Chapter 14: Luwian

Luwian in context

Textual evidence

Luwian is attested from the 16th through the 8th century BCE from central, western, and
southern Anatolia and northern Syria, in a cuneiform script borrowed from Mesopotamia and a
hieroglyphic script developed within Anatolia in the context of the Hittite Empire, which due to
its multi-ethnic and multi-lingual character may be better referred to after its own designation as
the Empire of Hattusha (see for the scripts Hawkins 2003 and Payne 2015).

This brief characterization seriously oversimplifies the facts of the attestation of Luwian. I
must first emphasize that all of our extant evidence for Luwian in cuneiform comes from the
state archives of the Hittite capital Hattusha in central Anatolia (16th–13th centuries BCE). The
overwhelming bulk of this material falls into two quite distinct groups. There are on the one hand
Luwian incantations embedded in therapeutic rituals originating in Kizzuwatna (classical Cilicia
Pedias) in southeastern Anatolia, and on the other scattered Luwian words in Hittite texts. As
shown by Yakubovich (2010, 15–73), the language of the incantations reflects a ritual koine
developed in Kizzuwatna (Kizzuwatna Luwian), while the Luwianisms in Hittite contexts belong
to another koineized dialect (Empire Luwian), developed under and promulgated by the central
administration of the Empire of Hattusha.

The ritual incantations are edited in transliteration by Starke (1985), who showed that the
numerous incomplete manuscripts represent copies of no more than a dozen compositions.
Although these rituals are presented as being dictated by named practitioners, some said to come
from Kizzuwatna, Miller (2004, 469–511), Christiansen (2006, 22–30), and others have
convincingly argued that the rituals as we have them are the product of a complex redactional

process by Hattusha scribes. Some may be dated by linguistic criteria to "early Middle Hittite" (15th century), while others are surely from the early Empire period (14th century). Nevertheless, the grammatical consistency of the language of the incantations supports the idea that they ultimately reflect dictation by Luwian practitioners from Kizzuwatna, even if the ritual instructions in Hittite likely do not (thus with Yakubovich 2010, 280).

Since it is now undisputed that there are already Luwian loanwords in Old Hittite (see below), one must restrict the notion of "Luwianism" in Hittite context to words showing unequivocally Luwian inflection. Such forms displaying features agreeing with those of the Empire hieroglyphic Luwian texts and differentiating them from Kizzuwatna Luwian are restricted to New Hittite (Empire) compositions (Yakubovich 2010, 54–62). There are some Luwian-inflected words in Middle Hittite texts, but they become commonplace only in New Hittite (summary in Melchert 2005, 448–52, now in need of revision). A complete up-to-date collection of the Luwianisms in Hittite is currently lacking, but it is unlikely that the present picture will change substantially.

A few lines of Luwian occurring in texts belonging to the state cult of the Old Kingdom of Hattusha (16th–15th centuries BCE) are too fragmentary to be assigned to any particular dialect. There is also tantalizingly at least one fragment of a letter, arguably two (Starke 1985, 368–9). Their use of the clause-initial conjunction $p\bar{a}$ agrees with Kizzuwatna Luwian vs. the Empire koine, but since this feature is likely an archaism (with Yakubovich 2010, 62–3), it alone is insufficient to identify the dialect. A few features of the "songs" of Istanuwa and Lallupiya suggest they belong to a dialect (or dialects?) different from the Kizzuwatna and Empire koines (Melchert 2003a, 174–5), but these texts (actually mere incipits of ritual songs) are too short and difficult of interpretation to allow for any definitive conclusions. Their principal importance lies

in reminding us that many more dialects of Luwian surely existed than our very limited and selective evidence attests (see for these texts Starke 1985, 294–353).

Inscriptions in the Anatolian hieroglyphs are attested from the 13th to 8th centuries BCE and over a broad geographic range: from Karabel, Karakuyu (Torbalı), Sipylos, and Latmos in the far west of Anatolia, from Hattusha and other sites in central Anatolia, from as far to the southeast as Ancoz in Commagene, and from as far south as Hama and Restan in Syria (map in Hawkins 2003, 142). Once again this blanket description requires significant elaboration. Chronologically, these texts may be usefully divided into three periods (Hawkins 2013a, 26): (1) those of the 13th century from the last part of the Empire of Hattusha; (2) those of a transition period roughly 1200–1000; (3) those of the post-Empire, Iron Age "Neo-Hittite" states from southern Anatolia and northern Syria dating from 1000–700.

Most inscriptions from the Empire period consist only of names and titles, the latter written logographically, and the *language* in which they are to be read can only be inferred, not proven. See the careful discussion by Hawkins (2003, 140–41), who adds that the same remark applies to most seal impressions, making them almost entirely irrelevant as evidence for the Luwian language (for a few post-Empire exceptions with isolated Luwian words see texts XIII 1, 4 and 11 in Hawkins 2000, 574–81). However, we do have a few Empire texts of considerable length, in Luwian, from the last two Hittite kings, Tuthaliya IV and Suppiluliuma II. These are fundamentally dedicatory in nature, but include accounts of royal military exploits and building activities. The texts from Emirgazi and Yalburt, in west central Anatolia, are assuredly by Tuthaliya IV, but both present many problems of reading and interpretation. One may receive an accurate impression of their content from the editions by Hawkins (1995, 66–102)—for Yalburt see also the *editio princeps* by Poetto (1993)—but revisions have already been made (e.g.,

Hawkins 2006, 54–9), and there will be more. No adequate edition of the badly weathered Nişantaş text of Suppiluliuma II exists, while both the interpretation and even the attribution of the Südburg inscription to him are highly controversial (see Payne, 2015, 78–84, with references).

Hawkins (2003, 146–7) already suggested that the previous perception of a "dark age" of two to three centuries between the fall of the Empire of Hattusha around 1200 BCE and the "revival" of Hittite culture by the smaller polities of southeastern Anatolia and northern Syria needed serious revision. Recent discoveries have further strengthened the case for assuming rather that there was a considerable degree of continuity in terms of culture and the writing of Luwian in hieroglyphs through the transitional period of the 12th and 11th centuries. Orthography, phraseology, and content argue for dating the Karahöyük inscription to the 12th century (Hawkins 2000, 289–90), likewise the set of inscriptions by Hartapu from Tabal, however the discrepancy with the dating of the accompanying sculpted figure is to be explained (Hawkins 2000, 429, 434 and 438–9). Use of the archaic phrase DEUS *430+*RA/I* for 'every god' or 'all the gods', but with rhotacism (/ponara/i-/), in the recently published Karakuyu (Torbali) inscription (thus with Oreshko 2013, 377 vs. ibid. 378) recalls the same combination of features in the Hartapu inscriptions (DEUS-*na/i* *430 and [*t*]*u-pi+ra/i* 'strikes/struck'—see Hawkins 2000, 438) and suggests a similar immediate post-Empire dating (Oreshko 2013, 386 argues on different grounds for ca. 1250–1150 BCE).

The Malatya inscriptions previously argued by Hawkins (2000, 187–8 and 296) to date from no later than the 11th and 10th centuries (arguably the late 12th) have now been joined by the newly published stele of Suhi I from Karkemish (Dinçol et al. 2014a), which on orthographic and historical grounds must be dated to the end of the 11th century or beginning of the 10th

(Dinçol et al. 2014b, 130). Also datable to the 11th century are the Aleppo temple inscriptions of Taita, self-designated King of Palishtin (see for text, dating, and historical context Hawkins 2011). The new Arsuz inscriptions of a Suppiluliuma, likewise with the title King of Walishtin, now permit a likely sequencing of texts from Amuq forming a continuum from the 11th to the 9th centuries (Dinçol et al. 2015, 62–3). Finally, because of its notoriety I should mention the "Ankara" silver bowl inscription (probably of Syrian origin) that on epigraphic grounds should be dated to the transitional period, whether or not it alludes to much earlier historical events (see for the most recent discussion Payne 2015, 84–98).

While these welcome recent discoveries have done much to fill the previous gap from the 12th and 11th centuries, the overwhelming majority of Luwian hieroglyphic texts date from the 10th–8th centuries and originate in the various minor "Neo-Hittite" states from southeastern Anatolia and northern Syria that formed after the fall of the Empire of Hattusha. While the term "Neo-Hittite" may seem confusing, it is fully justified, since these states were, and presented themselves as, the political and cultural heirs of the Hittites. Most of the texts represent inscriptions on stone, both natural rock faces and man-made structures. Like the inscriptions of the late Hittite kings, they are largely dedicatory in nature, but also describe military exploits and building activities of their authors (as seen by Cancik 2002, their textual composition imitates the practices of Assyrian royal inscriptions). There are also a few inscriptions on bowls of stone and metal (see Hawkins 2000, texts XII 3, 14, 15 and 16).

Of a very different nature are the few texts incised on soft lead strips (which could be rolled up for preservation and transport). Those attested thus far are of two genres. First, we have personal letters, those found in Assur, but almost certainly originating from Karkemish or vicinity (Hawkins 2000, 533–55), and the Kırşehir (Yassıhöyük) letter from Tabal (Akdoğan and

Hawkins 2010 and Weeden 2013). Second, there are the economic documents from Kululu

(Tabal) that record lists of commodities to be distributed to various individuals (Hawkins 2000,

503–13).

Sociolinguistic status of Luwian

It is commonplace that the written records of ancient corpus languages that have come down to

us present a very partial and skewed picture of their sociolinguistic situation. Our documents

tend to be the products of social elites and to show a strong bias towards political, administrative,

and hieratic content. It should be clear from the preceding summary that our documentation for

Luwian is no exception.

Nevertheless, we may make some reasonable hypotheses about the presence of Luwian

speakers and the use of Luwian as a spoken and written language—with the caveat that their

degree of plausibility varies markedly for different times and places and that new discoveries

may require that they be modified or replaced.

Our first (indirect) evidence for Luwian comes from Akkadian texts of the 20th–18th

centuries BCE from the Assyrian trading colonies in central Anatolia, most notably Kanesh

(modern Kültepe) on the Upper Halys River. Since personal names may be borrowed for various

reasons, the attestation of a modest number of Luwian names in these texts (see most recently

Yakubovich 2010, 208–23) does not assure the presence of Luwian speakers. However, we also

find several loanwords in the Old Assyrian texts that on phonological and morphological

grounds must be of Luwian origin: *ḫiniššannum* and *kulitannum* (names for vessels),

targumannum 'interpreter', and *upatinnum* 'royal land grant' (Dercksen 2007, 31–5 and

Yakubovich 2010, 208, note 2). While some of these could have been borrowed through Hittite,

there is no evidence for a Hittitized variant of Luwian *kullit-* (*contra* Dercksen 2007, 33). It is

also noteworthy that Luwian *tarkumm(a)i-* (and its Hittitized variant) only means 'report, pass on (verbally)' and never 'translate' (thus with Starke 1990, 273–5), suggesting that the Akkadian sense reflects use of the Luwian word in a face-to-face multilingual contact situation that *did* involve translation. We may tentatively conclude that at least some Luwian speakers were present in the area of Kanesh at the beginning of the second millennium BCE (compare Yakubovich 2010, 223).

Yakubovich (2010, 227–39) has argued for a Luwian superstrate in Old Hittite. The evidence is limited and subject to more than one interpretation. It is at least noteworthy that prehistoric Luwian loanwords into Hittite include minimally the respective titles for the king and queen, *tabarna-* and *tawananna-* (see Melchert 2003a, 18–20 and for the first also Yakubovich 2010, 229–32). Rieken (2016a) has now argued that the title *tuḫukant(i)-* for the crown prince is likewise a loanword from Luwian. For a discussion of the significance of Luwian personal names in the Old Hittite Kingdom, including those of kings, see Yakubovich (2010, 248–53). It remains difficult to assess just how many Luwian speakers had been integrated into Old Hittite society.

We are on firmer ground when we come to the Early Empire (Tuthaliya I to Suppiluliuma I). The prevalence of Luwian onomastics, the treatment of Luwian in instruction texts aimed at members of the bureaucracy and the military, and above all a series of unmistakably contact-induced changes in Hittite grammar together argue that by this period many if not most Hittite speakers were Luwian bilinguals. Luwianisms (unassimilated Luwian words) also appear in our bureaucratic documents (see van den Hout 2007, 234, revising Melchert 2005), but their still low number suggests that Luwian was primarily a spoken idiom, regarded as unsuited for official written use (see *in extenso* Yakubovich 2010, 260–72).

Events of the second half of the 14th century brought dramatic changes. First, Suppiluliuma I annexed portions of northern Syria and resettled large numbers of inhabitants to Hattusha and surrounding areas (Bryce 2005, 163; full text in Beckman 1996, 39–40). A few years later, Mursili II defeated the western Anatolian kingdom of Arzawa in a campaign that reached the Aegean coast and likewise forcibly transferred thousands of people to the Hittite homeland (Bryce 2005, 194–7). As often (compare Melchert 2007, 529), there was a slight time lag between the concomitant societal changes and their linguistic effects, and the language of Suppiluliuma I is that of the early New Kingdom ("late Middle-Hittite")—see Neu 1979. However, the language of his son Mursili II is transitional, showing the first signs of a series of major innovations in Hittite grammar, some of them attributable to Luwian influence—as well as the first use of the "Glossenkeil" (𒑱) to explicitly mark Luwianisms in Hittite texts.

A connection between the historical events and the linguistic changes has long been acknowledged, but there has been much debate about just what conclusions should be drawn regarding the sociolinguistic status of Hittite and Luwian in the later Empire of Hattusha. Already Rosenkranz (1938, 282) proposed that by this time Hittite existed only as a language of the imperial court and chancery (written and spoken), no longer natively transmitted. Reception of this characterization has been mixed: see the summaries by van den Hout (2007, 227–30) and Yakubovich (2010, 304–6), including reference to my own skeptical stance (Melchert, 2003a, 12–14 and 2005, 457–8). However, van den Hout (2007, 235–42) has now persuasively argued that the concentration of the use of the "Glossenkeil" in texts of an ephemeral nature requires the presence of large numbers of Luwian speakers and either extensive bilingualism or diglossia. Yakubovich (2010, Chapter Five) has progressed much further, making a strong case for what he terms (2010, 307) assymetrical bilingualism in Hattusha and nearby areas in the late Empire of

Hattusha, where a minority of Hittite native speakers fully bilingual in Luwian coexisted with a larger set of Luwian native speakers with varying competence in Hittite, and with monolingual Luwian speakers. Naturally, our official texts reflect only the first two groups centering on the imperial court and chancery; the existence of the third group may only be inferred. However, since the mass deportations from Luwian-speaking areas cited above surely included all social classes, there can be little doubt that they were present, surely in substantial numbers.

Convergent factors argue that the area known in Hittite times as the "Lower Land" southwest of the Halys River and near the Salt Lake (modern Tuz Gölü) was a predominantly Luwian area from the late third millennium (Yakubovich 2010, 243–8) through to the first millennium, when it was part of Tabal (Bryce 2005, 353–4 and 2012, 141). The economic documents of the Kululu lead strips suggest that northeastern Tabal was Luwian-speaking at least by the 8th century BCE.

The Luwian incantations in the Hattusha rituals from Kizzuwatna testify to Luwian presence there from the Early Empire period, though one must reckon with competition from Hurrian (see in detail Yakubovich 2010, 272–85). For arguments for continued use of Luwian in post-Empire Cilicia (Que) by the non-elite population see Yakubovich 2015a.

The extent of the use of Luwian as a spoken language in the other Neo-Hittite states east of Tabal and Que, i.e., in southeastern Anatolia, the Upper Euphrates, and northern Syria remains uncertain. Bryce (2012, 52–60) expresses justified skepticism about large movements of Luwian-speaking refugees into these areas after the fall of the Empire of Hattusha and argues that any Luwian presence there reflects earlier settlement under the Hittite administration. However, one may question whether his final conclusion that "the Luwian-speaking inhabitants of these

kingdoms probably constituted only a minority of their populations" applies equally to all of the areas in question.

Also controversial is the status of Luwian as a spoken language in western Anatolia during the second millennium. Yakubovich (2010, Chapter 2) argued at length against the presence of any significant numbers of Luwian speakers, suggesting that the aristocracy of the area spoke Proto- (or Pre-)Carian, rather than Luwian. This claim elicited the sharpest criticism of any portion of his monograph and began an extended debate: see in part Hawkins 2013a, Oreshko 2013, 401–9, Yakubovich 2013, 108–21, and Hawkins 2013b. A full discussion is impossible here, but some remarks are in order. First, I must emphasize that we have no means to securely identify the spoken language of even the elites of western Anatolia in the second millennium, so all hypotheses must depend on arguable indirect evidence. Second, it is hard to believe that the mass deportations from Arzawa by Mursili II did not play a major role in the Luwianization of Hattusha and surrounding areas from the 14th century onwards. In particular, the formation of an Empire koine quite distinct from that of the Kizzuwatna rituals argues for the influx of large numbers of speakers of *multiple* Luwian dialects, not just that of Kizzuwatna. Finally, none of the arguments of Yakubovich (2010 and 2013) are incompatible with the assumption of migrations of Luwian speakers *westward* in the first centuries of the second millennium, just before the Luwians appear in Hittite sources. The question must for the present simply be left open.

Contact between Luwian and other languages

Before treating the issue of possible contact effects between Luwian and other specific languages, we should note that Luwian shares in at least two phonological "areal features" of the region of its attestation. First, aside from two secondary examples due to loss of an initial dorsal

stop—Iron Age Luwian /ruwan/ 'formerly' and the name of the Stag-god *Runtiya-* (Melchert 1994, 256 with references)—Luwian has no word-initial /r-/, a restriction common to all of the Indo-European Anatolian languages as well as Greek, Armenian, and non-Indo-European Hattic and Hurrian. Second, due to what must be a post-Proto-Anatolian innovation that spread through the individual Indo-European Anatolian languages, Luwian in its attested form has only voiceless obstruents in word-initial position, as seen also in Hurrian (Melchert 1994, 18–20, *pace* Kloekhorst 2010).

The question of contact effects between Luwian and the other Indo-European Anatolian languages is complicated by two factors: first, it is unlikely that pre-Luwian speakers ever lost direct contact with the other prehistoric dialects; second, the evidence for and our understanding of the languages beyond Hittite and Luwian is seriously limited. It is thus often difficult to distinguish between shared common innovations (modeled in terms of a "Stammbaum" or of dialect geography) and borrowings from one of the already differentiated dialects into another (lexical and grammatical). On the general problem of shared common innovations see Melchert 2003b, and on developments in the reflexive enclitic pronoun Yakubovich 2010, 173–82. The results of both investigations point to a geographically central prehistoric position of Luwian with respect to the other dialects. The focus in what follows, however, will be on clearly post-differentiation borrowings and interference effects.

All truly compelling examples of *post-differentiation* contact effects between Luwian and another Indo-European Anatolian language involve Hittite, and except for a very few arguable cases they are unidirectional—from Luwian to Hittite. As per the preceding section, effects of Luwian on Hittite from the 14th century BCE have long been acknowledged. It was the merit of

Starke (1990) to show that already our oldest attested Hittite contains a substantial number of lexical borrowings from Luwian, far more than previously recognized.

Yakubovich (2010, Chapter Three, especially 182–205) further demonstrated that the Hittite reflexive particle *-z(a)* is the result of borrowing from Luwian through a complex series of developments that presupposes a longer and more intense prehistoric contact between Luwian and Hittite than required by mere lexical borrowing. The weight of this *linguistic* argument in support of his claim (2010, 243) that the prehistoric center of gravity of the Luwians was the Konya plain ("Lower Land" in Hittite sources) or alternatively (2013, 114–5) the valley of the Sakarya (classical Sangarios) has not been properly appreciated in the subsequent debate about the Luwians in western Anatolia.

As discussed in the preceding section, Luwian linguistic effects on Hittite during the Old Kingdom (leaving aside onomastics) are arguable. One should note, however, that there are some Luwianisms (NB: not loanwords) in Middle and New Script copies of assured Old Hittite texts of various genres (see Melchert 2005, 448–9 for examples marked with [L]). It is far from obvious that all or even most of these represent interpolations by the copyists (even if use of the "Glossenkeil" is such).

I identified (Melchert 2007) eight innovations that occurred in "Middle Hittite" (late Old to early New Kingdom). Yakubovich (2010, 268–71) argued that all of these can and most should be analyzed as due to contact with Luwian. At least four are compelling: (1) the required use of the reflexive particle *-z(a)* in nominal sentences or with the verb 'to be' *just* with the first and second persons (totally unmotivated within Hittite); (2) replacement of common gender nominative plural enclitic *-e* 'they' with *-at* (matching *-ata* in Luwian); (3) leveling of *ammuk* 'me' for *ūk* 'I' (but notably not of *tuk* 'thee' for *zik* 'thou', just as in Luwian); (4) confusion of

the common gender nominative and accusative plural case endings (notably agreeing with Empire and Iron Age Luwian, not Kizzuwatna Luwian). See on the last three features also Rieken (2006, 274–7).

As described above, the second half of the 14th century brought a massive new influx of Luwian speakers into the Hattusha court and chancery. Yakubovich (2010, 308–67) argues that a number of New Hittite innovations beginning with Mursili II are due to interference effects reflecting the (imperfect) second-language acquisition of Hittite by Luwian native speakers. These include: (1) a lexically diffused replacement of [e] by [i] due not to regular sound change but to hypercorrection by Luwian speakers whose own language had no phonemic contrast between /e/ and /i/; (2) diffusion of the Luwian pattern of "*i*-mutation" in nominal paradigms; (3) nominative-accusative common gender plurals in *-aš*; (4) clitic iteration (e.g., *n=at=ši(y)=at* 'and it to him/her it', with redundant repetition of the direct object pronoun). For the last see already Rieken (2006, 278).

Before leaving the topic of Luwian influence on Hittite, we should also indicate that from the prehistoric period through to the end of the Empire of Hattusha Luwian not only was the direct source of loanwords into Hittite, but also played an important intermediary role in transmitting loanwords from other languages, mostly but not exclusively Hurrian. As shown by Starke (1990, 210–21), the *-t-* that appears sporadically in the oblique cases of such words in Hittite does not reflect any Hurrian morpheme, but rather the suffix *-it-* that Luwian used to adapt most loanwords. One should also stress that these words include Wanderwörter whose ultimate source is unknown.

In contrast to the extensive demonstrated effects of Luwian upon Hittite, from prehistoric times to the end of the Empire of Hattusha—examples for Hittite influence on Luwian are

limited to a mere handful of alleged lexical borrowings, all thus far arguable. In a Kizzuwatna ritual context we find the hapax ^{GIŠ}*kattaluzzi=ša* 'threshold'. This *may* reflect a genuine Luwian neuter noun with a stem **kattaluzzit-* borrowed from Hittite common gender *kattaluzzi-* (Starke 1990, 214), but a Hittite loanword for this vocabulary item in Kizzuwatna Luwian (not Empire Luwian!) seems odd, and one may wonder whether it is instead a hybrid created by the Hittite copyist. Since the Luwian word for 'ruler, king' is acknowledged to be /xandawad/t(i)-/, Iron Age Luwian /xassuss(a)ra-/ 'queen' has been alleged to be a borrowing of Hittite *ḫaššuššara-*, transparently derived from *ḫaššu-* 'king'. This is not implausible for an official title, but the implied premise that Luwian could not natively have such an asymmetry between 'king' and 'queen' is hardly assured. I have argued (Melchert 2013) that the Iron Age Luwian expression /wanaxa/ 'away from' identified by Yakubovich is a borrowing of the matching Hittite *awan arḫa*, but for a very different analysis see Yakubovich (2012). Even if one accepts all suggested Hittite loans into Luwian, their number remains miniscule.

There is a widespread view that the Lydians in the second millennium were situated in the northwest of Asia Minor and only moved southward into their classical location later, presumably entering into a super- or substrate relationship with the Luwians: see among others Beekes (2002, 205–17). Yakubovich (2010, 112–7) has challenged this scenario, but even if it is true, one must state emphatically that thus far the only effects demonstrated are limited to a few personal names (most convincing is Lydian *Tiwda-*, surely based on a Luwian theophoric *Tiwada-* 'Sun-god', since the native Lydian reflex of **diw-* appears in *ciw-* 'god'). There will thus be no further discussion here of putative contact effects between Luwian and Lydian.

An adequate discussion of possible Luwian loanwords into Greek is not feasible here. A new critical reassessment updating Neumann 1961 is much needed. I note only that such borrowings

involve both native Luwian lexemes and words transmitted by Luwian from other languages. For reasons discussed by Yakubovich (2015a, 36–41), the likely place of transmission is Cilicia.

Kizzuwatna is a culturally and linguistically mixed Luwian-Hurrian region since our earliest sources. Hence the presence of Hurrian loanwords and Hurrianisms in many of the therapeutic Luwian rituals originating in Kizzuwatna. Yakubovich (2010, 47–53) has made plausible arguments that the creation *just in* Kizzuwatna Luwian of agglutinative forms in *-ašš-anz-* of the relational adjective in *-ašša-* to mark plurality of the possessor results from interference from Hurrian, in a situation where Hurrian native speakers were learning Luwian as a second language.

The most notable loanword from Semitic into Luwian is *ḫalāl(i)-* 'pure', attested thus far in Kizzuwatna Luwian (though its absence in Iron Age Luwian may be accidental). Surely a factor in its adoption was that it could be fit easily into the native nominal morphology: compare *ādduwal(i)-* 'wicked, evil'. We also find just once in Iron Age Luwian /sariyassi-/ 'eunuch' < Akkadian *ša rēši* (lit. 'he of the head'), whose shape has likely been influenced by the more usual calque /wassinassi-/ 'he of the body/person' (see Hawkins 2000, 349). On Phoenician as the primary language of the Karatepe and Çineköy Phoenician-Luwian bilingual texts from Cilicia and interference effects on the Luwian version see Yakubovich (2015a, 44–8).

Grammatical sketch

The following description applies to both Kizzuwatna and Empire/Iron Age Luwian unless noted otherwise. We know too little of the Istanuvian dialect to take it into account here.

Phonology

The Luwian phonemic inventory consists of the following:

Stops:	/p/	/t/		/k/	/kʷ/
	/b/	/d/		/g/	/gʷ/
Affricate:		/tˢ/			
Fricatives:		/s/		/x/	/xʷ/
				/ɣ/	/ɣʷ/
Nasals:	/m/	/n/			
Liquids:		/r/, /l/			
Glides:	/w/		/j/		
Vowels:	/i/, /iː/			/u/, /uː/	
			/o/, /oː/		
		/a/, /aː/			

Table 14.1

The exact nature of the contrast in the stops and the pairs of dorsal fricatives remains difficult to determine; it may well have been fortis versus lenis instead of voiceless versus voiced. In any case, in cuneiform the voiceless or fortis set are spelled as geminates in intervocalic position, and they certainly closed a preceding syllable (Melchert 1994, 13–21 and Kloekhorst 2014, 544–7). The voiced dorsal stops /g/ and /gʷ/ are rare, being restricted to position after sonorants. The dorsal fricatives may well have been uvular rather than velar; for the existence of labialized /xʷ/ and /gʷ/ see Kloekhorst (2006, 97–101) and Melchert (2011). There is a contrast between /s/ and /ss/ and between simple and geminate nasals and liquids in intervocalic position.

It is likely, though not strictly provable, that intervocalic *[d] became a flap or some kind of coronal continuant already in the prehistory of Luwian. In any case, *only* in Iron Age (first millennium) Luwian the result alternated with [l], and both of these (and occasionally [n]) in turn alternated with [r] (Morpurgo Davies 1982–3 and Rieken and Yakubovich 2010).

There is no doubt that Luwian has phonetically both short and long vowels, but due to a series of prehistoric changes (Melchert 1994, 239–47, following Eichner and Morpurgo Davies) the environments for a phonemic contrast are quite limited. Positing of the vowels /o/ and /oː/

distinct from /u/ and /u:/ is based entirely on the spelling contrast between <u> and <ú> in Luwian written in cuneiform, which follows the same basic pattern as in Hittite with differences in detail (Rieken 2016b). While there is no reason not to infer the existence of /o/ and /o:/ also for Empire/Iron Age Luwian written in hieroglyphs, it should be stressed that Luwian short [o] was likely of restricted distribution, and the *phonemic* contrast between /o/ and /u/ and /o:/ and /u:/ was also limited in scope.

Nominal Inflection

Luwian nouns and adjectives inflect for gender, number, and case. There are two genders, common and neuter, and two numbers, singular and plural. At least Empire Luwian shows a contrast between count (distributive) and collective (set) plural for some common gender nouns: e.g., nom. sg. *lalamiš* 'receipt' with collective nom.-acc. pl. *lalāma* beside unattested count nom.-acc. pl. *lalaminzi**. Luwian has a maximum of seven cases: nominative, accusative, vocative, ergative, genitive, dative-locative, and ablative-instrumental. Note that Empire/Iron Age Luwian has merged the common gender nominative and accusative plural. The rare vocative singular is attested only in Kizzuwatna Luwian; otherwise the nominative is used. The existence of a genitive case in Kizzuwatna Luwian is debated, and the existence of a genitive ending /-as(s)a/ in Iron Age Luwian is unprovable due to limitations of the hieroglyphic orthography. See on the complex situation of the use of the genitive and the relational adjective to mark possession Melchert (2012) with particular reference to Yakubovich (2008). For the distribution of the dative-locative singular endings see Yakubovich (2015b, section 6.2). The ablative-instrumental does not distinguish number. The Luwian endings may be schematized as in Table 14.2:

	Singular		Plural	
	KLuwian	E/I-ALuwian	KLuwian	E/I-ALuwian
Nom.C.	/-s/	/-s/	/-ntˢi/	/-ntˢi/
Acc.C.	/-n/	/-n/	/-ntˢ/	/-ntˢi/
Voc.	-Ø	---	---	---
N-ANt.	-Ø, /-n/	-Ø, /-n/	/-a/, -Ø	/-a/
Erg.	/-antis/	/-antis/	/-antintˢi/	/-antintˢi/
Gen.	/-as(s)i/, /-assa/?	/-as/, /-as(s)i/	---	/-as/, /-as(s)i/?
Dat.-Loc.	/-i/, /-a/	/-i/, /-a/	/-antˢ/	/-antˢ/
Abl.-Inst.		/-adi/		

Table 14.2

Two further phenomena should be noted. First, frequently in Kizzuwatna Luwian and virtually obligatorily in Empire/Iron Age Luwian the neuter nom.-acc. singular is followed by a particle /-sa/, which appears as /-tˢa/ after the *a*-stem ending /-an/. Second, by the feature known as "*i*-mutation" many stems obligatorily insert an *-i-* between the stem and ending *just* in the nominative and accusative of the common gender (see Starke 1990, 56–64 for a synchronic description, but compare also the reformulation by Yakubovich 2015b, section 6.4).

Pronouns

The near-deictic demonstrative in Luwian is /tˢá:-/, while /abá:-/ serves as the far-deictic demonstrative and the orthotonic third person pronoun. Our understanding of their inflection has been much advanced by Goedegebuure (2007) and (2010), the gist of whose synchronic analysis is followed here. Table 14.3 shows the paradigm of /abá:-/, with unattested forms assured by those of /tˢá:-/:

	KLuwian	E/I-ALuwian		KLuwian	E/I-ALuwian
NSgC	/abá:s/	/abá:s/	NPlC	/abí:ntˢi/*	/abá:ntˢi/
ASgC	/abá:n/	/abá:n/	APlC	/abí:ntˢ/	/abá:ntˢi/
N-ASgNt	/abá:/*	/abá:/	N-APlNt	/abá:/*	/abá:ya/, /abá:/
Dat-LocSg	/abáti/	/abáti/	Dat-LocPl	/abátantˢ/*	/abátantˢ/
Abl-Inst	/abá:di(n)/	/abín/		/abá:di(n)/	/abín/

Table 14.3

The inflection is entirely that of an *a*-stem: on the common gender nominative and accusative plural forms in Kizzuwatna Luwian and the neuter nom.-acc. plural in Empire/Iron Age Luwian, which do *not* show "*i*-mutation", see Melchert (2009). Thus far, possession is expressed in Kizzuwatna Luwian with the relational adjective /abassa-/. Empire/Iron Age Luwian also attests a genitive /abasi/. The ablative-instrumental forms also serve as adverbs 'thus, in that way' and 'there'.

As in Hittite, the nominative and accusative of the relative-interrogative stem /kʷi-/~/kʷa-/ show true *i*-stem inflection. The only exception is that in Empire/Iron Age Luwian the neuter nom.-acc. singular appears as /kʷan-tˢa/ by "reverse *i*-mutation", versus expected /kʷi:/ in Kizzuwatna Luwian (the latter is still preserved in Empire/Iron Age Luwian as a subordinating conjunction 'when'). The rest of the paradigm shares the endings of the demonstratives (for the dative-locative and ablative-instrumental see again Goedgebuure 2007 and 2010):

	KLuwian	E/I-ALuwian		KLuwian	E/I-ALuwian
NSgC	/kʷi:s/	/kʷi:s/	NPlC	/kʷi:ntˢi/	/kʷi:ntˢi/
ASgC	/kʷi:n/	/kʷi:n/	APlC	/kʷi:ntˢ/*	/kʷi:ntˢi/
N-ASgNt	/kʷi:/	/kʷan-tˢa/	N-APlNt		/kʷaya/
Dat-LocSg	/kʷati/	/kʷati/	Dat-LocPl		/kʷatantˢ/
Abl-Inst	/kʷadi(n)/	/kʷadi/		/kʷadi(n)/	/kʷadi/

Table 14.4

As in Hittite, the orthotonic personal pronouns of the first and second person show a limited inflection. Due to the nature of the text corpora, most of our evidence comes from Iron Age Luwian. The generalization of the non-subject forms also to use as subjects except for the second singular has already been mentioned. For the reading of the Iron Age Luwian first and second plural as ending in /-antˢ/ (not /-untˢ/ as previously given) see Yakubovich (2010, 66–9):

	KLuwian	E/I-ALuwian		KLuwian	E/I-ALuwian
1stSg			**1stPl**		
Nom.		/amu/	Nom.		/a:nt^{s}ant^s/
Dat.-Acc.		/amu/	Dat.-Acc.	/a:nt^s(as)/	/a:nt^{s}ant^s/
2ndSg					
Nom.	/ti:/$^?$	/ti:/	Nom.		/u:nt^{s}ant^s/
Dat.-Acc.		/tu:/	Dat.-Acc.	/u:nt^s(as)/	/u:nt^{s}ant^s/
Abl.-Inst.		/tuwari/	Abl.-Inst.		/u:nt^{s}ari/

Table 14.5

It is doubtful that there is any functional difference between the Kizzuwatna Luwian plural forms with and without the final /-as/, but we cannot be sure of this. The attested Iron Age ablative-instrumental forms show "rhotacism" with /-ari/ < /-adi/.

We have virtually no evidence for the first and second person enclitic personal pronouns in Kizzuwatna Luwian. In Empire/Iron Age Luwian the first person singular enclitic /-mu/ is attested in both dative and accusative function, and we may safely assume the same for second singular /-du/, first plural /-ant^s/, and second plural /-mmant^s/, thus far attested as datives. In the third person Kizzuwatna Luwian preserves the more archaic common gender accusative plural /-as/ and dative plural /-mmas/. These have been renewed as /-ada/ and /-mant^s/ in Iron Age Luwian. The rest of the paradigm is the same in both dialects:

	KLuwian	E/I-ALuwian		KLuwian	E/I-ALuwian
NSgC	/-as/	/-as/	NPlC	/-ada/	/-ada~-ara/
ASgC	/-an/	/-an/	APlC	/-as/	/-ada~-ara/
N-ASgNt	/-ada/	/-ada~-ara/	N-APlNt	/-ada~-ara/	/-ada~-ara/
DatSg	/-du/	/-du~-ru/	DatPl	/-mmas/	/-mmant^s/

Table 14.6

Empire/Iron Age Luwian has special enclitic reflexive forms in the singular for all three persons, /-mi/, /-di/, /-di/ (the latter appear also as [-ri]). Kizzuwatna Luwian also attests reflexive /-di/ for

the third singular. The plural enclitic personal pronouns serve as reflexives at least in Iron Age

Luwian: /-antˢ/, /-mmantˢ/ and /-mmantˢ/. In Iron Age Luwian first singular /-mu/ competes with

/-mi/ in use as a reflexive.

Verbal inflection

The Luwian finite verb is inflected for the expected three persons, singular and plural number,

active and medio-passive voice, and indicative and imperative moods. The formal distinction

between the "*mi*-conjugation" and the "*hi*-conjugation" known from Hittite is preserved only in

the third person singular. For the distribution of the alternating endings with initial /t/ and /d/ see

Morpurgo Davies (1982–3). As she indicates, those with initial /d/ are subject to alternation with

/r/ in Iron Age Luwian. The nature of our corpora leads to significant gaps in our knowledge of

the personal endings in both dialects, especially for the medio-passive. Table 14.7 shows what is

currently known:

	Present Indicative Active				
	KLuwian	E/I-ALuwian		KLuwian	E/I-ALuwian
1stSg	/-wi/	/-wi/	1stPl	/-unni/	
2ndSg	/-si/, /-ti/ᐟ?, /-tis/ᐟ?	/-si/, /-tis/	2ndPl	/-tani/	/-tani/
3rdSg	/-ti/~/-di/, /-ai/	/-ti/~/-di/, /-ai/	3rdPl	/-anti/	/-anti/

	Present Indicative Medio-passive				
	KLuwian	E/I-ALuwian		KLuwian	E/I-ALuwian
2ndSg			2ndPl	/-tuwar(i)/	
3rdSg	/-ar(i)/, /-tari/		3rdPl	/-antari/	

	Preterite Indicative Active				
	KLuwian	E/I-ALuwian		KLuwian	E/I-ALuwian
1stSg	/-xa/~/-ɣa/	/-xa(n)/~/-ɣa(n)/	1stPl		
2ndSg		/-ta/~/-da/	2ndPl		
3rdSg	/-ta/~/-da/	/-ta/~/-da/	3rdPl	/-a(w)nta/	/-a(w)nta/

Imperative Active

	KLuwian	E/I-ALuwian		KLuwian	E/I-ALuwian
1stSg	/-lu/?				
2ndSg	-Ø	-Ø		/-tan/	/-tanu/~/-danu/*
3rdSg	/-tu/~/-du/	/-tu/~/-du/		/-antu/	/-antu/

	Imperative	Medio-passive			
	KLuwian	E/I-ALuwian		KLuwian	E/I-ALuwian
3rdSg	/-aru/, /-taru/	/-aru/	3rdPl	/-antaru/	/-antaru/*

Table 14.7

Mention should also be made of the Iron Age Luwian preterite mediopassives formed by addition of a reflexive particle /-si/ (Rieken 2004 with references). Both dialects of Luwian attest an infinitive in /-una/ and a participle in /-mma-/ (which shows "*i*-mutation"). Iron Age Luwian also has a form in /-min(a)/ used predicatively in deontic function: '(is/are) to be __ed'.

Syntax

It is reasonably certain that the functionally unmarked word order is S O V. The sentence negation and preverbs regularly appear directly before the finite verb. Demonstratives, attributive adjectives and adnominal genitives usually appear before their head noun, but exceptions in Empire/Iron Age Luwian are not rare (for a comprehensive analysis of word order in noun phrases see now Bauer 2014).

As in Hittite, clause-level enclitics, including anaphoric pronouns and various particles, appear attached either to interclausal conjunctions or the first accented word in their clause by so-called "Wackernagel's Law". The order within the "clitic chain" is fixed: quotative particle+dative/reflexive+nominative/accusative+local particle. Most constituents of the clause may also undergo "fronting", appearing in absolute initial position or following an interclausal conjunction plus clitics. This word order marks some kind of focus or topicalization (or both), but the precise discourse function of pure "fronting" is not yet clear. Fronting is most frequent

when a constituent is marked for additive focus by the enclitic /-xa/ 'also; even' or for

contrastive focus by the enclitic /-ba/.

Agreement within noun phrases is regular (see Bauer 2014). Collective plural subjects take a

singular verb, and in the case of multiple subjects the verb is often singular, agreeing with the

nearer subject, as does any predicate adjective.

The use of nominal cases and verbal categories mostly follows expected patterns, but the

complex interplay of genitive case and relational adjective in marking possession is noteworthy

(see Melchert 2003a, 202 with references).

All previous descriptions of relative clause syntax in Luwian must be radically revised

(Melchert 2016).

Further reading

Plöchl (2003) and Payne (2014) offer excellent introductions to Empire/Iron Age Luwian. The

latter is in lesson format and includes an introduction to the script. For Kizzuwatna Luwian see

Melchert (2003a) and Yakubovich (2015b), but the former must be used with the correctives

given here and by Yakubovich.

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