

# Sprachkontakt und Sprachwandel

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The Problem of Luvian Influence on Hittite  
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## 1. The State of the Question

1.1 For many years the prevailing view was that Luvian influence on Hittite was limited to the “Empire Period” after 1400 BCE, beginning with Muršili and increasing thereafter (see most emphatically KAMMENHUBER 1971: 80,94,97 et aliter, but cf. also SOMMER 1947: 17ff; OTTEN 1953a: 3; GÜTERBOCK 1956: 138). Some scholars have recently argued for a more differentiated picture according to which a limited cultural influence already visible in Old Hittite was followed by a separate much more direct influence after 1400 (most explicitly STARKE 1985: 30; but cf. also CARRUBA 1971: 229 with note 9 and OLLZ 73.251; RIEKEN 1994: 46; even KAMMENHUBER 1955: 362!).

This revised viewpoint seems to be essentially correct, but previous studies have tended to be unsystematic and have not fully addressed certain fundamental methodological issues. Hittite and Luvian are very closely related languages. By what criteria can we distinguish a Luvian loanword into Hittite from a mere Hittite cognate of a given Luvian word? It is also important to differentiate so far as possible between true loanwords and Luvianisms as foreign words in Hittite contexts. Most crucially, we need to pay far more systematic attention to the relative chronology of various putative Luvian influences on Hittite, lexical and grammatical.

1.2. Any discussion of the identification of Luvian words in Hittite must begin with the use of the so-called “Glossenkeil” (◀, ◁) by Hittite scribes. Contrary to some claims, the use of this marker before a word does not assure that the word is Luvian. First of all, Hittite scribes use the Glossenkeil in the manner of modern “sic!” to call attention to various unusual features: a foreign word is merely one possibility (see SCHWARTZ 1938, who wrongly denies that marking foreign words is included, and more accurately GÜTERBOCK 1956: 119). As per GÜTERBOCK (1956: 130ff), some words so marked are undeniably Hittite: ◁šākanwa=šše=ššan ‘eyes’ (KUB 8.81 ii 10<sup>MS</sup>) vs. genuine Luvian tāwa.<sup>1</sup>

The motivation for use of the Glossenkeil in such cases is not always clear. I suggest as one possibility that it may sometimes reflect innovation and dialect variation within Hittite. The copyist of the example just cited may have been calling attention to what was for him an already archaic form –šše vs. his own –šši. In Muršili’s Annals we find just once ◁hūwaiš ‘ran’ (KBo 3.4 ii 31) beside many unmarked examples in Muršili and Ḫattušili vs. ◁hūiyami ‘I run’ (Ḫattušili, KUB 1.1 iv 10, but unmarked in the duplicate KBo 3.6 i 37). Contra OETTINGER (1986: 50f) and others the latter need not reflect Luvian influence, since the former certainly cannot. We have competing paradigms (older hī-verb vs. new mi-verb) and thus probably different scribal views of what

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<sup>1</sup> I adopt here the conventions of the *Chicago Hittite Dictionary* in using the sigla OH, MH, and NH to indicate the date of a *text/composition* as Old, Middle, or Neo-Hittite, but OS, MS, and NS to indicate the date of a *manuscript* (tablet) as belonging respectively to one of those periods.

counted as “unusual.” Likewise *ermalaš* ‘ill’ (Hatt. KUB 1.1 i 44, but *unmarked* in the other mss.) is merely a new analogical form after the base noun *erman* ‘illness,’ vs. older *armanaš*. The example *duwarnuman[zi]* in KUB 44.4+ i 23 is probably marked because it is archaic vs. the innovative stem *duwarniya-* ‘break.’ I stress that there is no formal feature of any of the marked words cited that may be identified as Luvian.<sup>2</sup> In the case of lexemes common to the two languages it is also possible that a scribe of Luvian background might mark a native Hittite word as Luvian (e.g. *paš(š)-* ‘swallow’ or *hūiya-* ‘run’).

We must also bear in mind that not all foreign words marked with the Glossenkeil are Luvian (though most are). See ROSENKRANZ (1952: 18ff); OTTEN (1953b: 9f) after Bossert; KAMMENHUBER (1959: 9-10); all contra ROSENKRANZ (1938: 268). A clear example is *šinašila* = Hurrian ‘second’ in KBo 3.3 ii 7. Use of the Glossenkeil is highly inconsistent in any case, as seen in the very divergent usage of the manuscripts of the Apology of Hattušili (see OTTEN 1981: 66ff). The fact is widely acknowledged (ROSENKRANZ 1938: 268ff; SOMMER 1947: 17ff; GÜTERBOCK 1956: 118). Finally, use of the Glossenkeil only begins in Middle Hittite (there are *no* examples in Old Hittite mss.), and it becomes common only from Muršili onward (GÜTERBOCK 1956: 135). We must therefore conclude: presence of the “Glossenkeil” is no guarantee of Luvian origin, and its absence is no argument against.

1.3. The only sure basis for defining a Luvianism in Hittite context as a foreign word (as opposed to a true loanword) is uniquely Luvian inflection.<sup>3</sup> For the verb this criterion is fairly reliable, since there is very little overlap between the verbal endings of the two languages. The only exceptions are the shared present second singular *-šī* and the ending *-(f)ā*, which is the preterite third singular ending in Luvian (active and probably also middle) and the present third singular middle ending in older Hittite.<sup>4</sup> The noun and adjective present a more serious problem, since Hittite and Luvian share the endings *-š* and *-(a)n* of the animate nominative and accusative singular, the dative singular ending *-i*, and the neuter or collective nominative-accusative plural in *-a*. The Luvian dative singular in *-a* looks like the Old Hittite allative ending, and in those cases where Luvian does not add the particle *-šā/-za*, the neuter nominative-accusative singular ending (*-an* for *a*-stems, zero for other classes) also matches that of Hittite.

The possibility that we may wrongly interpret as Hittite in form some examples of nouns that were intended as Luvian means that generalizations about Luvian foreign words must be made with caution. What we can say is that there are no words with assured Luvian inflection in Old Hittite manuscripts. There are a few examples in Neo-Hittite copies of Old Hittite texts: e.g. D-Lsg *nūti* in KBo 8.69,11 (CTH 327), Pret3Sg

2 Whereas the ending *-š* of *šūwais* and the dissimilation of *-uw-* to *-um-* in *duwarnumanzi* are peculiarly Hittite!

3 The distinction I am trying to make here is roughly that between English ‘fraternity,’ a fully assimilated loanword from French, and *bête noire*, a learned phrase used by English speakers with full consciousness of its French status.

4 The ending *-(f)ā* is of course also the preterite active second (and sometimes third) singular ending of the Hittite *-li-* conjugation, but in practice this potential overlap is a less serious problem.

*hašpaada* in KUB 33.66+ iii 5 (CTH 331),<sup>5</sup> Pret3PI *ammaššanda* in KUB 12.26 ii 8 (CTH 441), and others. Not all of these are likely to be innovations, but the rarity is surely significant. This conclusion is supported by the fact that there are extremely few words with assured Luvian inflection in Middle Hittite texts that are attested in MH manuscripts (as already noted by RIEKEN 1994: 48<sup>2-5</sup>). I know of only: *akurriyai* (IBoT 1.36 iii 59), *arunaint[ā]* (HKM 109 Ro 15), and *GISmurtan=za* (HKM 72 Vo 35). There appear to be almost no Luvian foreign words in Hittite before Muršili.

1.4. The fact that Hittite and Luvian are closely related languages necessarily makes the criteria for identifying Luvian *loanwords* into Hittite quite provisional. The mere fact that a word found in a Hittite context also appears in Luvian (Cuneiform or Hieroglyphic) proves nothing: we may be dealing merely with cognates inherited in both languages. We may tentatively suppose a Luvian origin for a Hittite word when we find any of the following three conditions:

1.4.1. The word (or a transparently related form) is also attested in Luvian context (Cuneiform or Hieroglyphic) and shows typically Luvian morphology: e.g. *harpanallai-* ‘rebellious; rebel’ (with and without Glossenkeil) beside CLuvian *harpanalliyan* ‘of a rebel’ (KBo 21.12,15). For the suffix *-alla/i-* see below.

1.4.2. The word is attested elsewhere as a Luvian foreign word (i.e., as per above with uniquely Luvian inflection): e.g. *nū-* ‘approval, assent’ (an animate *u-*stem in Hittite) beside Luvian D-Lsg *nūti* (KBo 8.69,11).

1.4.3. The root is attested in both languages, but the word in question shows uniquely Luvian phonological features: e.g. Hitt. *āpala-* ‘trap’ < Luv. *\*āpal-*, with STARKE (1990: 317ff), because accented initial *\*ā > ā* only in Luvian, not Hittite; *ubāi-* ‘land-share’ (or sim.), as per STARKE (1990: 195ff), with lack of assibilation of *\*t* before *i*.

The provisional character of all three criteria should be evident. Absence of the first two conditions may be due to chance, subject to revision at any time upon discovery of new evidence. The third criterion rests on claims about historical phonology and is thus a matter of opinion, not fact.

## 2. Provisional Survey of Luvian Loanwords and Foreign Words in Hittite Context

The following is a first attempt at a truly all-inclusive survey of Luvianisms in Hittite texts. As such, it is necessarily incomplete and imperfect. For reasons outlined above, the status of some examples is ambiguous. The time available was limited, and in my haste I have surely overlooked some cases. Finally, the chronologization of Hittite texts and manuscripts is subject to ongoing refinement and revision. There will thus inevitably be additions to and reassignment of some of the examples cited. I believe my coverage is systematic and comprehensive enough to provide meaningful results. The survey is meant to be complete for the most securely datable material: OH texts in OH

5 See GRODDEK (1999: 38) for the text. He himself (1999: 47) dates the text as MH.

manuscripts, MH texts in MH manuscripts, and Neo-Hittite historical texts.<sup>6</sup> We may thus provide a firmer basis for conclusions about the relative chronology of Luvian influence on Hittite than heretofore. I have also where practicable separated the material by text genre, so as not to prejudice the question of whether this factor plays a significant role.<sup>7</sup>

### 2.1. Old Hittite

#### 2.1.1. Old Hittite Texts in Old Hittite Manuscripts

Historical texts: *āppala-* 'snare, trap'; *ariyalli-* 'basket' (or sim.); *ḫandiliške-* '?'; *ubāi-* 'land-share.'

Laws/Instructions: *ḫpuššali-* 'leggings' (or sim.).

Rituals: *ḫēḫui-* 'basket'; ? *ḫuitar* 'wild animals'; ? *ḫurutil-* (a food); *putaliye-* 'gird'; *tabarna-/labarna-* 'ruler' (thus with EICHNER 1975: 81<sup>5</sup>, STARKE 1983: 406, et al. contra TISCHLER 1988 & 1991: 116ff, and KLINGER 1996: 207ff); *te/iššummi-* 'fired-clay vessel' (see NEU 1988: 239<sup>17</sup>).

Other: *appaliyalla-* 'fool, deceived one'; *labarna-* 'ruler.'

#### 2.1.2. Old Hittite Texts in Middle/Neo-Hittite Manuscripts (latter unless marked)

Historical texts: *arumma* 'very, highly'; *ḫamrit-* 'cult shrine' (or sim.) < Hurrian; ?<sub>LUMES</sub> *ḫapiri-* 'bedouin' (or sim.); ?*tupi-* 'strike'; *ubati-* 'land-share.'

Laws: ?*arawanni-* 'free-man'; <sup>TUG</sup>*adupli-* (garment); <sup>NA4</sup>*ḫarmiyalli-* '?'.<sup>18</sup>

Instructions: *ḫanḫaniya-* 'be malicious'; *tapariya-* 'be in charge'; *karšattar* 'selection'; *ḫūr* 'urine'; *upati-* 'land-share'; *zammurā(i)-* 'insult, slander'; *ḫzūwa-* 'food.'

Myths: *ḫammaššanda*<sup>1</sup> 'they wiped'; *aruma* 'very, highly'; *ḫašp-*<sub>L&H</sub> 'obliterate'<sup>MS1</sup>; *ḫupallaš-* 'head'; *ḫūrait(a)-* 'teat'; *mannitti-* 'fullness' (or sim.)<sup>MS1</sup>; *nū-* 'assent, approval'<sup>MS1/NS</sup>; <sup>UZU</sup>*pappašala/i-* 'esophagus'; *partian=za*<sup>1</sup> 'wing'; *šalḫi(an)i-* 'growth' (or sim.)<sup>MS1/NS</sup>; *šarlā(i)-* 'exalt'; *tabri(i)-* 'chair'<sup>MS1</sup>; *tarpanalli-* 'opponent'; *tarpi-* 'resistance' (or sim.); *tūmantiya-* 'obedience'<sup>MS1/NS</sup>; *ulipna-* 'wolf' (or sim.); *wandanniya-* '?<sup>MS1</sup>; ?*ḫwarku(i)-* (evil thing)<sup>MS1/NS</sup>; *zamna-* 'lair'.

Rituals: ?*ḫalmuna* '?<sup>MS1</sup> (Luv. inf.?)'; *ḫūmma-* 'pig-sty'; <sup>TUG</sup>*kušešida-* (garment); (*ḫ*)*lilā(i)-* 'pacify'; *marruwammi-* 'dark'; *marway(a)-*<sup>1</sup> 'dark'; <sup>NINDA</sup>*mitgaima/i-* 'sweet bread'; *nū* 'assent, approval'; *pūwā(i)-* 'crush'; *šaruma-* 'exaltation'; *tarpaššašši-* 'of a substitute'<sup>MS1</sup>; *tiwadaniya-*<sup>1</sup> 'curse'; *tūmantiya-* 'obedience.'

<sup>6</sup> For reasons of space I have had to omit the textual references for attestations of individual items. I will happily provide these upon request to anyone who wishes them. The superscript <sup>1</sup> in the lists indicates a foreign word *unequivocally* inflected as Luvian. Ambiguous examples of nouns and adjectives are left unmarked. A preceding question mark indicates that I consider the Luvian status of the word as less than fully assured.

<sup>7</sup> I must warn non-specialist readers, however, against drawing premature conclusions based purely on the relative *number* of examples from different genres. The number and length of texts from various genres at different periods varies too widely.

Festivals: (*ḫ*)*annari-* 'force'; <sup>NINDA</sup>*armanni-* 'lunula'; <sup>TUG</sup>*adupli-* (garment); *awiti-* 'sphinx'; *ḫapuš-*<sub>L&H</sub> 'replace'; <sup>NINDA</sup>*ḫarazuta-/ḫarzūzuta-* & *ḫarzazu-* (a food); *ḫazzivi(i)-* 'rite'; ?<sup>TU1</sup>*ḫurut(i)iel-* (a food); *kaluti-* 'circle, round' & *kalute/i-*<sub>L&H</sub> 'make the rounds of'; *kūrūdawant-* 'wearing a helmet'; <sup>NINDA</sup>*mitgaim(m)a/i-* 'sweet bread'; <sup>NINDA</sup>*miumiu-* (bread type); (*ḫ*)*U* *piḫaššašši-* '(Storm-god) of lightning'; *dammili-* 'virgin, untouched'; <sup>NINDA</sup>*dannaš-* 'pretzel' (or sim.); *tarkummiya(i)-* 'announce, impart'; *tarpi-* 'strength'; *tarwa-* 'dance'; ?<sup>LU</sup>*ummiyami-* '?'.<sup>19</sup>

### 2.2. Middle Hittite Texts

#### 2.2.1. Middle Hittite Texts in Middle Hittite Manuscripts

*akkarriya-*<sup>1</sup> 'tilt'; *ammañašši-* (type of bird); *appalā(i)-* 'entrap, deceive'; ?*armanni-* 'lumula'; *arunā(i)-*<sup>1</sup> '?'; <sup>TUG</sup>*adupli-* (garment); *ḫašp-* 'obliterate'; *ḫūramni-* (type of bird); ?*ḫūda-* 'alacrity'; *ikkamatta-* '?'; *kuḫzagannaḫit-*<sup>1</sup> '?'; *ḫaš* *kušalā(i)-* 'curry'; ?*ḫaš* *mariyawanna-* '?'; *ḫaš* *murtan-* '?'; *palahšiya-/palahšā(i)-* 'shield, protect'; *šarlā(i)-* 'exalt' & *šarlatta-* 'exaltation'; *tapariyalli-* 'commander'; *tapāšši-* (type of bird); <sup>LU</sup>*tariyanalli-* 'third-in-command'; *tarkummiya-* 'pass on, report'; <sup>LU</sup>*duyannalli-* 'second-in-command'; *zalla-* 'trof'; *zammurā(i)-* 'insult, slander.'

#### 2.2.2. Middle Hittite Texts in Neo-Hittite Manuscripts

<sup>MUNUS</sup>*ānnimiyami-* 'cousin'; *aruma* 'highly, very'; *ḫašp-* 'obliterate'; *ḫūtanu-* 'piling'; ?*mauwani(ya)-*<sup>1</sup> 'hitch as a four-span'; *niwalla-* 'innocent'; <sup>LU</sup>*tapariyalli-* 'commander'; *tarkummā(i)-* 'announce'; *tašari(ya)-*<sup>1</sup> '?'; <sup>U</sup>*zūhri(i)-*<sub>L&H</sub> 'grass'; *zalla-*<sup>1</sup> 'trof'; *zilatiya* 'henceforth, in the future.'

#### 2.3. Pre-Neo-Hittite Texts (NS unless marked)

Translation Literature: *ḫarpanalli-* 'rebel'; *ḫūtanu-* 'piling'; ?*tešsummi-* 'fired-clay vessel'; *tiššā(i)-* 'make ready' ('Song of Release' = Hurr.-Hitt. Bilingual, all MS); ?*ḫuiellā(i)-* '? ('Theogony').

Prayers: *lawarr(ya)-*<sup>1</sup> 'despoil'; *nū-* 'assent, approval'; *šarlā(i)-* 'exalt'; *tarkummiya-* 'pass on'<sup>MS</sup>; *tummantiya-* 'obedience'; *wenal-* 'stick, pole.'

Omens: *ānzašši-* '? (cf. *anzanu-*?)'; <sup>LUMES</sup>*ḫapiri-* 'bedouin'; *nakkuššē-* 'be a ritual substitute.'

Rituals: *ḫ* *alli-* '?'; *anāḫi-*<sup>1</sup> 'taste, sample'; *appāla-* 'trap'; *āpi(i)-*<sup>1</sup> 'bothros'; *ḫaš* *ariyal(a)-*<sup>1</sup> 'basket'; *arnami(ya)-*<sup>1</sup> '?'; *āštayaratar* 'sorcery'; <sup>LUMES</sup>*ḫarpanalli-* 'rebel'; *ḫardūwa-* 'descendance'; *ḫazizi(i)-*<sup>1</sup> 'wisdom'; *ḫupatt(a)-*<sup>1</sup> & *ḫupiyatar* 'cruelty' (or sim.); *ḫuprušḫi-* (ritual vessel); *ḫurtalli-* 'decocion vessel'; *ḫaš* *irḫui-* 'basket'; *kalute-* 'make the rounds of'; *gangati-* (medicinal plant) & *gangatā(i)-* 'treat with g'; *lulimi-* '?'; *lulu-* 'prosperity'; *luluwā(i)-* 'make prosper'; *mulātar* '?'; *nakkušši-* 'ritual substitute'; *nū* 'assent, approval'; *paḫḫit-*<sup>1</sup> (percussive instrument?); *patalla/i-* 'fetter' & *patalliya-* 'to fetter'; *puššā(i)-* 'crush'; *šapiya(i)-* 'cleanse'; *šarlā(i)-* 'exalt' & *šarlatta-* 'exaltation'; ?*šarli-* '? (noun); *šār-it-*<sup>1</sup> 'clew' (or sim.); *taluppi-* 'clod'; *tānit-*<sup>1</sup> 'cult-stele'; *tarpalli-* 'ritual substitute'; *tarwa-* 'dance'; *tiššarwa-*<sup>1</sup> 'molded thing' (or sim.);

*tiwariya*-<sup>L</sup> ‘of the Sun-god’ (NB last two explicitly glossed with *ḫalziššanzi* ‘they call (it)...’); *tiyanišš*- ‘fill, stuff’; *tāmmantiya*- ‘obedience’; *dupšahi(i)*-<sup>L</sup> (ritual type); *ušanitari*- ‘bringing gain/blessings’; *?aḫḫurā(i)*-<sup>?</sup>.

#### 2.4. Assured Neo-Hittite Compositions

Muršili: *ammašš(iya)*-<sup>L</sup> ‘wipe’; *ambašši*-<sup>L</sup> (cult object); *appalā(i)*- ‘entrap, deceive’; *arpuwan*- ‘steep, awry’; *arumma* ‘highly, very’; *ḫandalliya(i)*- ‘confront’; *ḫapira*- ‘bedouin’; *ḫazziwit*-<sup>L</sup> ‘rite’; *ḫūid(ū)wal(u)war*<sup>L3</sup> ‘being alive’; *kappilalli*- ‘hostile’; *ḫappilazza*-<sup>L</sup> ‘become angry/hostile’; *karšatti*-<sup>?</sup>; *kunzi*- (cult object); *ḫursauwan*-<sup>L</sup> ‘island’; *gurla*- ‘citadel’; *lulaḫi*- ‘mountain-dweller’; *lūlu*- ‘prosperity’; *luluwā(i)*- ‘make prosper’; *niwalli*- ‘innocent’; *pawari(ya)*-<sup>L</sup> ‘light a fire’; *putalliya*- ‘gird’; *?šāruniti*- ‘springs, well’; *(i)yašḫa*-<sup>L</sup> <sup>?</sup>; *ḫsamilayaya*-<sup>L3</sup> <sup>?</sup>; *(ḫ)tapar*- ‘rule’ & *tapar(p)iya(i)*- ‘be in charge of’/ *tapar(p)iya*- ‘rule’ (noun); *tarpalli*- ‘ritual substitute’; *tarpašša*- ‘ibid.’; *(ḫ)tarpanallašša*-<sup>L</sup> ‘become rebellious’; *ḫwaššura*-<sup>L3</sup> <sup>?</sup>; *zammurā(i)*- ‘insult, slander’; *zilatiya/ziladuwa* ‘henceforth, in the future.’

Muwattalli: *?altanni*- ‘spring’; *?annauli*- ‘equal’; *āninniyami*- ‘cousin’; *?arallā(i)*- ‘associate’; *ḫapiri*- ‘bedouin’; *ḫūwayalli*- ‘observing, attending’ (or sim.); *ḫulāni(ya)*-<sup>L</sup> ‘bring to an end’; *ḫulzattar* ‘sketch, rough draft’; *lulaḫi*- ‘mountain-dweller’; *lūlu*- ‘prosperity’; *mimma*- ‘have regard for’; *(d)U piḫaššašši*- ‘(Storm-god) of lightning’; *šarlā(i)*- ‘exalt’; *taparriya*- ‘be in charge’; *?ūšayatti*- ‘spring’; *(ḫ)tarāwīya*- ‘delivery, furnishing’ (or sim.); *tarkummā(i)*- ‘pass on’; *zilatiya* ‘henceforth, in the future.’

Ḫattušili/Pudḫepa: *GAD alalu*-<sup>?</sup>; *annān tiššan* <sup>?</sup>; *arrahḫaniya*-<sup>?</sup>; *?arallā(i)*- ‘associate’; *ḫarannu*-<sup>L</sup> ‘consign to’; *ḫarkammallā(i)*-<sup>L</sup> ‘make tribute-bearing’; *ḫarpaša*-<sup>L</sup> ‘become difficult’ (or sim.); *?ḫalwašši*- (oracle bird); *ḫitašša/i*-<sup>L</sup> <sup>?</sup>; *ḫūmma*-<sup>L</sup> ‘pigsty’; *ḫūpal(a)*- ‘hunting net’; *ḫūwa*-<sup>L</sup> <sup>?</sup>; *iparwašši*- ‘western’; *ḫarna*- ‘marna’ <sup>?</sup>; *ḫupiyati*-<sup>L</sup> ‘hatch a plot’; *ḫupiyatar* ‘plotting’, & *ḫupiyatalli*- ‘plotter’; *kurūt(a)*- ‘helmet’; *ḫuwayami*- ‘fearful’; *lalama/i*- ‘receipt’; *(EZEN)lila*- ‘pacification, conciliation’; *ḫalalašša*- ‘cloak’ (or sim.); *(ḫ)lūlu* ‘prosperity’; *ḫumpasši*- ‘regret’; (SISKUR) *mantalliya*-/ *mantallasamma/i*- ‘ritual for someone mantalli-’; *ḫmarḫ*-<sup>L</sup> <sup>?</sup>; *ḫmar(r)uw(i)*- ‘make dark’; *mazzallaša*-<sup>L</sup> ‘tolerate’; *parasši*-<sup>?</sup>; *puḫaršan* <sup>?</sup>; *ḫūḫiḫūšuwal(i)*-<sup>?</sup>; *šarlaimmi*- ‘exalted’; *šiwariya(i)*-<sup>?</sup>; *ḫaḫūšiya*-<sup>L</sup> ‘endure in silence’; *dammili*- ‘virgin, untouched’; *ḫtapar*-<sup>L</sup> ‘be in charge of’; *taparriya(i)*- ‘direct, control’; *tapariya*- ‘control’ (noun); *tarkummā(i)*- ‘pass on’; *tiššā(i)*- ‘make ready’; *?MUNUS udati*-<sup>?</sup>; *ḫwarwalan*- ‘seed, progeny’; *waškuwa*- ‘delict’; *ḫyašḫanduwan(i)*-<sup>?</sup>; *(ḫ)ziladuwa* ‘henceforth, in the future.’

#### Tuḫḫiya:

*?annauli*- ‘equal’; *ariyatt(a)*- ‘levy’ (or sim.); *ḫallapuwa*-<sup>L</sup> (topographic feature); *ḫalli(ya)*- ‘day’; *ḫapiri*- ‘bedouin’; *ḫarmima*-<sup>?</sup>; *ḫarduwa-ḫarduwa*- ‘descendance’; *(ḫ)ḫinnaru(wa)*-<sup>?</sup>; *ḫūḫūpašša*-<sup>?</sup>; *ḫuramma*-<sup>L&H</sup> ‘pasture’; *?ḫūta*- ‘alacrity’; *ḫkantanna*-<sup>L</sup> ‘wheat-field’; *ḫkuggurniyawar / kuggurniyaman*-<sup>L</sup> <sup>?</sup>; *ḫupiyati*-<sup>L</sup> ‘hatch a plot’ & *ḫukupalatar* ‘plotting’; *ḫkunišayalli*-<sup>?</sup>; *ḫawappal*-<sup>L3</sup> <sup>?</sup>; *ḫapana*- ‘(salt)-lick’; *ḫlapanal(i)ya*-<sup>L</sup> ‘(rights) pertaining to salt-lick’; *lūlaḫi*- ‘mountain-dweller’; *maršaštarri*- ‘falsehood’; *ḫmazalla*-<sup>?</sup>; *ḫnawila*-<sup>?</sup>; ‘young animal’

*ḫūnurašši*-<sup>L</sup> <sup>?</sup>; *pūḫ*-<sup>L</sup> <sup>?</sup> (verb); *puškaniti*- ‘miserly’ & *puškantatar* ‘miserliness’; *ḫtiššā(i)*- ‘make ready’; *ḫūḫukantaḫit*-<sup>L</sup> ‘position of crown-prince’; *taparriya*- ‘command’; *tarkummā(i)*- ‘intercede’; *ḫtiššā(i)*- ‘make ready’; *ḫupaḫili*-<sup>?</sup>; *upati*- ‘land-share’; *ḫwāniya*- ‘rock-face’; *warwalan*- ‘seed, progeny’; *ḫzantālā(i)*-<sup>L</sup> ‘belittle’ (or sim.); *zilatiya/ziladuwa* ‘henceforth, in the future.’

#### Šuppiluliuma II:

*ḫallallā*-<sup>?</sup>; *ḫapluša*-<sup>?</sup>; *ḫaḫwatiya*-<sup>?</sup>; *ḫarpanuwanti*- ‘rebellious’; *ḫašp*- ‘obliterate’; *ḫiššalla*-<sup>L3</sup> <sup>?</sup>; *?ḫuriant*- ‘curse’; *ḫulī(ya)*-<sup>L</sup> <sup>?</sup>; *ḫupiyati*- ‘plot’; *ḫkuwayamma/i*-<sup>L</sup> ‘fearful’ & *ḫkuwayata*- ‘concern’ (noun); *ḫkuwa(ya)lā*- ‘be of concern’; *?ḫlimma(n)*-<sup>?</sup>; *lulaḫi*- ‘mountain-dweller’; *ḫmali*-<sup>L</sup> ‘thought’ & *ḫmali(ya)*-<sup>L2</sup> ‘think, suppose’; *ḫmaršašša/i*- ‘treacherous’; *ḫnahḫunwāi*- ‘frighten’; *ḫpappaša*- ‘swallow’ & *ḫpašattarman*- ‘swallowing’; *ḫūšurwaššali*-<sup>?</sup>; *taparamaḫit*-<sup>L</sup> ‘position of ruling’; *taparriya*- ‘direct’; *ḫtiššā(i)*- ‘make ready’; *ḫyašatti(i)*-<sup>?</sup>; *ḫwašku*-<sup>L</sup> ‘delict’; *ḫzammurati(i)*- ‘insult, slander’; *zilatiya/ziladuwa* ‘henceforth, in the future.’

#### Other Assured Neo-Hittite (Letters & Oracles):

*?annau(a)li*- ‘equal’; *arpa*- ‘(tur)moil, confusion’; *arpaša*- ‘become difficult’; *arpuwan*- ‘steep’; *ḫatupalalašša/i*-<sup>L</sup> ‘of an a-garment’; *ḫašp*-<sup>L</sup> ‘obliterate’; *(ḫ)kargarant(i)*-<sup>?</sup>; *ḫkulani(ya)*-<sup>L</sup> ‘bring to an end’; *ḫulananni*- ‘military’; *ḫkuwa*-<sup>L3</sup> ‘be afraid’; *ḫmarušamma/i*- ‘dark blue’ (or sim.); *ḫpašihā(i)*-<sup>L&H</sup> ‘crush’; *šiwari(ya)*-<sup>L</sup> <sup>?</sup>; *ḫtakkāštra*-<sup>?</sup>; *taparri(ya)*- ‘control’; *ḫušā(i)*-<sup>L</sup> <sup>?</sup>; *ḫwalantalamma/i*- ‘obsolete’; *ḫwašta*-<sup>L</sup> ‘sin’; *ḫzaršiya*- ‘safe-conduct’; *zila*- ‘consequence’.

#### 2.5. Other Neo-Hittite

Historical: *ḫašp*-<sup>L</sup> ‘obliterate.’

Inventories (not complete!): *lalimi*-<sup>?</sup>; *lalinaimmi*-<sup>L&H</sup> ‘fitted w/ l’; *malliia.li*-<sup>L</sup> ‘honey-pots’; *pinkit*-<sup>L</sup> ‘knob, boss’; *ḫtittalitaimi*-<sup>L</sup> <sup>?</sup>; *ḫzuzunni(ya)*-<sup>L</sup> <sup>?</sup>.

Catalogues: *ḫnuḫari(ya)*-<sup>L</sup> ‘convulse.’

Cadastral Texts: *ḫarrammi*-<sup>?</sup>; *?arišuwant(i)*-<sup>?</sup>; *arziāšša/i*-<sup>?</sup>; *ḫašanašša/i*-<sup>?</sup>; *ḫašḫaimmattanāšša/i*-<sup>?</sup>; *ḫḫiitellari*-<sup>?</sup>; *ḫaršattar* ‘parcel, section’; *ḫursawanašša/i*- ‘insular’; *ḫlalattāšša/i*- ‘of (ritual) taking away’; *ḫluwarešši*-<sup>?</sup>; *ḫmuttanawanni*-<sup>?</sup>; *ḫparattāšša/i*- ‘polluted’ (or sim.); *ḫtapašuwant(i)*-<sup>?</sup>; *ḫtarpanuīya*-<sup>?</sup>.

Instructions: *ubaiti*- ‘land-share.’

Letters: *ḫannari*- ‘force (ful)’; *ḫanzanu*-<sup>L</sup> <sup>?</sup>; *ḫiyawan*-<sup>?</sup>; *ḫappilabḫi*- ‘be hostile’; *ḫkaršantalli*-<sup>?</sup>; *ḫkauttašsari*- ‘orthostat’; *ḫmantalli*- ‘of slander’ (or sim.); *ḫparzašša/i*-<sup>?</sup>; *ḫpāšihā(i)*-<sup>L</sup> ‘pulverize’; *ḫpurpurriyaman*- ‘connection’; *ḫšiwari(ya)*-<sup>L</sup> <sup>?</sup>; *ḫtapar*- ‘rule’; *taparriya*- ‘direct, be in charge of’; *ḫtapaš(a)*- ‘fever’; *ḫtattia*-<sup>L</sup> <sup>?</sup>; *?ḫdāyalla*-<sup>?</sup>; *ḫupaššallā(i)*-<sup>?</sup>; *?ḫuwalla*-<sup>?</sup>; *ḫyašḫani(i)*- & *ḫyašḫanduwan*-<sup>?</sup>; *ḫzammurā(i)*- ‘insult, slander’; *ḫzaršiya*- ‘safe-conduct, visa’ (or sim.).

Depositions:  $\leftarrow$  *amnan kuratta/i-* 'rebellious';  $\leftarrow$  *ḥarpanalla-* 'rebellious';  $\leftarrow$  *kappila-* [ ] 'hostile';  $\leftarrow$  *kupiyati-* 'plot';  $\leftarrow$  *lalama/i-* 'receipt';  $\leftarrow$  *lawarr(iya)-* 'strip, despoil';  $\leftarrow$  *mišti-* 'recept';  $\leftarrow$  *tarpala* [ ] 'ritual substitute';  $\leftarrow$  *tarpaš(šā(i))-* 'replace';  $\leftarrow$  *dušduma/i-* 'manifest' (noun);  $\leftarrow$  *wahwayalla/i-* '?, *zilāiya/ziladuwa* 'henceforth, in the future.'

Translation Literature:  $\leftarrow$  *akkati-* 'hunting net';  $\leftarrow$  *akkušša-* 'pit-trap'; *annalla/i-* 'maternal' (beside hybrid *attalla/i-* 'paternal');  $\leftarrow$  *annauti-* 'equal';  $\leftarrow$  *arpiya-* 'go badly' (or sim.); *ārtattar* '?, *aru(šuwaru-* 'extremely' (adv.);  $\leftarrow$  *ḥanḥaman-* '?, *ḥapa(n)zuzwalātar* 'obedience';  $\leftarrow$  *ḥaršandanaḥit-* (part of vehicle); *ḥūhadalla/i-* 'of one's grandfather'; *ḥutanu-* 'piling'; *irimpi(t)-* 'cedar';  $\leftarrow$  *kalpariwal(i)-* '?,  $\leftarrow$  *maltani-* '?,  $\leftarrow$  *niwaralli-* 'alien';  $\leftarrow$  *paini-* 'cedarwood'; *pašihā(i)-* 'pulverize';  $\leftarrow$  *pinta-* 'oar'; *puššā(i)-* 'crush'; *šapp-* 'peel';  $\leftarrow$  *šapidduwa-* '?,  $\leftarrow$  *šāššumā(i)-* 'sleep with'; *taparriya-* 'be in charge of, ( $\leftarrow$  *ḥarpanalli-* 'opponent'; ( $\leftarrow$  *tīššā(i)-* 'make ready';  $\leftarrow$  *ḡš-iyarit-* 'wagon'; *winal-* 'stick, pole'; *zaḥ(ḥu)rā(i)-* 'break' (nearly all Gilgamesh and Ullikummi!)).

Rituals & Cults: *āḥrušḥi(i)-* L&H 'censer';  $\leftarrow$  *alalu-* L&H '?,  $\leftarrow$  *NINDA alatur-* L '?,  $\leftarrow$  *NINDA allinašši-* '?,  $\leftarrow$  *NINDA alpašši-* '?, *anāḥi(t)-* L&H 'sample, taste'; *āpi(t)-* L&H 'brothos';  $\leftarrow$  *ar-kiw-* 'canopy, awning';  $\leftarrow$  *ārni-* \* (medicinal plant); *ašta-* '(evil) spell, charm';  $\leftarrow$  *eripi-* L 'cedar';  $\leftarrow$  *MUNUS ḡš-* L '?,  $\leftarrow$  *ētmari-* L (vessel); *ḥalwainazza-* 'become excited'; *ḥazziwi-* 'rite'; *ḥuprušḥi-* (ritual vessel); *gangāti-* (medicinal plant); *gangatā(i)-* 'treat w/g'; &  $\leftarrow$  *MUNUS gangatitalla-*; *kappilalli-* 'hostile'; *katmarš(ya)-* L 'defecate'; *kutawi(ya)-* L 'turn';  $\leftarrow$  *DUG kullit-* L (vessel); *gulzi-* 'drawing'; *kuwanzunnašši-* 'heavy'; *kuwarayalla-* '?,  $\leftarrow$  *mammanna-* L 'have regard for';  $\leftarrow$  *NINDA mulāti*; *muwaddalalāḥit-* 'mightiness'; *naktuššāḥit-* L 'status of ritual substitute'; *naḥit-* L 'bed'; *nū-* 'assent, approval';  $\leftarrow$  *NINDA partanni-* L (bread type); *pašš-* L 'swallow';  $\leftarrow$  *padatur/n-* L 'mortar'; *puwā(i)-* L 'crush'; *šarlā(i)-* 'exalt'; *šarlatta-* & *šarlamiš-* L 'exaltation'; *dammili-* 'virgin, untouched'; *tapri-* 'chair';  $\leftarrow$  *tiwadani(ya)-* L 'curse';  $\leftarrow$  *NINDA warmanni-* L (bread type); *wašša-* 'be favorable'; ( $\leftarrow$  *ḡš*); *zakkit-* L 'door-latch'; *ziladuwa* 'henceforth, in the future.'

Oracles:  $\leftarrow$  *ḥallapa-* L '?, *kankat(a)j-* L 'treat w/g';  $\leftarrow$  *kišū(i)-* L 'comb'; *lūlu-* L 'prosperity'; *malḥaššallāḥit-* L 'performance of a ritual';  $\leftarrow$  *nami(ya)-* '?,  $\leftarrow$  *palaššarinuwa-* L '?,  $\leftarrow$  *parri(ya)-* L 'apply';  $\leftarrow$  *paštarnuwa-* L & *paštari(ya)-* L '?,  $\leftarrow$  *puḥalli(ya)-* L 'gird'; *šargašammi-* '?,  $\leftarrow$  *tarrawā(i)-* '?,  $\leftarrow$  *tīššā(i)-* L 'make ready' & *tīššalli-* '?,  $\leftarrow$  *dupšāḥit-* L (a ritual); *zaḥarliti-* (a bird);  $\leftarrow$  *zappantallā(i)-* L&H '?,

Dreams:  $\leftarrow$  *palayanalliyan-* L '?,  $\leftarrow$  *tarš(i)ya-* L 'vomit' (or 'drool').

2.6. I prefer not to speak of conclusions, given the significant limitations on the accuracy and completeness of this evidence, but several clear impressions do emerge. First, there does seem to be support for the basic idea that Luvian influence on Hittite was relatively limited in the older period but became much more intensive in Neo-Hittite. While the number of loanwords from pre-NH texts may appear impressive, a closer look shows that there is considerable overlap in the lists from early sources. There can be little doubt that there is a significant new layer of loanwords in Neo-Hittite, as well as a liberal sprinkling of Luvian foreign words. As noted earlier, the latter feature is

almost entirely lacking in Old and Middle Hittite. It is less clear whether the transition from Middle to Neo-Hittite in this regard was gradual or abrupt.

A second point is that there is no obvious difference in the rate of borrowing according to genre, contrary to some previous claims (SOMMER 1947: 17ff; GÜTERBOCK 1956: 137; KAMMENHUBER 1959: 9-10). On the other hand, there are some striking discrepancies *within* certain classes of texts that seem not to have been noticed. The "Song of Ullikummi" and the Hittite version of the Gilgamesh epic are full of Luvianisms, while there are extremely few in the rest of the Hurrian translation literature, most notably in the "Theogony" and "Song of Release." Likewise, there are surprisingly few Luvianisms in the Hittite portions of the older rituals and festivals containing Luvian passages (for the dating see STARKE 1985: 30). There is also great variability within the "personal" rituals: few Luvianisms in the rituals of Alli, Mastigga, and Zuwi; more in those of Tunnawi, Papanikri, and the Ritual of Šamuḫa; many in the Birth Ritual KUB 44.4+KBo 13.260 and that in KUB 17.12 (CTH 431). At a minimum this pattern suggests that not all of the translations from Hurrian were done at the same period.<sup>8</sup> It also seems likely that the Hittite versions of the various Luvian rituals are not all contemporary. These findings tend to raise doubts about the validity of unitary Hurrian and Luvian "Kultschichten" within Hittite.

A full analysis of the Luvian loanwords in terms of their semantic fields is not possible here. One's first impression is of a quite variegated assortment. If we restrict ourselves to those for Old Hittite, we may pick out the following groupings:<sup>9</sup> (1) food, utensils, clothing (*ariyalli-*, *ērḫui-*, *putaiye-*, *teššummi-*, *[armanni-]*, *[adupli-]*, *[ḥarzazu(ia)-]*, *[danmaš-]*, *[tapri(t)-]*); (2) hunting/ herding (*āppala-*, *[ḥümma-]*, *[karšattar]*); (3) military (*[ḥašp-]*, *[kuruta-]*); (4) religion/cult (*[lila-]*, *[šarlā(i)-]*, *[tarpāšša-]*, *[tiwadaniya-]*); (5) social order (*tabarna-*, *ubati-*, *[nū-]*, *[tapariya-]*, *[tumantiya-]*). In other cases we either know or may suspect that there is an existing native Hittite word for the same concept, and the usage seems to be in some way stylistic: *[ammašša-]* vs. Hitt. *āni(a)šš-*, *[dār]* vs. Hitt. *šēḫur*, *[ḥupallaš-]* vs. Hitt. *ḥaršar*, *[ḫaratta-]*, *[pappašala/i-]*, *[arumma]*, *[ḥanḥaniya-]*, *mitgaima/i-*, *zammurā(i)-*.

The first three sets could be viewed as colloquialisms: Hittite as a written literary language borrowed terms for items from everyday life from the spoken language Luvian (on this general idea see further below). The "stylistic" set could be interpreted in a similar fashion: colloquialisms were used to add color and vividness. However, this analysis seems much less illuminating for groups (4) and (5). In particular, I find it highly implausible that the Hittite kings adopted *t/abarna* as a title because it had the status of a colloquialism: Hittite kings were not politicians currying favor by showing

8 This conclusion is further supported by the fact that the "Theogony," which shows almost no Luvianisms, also has several clear Old Hittite linguistic features, while the Song of Ullikummi, replete with Luvian words, has none.

9 Examples in square brackets are attested only in later copies of OH texts, and their status as loanwords into Old Hittite is thus not assured.

solidarity with the masses.<sup>10</sup> The terms *nū-* and *tummanīya-* are abstracts that in the context of their first occurrence (KUB 17.10 iv 33<sup>MS</sup>) form part of a list of what the Hittites considered the ideal elements of a peaceful and ordered society. I see nothing “colloquial” in their register. The everyday items of the first three groups are also not necessarily all on a par. As established by STARKE (1990: 212ff), many Hurrian loan-words into Hittite come via Luvian, and an item such as *tabrit(a)-* ‘chair’ was probably for the Hittites an element of high culture (the same goes for whatever precise kind of basket *ērḫui-* represents). Finally, we can hardly be sure that the last set of words was used because they were colorful colloquialisms. It is equally possible that as foreign words they were felt to add to the high tone of a consciously literary composition (cf. the use of French words in English). In sum, I do not think that we can readily infer much from the early loanwords about the sociolinguistic status of Luvian vis-à-vis Hittite.

### 3. Luvian Influence on Hittite Grammatical Features

Scholars have attributed a number of features in Hittite derivation and inflection to Luvian influence. I will review several of these here, with particular attention to the relative chronology of their appearance and to the details of how they are embedded in the larger framework of Hittite grammar.

#### 3.1. Verbal Stems in *-(i)yai-* for *-(i)ya/e-*

OETTINGER (1979: 382ff) saw the variant *-(i)yai-* of Hittite verbal stems in *-ye-/ya-* as a borrowing from Luvian, citing as a model CLuvian *šapiyaimma/i-* (KUB 35.133 iii 9 & KBo 29.6 Ro 25). The following Hittite verbs in *-iyai-* are attested (here a raised <sup>L</sup> indicates that the base stem is borrowed from Luvian):

Old Hittite: *tiyaizzi*, **urkūyaizzi**<sup>OS</sup> (laws); *peššiyait*, <sup>L</sup>*tar-kummiyai*<sup>MS</sup> (prayers); *āršiyai*, <sup>L</sup>*ḫariyaizzi*, <sup>L</sup>*šarriyaizzi*, <sup>L</sup>*šiyaizzi/šiyaiškezzi*, <sup>L</sup>*duwarniyaizzi*, [<sup>L</sup>*šariyaizzi* (rituals)]; *šiyaizzi*, <sup>L</sup>*tar-kummiyaizzi*, [<sup>L</sup>*ti*] *yaizzi* (festivals); Middle Hittite (all MS except last): <sup>L</sup>*akkurriyai* (P3Sg *ḫi-*verb!), *kardimiyaitta*, <sup>L</sup>*laḫḫiyaizzi*, <sup>L</sup>*tar-kummiyai* (Imv2Sg), *dayair*, <sup>L</sup>*tektuššiyaizzi*, <sup>L</sup>*wemiyai*<sup>NS</sup>, Pre-Neo-Hittite (all NS): *laḫḫiyaiški*, *šiyaiškezzi* (translation literature); *aniyaēzzi* (or erroneous compromise spelling?), *ḫuitiyai* (Pres3Sg *ḫi-*verb!), <sup>L</sup>*ḫūlāliyaizzi*, *iškezzi*, *iyaizzi*, *paršiyaizzi*, *peššiyai* (Pres3Sg *ḫi-*verb!), *šaliyaitta*, *šiyaēškezzi*, *tiyaizzi*, *wiyaiškemi* (rituals); Neo Hittite (assured NH compositions): *laḫḫiyait* (Arnuwanda); *ariyair*, <sup>L</sup>*ḫandallaiir*, <sup>L</sup>*šiyait/šiyair*, <sup>L</sup>*daparriyaēr*, <sup>L</sup>*taštašiyail/taštašiyaizzi*, <sup>L</sup>*tūḫušiyail/duḫušiyait*, *waggariyaizzi* (Muršili); *laḫḫiyaiškešzi*, <sup>L</sup>*tāštašiyaizzi* (Muwattalli); *laḫḫiyait*, *šiyait*, <sup>L</sup>*šiwariyait*, <sup>L</sup>*taparriyai* (Ḫattušili); <sup>L</sup>*ḫanīyail/hanīyaizzi*, <sup>L</sup>*laḫḫiyaizzi*, <sup>L</sup>*taparriyaizzi*, <sup>L</sup>*ieššaeškešzi/ieššaeški* (Tuthaliya); Other Assured Neo-Hittite (Letters & Oracles): *laḫḫiyaizzi*, *peššiyaizzi*; Other Neo-Hittite:

<sup>10</sup> I am of course keenly aware that the interpretation of *t/labarna-* as being borrowed from Luvian (instead of from Hattic) is extremely controversial. I cannot pursue this in detail here. I do insist that the word has a perfectly regular derivation in terms of Indo-European morphology (*pace* TISCHLER 1991: 1181), while no convincing Hattic morphological analysis has been offered.

<sup>L</sup>*aštaniyai* (P3Sg *ḫi-*verb!) (Oracle), *ḫuitiyai* (Ritual), *ḫuntariyaitta* (Ritual), *kartimiyai* (Letter), *šapiyai* (Imv2Sg) (Ritual), *šiyaizzi* (Ritual).

We may summarize the salient facts as follows. First, there is no “class” of verbal stems in *-(i)yai-*: all attested examples co-occur with *-(i)ya-* and *-(i)ye-* (including in contemporary mss.). We should thus treat *-(i)yai-* as an allomorph of the regular Hittite suffix *-ye-/ya-*. Second, the distribution of this allomorph is highly restricted: two-thirds of the cases are Pres3Sg of the *mi-*conjugation (*-yaizzi*); there are also a few examples of *ḫi-*conjugation Pres3Sg (*-yai*), a few iteratives (*-yaiške-*), some Pres3Pl (*-yair*), and finally four Imv2ndSg (*-yai*). Third, STARKE (1990: 255) pointed out that there are in fact *no* attested Luvian finite forms in *\*-yaitti*, *\*-yainti*, *\*-yaitta* or the like. The last two points make problematic Oettinger’s scenario of a straightforward borrowing of a Luvian category. What does exist in Luvian are *ḫi-*conjugation(!) third singulars in *-(i)yai*: CLuv. *ḫanḫaniyai*, *padalliyai*, HLuv. *piyai*, *pa+LITUUS-taniyai*, and probably *wai/ra/i-ya-ya = /wariyai/* (see MORPURGO DAVIES 1979: 584ff). There are no native Hittite *ḫi-*conjugation present third singulars of this form: *ḫuitiyai* and *peššiyai* are neologisms to *mi-*verbs in *-ye/azzi*. These two examples do suggest the true line of development. Because Hittite had no ending *-yai*, a Luvian Pres3Sg such as *taparriyai* was remodeled in Hittite as *taparriyaizzi*, and the variant *-yaizzi* spread sporadically also to native Hittite stems in *-ya-* (hence the preponderance of precisely Pres3Sg examples). In general the rest of the paradigm remained an ordinary *-ya-* stem, but there was a limited tendency for analogical influence of the “founding” form of the Pres3Sg on other parts of the paradigm, producing a new allomorph *-yai-*. It is noteworthy, however, that this appears *only* where the native Hittite class in *-ā(i)-* has the allomorph *-āi-*. There were also a few rare back-formations such as *ḫuitiyai* and *peššiyai* (cf. Pres3Sg *ḫandai* beside *ḫandaizzi*).<sup>11</sup> We thus are not facing a case of direct borrowing of a grammatical feature. Instead, in borrowing a class of Luvian verbs whose inflection it found problematic, Hittite created a new stem allomorph from what was a verbal ending in the source language.

#### 3.2. Nouns in *-alla-* and *-alli-*

The situation is similar in the case of the nominal suffix *-alla-/alli-*. The native Hittite denominative “appurtenance” suffix is *-āa-*, which forms adjectives as well as substantives (KAMMENHUBER 1959: 25-26; OETTINGER 1986: 4; RIEKEN 1994: 49; et al.). The corresponding Luvian suffix is *-alla/i-* with “i-mutation” (for which see STARKE 1990: 59ff and passim). In Hittite we find *substantives* in both *-alla-* and *-alli-*, beginning already in Old Hittite (OS): *appaliyalla-* ‘deceived one, fool,’ *ḫurtiyalla-* ‘basin’, beside *ariyalli-* ‘basket,’ *ḫaršiyalli-* ‘pithos,’ *zupparyalli-* ‘torch-bearer.’ One should note on the one hand the two examples built on Luvian bases (*appaliyalla-* and *ariyalli-*) and on the other the complete absence of evidence for alternation between *-a-*

<sup>11</sup> One may also with Starke take the rare examples of CLuvian participles in *-yaimmi-* as Hittite hypercorrections (besides *šapiyaimma/i-* there is only *puriyaimiš* in Hittite context in KUB 42.16 iv 1). I know of no such cases in HLuvian.

and *-i-* in the same stem.<sup>12</sup> As stressed by RIEKEN (1994: 49<sup>29</sup>), due to the pattern of “*i-* mutation” there are no *neuter* nouns in *-alli-* in Luvian, but many of the Hittite nouns in *-alli-* are neuter. Once again this argues against a direct borrowing. The facts suggest rather that in Old Hittite the complex Luvian pattern of “*i-* mutation” was lost in the borrowing process: from one Luvian suffix Hittite created two separate non-alternating suffixes *-alla-* and *-alli-*, used primarily to create substantives (with gender assignment based on the semantic function).<sup>13</sup>

### 3.3. “Agent” Nouns in *-(a)l(t)alla-*

As already argued by OETTINGER (1986), a third case where Hittite created a new form by reanalysis of Luvian source material is the Hittite derivational suffix *-(a)l(t)alla-*, which productively forms agent nouns from both nouns and verbs (in the first case replacing native Hittite *-āla-* in the same function). I would now suggest, against both OETTINGER (1986: 43ff) and MELCHERT (1994: 15), that it is likely that there are two real variants */(a)dalla-/* and */(a)talla-/*, reflecting the two different types of Luvian models. First, already in Old Hittite (OS) we find *irḫuitalla-* ([-idalla-]) ‘basket-man,’ based on Luvian *irḫuit-alla/i-* ‘(the one) of the basket,’ but reanalyzed as *irḫui-talla-*, as if derived from the Hittite animate *i-* stem *ērḫui-* (thus with OETTINGER ). Second, we also have Old Hittite (OS) *paḫwattalla-* ([-atalla-]) ‘clapper,’ deverbal from *paḫwā(i)-* ‘to clap.’ I see this type as built on a model such as the derivational chain shown by CLuv. *muwā(i)-* ‘overpower’ → [*\*muwatt(a)-* ‘mighty’] → *muwattalla/i-* ‘mighty,’ where omission of the middle step leads to a deverbal suffix *-(a)ltalla-*.

### 3.4. Alternation of *-a-/i-* in Hittite Nominal Stems

As elucidated by RIEKEN (1994: 42-50), beginning in Middle Hittite we find a stem alternation *-a-/i-* in the inflection of many nouns. While variable, this alternation is by no means random: in *a-* stems the intrusive *i-* forms are concentrated in the animate nominative and accusative, singular and plural; conversely, intrusive *a-* forms in *i-* stems are usually found elsewhere in the paradigm. This particular near-complementary distribution of the variants argues strongly that this pattern represents a Hittite adaptation of the Luvian “*i-* mutation” established by STARKE (1990: 59ff). While Luvian loanwords with this pattern undoubtedly played a crucial role in serving as models, it is important to stress with Rieken that the variation becomes part of Neo-Hittite grammar, applying to native words. This case thus differs from the others just discussed in that it shows direct influence of Luvian on Hittite inflection.

### 3.5. Shifts in Verbal Stem Class

A number of verbs change their inflectional class from Old to Neo-Hittite. Among these changes are that of the type *memāi*, *memianzi* ‘speak’ to *memāi*, *memanzi* and that of

12 There is, however, already in OS evidence for confusion between *-alla/i-* and *-ala-*: ASg *ḫurriyallan* but D-LSg *ḫurriyali* in KBo 17.1 i 7.

13 I find unpersuasive the alternate derivation of *-alla-* as a native Hittite suffix by RIEKEN (1999: 444). The Luvian affiliations of *-alla-* are as strong as those of *-alli-*, and she offers no PIE source for the alleged suffix *\*-lh<sub>2</sub>-*. Cf. OETTINGER (1986: 45<sup>17</sup>).

Pres3Sg *ēzz(a)zzi* ‘eats’ to *ēzzāi*. OETTINGER (1986: 50f) attributes these two changes to Luvian influence, citing respectively the type of CLuvian *illiḫāi*, *ēlḫiḫānu* and HLuvian *pazai*. However, in the first case there is also a native Hittite model available (type of *tarnāi*, *tarnanzi*). For the second, one should note Pres3Sg *mazze* (KBo 7.14 Ro 8<sup>OS</sup>), with archaic vocalism of the ending and a generalized stem *mazz-* that must have originated in persons with an ending beginning with *-t-* (such as Pres2Sg *\*mazzi*). We thus cannot exclude that there was a later Pres3Sg *\*mazzāi* that served as the model for *ēzzāi*. Luvian influence in these cases remains possible, but is impossible to prove.<sup>14</sup>

### 4. Implications for the Sociolinguistic Relationship of Hittite and Luvian

What can the effects of Luvian on Hittite just described tell us about the respective spheres of use of these languages during the period of the Hittite kingdom? We must preface any such discussion with a reminder of how extremely limited our knowledge is about this topic. For many reasons we may assume that the overwhelming majority of the population was illiterate. But our only evidence (for Luvian as well as Hittite!) consists of written documents produced by a professional set of scribes. What little we can say about language use thus applies strictly speaking to a very small number of people.

There are some hints in our bureaucratic documents from Ḫattuša of a chronological replacement of Hittite by Luvian, or perhaps more accurately of growing Luvian competition with Hittite. In his “Deeds” Mursili cites the anger of his father Šuppiliuma in a first-person *quote* as: *nu=wa=mu kartimiyaz [kišat]* (KBo 14.12 iv 5) with a Hittite expression. In his “Plague Prayer” he *reports* this in the third person as: *ABU=YA=ma ḫ-kappilazzata* (KUB 14.8 i 23 etc.) using a Luvian verb with Luvian inflection.<sup>15</sup> In Muwattalli’s prayer ms. A uses *ḫūmandaz* vs. ms. B *da<pi>az* and *ḫurui* ‘witness’ vs. *ḫūwayalli*. SINGER (1996: 135-142) presents a number of arguments for assuming that B is the original dictated text while A is a revised version that shows the editorial hand of a more senior scribe.<sup>16</sup> The changes made may reflect an attempt to replace what were felt to be Luvian neologisms with more conservative Hittite forms. This conclusion is supported by the fact that ms. B also uses *kiḫani* for *kēḫani*, the first attestation of a change of *ē > ī* that becomes standard only in the texts of the following kings Tuḫaliya IV and Šuppiliuma II (see MELCHERT 1984: 142f). Finally, in the “Parallel Text” of the Laws (a NH composition) we find the Luvianisms

14 The cases of Luvian influence on Hittite grammatical features cited here are not meant to be exhaustive. The obligatory use of the reflexive pronoun in nominal sentences just with the first and second person is an innovation of Middle Hittite (HOFFNER 1969: 226). The presence of this typologically very unusual feature also in HLuvian (EICHNER 1974: 68<sup>16</sup>; MELCHERT 1988: 41f) cannot be unconnected. However, the direction of influence is by no means clear, and the fact that the usage is thus far attested only in first millennium HLuvian texts further complicates the matter.

15 Note, however, that in the same text (KUB 14.8 i 37) a report of an oracular inquiry uses the Hittite expression with dative + *kartimiyaz kišat*. It is such variation that makes me speak more cautiously of competition rather than replacement.

16 The text may or may not have been dictated by the king himself: see SINGER (1996: 161).

*dammel pēdan* 'uncultivated land' at KBo 6.4 i 11 (see HOFFNER 1997: 172f), *ḫapallašai* 'wounds' for older *ḫūnikzi* (ibid. i 22), and *karmalaššai* 'becomes crippled' (ibid. i 28ff).

I must insist, however, that examples like those just cited in no way prove the claim that Hittite as we have it was merely a written "Kanzleisprache" while Luwian was the spoken language (ROSENKRANZ 1938: 382 et al.). Changes from Old Hittite to Neo-Hittite argue rather that the language was being spoken (by someone), as per KAMMENHUBER (1959: 9).<sup>17</sup> There is also limited evidence for "colloquialisms" within Hittite: in the Middle Hittite Instructions for the Royal Bodyguard (IBoT 1.36 iii 54), a lower official reports to a superior *ḫulalittat* 'it has been wrapped up,' but the official says to the king *tarpūtat* 'it has been completed' (see MELCHERT, JNES 55.135). The private scribal correspondence appended to the official letters in Mašat also is entirely in Hittite.

The assimilated loanwords and creation of hybrid forms in Old Hittite (3.1-3.3 above) suggest that Luwian influence was limited at that period (at least on the language of the state bureaucracy). For the creation of such hybrid forms under conditions of cultural linguistic influence compare the German derivational suffix *-ieren* reanalyzed from the French infinitive ending *-er* (see ROSENQVIST 1943: 105f and ÖHMANN et al. 1953: 159f). The appearance of words with Luwian inflection and the effects of *i*-mutation on Hittite inflection, which begin in Middle Hittite and increase dramatically in Neo-Hittite, do point to a qualitatively different and perhaps more direct form of influence. It is far from clear, however, whether this change reflects a sharp break (due to some dramatic change in ruling hierarchy or more general social conditions) or is part of a continuum. In view of our vast ignorance of the sociolinguistic situation in the society as a whole, I forgo here any attempt at characterizing this influence more precisely in terms of language-contact typologies.

<sup>17</sup> A. Lubotsky reminds me that significant grammatical changes can occur in purely written languages and that phonological changes are better evidence for a spoken language. Phonological changes from OH to NH are few, but they do exist, most notably involving the vowels *e* and *i*. In addition to that in late NH of *ē* > *i* cited above there is also that of *i* > *e* in words like *šša-* > *ēšša-* 'do, make' (see MELCHERT 1984: 153ff but cf. also RIEKEN 1996: 294ff).

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