–4, 8–11) show a different number of lines in the two versions (although with longer overflowing parts in Hittite), without indentation and marking of the last line. Therefore, this solution seems to be not completely satisfying and should be regarded as provisional.

Furthermore, in the Hurrian omens KBo. 33.51 + KBo. 33.52, 4′, 8′, 12′ (CTH 774) the last line (or word) of every paragraph is marked and indented, although there is enough space at the beginning of the line. Unfortunately, the tablet is very fragmentary, and we cannot speculate about the reasons of this use here.

Finally, in KUB 40.2 obv. 41 (CTH 641.1), we see two *Winkelhaken* at the beginning of the line, followed, after a large blank space, by the *Glossenkeil* and a sentence beginning with *ke-e-ez-ma-aš-ši*. In my view, the two initial *Winkelhaken* should be regarded as an attempt to write the sign KI, aborted because the space between the preceding line and the lower edge was too narrow. Therefore, the scribe decided to continue writing further, marking the beginning of the new line with a *Glossenkeil*.[67]

As can be seen from the table above, the practice of marking an indented line seems to start in MS tablets, with more than 20 examples attested, while no OS tablet showing this use of the *Glossenkeil* is extant so far.[68] Such a chronology is interesting, because we know that the marking of "unusual" words (especially Luwian) also starts in MS tablets, but it is known from a very small number of examples, becoming much more frequent from the reign of Muršili II onwards.[69] Therefore, it is possible that the practice of marking indented lines preceded that of marking single words, which later became far more frequent.

As for the textual genres, this use does not seem to be specifically associated with a genre, but is attested in almost all kinds of Hittite compositions. However, if we take into account the subdivision of the Hittite textual material into texts with duplicates (i.e. those meant to be kept for a long time) and texts in single copies (i.e. those kept just for a while and then discarded), suggested by van den Hout (2002, slightly revised in van den Hout 2007: 223–224), the use of the *Glossenkeil* marking indentation shows the distribution summarised in **Table 2**.[70]

Tab. 2: Distribution of the *Glossenkeil* marking indentation among the Hittite genres (based on van den Hout 2007).

A. Texts in multiple copies		B. Texts in single copies	
Historical prose, treaties, edicts (CTH 1–147, 211–216)	7	Correspondence (CTH 151–210)	5
Instructions (CTH 251–275)	1	Land deeds (CTH 221–225)	1
Laws (CTH 291–292)	1	Lists and rosters (CTH 231–239)	–
Celestial omina (CTH 531–535)	–	Economic administration (CTH 240–250)	–
Hymns and prayers (CTH 371–389)	2	Court depositions (CTH 293–297)	1
Festival scenarios (CTH 591–721)	27	Cult inventories (CTH 501–530)	1
Rituals (CTH 390–500)	17	Non-celestial omina (CTH 536–560)	–

67 An analogous example, but without the *Glossenkeil*, can be found in KUB 17.10+ i 25′ (MS, CTH 324.1.A), where an attempt to write the sign ḪUR of the Sumerogram ḪUR.SAG can be seen.

68 As a matter of fact, as far as I know, no *Glossenkeil* occurs in OS documents, regardless of the function (cf. Güterbock 1956: 135, Kammenhuber 1970: 551).

69 Cf. van den Hout (2007: 230–231, with fn. 59), the only assured Luwian word being *:annarā* in HKM 88, 12′.

70 I do not consider the three fragments listed under CTH 832.

Tab. 2: (continued)

A. Texts in multiple copies		B. Texts in single copies	
Mythology, Anatolian (CTH 321–338) and non-Anatolian (CTH 341–369)	2	Oracle reports (CTH 561–582)	4
Hattian, Palaic, Luwian, Hurrian texts (CTH 725–791)	15	Vows (CTH 583–590)	–
Hippological texts (CTH 284–287)	2	Tablet collection shelf lists (CTH 276–282)	–
Lexical lists (CTH 299–309)	–	Tablet collection labels (CTH 283)	–
Sumerian and Akkadian compositions (CTH 310–316, 792–819) and the Hurrian-Hittite bilingual (CTH 789)	4		
Total	78	Total	12

As can be seen, the use of the *Glossenkeil* as a mark of indentation occurs much more frequently in texts with multiple copies, and the gap increases further if we consider that the Tawagalawa text may not be a letter (and the occurrence of a *Glossenkeil* marking indentation is very uncertain),[71] the Šaḫurunuwa deed is exceptional, being the only one having a duplicate,[72] the oracle report CTH 566 probably belonged to a textual tradition,[73] and the oracle CTH 568 had several copies. Such a distribution seems to corroborate the hypothesis that the *Glossenkeil* was used as an editorial mark, pointing out that the line should not be indented in copying the text.

Outside Boğazköy, a similar use seems to be found in texts from Tell Meskene/Emar, belonging both to the Syrian and the Syro-Hittite scribal traditions.[74] If it actually represents the same phenomenon – and this is by no means certain[75] –, we could possibly imagine a spread of this use from Ḫatti to Emar, although the local Syro-Hittite script was quite different from the Hittite one.

5 The Issue of Genuine Hittite *Glossenkeilwörter*

As previously mentioned, although the *Glossenkeil* mostly marks Luwianisms, there are some cases in which genuine Hittite words are marked. A well-known example is *:šākuwa=šše=ššan* in KUB 8.81+ ii 10′ (MS, CTH 41.II.1), where *šākuwa* is the Hittite word for 'eyes' (vs. Luwian *tāwa-*). The use of the *Glossenkeil* in this context has been explained in different ways: according to Melchert (2005: 445), the marked form is not *šākuwa*, but the archaic clitic *-šše* (vs. the new and more common form *-šši*), whereas Yakubovich (2010: 375) suggests that the *Glossenkeil* marks the unusual Hittite syllabic writing of the word *šākuwa*, which is commonly written with the Sumerogram IGI[hi.a] in the expression *=šan … šākuwa ḫark* 'to keep an eye (on someone)'.[76]

---

71 See the discussion in Hoffner (2009: 296-298).

72 Cf. van den Hout (2002: 873).

73 This is suggested by the frequent occurrence of the sign PAB, marking an unreadable passage in the model from which the scribe was copying (cf. Ünal 1978: 23).

74 See e.g. (in what follows, S = Syrian, SH = Syro-Hittite, unc. = uncertain; data come from the Appendices in Rutz 2008) RE 20, 5a, 19a (S), Emar 156, 8 (S), Emar 158, 5 (S), Emar 652, 55′ (SH), Emar 655, 60′, 63′ (unc.), Emar 656, 8′, 10′ (unc.), Emar 657, 2′, 3′, 6′, 8′ (unc.), Emar 658, 2′, 3′, 6′ (unc.), Emar 670, 17, 31, 33, 38, 45, 48 (S), Emar 695, 13′–14′ (SH), and especially the *šumma immeru* omen text Emar 698 i 2, 5, 8, 11, 13, 15, 17, 28, 30, 32, 35, 38, 40, 43, ii 48, 55, 57; fr. F, 2′ (unc./SH, CTH 560.I, written by the scribe Baʿal-mālik, son of Baʿal-qarrād; I refer to the comprehensive edition by Arnaud 1987: 318–324, but see Cohen 2007 and Rutz 2013: 250–251 for the organisation of the six manuscripts recording the text). For the scribal traditions at Emar, cf. Faist (2008) and Cohen (2012, 2016).

75 Based on the autographs (unfortunately I could not see the photos of the tablets), it seems that the *Glossenkeil* did not mark only lines indented due to lack of space.

76 See also Kudrinski/Yakubovich (2016: 61).

However, there could be a third possibility, already suggested by Güterbock (1956: 135–136): "The line may have been indented in the original and the wedge as mark of indentation may have been mechanically copied by the scribe of VIII 81".[77] This explanation is consistent with the position of *:šākuwa=šše=ššan* in the last line of the paragraph, which, as we have shown, is the place where indentation mostly occurs. Unfortunately, a confirmation of this hypothesis could only come from the tablet used as a model to copy KUB 8.81+, which is so far missing, but we should stress that the manuscript is Middle Hittite, when the practice of marking independent words was very sporadic (cf. § 4 above).[78]

As further evidence, we probably have a positive example where both the original and the copy of the same text are attested, showing that an unexpected *Glossenkeil* may be due to mechanical copying: in the manuscript of the Funerary Ritual KUB 39.7+ (LNS, CTH 450.Tg12/13), the *Glossenkeil* marks an indented line in iii 64–65 (clearly due to lack of space at the beginning of the two lines, as shown in **fig. 2**):
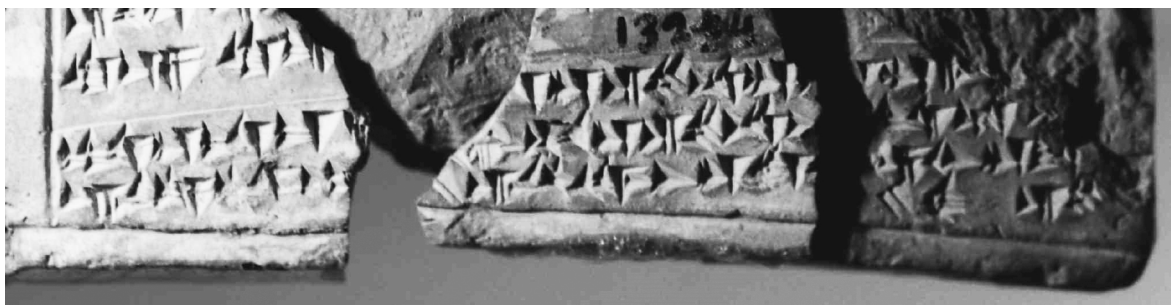
Fig. 2: KUB 39.7+ iii 64–65 (photo: hethiter.net/: fotarch N06545).

KUB 39.7+ iii[79]
62 EGIR-*an-da-ma* ⌜NINDA⌝[(.ERIN₂^{meš} *d*)*a-an-zi na-an-*⌜*ša*⌝*-an A-N*[*A* ALAM]
63 *ge-e-nu-wa-aš-š*[(*a-aš š*)]*e-er ti-an-zi na-a*[*n*⌝*-(š*)]*i-iš-ša-a*[(*n*)]
64 vacat   [vacat] ⌜:⌝*gi-nu-u-wa-aš an-tu-w*[*a*]*-ah-ha-aš an-*⌜*da*⌝
65 vacat   [vacat]   vacat   *:har-zi*
(end of column iii)

The duplicate KUB 39.8+ (NS, CTH 450.Tg12/13) seems to have been directly copied from KUB 39.7+ (see the argument in Kassian et al. 2002: 540–542, 582) and shows the following text:

KUB 39.8+ iii[80]
25″ EGIR-*an-da-ma* NINDA.ERIN₂^{meš} *da-an-zi na-an-ša-an A*[(*-N*)*A* ALAM]
26″ ⌜*ge*⌝*-e-nu-wa-aš-ša-aš še-er* [(*t*)]*i-an-zi*
27″ [(*na-a*)*n-*]*ši-ša-*⌜*an* :⌝[(*g*)]*i-nu-*⋆*u*⋆*-wa-aš* UN*-aš an-da har-zi*
(the paragraph continues with other four lines, matching KUB 39.7+ iv 1–2)

As can be seen, the form *ginūwaš* is preceded by a *Glossenkeil* in both texts (although partly broken in the latter), but in KUB 39.7+ iii 64 it occurs at the beginning of an indented line, where the presence of the *Glossenkeil* is expected, while in KUB 39.8+ iii 27″ it is found in the middle of the line, and it seems to empha-

---

77 As an alternative solution, Güterbock (1956: 136) adds that the *Glossenkeil* could have been used as an "exclamation point" marking the strange cluster *šākuwa+še+šan*.

78 Such an explanation cannot account for every non-Luwian word marked by the *Glossenkeil*, but some other cases can be possibly found, e.g. *:padummazzi=ya* in KBo. 52.26 ii 40″ (LNS, CTH 402.C), which is Hittite (cf. Melchert 1993: 175) and occurs in the last line of a paragraph, and perhaps also *:warku*(*n*)*=ššan* in KUB 17.10+ iii 12 (MS, CTH 324.1.A), but cf. van den Hout (2007: 231 fn. 59).

79 Kassian et al. (2002: 512); M. Kapełuś (ed.), hethiter.net/: CTH 450.1.1.4 (TX 16.02.2011, TRen 16.02.2011).

80 Kassian et al. (2002: 572).

sise the word *ginūwaš*. However, since *ginūwaš* is a good Hittite form, and there are independent reasons to think that KUB 39.8+ is a direct copy of KUB 39.7+, it is more likely, following Kassian et al. (2002: 541–542),[81] that the scribe of KUB 39.8+ mechanically copied the *Glossenkeil* from KUB 39.7+.

Some other cases of marked words that could be explained by means of the paragraphemic function of the *Glossenkeil* do not occur at the end of a paragraph. One of these examples is the problematic *:[k]aršantalliuš* in KUB 19.23 lo.e. 1 (NS, CTH 192). This is the only occurrence of the alleged Luwian stem *karšantalli-*, whose meaning is unknown and not inferable from the context:[82] its belonging to the Luwian language is suggested by the suffix *-alli-*, which is however fully integrated and productive in Hittite,[83] and especially by the *Glossenkeil*, although Melchert (1993: 102) casts doubts about its status. The form occurs in the first line of the lower edge, but it is preceded by two signs (possibly $E_2^{meš}$) that, according to the edition by Goetze (KUB 19), belong to the first line on the left edge (**fig. 3**).[84]
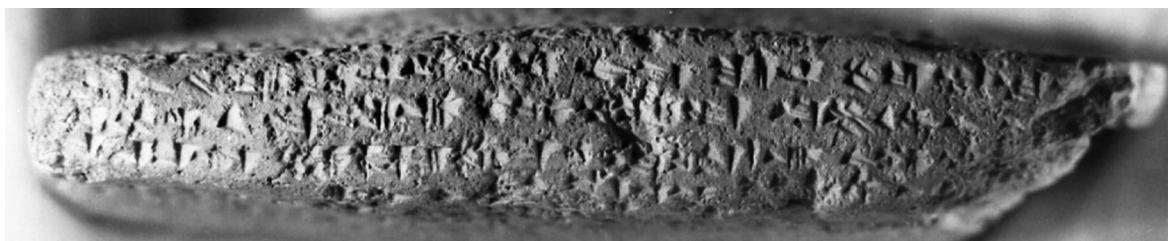

Fig. 3.: KUB 19.23, lower edge (photo: hethiter.net/: fotarch N03694).

If this is correct, it could suggest that the *Glossenkeil* is used here to divide what belongs to the left edge from the text in the lower edge.[85] However, in this case, the position of *:[k]aršantalliuš* after these two signs would show that the left edge was written before the lower edge,[86] which would be quite strange, although the text is broken and its structure cannot be determined for sure.

Finally, a puzzling example is KUB 1.11+ ii 41 (MS, CTH 284.Tf03.A), where *na-aš* at the beginning of the line is followed, after a large blank space, by the Hittite verb *tu-u-ri-ya-an-zi*, preceded by a *Glossenkeil*. We can wonder why a good Hittite word, occurring several other times in this composition, is marked here (although it would not be the only case in this composition). In her edition of the text, Kammenhuber (1961: 114 fn. 38) briefly says that "Hierbei handelt es sich um ein Zwischending zwischen Glossenmarkierer und Satztrenner", without giving any further explanation. I would tentatively suggest that the presence of the *Glossenkeil* could be related to the large blank space before: if this sign was a more or less common strategy to mark the beginning of a line, ideally cancelling the preceding blank space and its possible meaning, we could imagine that it might have been used also to mark the resumption of a line, with the same "invalidating" function. In other words, it is possible that, in this passage, the *Glossenkeil* means something like "despite the blank space, after *n=aš* read *tūriyanzi*! Nothing should be restored in between", or simply "the blank space you see does not exist". If this interpretation is correct, we can imagine that the scribe left some space between *n=aš* and the verb, possibly thinking that it should have been filled with something,[87] and then placed the *Glossenkeil*, after having realised that the sentence was instead complete. However, I admit that

---

81 However, what cannot be accepted is their interpretation of the *Glossenkeile* in KUB 39.7+ iii 64–65, as well as in KUB 30.24+ iii 40′–41′, as "markers of the end of the column".

82 See however HED K: 105.

83 Cf. Melchert (2005: 455–456).

84 Cf. KUB 19: 21, followed by Hoffner (2009: 349), but differently Hagenbuchner (1989: 28–29, 32), who reads UN^meš *:[ka]ršantalliuš*, meaning 'Sie sind [un]zuverlässige Leute'. In the former edition by Heinhold-Krahmer (1977: 313–314), the two signs (transliterated as x ^meš) occur both in rev. 17′ (= lo.e. 1, with a question mark) and in the left edge.

85 This solution is not in contrast with the fact that the scribe also uses the *Glossenkeil* to mark some Luwian words in this text: *:zamuranun* in obv. 3 and 10, *:yašḫantin* in obv. 11, and *:yašḫanduwati* in obv. 13.

86 *Contra* Hoffner (2009: 349).

87 Perhaps a temporal (cf. i 38, ii 53–54, iii 58–59, iv 32) or spatial (cf. iv 13–14) indication.

such an explanation is totally *ad hoc* (although, as far as I know, this example is unique), but I cannot imagine a better solution.[88] Perhaps, a more thorough analysis of the *Glossenkeil* in the Kikkuli texts could provide a more convincing explanation.

6 Marked Indentation as a Palaeographical Criterion

Now that we have shown the use of the *Glossenkeil* with indentation, we can try to figure out what practical applications can derive from this analysis. As we have seen, in those tablets where the *Glossenkeil* marks forced indentation, its use seems to be consistent, i.e. the scribe uses it whenever such indentations occur. If so, the *Glossenkeil* as a mark of indentation can be a useful hint to confirm or deny an indirect join between two fragments, in the lucky circumstance that we have examples of forced indentation in both. Furthermore, it could represent a reliable criterion, both in positive and in negative, for the identification of the scribes, if we assume that a scribe was fully consistent in every document he wrote.

Unfortunately, only four tablets showing this feature have the name of the scribe recorded in the colophon. Two scribes are indicated as responsible for the tablet KUB 33.65+ (NS, CTH 330.1.A), Šippaziti and Ziti, son of NU.^{giš}KIRI$_6$. Unfortunately, no other tablet jointly or individually written by the two scribes[89] shows cases of indentation due to lack of space at the beginning of the line; therefore, it is not possible to confirm or deny the consistency of the marking by means of the *Glossenkeil*. The same goes for the tablets written by Armaziti, the scribe of the *Sammeltafel* KBo. 3.8+ (NS, CTH 390.A), and for those written by Pikku, the scribe of KUB 12.58+ (NS, CTH 409.I.A): as far as we know, no examples of forced indentation are found in any other texts written by these scribes.[90] Finally, the birth ritual KBo. 5.1 (NS, CTH 476.A) was written by Kuparabi, unattested elsewhere in the Hittite documentation. All in all, we do not have conclusive data about the habits of these scribes. We should note that all of them are related to the scribal circle of Anuwanza,[91] with the exception of Kuparabi, for whom we lack any information. However, since the data are so scanty, it would be reckless to take this fact as evidence specifically linking the practice of marking indentation to the scribes of Anuwanza's circle, whose family lineage can be sometimes traced back to the Middle Hittite period.[92] Moreover, among the tablets showing this feature, there are two fragments of the (ḫ)išuwa festival, KBo. 15.49(+) (NS, CTH 628.Tf05.D) and DBH 46/2.141 (NS, CTH 628.Var1), and the colophons attested so far for this composition show that it was copied by the scribes of Walwaziti's circle.[93]

Needless to say, the presence of the *Glossenkeil* as a mark of indentation cannot represent the only criterion to identify tablets written by the same scribe, because several other features should be taken into account. However, it could be a good starting point, since it allows us to easily identify potential candidates, in order to attempt a palaeographical analysis. I will illustrate this point with an example.

---

88 As an alternative, we can suggest that the mark was added by the scribe after having written the following line, where the verb forms shift to singular, in order to emphasise a plural form to replace in a later copy. This solution, however, does not explain the blank space before the verb, and we should note that the shift from plural to singular, involving the same verbs (*tūriyanzi*, *pennai*, and *parḫai*), seems to be systematic in this text (see i 7–8, 16–17, 38–40, 50–51, ii 2–3, 13–14, 22–24, 32–33, 54–55, iii 39–40, 50–51, 59–60, iv 7–8, 14–15; the only exception in this tablet is in i 1–2, where the first verb is the 3sg.pres. *tūrizi*).

89 Ziti, son of NU.^{giš}KIRI$_6$, wrote KUB 29.4+ (NS, CTH 481.A) and KUB 35.41 (NS, CTH 759.3), whereas both Šippaziti and Ziti are the scribes of KBo. 45.168+ (NS, CTH 691.1). Probably, as per van den Hout (2015: 213), the two tablets where both Šippaziti and Ziti are mentioned as scribes were actually written by Ziti, whereas Šippaziti was responsible for the content of the text. If so, we should consider the practice of marking indented line as a habit of Ziti, not necessarily shared by Šippaziti.

90 We know of two other texts written by Armaziti, KUB 4.1 (NS, CTH 422.A) and KBo. 19.128+ (NS, CTH 625.2.A). As for Pikku, he is also the scribe of KUB 29.1 (NS, CTH 414.1.A), KUB 29.11+ (NS, CTH 533.3.B), KUB 10.18 (NS, CTH 594.A), and KBo. 48.133 (NS, CTH 670.3808).

91 For the relation between Šippaziti and the circle of Anuwanza, see Gordin (2011: 184) and Torri (2015: 582).

92 Furthermore, there are scribes belonging to the circle of Anuwanza that do not mark indented lines, e.g. Zuzzu, the scribe of KUB 10.89 (LNS, CTH 591.III.A), which shows an unmarked indented line in i 39′.

93 Cf. e.g. Gordin (2011: 185–189).

Looking at **tab. 1** above, we can see that in two tablets of the funerary ritual, KUB 30.24+ (LNS, CTH 450.I)[94] and the above mentioned KUB 39.7+ (LNS, CTH 450.Tg12/13), an indented line seems to be consistently marked by a double oblique wedge *Glossenkeil*. We are dealing here with two distinct manuscripts belonging to the same composition, both exhibiting LNS ductus and coming from Building A on Büyükkale. Therefore, we can wonder if a single scribe could have been responsible for the redaction of the two tablets. Analysing the shape of different signs, it is possible to observe a striking similarity, e.g. the sign AB shows the second lower horizontal wedge shorter than the upper one; GAR has the first upper vertical wedge quite long, going down on the left of the large lower vertical; the right part of the sign GI shows three *Winkelhaken* arranged obliquely on a long horizontal wedge; in the sign LU, the heads of the three horizontal wedges lie on the first vertical one; NU has a reversed almost vertical wedge crossing the horizontal; PI₂ has the upper horizontal wedge shorter than the lower one; TI shows a very small *Winkelhaken* below and a significantly larger one on the right; the Akkadian preposition *A-NA* is written with a ligature, in which the horizontal wedge of the sign NA is much smaller than the one that NA shows elsewhere. All in all, it is highly likely that the two tablets have been written by the same scribe, although we do not know his name.[95]

7 Conclusion

To sum up, I have shown that, in Hittite texts, the use of the *Glossenkeil* as a mark of indented line is limited to what I have classified as Type IV indentation, i.e. forced indentation – resulting from contingent facts, and not from a deliberate choice of the scribe – of textual material that does not have an independent status. More accurately, it has been suggested that, with this function, the *Glossenkeil* should be considered as a mark of the real beginning of the line, which deletes, so to speak, the preceding blank space, invalidating the potential meaningfulness given by the indentation. Thus, it was probably also an editorial mark, pointing out that the indentation should not be replicated in a future copy of the text. An analogous explanation could perhaps account for the marked Hittite verb *tūriyanzi* in KUB 1.11+ ii 41, following *n=aš* after a large blank space: maybe the scribe thought that something should have been restored before the verb, then changed his/her opinion and marked the resumption of the line with the *Glossenkeil*. More generally, we have seen that, in some cases, the marking of genuine Hittite words might not depend on unusual, archaic, or foreign elements, but could be explained by invoking the paragraphemic function of the *Glossenkeil*.

Since the data seem to show that scribes were consistent in marking indented lines, both in positive and in negative terms, I have suggested that this feature could represent a reliable tool for a palaeographical analysis and a good starting point to identify manuscripts potentially written by the same scribe. Starting from this, I tried to demonstrate that two tablets of the Hittite funerary ritual, KUB 30.24+ and KUB 39.7+ were probably the work of the same scribe. By using this method, we might be able in the future to identify other groups of texts written by the same hands, thus going deeper in the reconstruction of the Hittite textual traditions and the scribal groups working on them.

We cannot conclude this paper without saying something about the origin of this specific use of the *Glossenkeil*. Despite the two different shapes this mark shows in the Hittite tradition (i.e. one or two oblique wedges), it should be regarded as a single sign, because no specific value(s) can be univocally associated with either shape. Although I still do not have a complete view of the use of the *Glossenkeil* in the whole cuneiform world, it appears that different cuneiform traditions employed different marks, with more or less

---

94 This tablet contains the 8th and 9th days of the ritual (cf. Otten 1958: 10 and Kassian et al. 2002: 16).

95 Another tablet of the funerary ritual, KBo. 25.184 (NS, CTH 450), shows indented lines marked by a single oblique wedge *Glossenkeil*. Although some of the signs in this tablet resemble those found in KUB 30.24+ and KUB 39.7+, some others are strongly divergent, showing that the tablet was written by a different scribe. Furthermore, note that in two tablets of the complete Annals of Mušili II, KBo. 19.76+ (NS, CTH 61.II.6.A) and KBo. 5.8 (NS, CTH 61.II.7.A), both coming from the Temple I, indented lines seem to be consistently marked by the *Glossenkeil*, but there are several differences in the shape of the signs, and we should conclude that they have been written by two different scribes. Possibly, we may imagine that these two scribes belonged to the same scribal school, but further research is needed to confirm this scenario.

the same functions attested for the Hittite *Glossenkeil*.[96] However, two aspects, partly related to each other, are difficult to determine and need further study: 1) whether this variation is original or is the result of the split of a single mark;[97] 2) whether we should imagine that the use of a paragraphemic mark arose independently in different places or we should instead posit one single source, in Mesopotamia or in Syria, where one mark or a small set of marks was used. In any case, it is likely that the Hittite *Glossenkeil* is an imported mark (see below), although its exact source is difficult to identify and lies beyond the scope of this paper.

As previously mentioned, what could be a specific Anatolian innovation, already started in 15th century BCE, and possibly later spread to Emar, is the *Glossenkeil* marking an indented line: to my knowledge, this practice is not found in Mesopotamia and in the other Cuneiform traditions. If we want to imagine a possible source for this function, we can perhaps find a direct antecedent in the use of the *Glossenkeil* as a divider when signs belonging to the left column crossed over into the right one, causing the indentation of the line. Also, the marking of elements belonging to a preceding line, which sometimes involves indentation and is found in other Cuneiform traditions, could have played a role.

As a final remark, I would like to suggest that the moment in which the *Glossenkeil* entered Ḫattuša should be placed in the Middle Hittite period (15th century BCE). As far as I know, no *Glossenkeil* is found in OS texts, and its occurrences start in MS manuscripts. Clearly, this could be due to chance, but in the Middle Hittite period we see other innovations in the scribal practices, such as an increasing number of Sumerograms, changes in the shape of some signs, and the emergence of the MS ductus (soon evolving in the NS one). Furthermore, it is from this period that Hittite scribes began to write their names in the colophons of the tablets they wrote.[98] All in all, we can state that, in Middle Hittite period, the scribal practices changed, and the beginning of the use of the *Glossenkeil* could have well been part of this change. Now, if we combine these data with the fact that no lexical list or translated Mesopotamian literary text is found in OS tablets, such a documentation starting with MS manuscripts,[99] we can imagine that the innovations in the scribal practices could be related to the arrival of these materials in the Hittite capital, both through direct transmission from Babylonia and Assyria and through Hurrian intermediation,[100] but further research is needed in order to reach a better understanding of this issue.

References

Arnaud, D. (1987): Les textes sumériens et accadiens. Vol. 4: Textes de la bibliothèque: transcriptions et traductions (Recherches au pays d'Aštata. Emar VI/4), Paris.

Artzi, P. (1963): The "Glosses" in the El-Amarna Tablets: A Contribution to the Study of Cultural and Writing Traditions among the Scribes of Canaan before the Israelite Conquest, Annual of Bar-Ilan University 1, xiv-xvii (English summary), 24–57.

---

96 See e.g. the variety of marks used in the Amarna letters coming from different places (Mabie 2004: 165–170). Also in Mesopotamia, several different auxiliary marks were employed by the scribes in the commentaries, each one with a specific meaning (cf. Labat 1976: 24–25 and Mabie 2004: 28–36), and also the practice of marking independent words to emphasise some particular aspects could be occasionally found, as Mabie (2004: 33–34) suggests in order to explain some marked words (by means of a vertical wedge) in a tablet from Tall Asmar (cf. Gelb 1942).

97 In some cases, we could suppose a secondary creation: it is likely that some of the marks employed in Mesopotamian commentaries were secondarily created for disambiguation purposes and did not occur outside that genre.

98 Cf. Gordin (2014: 63).

99 What we have from OS tablets is limited to some omen texts (one fragment in Akkadian, three Hittite translations, and three bilingual liver models), which could have been used also for the education of the scribes, beside their practical purpose.

100 Cf. Beckman (1983: 102).

Beckman, G. (1983): Mesopotamians and Mesopotamian Learning at Ḫattuša, JCS 35, 97–114.

Burgin, J.M. (2016): Aspects of Religious Administration in the Hittite Late New Kingdom, PhD Diss., Chicago.

Cohen, Y. (2007): Akkadian Omens from Hattuša and Emar: The *šumma immeru* and *šumma ālu* Omens, ZA 97, 233–251.

Cohen, Y. (2012): An Overview on the Scripts of Late Bronze Age Emar. In: E. Devecchi (ed.), Palaeography and Scribal Practices in Syro-Palestine and Anatolia in the Late Bronze Age. Papers Read at a Symposium in Leiden, 17–18 December 2009 (PIHANS 119), Leiden, 33–45.

Cohen, Y. (2016): The Scribal Traditions of Late Bronze Age Emar. In: Sh. Yamada/D. Shibata (ed.), Cultures and Societies in the Middle Euphrates and Habur Areas in the Second Millennium BC. Vol. 1: Scribal Education and Scribal Traditions (StCh. 5), Wiesbaden, 119–131.

Cooper, J.S. (1971): Bilinguals from Boghazköi. I, ZA 61, 1–22.

Faist, B. (2008): Scribal Traditions and Administration at Emar. In: L. d'Alfonso et al. (ed.), The City of Emar among the Late Bronze Age Empires: History, Landscape, and Society (AOAT 349), Münster, 195–205.

Forrer, E. (1922): Die Inschriften und Sprachen des Ḫatti-Reiches, ZDMG 76, 174–269.

Gantzert, M. (2011): The Emar Lexical Texts, Ph.D. Diss., Leiden.

Gelb, I.J. (1942): A Tablet of Unusual Type from Tell Asmar, JNES 1, 219–226.

Giusfredi, F. (2012): The Akkadian Medical Text KUB 37.1, AoF 39, 49–63.

Gordin, Sh. (2011): The Tablet and its Scribe: Between Archival and Scribal Spaces in Late Empire Period Ḫattuša, AoF 38, 177–198.

Gordin, Sh. (2014): The Socio-historical Setting of Hittite Schools of Writing as Reflected in Scribal Habits. In: Sh. Gordin (ed.), Visualizing Knowledge and Creating Meaning in Ancient Writing Systems (BBVO 23), Gladbeck, 57–79.

Görke, S. (2013): Luwian Words in Hittite Festivals. In: A. Mouton et al. (ed.), Luwian Identities. Culture, Language and Religion Between Anatolia and the Aegean (CHANE 64), Leiden – Boston, 125–134.

Groddek, D. (2011): Hethitische Texte in Transkription: KBo 47 (DBH 33), Wiesbaden.

Güterbock, H.G. (1956): Notes on Luwian Studies (A propos B. Rosenkranz' Book Beiträge zur Erforschung des Luvischen), Or. NS 25, 113–140.

Hagenbuchner, A. (1989): Die Korrespondenz der Hethiter. 2. Teil: Die Briefe mit Transkription, Übersetzung und Kommentar (THeth. 16), Heidelberg.

Hecker, K. (1968): Grammatik der Kültepe-Texte (AnOr. 44), Rome.

Heinhold-Krahmer, S. (1977): Arzawa: Untersuchungen zu seiner Geschichte nach den hethitischen Quellen (THeth. 8), Heidelberg.

Hoffner, H.A. (2009): Letters from the Hittite Kingdom (SBL WAW 15), Atlanta.

Houwink ten Cate, Ph.H.J. (1968): Muwatallis' "Prayer to be Spoken in an Emergency", an Essay in Textual Criticism, JNES 27, 204–208.

Hunger, H. (1968): Babylonische und assyrische Kolophone (AOAT 2), Neukirchen-Vluyn.

Izre'el, Sh. (1977): Two Notes on the Gezer-Amarna Tablets, Tel Aviv 4, 159–167.

Izre'el, Sh. (1995): The Amarna Glosses: Who Wrote What for Whom? Some Sociolinguistic Considerations. In: Sh. Izre'el/R. Drory (ed.), Language and Culture in the Near East (IOS 15), Leiden, 101–122.

Justus, C.F. (1981): Visible Sentences in Cuneiform Hittite, Visible Language 15, 373–408.

Kammenhuber, A. (1957): Philologische Untersuchungen zu den "Pferdetexten" aus dem Keilschriftarchiv von Boghazköy, MSS 2, 47–120.

Kammenhuber, A. (1961): Hippologia Hethitica, Wiesbaden.

Kammenhuber, A. (1970): Keilschrifttexte aus Boğazköy (KBo XVI), Or. NS 39, 547–567.

Kassian, A. et al. (2002): Hittite Funerary Ritual *šalliš waštaiš* (AOAT 288), Münster.

Korpel, M.C.A. (2005): Unit Delimitation in Ugaritic Cultic Texts and Some Babylonian and Hebrew Parallels. In: M.C.A Korpel/ J.M. Oesch (ed.), Layout Markers in Biblical Manuscripts and Ugaritic Tablets (Pericope 5), Assen, 141–160.

Kudrinski, M./I. Yakubovich (2016): Sumerograms and Akkadograms in Hittite: Ideograms, Logograms, Allograms, or Heterograms?, AoF 43, 53–66.

Labat, R. (1976 [1948[1]]): Manuel d'épigraphie akkadienne (signes, syllabaire, idéogrammes), Paris.

Mabie, F.J. (2004): Ancient Near Eastern Scribes and the Mark(s) They Left: A Catalogue and Analysis of Scribal Auxiliary Marks in the Amarna Corpus and in the Cuneiform Alphabetic Texts of Ugarit and Ras Ibn Hani, PhD Diss., Los Angeles.

Melchert, H.C. (1993): Cuneiform Luvian Lexicon (Lexica Anatolica 2), Chapel Hill.

Melchert, H.C. (1994): Anatolian Historical Phonology, Amsterdam – Atlanta.

Melchert, H.C. (2005): The Problem of Luvian Influence on Hittite. In: G. Meiser/O. Hackstein (ed.), Sprachkontakt und Sprachwandel. Akten der XI. Fachtagung der Indogermanischen Gesellschaft, 17.–23. September 2000, Halle an der Saale, Wiesbaden, 445–460.

Miller, J.L. (2012): The Palaeography and Orthography of Six Rituals 'Redacted' in the Manner of Arusna. In: E. Devecchi (ed.), Palaeography and Scribal Practices in Syro-Palestine and Anatolia in the Late Bronze Age. Papers Read at a Symposium in Leiden, 17–18 December 2009 (PIHANS 119), Leiden, 95–109.

Neu, E. (1996): Das hurritische Epos der Freilassung. Vol. 1: Untersuchungen zu einem hurritisch-hethitischen Textensemble aus Ḫattuša (StBoT 32), Wiesbaden.

Otten, H. (1958): Hethitische Totenrituale, Berlin.

Richter, Th. (2003): Das "Archiv des Idanda": Bericht über Inschriftenfunde der Grabungskampagne 2002 in Mišrife/Qaṭna, MDOG 135, 167–188.

Rieken, E. (2009): Die Tontafelfunde aus Kayalıpınar. In: F. Pecchioli Daddi et al. (ed.), Central-North Anatolia in the Hittite Period: New Perspectives in Light of Recent Research. Acts of the International Conference Held at the University of Florence (7–9 February 2007) (St. Asiana 5), Rome, 119–143.

Rizza, A. (2008): "Cercato in traduzione": su di un passo problematico della bilingue "SÌR *parā tarnum(m)aš*". In: B. Bellucci et al. (ed.), Traduzione di tradizioni e tradizioni di traduzione. Atti del quarto incontro "Orientalisti" (Pavia, 19–21 aprile 2007), Milan, 53–79.

Rosenkranz, B. (1942): Rez. zu H.A. Potratz, Das Pferd in der Frühzeit, Rostock 1938, IF 58, 80–82.

Rosenkranz, B. (1950–1951): Glossenkeilwörter aus den veröffentlichten Boğazköy-Texten, JKlF 1, 189–198.

Rosenkranz, B. (1952): Beiträge zur Erforschung des Luvischen, Wiesbaden.

Rutz, M.T. (2008): Scholars, Texts, and Contexts: An Archaeological and Textual Study of the Diviners' Archive from Late Bronze Age Emar, Syria, PhD Diss., University of Pennsylvania.

Rutz, M.T. (2013): Bodies of Knowledge in Ancient Mesopotamia: The Diviners of Late Bronze Age Emar and Their Tablet Collection (AMD 9), Leiden – Boston.

Scheucher, T.S. (2012): The Transmissional and Functional Context of the Lexical Lists from Ḫattuša and from the Contemporaneous Traditions in Late-Bronze-Age Syria, PhD Diss., Leiden.

Schuster, H.-S. (1974): Die Ḫattisch-Hethitischen Bilinguen. Vol. 1: Einleitung, Texte und Kommentar, Leiden.

Schwartz, B. (1938): On the 'Glossenkeil' in Hittite, ArOr. 10, 65–78.

Schwemer, D. (2015): Hittite Prayers to the Sun-God for Appeasing an Angry Personal God: A Critical Edition of CTH 372–74. In: M. Jaques, Mon dieu, qu'ai-je fait? Les diĝir-šà-dab(5)-ba et la piété privée en Mésopotamie (OBO 273), Fribourg – Göttingen, 349–393.

Souček, V. (1957–1971): Glossen. B, RlA 3, 440.

Starke, F. (1990): Untersuchung zur Stammbildung des keilschrift-luwischen Nomens (StBoT 31), Wiesbaden.

Süel, A./O. Soysal (2003): A Practical Vocabulary from Ortaköy. In: G. Beckman et al. (ed.), Hittite Studies in Honor of Harry A. Hoffner Jr. on the Occasion of His 65th Birthday, Winona Lake, 349–365.

Torri, G. (2015): Hereditary Transmission of Specialized Knowledge in Hittite Anatolia: The Case of the Scribal Families of the Empire Period. In: A. Archi (ed.), Tradition and Innovation in the Ancient Near East. Proceedings of the 57th Rencontre Assyriologique Internationale at Rome, 4–8 July 2011, Winona Lake, 577–586.

Ünal, A. (1978): Ein Orakeltext über die Intrigen am hethitischen Hof (KUB XXII 70 = Bo 2011) (THeth. 6), Heidelberg.

van den Hout, Th.P.J. (1998): The Purity of Kingship: An Edition of CTH 569 and Related Hittite Oracle Inquiries of Tutḫaliya IV (DMOA 25), Leiden – Boston – Köln.

van den Hout, Th.P.J. (2002): Another View of Hittite Literature. In: S. de Martino/F. Pecchioli Daddi (ed.), Anatolia Antica. Studi in memoria di Fiorella Imparati (Eothen 11), Firenze, 857–878.

van den Hout, Th.P.J. (2007): Institutions, Vernaculars, Publics: The Case of Second-Millennium Anatolia. In: S.L. Sanders (ed.), Margins of Writing, Origins of Cultures (OIS 2), Chicago, 221–260.

van den Hout, Th.P.J. (2015): In Royal Circles: The Nature of Hittite Scholarship, Journal of Ancient Near Eastern History 2, 203–227.

van der Toorn, K. (2000): Cuneiform Documents from Syria-Palestine: Texts, Scribes, and Schools, ZDPV 116, 97–113.

von Dassow, E. (2004): Canaanite in Cuneiform, JAOS 124, 641–674.

von Dassow, E. (2012): Gloss Marking and the Language of the Alalaḫ IV Texts. In: E. Devecchi (ed.), Palaeography and Scribal Practices in Syro-Palestine and Anatolia in the Late Bronze Age. Papers Read at a Symposium in Leiden, 17–18 December 2009 (PIHANS 119), Leiden, 201–216.

Waal, W.J.I. (2015): Hittite Diplomatics: Studies in Ancient Document Format and Record Management (StBoT 57), Wiesbaden.

Watkins, C. (1997): Luvo-Hittite :lapan(a)-. In: D. Disterheft et al. (ed.), Studies in Honor of Jaan Puhvel. Part One: Ancient Languages and Philology (JIES Mon. 20), Washington, D.C., 29–35.

Yakubovich, I. (2010): Sociolinguistics of the Luvian Language (Brill's Studies in Indo-European Languages & Linguistics 2), Leiden – Boston.

Zorman, M. (2007): Sprachtabu als Motiv der Verwendung von Glossenkeilen. I. Wörter von A bis I. In: D. Groddek/M. Zorman (ed.), Tabularia Hethaeorum. Hethitologische Beiträge Silvin Košak zum 65. Geburtstag (DBH 25), Wiesbaden, 753–769.

Zorman, M. (2010a): La réforme de la langue hittite au XIIIe siècle av. J.-C.: un instrument au service de la construction de l'identité. In: I. Klock-Fontanille et al. (ed.), Identité et altérité culturelles: le cas des Hittites dans le Proche-Orient ancien. Actes de colloque, Université de Limoges 27–28 novembre 2008, Bruxelles, 217–225.

Zorman, M. (2010b): Über die Gründe für die Verwendung von Glossenkeilen im Hethitischen / Hitit Dilinde Köşe Çengelli Sözcüklerin (Glossenkeil) Kullanılma Nedenleri Hakkında. In: A. Süel (ed.), VII. Uluslararası Hititoloji Kongresi bildirileri, Çorum 25–31 Ağustos 2008 / Acts of the VIIth International Congress of Hittitology, Çorum, August 25–31, 2008, Ankara, 1029–1046.

Zorman, M. (2016): Sprachtabu als Motiv der Verwendung von Glossenkeilen. II. Wörter von K bis Z. Ideogramme. Akkadische Wörter. In: S. Erkut/Ö. Sir Gavaz (ed.), Ahmet Ünal armağanı / Studies in Honour of Ahmet Ünal, İstanbul, 575–602.